Exhibit L

MITIGATED NEGATIVE DECLARATION

FILE: CUP19-0007

PROJECT NAME: AT&T CAF II, Frenchtown 2

NAME OF APPLICANT: AT&T Mobility, c/o Jared Kearsley, Epic Wireless Group, LLC

ASSESSOR'S PARCEL NO.: 091-070-022 **SECTION:** 18 **T:** 9W **R:** 10E

LOCATION: On the west side of Big Canyon Road, approximately 690 feet south of the intersection with French Creek Road in the Shingle Springs area.

☐ **GENERAL PLAN AMENDMENT: FROM: TO:**

☐ **REZONING: FROM: TO:**

☐ **TENTATIVE PARCEL MAP** ☐ **SUBDIVISION TO SPLIT ACRES INTO LOTS SUBDIVISION (NAME):**

☒ **SPECIAL USE PERMIT TO ALLOW:** Construction and operation of one 160-foot tall telecommunication tower (stealth monopine).

☐ **OTHER:**

REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:

☐ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

☒ **MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

☐ **OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Planning Department hereby prepares this MITIGATED NEGATIVE DECLARATION. A period of thirty (30) days from the date of filing this mitigated negative declaration will be provided to enable public review of the project specifications and this document prior to action on the project by COUNTY OF EL DORADO. A copy of the project specifications is on file at the County of El Dorado Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

This Mitigated Negative Declaration was adopted by the _____ on _____.

_____

Executive Secretary

COMMUNITY DEVELOPMENT SERVICES
PLANNING AND BUILDING DEPARTMENT

EL DORADO COUNTY

INITIAL STUDY AND PROPOSED MITIGATED NEGATIVE DECLARATION FOR CONDITIONAL USE PERMIT CUP19-0007 AT&T CAF II FRENCHTOWN 2 (SHINGLE SPRINGS)

EL DORADO COUNTY
COMMUNITY DEVELOPMENT SERVICES,
PLANNING AND BUILDING DEPARTMENT
INITIAL STUDY & PROPOSED MITIGATED NEGATIVE DECLARATION FOR
CONDITIONAL USE PERMIT CUP19-0007
(AT&T Mobility, c/o Jared Kearsley, Epic Wireless Group, LLC.)

1.0 PROJECT INFORMATION

A. **Applicant: AT&T Mobility, c/o Jared Kearsley, Epic Wireless Group, LLC**

B. **Owner:** Matt Lippman

C. **Staff Contact:** Gina Hamilton, El Dorado County Planning and Building Department, 2850 Fairlane Court, Placerville, CA 95667, email: gina.hamilton@edcgov.us

D. **Project Name:** Conditional Use Permit CUP19-0007
AT&T CAF II, Frenchtown 2 (Shingle Springs)

E. **Project Location:** On the west side of Big Canyon Road, approximately 690 feet south of the intersection with French Creek Road in the Shingle Springs area, Supervisory District 3

F. **Type of Application**: Conditional Use Permit

G. **Assessor's Parcel Number**: 091-070-022 (Attachment 1)

H. **Coordinates: Section 18, Township 10 North, Range 10 East**

I. **Parcel Size**: 85.05 Acres

J. **Lease area size:** Approximately 1,600 square feet (SF).

K. **Zoning:** Rural Lands, 10 acres (RL-10) (Attachment 2)

L. **General Plan Designation**: Rural Residential (RR) (Attachment 3)

M. **Environmental Setting:** The project site is located approximately 690 feet south of the intersection with French Creek Road in the Shingle Springs area. The project lease area is located in the northern portion of an 85.05 acre parcel. The project site is dominated by oak woodlands and topography within the project parcel ranges from flat to moderately steep hillsides with slopes ranging from 0 percent to 30 percent. The tower location's elevation is approximately 1,145.5 feet above sea level and the tower site is virtually flat.

N. **Surrounding Land Uses**:

Adjacent and nearly land uses consist mainly of rural residential land uses and oak woodland.

	Zoning	General Plan	Land Use
Project Site	RL-10	RR	Undeveloped
North	RL-10	RR	Single family residences
South	AG-40/RL-10	RR	Single family residences/ Undeveloped
East	RL-10	RR	Single family residences/ Undeveloped
West	RL-10	RR	Single family residences

O. **Project Description:** A request for a Conditional Use Permit to construct and operate an unmanned wireless telecommunication facility on the project site (APN 091-070-22) located in the Shingle Springs area. Section 130.40.130 of the Zoning Ordinance allows wireless facilities within the Rural Lands, 10 acres (RL-10) zone, subject to the approval of a Conditional Use Permit by the Planning Commission.

The proposed facility consists of a 160-foot stealth monopine wireless co-locatable communication facility with twelve (12) antennae panels, twenty-four (24) remote radio units, one (1) GPS unit, and associated equipment concealed on the tower. The facility would include a new 8-foot x 8-foot walk-in equipment shelter and associated equipment,

and emergency backup 30kW power generator located within a 40-foot x 40-foot (1,600 square foot) fenced lease area. The proposed antennas would be concealed with "needle socks" and painted brown to match the tower.

Construction of the facility would include a 15-foot wide AT&T utility easement consisting of a 12-foot wide, 709-foot gravel access road that would provide access to the facility from French Creek Road. A 16-foot wide gate and fire department knox box would be installed at the entrance to the access road. The proposed project would include extension of telco and power to the project lease area. There is an existing power pole on the project parcel near the northern boundary which would be the point of contact for the proposed project. An existing telco line running north-south near the eastern boundary of the parcel would provide telco services to the proposed project. Site plans, including elevation and utility easement information, are included as Attachment 4.

The project lease area is located in the northern portion of an 85.05 acre parcel, approximately 715 feet from the proposed access point at the northern property line at the intersection of French Creek Road and Big Canyon Road, 360 feet from the eastern property line, approximately 665 feet from the western property line, and approximately 0.4 miles from the southern property line.

Access to the lease area and operation of the facility will not interfere with existing uses on the property. Planning Commission approval of this facility is being requested pursuant to the requirements of Section 130.40.130 of the Zoning Ordinance (Communication Facilities).

The unmanned facility would provide wireless high speed internet and enhanced wireless network coverage 24 hours a day, 7 days a week. Maintenance workers will visit the site approximately once per month to once per quarter. The generator will be operated once per week on weekdays between the hours of 8:00 a.m. and 7:00 p.m. for approximately 15 minutes for maintenance purposes and during emergency power outages. There would be temporary construction noise associated with development of the facility.

Required fire protection services are provided to the project site by the El Dorado County Fire Protection District (Fire District).

Co-Location: The tower will be built to allow for co-location opportunities. There are no existing towers in the search area. The targeted area is a relatively low populated area; therefore, typical cellular services are less prone to be present

Site Selection Process: The selection of a location for a wireless telecommunication facility that is needed to improve service and provide reliable coverage is dependent upon many factors, such as: topography, zoning regulations, existing structures, co-location opportunities, available utilities, access, and the existence of a willing landlord. Wireless communication utilizes line-of-sight technology that requires facilities to be in relative close proximity to the wireless handsets to be served. Each site is unique and must be investigated and evaluated on its own terms.

AT&T's objective for the proposed project is to provide wireless hi-speed broadband internet to the surrounding community and cellular services to the nearby residences in addition to the nearby public roadways. Just south, west and north of the search ring are relatively dense underserved areas. After running a coverage simulation at the site

location, AT&T is anticipating meeting and exceeding their FCC objective for the targeted area and will fill significant coverage gap in the targeted area. The proposed site's elevation is approximately 1,145 feet while the surrounding community's elevation averages around 1,000 feet, giving the homes within the surrounding community great potential for line of site to the tower. The service coverage in this portion of the County is described in the accompanying zoning propagation maps (coverage maps)(Attachment 5).

After establishing the need for the proposed facility, AT&T set out to identify the least intrusive means of achieving the necessary service objective. Upon review of the region AT&T found no existing wireless facility locations within the search ring. This is a relatively low populated area and typical wireless carriers are not present in such areas. AT&T's primary focal point of this project is covering the "underserved" area by servicing the most living units as possible.

Alternative Sites Analysis: AT&T considered six alternative sites for facilities to fill the identified coverage gap in this portion of El Dorado County. AT&T searched for, but did not find, feasible co-location opportunities in and around the coverage objective (Attachment 6). Property owners for three candidate sites did not respond to AT&T's letters of interest. Three property owners indicated interest in leasing space for the facility. However, based on viability, siting needs, and/or high visibility, parties were unable to determine an appropriate facility location on two of these properties. The third property was initially identified as the preferred site; however, after further discussion with the property owner, they elected not to encumber their property and passed on leasing the site to AT&T. AT&T's alternative sites analysis is included in Attachment 6.

RF Emissions: An Electromagnetic Fields/Radio Frequency Report (EMF/RF) for the proposed wireless facility was prepared and submitted to the El Dorado County Planning Department. It demonstrates compliance with the latest FCC Wireless Facility Standards for emissions and exposure levels (Attachment 7).

Construction Schedule: The construction of the facility will be in compliance with all local rules and regulations, and will be limited to 8:00 am – 5:00 pm. The crew size will range from two to ten individuals. The construction phase of the project is anticipated to last approximately two to three months and will not exceed acceptable construction noise levels.

Development standards: The tower would be a stealth monopine. The pole would be painted with flat brown non-glare paint. The antenna and pole will be concealed by faux monopine branches with needle-style antenna socks. The site is located within the Rural Lands, 10 acres (RL-10) zone, which requires 30-foot front, rear, and side setbacks. The project lease area is located in the northern portion of an 85.05 acre parcel, approximately 715 feet from the proposed access point at the northern property line at the intersection of French Creek Road and Big Canyon Road, 360 feet from the eastern property line, approximately 665 feet from the western property line, and approximately 0.4 miles from the southern property line.

Lighting: The only lighting on the facility would be located by the entry door to the pre-fabricated equipment shelter and at the rear of the equipment shelter near the HVAC unit. The light will be shielded, down-tilted, and include a motion sensor.

Compliance with FCC standards: The proposed project will not interfere with any TV, radio, telephone, satellite, or other signals. Any interference would be against federal law and a violation of AT&T Wireless's FCC license.

Public Agency Approvals: El Dorado County Planning and Building Department, El Dorado County Fire District.


THIS IS NOT A SITE SURVEY
PLAN NORTH
SITE PLAN
FRENCH CREEK ROAD
PROPERTY BOUNDARY
BIG CANYON ROAD
A.P.N. 091-070-022-000
(E) POWER POLE, (P) POWER POC
(P) 6' AT&T NON-EXCLUSIVE UTILITY EASEMENT
(E) BARBWIRE FENCE TO BE REMOVED AT ACCESS ROAD
(P) 6' AT&T NON-EXCLUSIVE UTILITY EASEMENT
(E) J-POLE (P) TELCO POC
(P) 14' ACCESS GATE W/ (P) FIRE DEPARTMENT KNOX BOX AT (E) BARBWIRE FENCE
(E) TELCO POLE
(E) OVERHEAD UTILITY LINES
(E) TELCO POLE
(P) AT&T 15' NON-EXCLUSIVE ACCESS & UTILITY EASEMENT W/ (P) 12' WIDE IMPROVED GRAVEL ROAD, ± 709' LN. FT.
(P) TREES TO BE TRIMMED OR LIMBED UP TO REQUIRED VERTICAL FIRE CLEARANCE, TYP.
(P) TURN-OUT
(P) TELCO UNDERGROUND CONDUIT ROUTE: ±377' INCLUDING (1) 4" UNDERGROUND CONDUIT WITH INNERDUCT AND MULE TAPE BY AT&T MOBILITY.
(P) POWER UNDERGROUND CONDUIT ROUTE: ±690' INCLUDING (1) 4" UNDERGROUND CONDUIT WITH MULE TAPE BY AT&T MOBILITY.
(P) FIRE DEPARTMENT HAMMER HEAD= ± 2,052 SQ. FT.
(P) EQUIPMENT ENCLOSURE PLAN
(P) 30"X60" SPLICE BOX BY AT&T MOBILITY
(P) RFNF EQUIPMENT SHELTER
(P) 30kW PROPANE GENERATOR W/ ATTACHED 190 GALLON BELLY TANK
(P) AT&T ±154'-0" TALL MONOPINE W/ FOLIAGE AT ±140'-0"
(P) AT&T 40'X40' LEASE AREA
(P) APPROXIMATE CENTERLINE P.U.&E. EASEMENT
(P) 6' AT&T NON-EXCLUSIVE UTILITY EASEMENT
SECTOR 'A' AZIMUTH 14°
SECTOR 'B' AZIMUTH 134°
SECTOR 'C' AZIMUTH 254°
NOTES:
1. NO GRADING OR REMOVAL OF VEGETATION SHALL OCCUR WITH 100' RADIUS OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.
2. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT DIG ALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES IN THE RIGHT OF WAY. IF CONFLICTS, CONTRACTOR TO CONTACT POC.
PROJECT SITE PLAN
SITE TYPE: MONOPINE/EQUIPMENT SHELTER
FRENCHTOWN 2 - BUTTE MEADOWS
5101 FRENCH CREEK RD
OROVILLE, CA 95966
PREPARED FOR
at&t
EPIC WIRELESS GROUP, LLC
AT&T SITE NO: CVU0082
PROJECT NO: 13757-BPA
DRAWN BY: SAD
CHECKED BY: CES
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 EATHA WAY
SACRAMENTO, CA 95821
craighornerpe@yahoo.com
SITE PLAN
A-1.1

P. POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST SETTING

Q. Environmental Factors Potentially Affected:

The environmental factors checked below could be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

[ ] 4.1 Aesthetics	[ ] 4.2 Agriculture Resources	[ ] 4.3 Air Quality
[X] 4.4 Biological Resources	[X] 4.5 Cultural Resources	[ ] 4.6 Geologic Processes
[ ] 4.7 Geologic Processes	[ ] 4.8 Greenhouse Gas Emissions	[ ] 4.9 Hazards/Hazardous Material
[ ] 4.9 Hydrology/Water Quality	[ ] 4.10 Land Use/Planning	[ ] 4.11 Mineral Resources
[ ] 4.12 Noise	[ ] 4.13 Housing	[ ] 4.14 Public Services
[ ] 4.15 Recreation	[ ] 4.16 Transportation/Traffic	[X] 4.17 Tribal Cultural Resources
[ ] 4.18 Utilities/Service Systems	[ ] 4.19 Wildfire	[X] 4.20 Mandatory Findings of Significance

2.0 DETERMINATION

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 "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 in 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.

Signature: _____ Date: 7-7-2020

Printed Name: GINA HAMILTON For: El Dorado County

Signature: _____ Date: 7-7-2020

Printed Name: ROMMEL PABALINAS For: El Dorado County

3.0 ENVIRONMENTAL IMPACTS:

3.1 AESTHETIC/VISUAL RESOURCES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting:

The project site area is characterized as oak woodland. The 85.05-acre project parcel is undeveloped. The site is not located within, or in the vicinity of, a scenic corridor or highway.

Impact Discussion:

(a) Scenic Vista and (b) Scenic Resources: Less Than Significant Impact. The project site is not located along a designated state scenic-highway or an identified scenic area. The project parcel is located south of the intersection of French Creek Road and Big Canyon Road in the Shingle Springs area –approximately 2.3 miles south of US Highway 50 and approximately 1.9 miles east of South Shingle Road. The tower itself will be painted with flat brown non-glare paint and has been designed as a stealth monopine to blend with the surrounding environment. The antenna and tower will be concealed by faux monopine branches with needle-style antenna socks. Supporting ground equipment within the lease area, including a walk-in equipment shelter and emergency backup generator, would be concealed from view mainly due to topography and its location on the project parcel.

The nearest off-site residential dwellings are approximately 730 feet northwest and 780 feet northeast of the proposed lease area. The applicant supplied photosimulations of the proposed stealth monopine tower as seen from different locations in the project area (Attachment 8).

The location proposed would not result in a significant impact to scenic vistas and to the area's scenic resources for the purpose of CEQA.

(c) Visual Character or Quality: Less Than Significant Impact. The project site is undeveloped with oak woodland and is surrounded by oak woodland in a rural residential area. A stealth monopine is designed to resemble a pine tree to blend in with the surrounding environment. In this case, there are oak trees on and surrounding the project site as well as on adjacent properties. The monopine would be similar in size, albeit taller, to the surrounding trees. The location proposed will not substantially degrade the existing visual character of the site or its surroundings and is not expected to result in a significant impact to the area's visual character for the purpose of CEQA.

(d) Substantial Light or Glare: Less Than Significant Impact. The tower will not be lighted, and the County discourages additional lighting in the area. Further, any future lighting would be subject to Section 130.34.020 of the El Dorado County Zoning Code, which requires that all outdoor lighting shall be located, adequately shielded, and directed such that no direct light falls outside the property line, or into the public right-of-way. Proposed lighting for the equipment shed will meet these requirements. With the implementation of outdoor lighting regulations at the time of development, the proposed project would not create new sources of substantial lighting or glare that would generate a significant impact.

Mitigation Measure: None required.

FINDING: For this Aesthetic/Visual Resources category, no significant impacts would be anticipated to result from the project

3.2 AGRICULTURE RESOURCES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Impact Discussion:

(a) Convert Farmland: No Impact. The project site is zoned Rural Land-10 Acres (RL-10). The RL-10 zone allows wireless communications facilities, with approval of a Conditional Use Permit pursuant to El Dorado County Zoning Code Section 130.40.130.6.b (New Towers or Monopoles). There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the project site.

(b) Conflict with Agricultural Zoning, or Williamson Act Contract: No Impact. The project site is zoned RL-10 and is bound on all sides by RL-10 zoned parcels, other than the southwestern boundary. The southwestern boundary is adjacent to a parcel zoned Agricultural Grazing, 40-Acre (AG-40), which is under Williamson Act Contract. Other zones in the area include Rural Land-40 Acres (RL-40), Residential Estate-5 Acres (RE-5), and Residential Estate 10-Acres (RE-10) (Attachment 2). The project site is approximately 0.4 miles from the southern property line. The proposed project is the construction and operation of an unmanned wireless communications facility and would not conflict with agricultural zoning or existing uses on the parcel to the southwest.

(c) Conflict with Zoning for Forest Land or Timberland: No Impact. The project site is not located in a timber resource zoning category such as Timber Mountain (TM), Timber Production (TPZ), or Resource Conservation (RC). The project site is also not classified as forest land, pursuant to California Public Resources Code Section 12220(g). Therefore, the proposed project would not conflict with, or cause the rezoning of, a timber resource zoning designation.

(d) Loss or Conversion of Forest Land: No Impact. The project site is not considered forest land and therefore, the proposed project would not result in loss or conversion of forest land to a non-forest use.

(e) Indirect Conversion of Farmland: No Impact. The project site is not considered Farmland or forest land. The proposed project would not result in loss or conversion farmland to a non-agricultural use or the loss or conversion of forest land to a non-forest use.

Mitigation Measure: None required.

FINDING: For this Agricultural category, the thresholds of significance have not been exceeded and no impacts would be anticipated to result from the project.

3.3 AIR QUALITY:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Setting:

El Dorado County's air pollution management is the responsibility of the El Dorado County Air Quality Management District (EDCAQMD), and the project is subject to federal, state, and local regulations. The wider Sacramento Region, including portions of El Dorado County, is currently designated nonattainment for federal 8-hour ozone and PM2.5, while it currently meets the National Ambient Air Quality Standards (NAAQS) for carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead.

The federal Clean Air Act (CAA) requires plans which identify how nonattainment areas will attain and/or maintain the NAAQS. The CAA requires the US EPA to review each plan and any plan revisions and to approve the plan or plan revisions if consistent with the CAA. Key elements of these plans include emission inventories, emission control strategies and rules, air quality data analyses, modeling, air quality progress and attainment or maintenance demonstrations. The Sacramento Air Quality Management District has a prepared attainment plans, available at: http://www.airquality.org/air-quality-health/air-quality-plans/federal-planning.

The California Air Resources Board (CARB) also prepares and submits to the EPA a State Implementation Plan (SIP) explaining how the state will attain compliance with Federal clean air standards. The EDCAQMD rules are federally enforceable as parts of the SIP, and are available at: https://www.arb.ca.gov/drdb/ed/cur.htm.

Impact Discussion:

(a) - (c) Conflict with Air Quality Plans or Standards and (b) Expose Sensitive Receptors To Substantial Pollutants: Less Than Significant Impact. Construction activities, a source of organic gas emissions, will be limited to the stealth monopine, related ground equipment, utilities, and access drive. During construction, various diesel-powered vehicles and equipment would be in use. Construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction-related sources are mobile and transient in nature. Because of its temporary duration and the limited area of disturbance, health risks from construction emissions of diesel particulate would be less-than-significant impact. The project is not expected to create any significant amounts of fugitive dust, oxides of nitrogen, or reactive organic gases emissions.

The proposed project would include an emergency backup 30kW power generator. The standby generator is for emergency use only, therefore the project would not create on-going emissions. The ongoing project would not generate any significant amounts of fugitive dust because the only soil disturbance would be some minor excavation for the facility.

The effects of construction activities would be an increase in dust fall, and locally elevated levels of particulates downwind of construction activity. Negligible amounts of emissions would be generated by construction equipment during site development activities, because of the limited amount of construction equipment and time needed to install the facility.

Construction activities associated with the proposed project would temporally generate additional vehicle traffic in the project area. Once construction has been completed, traffic will return to pre-construction levels with the addition of a monthly to quarterly maintenance site visit.

Due to its limited construction and operational scope, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This impact would be less than significant.

(e) Create Objectionable Odors: Less Than Significant Impact. The standby generator would be for emergency use only and would not result in objectionable odors affecting a substantial number of people. Otherwise, the proposed stealth monopine and ground related equipment will not use anything that will generate objectionable odors to the surrounding properties or area.

Mitigation Measure: None Required.

FINDING: The proposed project would not affect the implementation of regional air quality regulations or management plans. The proposed project would not cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts.

3.4 BIOLOGICAL RESOURCES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 or the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means)?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy ordinance?	☐	☒	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Regulatory Setting

Jurisdictional Waters of the United States, including Wetlands

Waters of the United States (U.S.), including wetlands, are broadly defined to include navigable waterways, and tributaries of navigable waterways, and adjacent wetlands. Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface water or groundwater, supporting vegetation adapted to life in saturated soil. Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the U.S. Army Corps of Engineers (USACE). USACE holds sole authority to determine the jurisdictional status of waters of the U.S., including wetlands. Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetland and waters of the U.S. provide critical habitat components, such as nest sites and reliable source of water for a wide variety of wildlife species.

Special-Status Species

Many species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. A sizable number of native species and animals have been formally designated as threatened or endangered under State and Federal endangered species legislation. Others have been designated as "Candidates" for such listing; still others have been designated as "Species of Special Concern" by the California Department of Fish and Wildlife (CDFW). The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered. Collectively, these plants and animals are referred to as "special status species."

Limited, direct and indirect impacts to biological resources may result from the small amount of development enabled by the project, including the loss and/or alteration of existing undeveloped open space that may serve as habitat. California Environmental Quality Act Guidelines Section 15065 requires a mandatory finding of significance for projects that have the potential to substantially degrade or reduce the habitat of a threatened or endangered species, and to fully disclose and mitigate impacts to special status resources.

Impact Discussion

The approximately 0.42-acre Biological Study Area (BSA) consists of interior oak woodland, dirt roads, and disturbed areas

(a) Candidate, Sensitive, or Special Status Species: Less Than Significant Impact with Mitigation Incorporated. The BSA provides habitat for three special-status plants which primarily or only occur within the Pine Hill formation within the Sierra Nevada foothills of California. These three plants are also ranked by the California Native Plant Society (CNPS). One of these plants, El Dorado County bedstraw (*Galium californicum ssp. sierra*), is state listed as Rare and federally-listed as Endangered. The field survey was conducted during the evident and identifiable blooming period for these plants. These plants were not observed during the biological survey.

The project site is located in El Dorado County Rare Plant Mitigation Area 2. According to El Dorado County Ordinance Section 130.71.060, development occurring within Rare Plant Mitigation Areas 1 or 2 requires payment of an in-lieu fee or participation in off-site rare plant mitigation.

Nesting birds regulated by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code could occur on the project site. Biological Resources Mitigation Measure #1, below, requires pre-construction bird surveys to confirm absence from the site and the implementation of avoidance measures in the event these bird species are detected. With this mitigation incorporated, impacts would be less than significant.

(b) Riparian Habitat or Sensitive Natural Communities and (c) Wetlands: No impact. The project site is located in a rural residential area and does not have any, streams, creeks, or riparian habitat on site. Big Canyon Creek is approximately 0.75 miles southeast of the project site and the project will not affect the creek. There are no potentially jurisdictional wetlands waters in the BSA.

(d) Movement or Wildlife Corridors: Less Than Significant with Mitigation Incorporated. The BSA is within an Important Biological Corridor defined in the El Dorado County General Plan. The proposed project would be an unmanned wireless communications facility located within a 40-foot x 40-foot (1,600 square foot) fenced lease area. The proposed will not impede wildlife movement or migration as there are no barriers proposed as part of the project. The proposed project is not expected to result in impacts to wildlife migration corridors.

The construction of new communication towers creates a potentially significant impact on migratory birds covered by the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and related Code of Federal Regulations designed to implement the MBTA, the Endangered Species Act and Bald and Golden Eagle Act. The guidelines are based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at monopoles. Some of the guidelines are:

a. New facilities should be collocated on existing towers or other existing structures.
b. Towers should be less than 200 feet above ground level
c. Towers should be freestanding (i.e., no guy wires)
d. Towers and attendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the monopole "footprint".
e. New towers should be designed structurally and electrically to accommodate the applicant/licensee's antennas and antennas for at least two additional users (minimum of three users for each monopole structure.
f. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.
g. Monopoles no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

Although the proposed project will be in a relatively small portion of the project site, there is the potential for impact to the nesting of migratory and raptors in the project area.

Biological Resources Mitigation Measure BIO-1, below, is therefore included to avoid potential impacts.

(e) Conflict With Policies Protecting Biological Resources: Less Than Significant with Mitigation Incorporated. The proposed project would require the removal of 0.07 acre of oak woodland. None of the trees to be removed are considered heritage trees (as defined in the El Dorado County Zoning Ordinance Section 130.39.030). According to El Dorado County Ordinance Section 130.39.070.C, Oak Tree and Oak Woodland Removal Permits (Discretionary Development Projects), identifies mitigation options for development projects, including an in-lieu fee payment based on the percent of on-site Oak Woodland impacted by the development. The proposed project would be conditioned to mitigate for impacts to oak woodlands through payment of the County's in-lieu fee. The current in-lieu fee is $8,285 per acre, as specified in the County Oak Resources Management Plan (ORMP). The in-lieu fee cost for a 0.07-acre impact to oak woodland is $579.95.

In addition, the proposed project would incorporate Biological Resources Mitigation Measure BIO-2, below, to avoid potential impacts to oak trees in oak woodlands bordering the project site, which may be affected by project operation and project construction activities such as clearing, grading, and pruning for clearance requirements.

(f) Conflict with Conservation Plans: No Impact. This project site is not located within an approved habitat conservation plan area.

Mitigation Measures

BIO-1. Migratory and Special-Status Bird Species:

The project site provides suitable nesting habitat for nesting birds and birds-of-prey regulated by the federal Migratory Bird Treaty Act (MBTA), and/or California Fish and Game Code that could occur in the BSA. Under the MBTA and CA Fish and Game Code §3503, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from 15 February through 31 August.

Nesting bird avoidance and mitigation measures:

- Tree and vegetation removal shall occur outside of the nesting season (15 February through 31 August annually). All tree removal shall occur between 1 September and 14 February, which is outside of nesting season for MBTA and Fish and Game Code protected birds. If work occurs outside the nesting season, there will be no need to conduct a preconstruction survey for active nests.
- If project work occurs during the nesting season, a qualified biologist shall conduct a pre-construction survey for nesting birds of prey and other birds protected by the MBTA and Fish and Game Code within 15 days prior to the start of construction. The survey area shall cover the Project, a 500-foot radius for nesting birds of prey, and a 100 foot radius for all other MBTA and Fish and Game Code protected birds. If no active nest of a bird of prey, MBTA bird, or other Fish and Game Code-protected bird is found, then no further mitigation measures are necessary.
- Should an active nest of a protected bird be identified, an exclusion zone of 500 feet shall be established around the nest if it is a bird of prey, and 100 feet if it is a protected bird

other than a bird of prey. Buffer sizes may be adjusted at the discretion of the biologist depending on the species of bird, the location of the nest relative to the project, the existing level of disturbance, and other site-specific conditions. No work will be allowed in the exclusion zone until the biologist determines that the nest is no longer active, or monitoring determines that a smaller ESA will protect the active nest.

- From 15 January through 31 August, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.
- If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

Monitoring Requirement: This mitigation measure shall be noted on grading and construction plans. The Planning Department shall verify the completion of survey prior to issuance of grading and building permits.

Monitoring Responsibility: El Dorado County Planning and Building Department.

BIO-2. Oak Woodland Preservation

Pre-construction

- A tree protection zone (TPZ) shall be established around retained trees. The TPZ shall extend 20 feet beyond the dripline where possible given grading limits. The TPZ around retained trees near the limit of grading will be much smaller.
- The TPZ shall be marked with minimum 4-foot high orange construction fence hung on posts (such as T-posts) before clearing occurs. The fence shall not be supported by trees or other vegetation. The fence shall remain in place until construction is complete.
- There shall be no driving, parking, or storage of supplies or equipment within the TPZ. Entry of construction personnel into the TPZ is not allowed except for maintenance of the fence or other activities undertaken for the protection of trees.
- The tree canopy along the TPZ boundary shall be inspected prior to vegetation clearing in the area of grading. The canopy of trees to be removed shall be pruned where it is intertwined with the canopy of retained trees, or wherever felling of trees to be removed may damage the canopy of retained trees. The canopy of retained trees that overhangs the area to be graded shall be pruned to the minimum height required for construction.
- Pruning of retained trees shall be conducted in accordance with American National Standard Institute (ANSI) A300 Pruning Standard and adhere to the most recent edition of ANSI Z133.1.

During Vegetation Clearing

- Brush clearing along the TPZ boundary may be necessary in some areas for installation of a fence. Brush along the TPZ boundary, outside areas to be graded, shall be cut near ground level; not removed by the roots. Brush shall be cut and removed so that trees in the TPZ are not harmed. Brush shall not be disposed of in the TPZ.

- Trees in the area of grading shall be felled in a direction away from the TPZ

Project Operation

Most of the trees in the areas of avoided oak woodland are mature. All of them have been growing under the natural moisture regime without irrigation and are adapted to dry summer/fall conditions. Extra irrigation water should not be applied to the trees, especially within a few feet of the trunk.

Monitoring Requirement: This mitigation measure shall be noted on grading and construction plans. The Planning Department shall verify the installation of construction fencing to delineate the tree protection zone (TPZ) prior to issuance of grading and building permits.

Monitoring Responsibility: El Dorado County Planning and Building Department.

Finding: With implementation of the above identified mitigation measures, for this Biological Resources category, impacts would be less than significant.

3.5 CULTURAL RESOURCES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);

B. Are associated with the lives of persons significant in our past (persons);

C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or

D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of persons important in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

B. Are associated with the lives of persons important to local, California, or national history.

C. Embody the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values.

D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological, and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

Discussion: In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or culturally significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

Impact Discussion:

The Cultural and Historical Resources Investigation prepared in August 2019 for the proposed project identified cultural and historic resources on the project parcel.

(a) Historical Resources and (c) Paleontological Resources: Less Than Significant. The Cultural and Historical Resources Investigation prepared for the proposed project determined that the resources on the project parcel are considered ineligible for the National Registry or the California Register listings. Further, the resources on the site are not considered unique or historically significant. The site investigation determined that the proposed project would not have any direct physical impact on the resources nor would its presence reduce the integrity of the setting. As such, this impact would be less than significant.

(b) Archaeological Resources and (d) Human Remains: Less Than Significant with Mitigation Incorporated. The Cultural and Historical Resources Investigation identified cultural resources on the project parcel. The site investigation determined that the proposed project would not have any direct physical impact on the known resource. Given the presence of known resources identified during the site survey, there may be potential for the discovery of previously-undiscovered resources during construction. Cultural Resources Mitigation Measures #2 and #3, below, would require archaeological monitoring of ground disturbance activities during construction of the proposed project.

Mitigation Measures

CR-1. Archaeological Resources

The following shall be incorporated as a note on the grading/improvement plans:

In the event archeological resources are discovered during grading and construction activities, the applicant shall ensure that all such activities cease within 50 feet of the discovery until an archaeologist can examine the find in place. If the find is determined to be a "unique archaeological resource", contingency funding, and a time allotment sufficient to allow recovering an archaeological sample or to employ one of the avoidance measures may be required under the provisions set forth in Section 21083.2 of the Public Resources Code. Construction work could continue on other parts of the project site while archaeological mitigation takes place.

If the find is determined to be a "unique archeological resource", the archaeologist shall determine the proper method(s) for handling the resource or item in accordance with Section 21083.2(b-k). Any additional costs as a result of complying with this section shall be borne by the project applicant. Grading and construction activities may resume after appropriate measures are taken or the site is determined a "nonunique archeological resource".

Monitoring Requirement: This mitigation measure shall be noted on grading and construction plans. The Planning Department shall verify the inclusion of this notation on the grading plans prior to the issuance of a grading permit.

Monitoring Responsibility: El Dorado County Planning and Building Department.

CR-2. Human Remains

The following shall be incorporated as a note on the grading/improvement plans:

In the event of the discovery of human remains, all work shall cease and the County coroner shall be immediately notified pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code and Section 5097.98 of the Public Resources Code. The Coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the Coroner of the discovery or recognition of the human remains. If the Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Section 5097.98 of the Public Resources Code, with the most likely descendants regarding their recommendations. The descendants shall complete their inspection and make their recommendation within 48 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials or other proper method(s) for handling the remains in accordance with Section 5097.98(b-h). Any additional costs as a result of complying with this section shall be borne by the project applicant. Grading and construction activities may resume after appropriate measures are taken.

Monitoring Requirement: This mitigation measure shall be noted on grading and construction plans. The Planning Department shall verify the inclusion of this notation on the grading plans prior to the issuance of a grading permit.

Monitoring Responsibility: El Dorado County Planning and Building Department.

FINDING: As conditioned and with adherence to El Dorado County Code of Ordinances (County Code), and with implementation of the above identified mitigation measures, for this Cultural Resources category, impacts to cultural resources will be less than significant.

3.6 ENERGY:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Regulatory Setting

Federal Energy Policy Act of 2005

The Federal Energy Policy Act of 2005 (EP Act) was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy (U.S. DOE). The EP Act addresses energy production in the U.S., including oil, gas, coal, and alternative forms of energy and energy efficiency and tax incentives. Energy efficiency and tax incentive programs include credits for the construction of new energy efficient homes, production or purchase of energy efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of greenhouse gases (GHG).

State Laws, Regulations, and Policies

California Building Standards Code (Title 24, California Code of Regulations), including Energy Code (Title 24, Part 6) and Green Building Standards Code (Title 24, Part 11)

California first adopted the California Buildings Standards Code in 1979, which constituted the nation's first comprehensive energy conservation requirements for construction. Since this time, the standards have been continually revised and strengthened. In particular, the California Building Standards Commission adopted the mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]) in January 2010. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. The California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code), and associated regulations in CALGreen were revised again in 2013 by the California Energy Commission (CEC). The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The next update to the Title 24 energy efficiency standards will occur in 2016 and take effect in 2017. The California Building Code

applies to all new development, and there are no substantive waivers available that would exempt development from its energy efficiency requirements. The California Building Code is revised on a regular basis, with each revision increasing the required level of energy efficiency.

Senate Bills 1078/107 and Senate Bill 2—Renewables Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewables Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB 2 (2011) set forth a longer range target of procuring 33% of retail sales by 2020. Implementation of the RPS will conserve nonrenewable fossil fuel resources by generated a greater percentages of statewide electricity from renewable resources, such as wind, solar, and hydropower.

Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006)

Water conservation reduces energy use by reducing the energy cost of moving water from its source to its user. Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006) requires the Department of Water Resources (DWR) to adopt an Updated Model Water Efficient Landscape Ordinance (MWELO) and local agencies to adopt DWR's MWELO or a local water efficient landscape ordinance by January 1, 2010 and notify DWR of their adoption (Government Code Section 65595). The water efficient landscape ordinance would apply to sites that are supplied by public water as well as those supplied by private well. Local adoption and implementation of a water efficient landscape ordinance would reduce per capita water use from new development.

Senate Bill X7-7 (Chapter 4, Statutes of 2009)

SB X7-7 (Chapter 4, Statutes of 2009), the Water Conservation Act of 2009, establishes an overall goal of reducing statewide per capita urban water use by 20% by December 31, 2020 (with an interim goal of at least 10% by December 31, 2015). This statute applies to both El Dorado Irrigation District (EID) and the Georgetown Divide Public Utilities District (GDPUD). EID has incorporated this mandate into its water supply planning, as represented in its Urban Water Management Plan 2010 Update (El Dorado Irrigation District 2011) and all subsequent water supply plans. Reducing water use results in a reduction in energy demand that would otherwise be used to transport and treat water before delivery to the consumer.

Assembly Bill 2076, Reducing Dependence on Petroleum

The CEC and Air Resources Board (ARB) are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

Senate Bill 375—Sustainable Communities Strategy

SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Each metropolitan planning organization (MPO) across California is required to develop a sustainable communities strategy (SCS) as part of their regional transportation plan (RTP) to meet the region's GHG emissions reduction target, as set by the California Air Resources Board. The Sacramento Area Council of Governments (SACOG) is the MPO for the Sacramento region, including the western slope of El Dorado County. SACOG adopted its SB 375-compliant Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 in April 2012.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009, 2012 rule-making)

AB 1493 required the ARB to adopt vehicle standards that will improve the efficiency of light duty autos and lower GHG emissions to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The improved energy efficiency of light duty autos will reduce statewide fuel consumption in the transportation sector.

CEQA and CEQA Guidelines

Section 15126.2(b) of the CEQA Guidelines requires detailed analysis of a project's energy impacts. If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the environmental document shall prescribe mitigation for those impacts. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.

CEQA Guidelines, Appendix F: Energy Conservation

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, Energy Conservation, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places "particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy," and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be "considered in an EIR to the extent relevant and applicable to the project." Mitigation for potential significant energy impacts (if required) could include implementing a variety of strategies, including measures to reduce wasteful energy consumption and altering project siting to reduce energy consumption.

Local Laws, Regulations, and Policies

The County General Plan Public Services and Utilities Element includes goals, objectives, and policies related to energy conservation associated with the County's future growth and development. Among these are is Objective 5.6.2

(Encourage Energy-Efficient Development) which applies to energy-efficient buildings, subdivisions, development and landscape designs. Associated with Objective 5.6.2 are two policies specifically addressing energy conservation:

> Policy 5.6.2.1: Requires energy conserving landscaping plans for all projects requiring design review or other discretionary approval.
>
> Policy 5.6.2.2: All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Further, the County has other goals and policies that would conserve energy even though not being specifically drafted for energy conservation purposes (e.g., Objective 6.7.2, Policy 6.7.2.3).

Impact Discussion:

(a) Unnecessary Consumption: Less Than Significant. Project-related construction and operation would be consistent with applicable energy legislation, policies, and standards for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy) as described in the Regulatory Setting. The proposed project would conform to building code and other state and local energy conservation measures described in the Regulatory Setting. Therefore, the proposed project would not result in the inefficient or wasteful consumption of energy.

(b) Conflict with Energy Plans: Less Than Significant. Development under the project will be consistent with all applicable state and local plans for renewable energy or energy efficiency and will not obstruct implementation of applicable energy plans. This impact would be less than significant.

FINDING: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. The project would be consistent with all applicable state and local plans for renewable energy or energy efficiency. For the Energy category, impacts would be less than significant.

3.7 GEOLOGIC PROCESSES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
1. 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.	☐	☐	☒	☐
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

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. Be located on expansive soil, as defined in Table 18-1- B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal or wastewater?	☐	☐	☐	☒

Impact Discussion:

(a.1) - (a.4) Expose People Or Structures To Seismic-Related Hazards or Landslides: Less Than Significant Impact. No seismic impacts, including seismic-related ground failure impacts are anticipated since no rupture of a known earthquake fault exists in the project area. Further, the proposed project would be consistent with El Dorado County General Plan Objective 6.3.2, to address county-wide seismic hazards.

Like most of north-central California, the project site can be expected to be subjected to strong seismic ground shaking at some future time. Accordingly, the proposed wireless communications facility would be designed and installed in accordance with building code requirements. Because any structures that are built during the course of the proposed project will be designed and installed in accordance with building code standards for the appropriate Seismic Hazard Zone, potential geologic impacts would be less than significant. Due to the relatively level proposed project site, minimum disturbance of the project and existing vegetation on the site, the potential for a land slide is unlikely.

(b) Soil Erosion Or Loss of Topsoil and (c) Unstable Geologic Unit Or Soil: Less Than Significant Impact. A Geotechnical Investigation Report was prepared for the project site in February 2020 (Attachment 9). The report indicates that soil conditions and the presence of shallow rock and metavolcanic rock as well as the potential for perched water may create unstable soil conditions; therefore, construction of the proposed project may require special design and/or construction provisions. The project would be conditioned to require preparation of a site improvement/grading plan prepared by a professional civil engineer for approval prior to issuance of any grading or building permits. The site improvement/grading plan should include site preparation and construction recommendations identified in the Geotechnical Investigation Report including, and not limited to, those identified as site design Option 1. In addition, the project would be required to comply with applicable portions of the building code.

During project construction activities, soil would be exposed, and there would be an increased potential for erosion of soils compared with existing conditions. In the event that perched water is encountered above onsite rock during groundwork activities, use of a sump system or dewatering may be required. Additionally, as indicated in the Geotechnical Investigation Report,

runoff water within or adjacent to any excavations would be collected and disposed of outside the construction limits.

Construction activities would result in a land disturbance of less than one acre and therefore are not expected to require a Stormwater Pollution Prevention Permit (SWPPP) from State Water Resources Control Board prior to construction. The project's grading and construction plans would also be required to adhere to the El Dorado County Grading, Erosion Control and Sediment Ordinance, which would require the implementation and execution of Best Management Practices (BMPs) to minimize degradation of water quality during construction.

Compliance with the requirements of the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion and other geologic impacts.

(d) Expansive Soils: No Impact. The project does not contain expansive soils. There would be no impact.

(e) Septic and Wastewater Systems: No Impact. The project does not require the use of septic systems. There would be no impact.

Mitigation Measure: None required.

FINDING: A review of the soils and geologic conditions on the project site determined that the project would not result in a substantial adverse effect. All grading and construction activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion and other geologic impacts. As applicable, the project would be required to comply with the Uniform Building Code (UBC) which would address potential seismic related impacts. As conditioned and with adherence to El Dorado County Code of Ordinances (County Code) and the UBC, for this Geology and Soils category, impacts would be less than significant.

3.8 GREENHOUSE GAS EMISSIONS:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Discussion:

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (such as precipitation or wind) that last for an extended period of time. The term "global climate change" is often used

interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. Global surface temperatures have risen by 0.74°C ± 0.18°C over the last 100 years (1906 to 2005). The rate of warming over the last 50 years is almost double that over the last 100 years.[1] The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO2) and other greenhouse gases (GHGs) are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[2]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The following are the gases that are widely seen as the principal contributors to human-induced global climate change:[3]

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF_6)

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming, while manmade GHGs include naturally-occurring GHGs such as CO_2, methane, and N_2O, some gases, such as HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Section 15064.4 of the CEQA Guidelines sets forth guidance for determining the significance of Impacts from Greenhouse Gas Emissions. The guidelines allow impacts from a particular project to be described quantitatively or qualitatively and direct that impacts should be evaluated in consideration of existing environmental setting, applicable thresholds of significance, and compliance with regulations and requirements adopted to implement the mitigation of greenhouse gas emissions.

Section 15064 (h)(3) of the CEQA Guidelines specifies that a project's contribution to a cumulative effect may be found 'not cumulatively considerable' if the project will comply with the requirements in a previously approved plan or mitigation program, including plans or regulations for the reduction of greenhouse gas emissions. El Dorado County has not adopted a plan or mitigation program for the reduction of GHGs as of the publication of this study. Likewise, it has not adopted thresholds of significance for evaluating greenhouse gas emissions. However, the General Plan provides applicable county-wide goals and policies aimed at improving energy efficiency, improving transportation efficiency, and reducing air emissions, which could reduce or

[1] Intergovernmental Panel on Climate Change (IPCC), 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC*.

[2] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse allows heat from sunlight in and reduces the amount of heat that escapes, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.

[3] The greenhouse gases listed are consistent with the definition in Assembly Bill (AB) 32 (Government Code §38505).

sequester GHGs, including Goal TC-1, Policies TC-1p and TC-1q, Goal 5.6, Objective 5.6.2, and Policies 5.6.2.1 and 5.6.2.2.

(a) Greenhouse Gas Emissions: Less Than Significant Impact. The proposed project is a wireless communications facility that would not significantly contribute to the existing greenhouse gas inventory for El Dorado County. Short-term construction GHG emissions will occur during installation of the tower and ground equipment. The emergency backup 30kW power generator will only be used during power outages and for a short duration during testing. Vehicle trips will be associated with very limited construction and routine maintenance. GHG emissions generated by the development and vehicle trips would be of an extremely limited scope and duration, and would not directly or indirectly result in a significant impact on the environment.

(b) Applicable Plan, Policy, Or Regulation Related to Greenhouse Gas Emissions: Less Than Significant Impact. The El Dorado County General Plan establishes numerous policies relative to GHGs. The everyday operation of the proposed communication facility would not generate greenhouse gas emissions. Due to the short term construction, limited vehicle trips to the site and monthly to quarterly testing of the emergency backup 30kW power generator, the anticipated increase in emissions would not conflict with the applicable with policies adopted for the purpose of reducing GHG emissions.

Mitigation Measure: None required.

FINDING: The project would result in less than significant impacts to greenhouse gas emissions. For this Greenhouse Gas Emissions category, there would be no significant adverse environmental effect as a result of the project.

3.9 HAZARDS AND HAZARDOUS MATERIALS:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environmental through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter mile of an existing or proposed schools?	☐	☐	☒	☐

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Impact Discussion:

(a) Transport, Use, Or Disposal of Hazardous Materials: Less Than Significant Impact. The project is proposed to utilize an emergency diesel generator for back-up power, and would include a separate 190 gallon diesel tank. The storage of diesel fuel is required only for emergency purposes during a power outage and will not be routinely used or transported. The amount of diesel fuel stored would be similar to that for a residential use. Storage and handling of diesel fuel, or any other chemicals or hazardous materials, would be subject to a Hazardous Materials Business Plan, administered by the El Dorado County Public Health Department at the time of development of the proposed project. The plan would include an inventory of hazardous materials and chemicals handled or stored on the site, an emergency response plan, and a training program in safety procedures.

Construction activities associated with the development of the proposed project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. However, all potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and

regulations. In the event of an accidental release, construction personnel who are experienced in containing accidental releases of hazardous materials will likely be present to contain and treat affected areas in the event a spill occurs. If a larger spill were to occur, construction personnel would generally be on-hand to contact the appropriate agencies. Hazardous materials used during construction would ultimately be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility.

Radiofrequency (RF) Emissions

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

The Federal Communications Commission (FCC) is the government agency responsible for the authorization and licensing of facilities such as cellular towers that generate RF radiation. For guidance in health and safety issues related to RF radiation, the FCC relies on other agencies and organizations for guidance, including the EPA, FDA, the National Institute for Occupational Safety and Health (NIOSH) and OSHA, which have all been involved in monitoring and investigating issues related to RF exposure. The FCC has developed and adopted guidelines for human exposure to RF radiation using the recommendations of the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE), with the support of the EPA, FDA, OSHA and NIOSH. According to the FCC, both the NCRP exposure criteria and the IEEE standard were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The exposure guidelines are based on thresholds for known adverse effects, and they incorporate wide safety margins. In addition, under the National Environmental Policy Act (NEPA) the FCC is required to evaluate transmitters and facilities for significant impacts on the environment, including human exposure to RF radiation. When an application is submitted to the FCC for construction or modification of a transmitting facility or renewal of a license, the FCC evaluates it for compliance with the RF exposure guidelines, which were previously evaluated under NEPA. Failure to show compliance with the FCC's RF exposure guidelines in the application process could lead to the additional environmental review and eventual rejection of an application. The proposed telecommunication facility is subject to the FCC exposure guidelines, and must fall under the FCC's American National Standards Institute (ANSI) public limit standard of 0.58 mW/cm2.

Finally, it should be noted that Section 704 of the Telecommunication Act of 1996 states that "No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." Because the proposed facility would operate under federally mandated limits on RF radiation for cellular towers and is regulated by the FCC in this respect, the County may not regulate the placement or construction of this facility based on the RF emissions.

An EMF/RF Report has been prepared and submitted for the project (Attachment 7). 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. It demonstrates compliance. Should the

facility's emissions exceed FCC standards, the applicant would be responsible for the cost of additional tests and corrective measures to establish compliance with FCC standards. These County development standards would be reflected as conditions of approval in the use permit.

The applicant has provided a Hazardous Materials and Emissions Questionnaire to the County (Attachment 10). If materials exceed applicable thresholds outlined in the Hazardous Materials Release Response Plans and Inventory Law of 1985 (The Business Plan Act), a Hazardous Materials Business Plan would need to be obtained. The plan, when implemented, would address potential impacts associated with the accidental spill or release of chemicals and/or hazardous materials used during operations.

Impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

(b) Release of Hazardous Materials: Less Than Significant Impact. See discussion under 3.8(a), above. This impact would be less than significant.

(c) Hazardous Emissions or Materials within one-quarter mile of any schools: Less Than Significant Impact. There are no schools within one-quarter mile of the project site. As discussed above, the proposed project may require the use of potentially hazardous materials during construction and operation of the communications facility, including the storage of diesel fuel. Standard construction practices and implementation of the Business Plan Act, would minimize the potential for accidental release of hazardous materials within proximity to or on a school site. With adherence to standard construction practices and implementation of the Business Plan Act, this impact would be less than significant.

(d) Located On A Hazardous Materials Site: Less Than Significant Impact. A review of regulatory agency databases, which included lists of hazardous materials sites compiled pursuant to California Government Code Section 65962.5, did not identify contamination sites as being located on the project site.

(e) Airport Land Use Plan Area: No Impact. No public use airports have been identified to be located within the vicinity of the project site. The proposed project is located outside the compatibility zones for the area airports, and therefore, would not result in a safety hazard to people working and residing on the project site.

(f) Interfere With Emergency Response Or Evacuation Plan: No Impact. The proposed project is an unmanned facility, so no evacuation and/or emergency response plans are necessary. The proposed project does not include any actions that physically interfere with any emergency response or emergency evacuation plans. Development of the proposed project would add a small amount of trips onto the area roadways – maintenance workers will visit the site approximately once per month to once per quarter. In the event future construction activities require work to be performed in the roadway, appropriate traffic control plans would be prepared in conjunction with County requirements.

(g) Expose People Or Structures To Risk Of Wildland Fires: No impact. The proposed use is unmanned and will not subject additional people to risk of fire.

Mitigation Measure: None required

FINDING: The proposed project would not expose the area to hazards relating to the use, storage, transport, or disposal of hazardous materials. For this Hazards and Hazardous Materials category, impacts would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐

g. Place housing within a 100-year flood hazard area as mapped by Federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i. Expose people or structures to a significant risk or loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Impact Discussion:

(a) Violate Water Quality Standards and (b) Substantially Deplete Groundwater: Less Than Significant Impact. The project does not require the use of water and would not result in the depletion of groundwater supplies or recharge. During project construction activities, soil would be exposed, and there would be an increased potential for erosion of soils compared with existing conditions. The Geotechnical Investigation Report prepared for the project site (Attachment 9) indicates the potential for perched water (due to rainfall) or perched groundwater may be encountered above onsite rock during groundwork activities, which would require use of a sump system or dewatering. In the event that perched water is encountered above onsite rock during groundwork activities, use of a sump system or dewatering may be required. Additionally, as indicated in the Geotechnical Investigation Report, runoff water within or adjacent to any excavations would be collected and disposed of outside the construction limits.

Construction activities would result in a land disturbance of less than one acre and therefore are not expected to require a Stormwater Pollution Prevention Permit (SWPPP) from State Water Resources Control Board prior to construction. The project's grading and construction plans would also be required to adhere to the El Dorado County Grading, Erosion Control and Sediment Ordinance, which would require the implementation and execution of Best Management Practices (BMPs) to minimize degradation of water quality during construction.

Compliance with the requirements of the El Dorado County Grading, Erosion Control and Sediment Ordinance would reduce potential water quality impacts to less than significant.

(c) - (f) Substantially Alter Drainage Patterns or Degrade Water Quality: Less Than Significant Impact. An equipment shelter is proposed within the 1,600-square foot fenced lease area. The proposed area to be developed, including the stealth monopine location and the ground equipment area, would not affect local drainage patterns or contribute to or create additional runoff or substantially degrade water quality. The 12-foot wide access road will not create any significant impacts to drainage patterns or create significant runoff.

(g) - (i) Flood Hazards: No Impact. The Federal Emergency Management Agency (FEMA) is responsible for mapping areas subject to flooding during a 100-year flood event (i.e., 1 percent

chance of occurring in a given year). According to floodplain mapping of the project area, the project site is located within the X zone (Unshaded). The X zone (Unshaded) is defined by FEMA as areas of minimal flood hazard from the principal source of flood in the area and determined to be outside of the 0.2 percent annual chance floodplain.

(j) Inundation by Seiche, Tsunami, Or Mudflow: No Impact. The project site has an approximate elevation of 1,145.5 feet above sea level. Based on the geographic location of the project site above sea level and situation along a ridgeline, it will not be subject to inundation by seiche, tsunami, or mudflow.

Mitigation Measures: None required.

FINDING: The proposed project would not result in significant impacts to hydrology or water quality. For this Hydrology and Water Quality category, impacts would be less than significant.

3.11 LAND USE/PLANNING:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with an applicable land use plan, policy, or regulations of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Impact Discussion:

The project parcel is zoned Rural Lands-10 Acres (RL-10). Once constructed and operational, the communications facility would provide 24-hour service to customers seven days a week. Apart from initial construction activity, no personnel will be stationed at the site. Routine maintenance and inspection of the facility would occur monthly to quarterly during normal business hours. No water or sewer service is required as the site would be unmanned.

(a) Physically Divide An Established Community: No Impact. No new parcels or substantial development would result from this project. The project would not divide any established community.

(b) Conflict With Applicable Land Use Plan, Policy, Or Regulations: No Impact. The proposed project was reviewed for consistency with the zoning code and General Plan, and is consistent with both. The proposed stealth monopine tower is a conditionally permitted use in the RL-10 zone with a Conditional Use Permit, which is requested for the project. The proposed project is subject to and conforms to the development standards for communication facilities contained in El Dorado County Zoning Code Section 130.40.130.D, and no impact is anticipated

(c) Conflict With Applicable Conservation Plan: No Impact. This site is not located within a habitat conservation or natural community plan area.

Mitigation Measure: None Required.

FINDING: The proposed use of the land would be consistent with the Zoning Ordinance and General Plan. There would be no impact to land use goals or standards resulting from the project.

3.12 MINERAL RESOURCES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Impact Discussion:

(a) Result In Loss Of Valuable Mineral Resource, and (b) Result In The Loss Of Availability Of A Locally Important Mineral Resource Recovery Site: No Impact. The California Geological Survey (CGS) has classified the project site as being located in a Mineral Resource Zone (MRZ). There are no mining activities occurring on the project site and no mining equipment on the site. The proposed project would not use or extract any mineral or energy resources.

Construction and operation of the proposed project would not prevent future mining activities on the site. Per Section 130.29.080, Measure A Initiative Ordinance, in the El Dorado County Ordinance

> In addition to any other requirements set forth in any applicable zone, any mining projects for any kind of open pit mining or strip mining for purposes of exploration or extraction which require the removal of overburden in a total amount of more than 1,000 cubic yards on any lot shall require issuance of a Conditional Use Permit. However, prior to issuing the Conditional Use Permit, in addition to any other necessary findings, the review authority shall make the finding that all boundaries of the proposed project for

open pit mining or strip mining shall be greater than a linear distance of 10,000 feet from any existing residential, hospital, church, or school use, including, but not limited to, nursery or day care uses or any residential, hospital, church or school use as designated in the General Plan or any community or specific plan, or as allowed by this Title.

It is not anticipated that future mining on the site would occur.

Mitigation Measure: None required.

FINDING: No impacts to mineral resources are expected either directly or indirectly. For this mineral resources category, there would be no impacts.

3.13 NOISE:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact Discussion:

The project parcel is zoned Rural Lands-10 Acres (RL-10). The project site is undeveloped and the main land cover is oak woodland. The project lease area is located in the northern portion of the 85.05 acre parcel, approximately 715 feet from the proposed access point at the northern property line at the intersection of French Creek Road and Big Canyon Road, 360 feet from the eastern property line, approximately 665 feet from the western property line, and approximately 0.4 miles from the southern property line.

Noise levels in the project area are associated with vehicles on French Creek Road and Big Canyon Road, and with the residential land uses in the area. Noise associated with the proposed facility would include temporary short term construction noise, HVAC equipment, and monthly to quarterly testing of the emergency generator. In the event that the emergency generator is needed, there would be some noise generated during that time, as well. The proposed wireless communications facility is unmanned and would not expose people at the facility to noise levels.

(a) Exposure Of Persons To Noise Levels In Excess Of Standards, and (c) Substantial Permanent Increase In Ambient Noise Levels: Less Than Significant Impact. Uses associated with the proposed project would not create a significant increase in ambient noise levels within or in proximity to the project site. The potential use of onsite emergency standby generators would provide power until normal power is restored. The use of standby generators would be short term in duration and would not create significant impacts. After calculating all decibel levels at each nearby property line and residence, the HVAC and the onsite emergency backup generator are within El Dorado County's noise level standards according to El Dorado County Title 130 Zoning and Noise Ordinance, Chapter 130.37 – Noise Standards. Nighttime maximum allowed decibels (dBA) in the County's zoning ordinance is 50 dBA in Rural Regions. The average dBA for the HVAC equipment would be 46.5 at 30 feet away. The average for the dBA emergency backup generator would be 41.05 dBA at 630 feet away. Noise levels will be reduced, however, by a factor of six dBA with each doubling of distance from the noise source and by intervening oak woodland. The impact would therefore be less than significant.

(b) Exposure Of Persons To Noise Levels In Excess Of Standards, and (d) Substantial Temporary Or Periodic Increase In Ambient Noise Levels: Less Than Significant Impact. The proposed project would not include the development of land uses that would generate substantial ground-borne vibration or noise. Construction activity on the site has the potential to generate high noise levels on and adjacent to the project site intermittently during project development activities. The presence of shallow rock may impact trench (and other shallow) excavations. Some excavation and/or trenching activities may require use of a track- mounted excavator, possibly equipped with a single ripper tooth, hydraulic percussion hammer, rock wheel, or other similar equipment specifically intended for rock removal within some areas of the site.

Construction noise activities related to project construction are temporary in nature and the distance from the project site to the nearest offsite residence is approximately 730 feet. Consistent with County requirements, noise generating construction activities will be limited to daytime hours between 7:00 am and 7:00 pm on weekdays and non-holidays, and 8:00 am to 5:00 pm on weekends. Given the distance from the nearest off-site residential structures, construction activities are not expected to have a significant impact on residences in the area. Furthermore, any such construction-related disturbance would be intermittent, short-term in

nature, and required to be in compliance with County requirements. The impact would therefore be less than significant.

(e) and (f) Expose People To Excessive Noise Associated With An Airport Of Private Airstrip: No Impact. The project is located more than two miles from the nearest airport or private airstrip. Cameron Airpark is located approximately 5 miles to the northwest of the project site in Cameron Park and Placerville Airport is located approximately 10 miles northeast of the project site in Placerville.

Mitigation Measure: None required.

FINDING: With adherence to County Code, no significant direct or indirect impacts to noise levels are expected either directly or indirectly. For this Noise category, the thresholds of significance would not be exceeded.

3.14 HOUSING:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial 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?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Discussion:

(a) Induce Substantial Population Growth: No Impact. The proposed project would not affect the population of the area because no new parcels would be created and no additional dwellings would be placed on the project site as a result of this project.

(b) and (c) Displace Substantial Numbers Of Existing Housing Or People: No Impact. The proposed project would not displace individuals or housing. The project does not require the extension of any infrastructure, such as roads, water, or sewer systems. Therefore, the project would not induce substantial population growth in the project area.

Mitigation Measure: None required.

FINDING: The project would not displace housing. There would be no potential for a significant impact due to substantial growth either directly or indirectly. For this Population and Housing category, the thresholds of significance would not be anticipated to be exceeded.

3.15 PUBLIC SERVICES:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project 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 public services?	☐	☐	☒	☐
b. Fire protection?	☐	☐	☒	☐
c. Police Protection?	☐	☐	☐	☒
d. Schools?	☐	☐	☐	☒
e. Parks?	☐	☐	☐	☒
f. Other public services?	☐	☐	☐	☒

Impact Discussion:

(a) and (b) Result In The Need For New Fire Protection Facilities: Less Than Significant Impact. The El Dorado County Fire Protection District (Fire District) currently provides emergency service to the project parcel. The 12-foot wide access road for the proposed project would be include a hammer head fire turnaround at the facility and would have a fire department knox box at the entrance gate. The proposed project would be conditioned to meet the current 2019 CA Fire Code, El Dorado County Fire Ordinance 2019-02, National Fire Protection Association (NFPA) standards, and other appropriate standards and, as such, would result in less than significant impacts to fire protection services.

(c) Result In The Need For New Police Protection Facilities: No Impact. The proposal is not expected to result in an increase in demand for police services because wireless communication facilities do not normally require such services.

(d) Result In The Need For New Schools: No Impact. The communication facility is an unmanned facility and therefore will not result in an increase in demand for school facilities in the area.

(e) Result In The Need For New Parks: No Impact. The communication facility is an unmanned facility and therefore will not create an increase in park usage.

(f) Result In The Need For Other Public Facilities: No Impact. The communication facility is an unmanned facility and therefore will not require other public services

Mitigation Measure: None required.

FINDING: The project would not result in a significant increase of public services to the project. As conditioned, for this Public Services category, impacts would be less than significant.

3.16 RECREATION:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Discussion:

(a) Increase Use Of Existing Parks, and (b) Include The Construction Or Expansion Of Recreational Facilities: No Impact. The communication facility is an unmanned facility and therefore will not create an increase in park usage. No recreational facilities are proposed under this proposal and none are located on the project site. No impacts on existing or future recreational facilities would occur.

Mitigation Measure: None required.

FINDING: No significant impacts to open space or park facilities would result as part of the project. For this Recreation category, impacts would be less than significant.

3.17 TRANSPORTATION:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subsection (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the Proposed Project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

The Transportation and Circulation Element of the El Dorado County General Plan relies on automobile delay and Level of Service (LOS) as performance measures to determine impacts on County-maintained roads and state highways within the unincorporated areas of the county.

County General Plan Policy TC-Xd states that Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is calculated using the methodologies in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are exempt from these standards and are allowed to operate at LOS F and are listed in Table TC-2. According to Policy TC- Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A 2 percent increase in traffic during a.m. peak hour, p.m. peak hour, or daily, or

B. The addition of 100 or more daily trips, or

C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

Discussion: Starting on July 1, 2020, automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development under CEQA. Instead, an alternative metric that supports the goals of SB 743 legislation will be required. The use of vehicle miles traveled (VMT) has been recommended by the Governor's Office of Planning and Research (OPR) and is cited in the CEQA Guidelines as the most appropriate measure of transportation impacts (Section 15064.3(a).

The intent of SB 743 is to bring CEQA transportation analysis into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure, instead of LOS, is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks.

Current direction regarding methods to identify VMT and comply with state requirements is provided by the California Governor's Office of Planning and Research (OPR) December 2018 publication, Technical Advisory on Evaluating Transportation Impacts in CEQA. This advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR provides this Technical Advisory as a resource for the public to use at their discretion. OPR is not enforcing or attempting to enforce any part of the recommendations contained herein. (Government Code Section 65035 ["It is not the intent of the Legislature to vest in the Office of Planning and Research any direct operating or regulatory powers over land use, public works, or other state, regional, or local projects or programs."].)

OPR's Technical Advisory provides this direction for small projects:

> Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Per OPR's Technical Advisory, this determination is based on the following:

> CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

El Dorado County Department of Transportation (DOT) has not yet adopted VMT screening thresholds. However, consistent with El Dorado General Plan Policy TC- Xe, cited above, transportation impact studies (TIS) are required of development when development "worsens" travel conditions. The threshold criteria for worsening conditions include a 2 percent increase in overall volumes, 100 daily trips, or 10 peak hour trips. The threshold of 100 trips generated by the project is more conservative than the recommended exemption threshold of 110 trips suggested by the OPR.

Further, DOT's current criteria for determining uses that are typically exempt from preparation of a transportation impact study (TIS) include industrial uses with footprints of 10,000 square feet or less, which is reflective of the direction in OPR's Technical Advisory for evaluating traffic impacts for small projects. (For the purposes of evaluating the proposed project for potential traffic impacts, DOT classified the proposed project as industrial.)

Impact Discussion:

Access to the project site would be provided by a new 15-foot wide, 709-foot long gravel access road/utility easement that would provide access to the facility from French Creek Road.

(a) Conflict with a transportation plan, ordinance, or policy: Less Than Significant Impact. The project area is rural residential. The proposed project would be an unmanned wireless communications facility. The proposed project site is not on a main roadway and there are very low traffic volumes. Construction activities associated with the proposed project would temporally generate additional vehicle traffic in the project area. Once construction has been completed, traffic will return to pre-construction levels with the addition of a monthly to quarterly maintenance site visit. The proposed project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

(b) Would The Project Conflict Or Be Inconsistent With CEQA Guidelines Section 15064.3, Subsection (b): Less Than Significant Impact. The proposed project would be an unmanned wireless communications facility and with a facility footprint of 1,600 square feet. Construction activities associated with the proposed project would temporally generate additional vehicle traffic in the project area but would not be expected to exceed 110 trips per day during the construction period. Once construction has been completed, traffic will return to pre-construction levels with the addition of a monthly to quarterly maintenance site visit. The proposed project would not occupy more than 10,000 square feet nor would the proposed project be expected to exceed 100 trips per day. Therefore, in accordance with DOT's criteria for exemption from requiring a TIS and OPR's direction regarding determining transportation impacts for small projects, this impact would be less than significant.

(c) Substantially Increase Hazards: No Impact. No design features associated with the proposed project would increase hazards or create any additional hazards.

(d) Result In Inadequate Emergency Access: No Impact. The proposed project would be an unmanned facility and does not involve a substantial number of vehicle trips. The 12-foot wide access road for the proposed project would be include a hammer head fire turnaround at the facility and would have a fire department knox box at the entrance gate. The proposed project would not result in inadequate emergency access.

Mitigation Measure: None required.

FINDING: The project would not exceed the thresholds for traffic identified within the General Plan. For this Transportation/Traffic category, the thresholds of significant would not be exceeded and impacts would be less than significant.

3.18 TRIBAL CULTURAL RESOURCES:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and this is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. 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	☐	☐	☒	☐
b. 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 apply the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Impact Discussion:

(a) Historical Resources With Tribal Cultural Value: Less Than Significant. As discussed in Section 3.5, Cultural Resources, above, the Cultural and Historical Resources Investigation prepared for the proposed project determined that the resources on the project parcel are considered ineligible for the National Registry or the California Register listings. Further, the resources on the site are not considered unique or historically significant. The site investigation determined that the proposed project would not have any direct physical impact on the resources nor would its presence reduce the integrity of the setting. As such, this impact would be less than significant.

(b) Other Resources with Significant Tribal Value: Less Than Significant with Mitigation Incorporated. The Colfax-Todds Valley Consolidated Tribe, the Ione Band of Miwok Indians, the Nashville-El Dorado Miwok, the Shingle Springs Band of Miwok Indians, United Auburn

Indian Community of the Auburn Rancheria (UAIC), the Washoe Tribe of Nevada and California, the Wilton Rancheria, and the El Dorado County Wopumnes Nisenan-Mewuk Nation, were notified of the proposed project and given access to all project documents. No other tribe had requested to be notified of the proposed projects for consultation in the project area at the time. In response to the notification mailings, the UAIC and the Wilton Rancheria responded with a request for project information, which the County provided. Wilton Rancheria indicated that the site lies within a culturally sensitive area and requested tribal monitoring during ground-disturbance activities. This request is reflected in Tribal Cultural Resources Mitigation Measure #1 below.

The Cultural and Historical Resources Investigation prepared in August 2019 for the proposed project identified cultural and historic resources on the project parcel. The investigation determined that the resources on the project parcel are considered ineligible for the National Registry or the California Register listings. Further, the resources on the site are not considered unique or historically significant. The site investigation determined that the proposed project would not have any direct physical impact on the resources nor would its presence reduce the integrity of the setting. As such, the proposed project has no potential for significant adverse change to the historic resources on the site.

The Cultural and Historical Resources Investigation identified cultural resources on the project parcel. The site investigation determined that the proposed project would not have any direct physical impact on the known resources. Given the presence of known resources identified during the site survey, there may be potential for the discovery of previously-undiscovered resources during construction. Cultural Resources Mitigation Measures CR-1 and CR-2, above, would require archaeological monitoring of ground disturbance activities during construction of the proposed project.

Mitigation Measure

TCR-1. Tribal Cultural Resources

If any Tribal Cultural Resources (TCRs) are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. The appropriate tribal representatives from culturally affiliated tribes shall be immediately notified. Work at the discovery location shall not resume, until the potential TCR is determined, in consultation with culturally affiliated tribes, that the find is not a TCR, or that the find is a TCR and all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. Preservation in place is the preferred alternative, and every effort must be made to preserve the identified resource in place, including but not limited to project redesign. Should be project redesign be required, the project shall be required to obtain a revision to the Design Review Permit. The contractor shall implement any measures deemed by the County to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find as necessary.

Monitoring Requirement: This mitigation measure shall be noted on grading and construction plans. The Planning Department shall verify the inclusion of this notation on the grading plans prior to the issuance of a grading permit.

Monitoring Responsibility: El Dorado County Planning and Building Department.

FINDING: The project site is considered sensitive for tribal cultural resources. With adherence to El Dorado County Code of Ordinances (County Code) and with implementation of the above identified mitigation measures, for this Tribal Cultural Resources category, impacts to cultural resources will be less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS:

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g. Comply with federal, state, and local statutes, and regulations related to solid waste?	☐	☐	☐	☒

Impact Discussion:

(a) – (g) Exceed Wastewater Requirements Or Result In The Need For New Utilities Or Service Systems: No Impact. Implementation of the project would not require domestic water or wastewater treatment, or solid waste facilities. It would not be in non-compliance with any statutes or regulations relating to solid waste, nor would it employ equipment that would introduce interference into any system. Thus, the project would have no impact on any utilities or service systems.

Mitigation Measure: None required.

FINDING: No significant utility and service system impacts would be expected with the project, either directly or indirectly. For this Utilities and Service Systems category, the thresholds of significance would not be exceeded.

3.20 WILDFIRE:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Regulatory Setting

State Laws, Regulations and Policies

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CAL FIRE) administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

Local Laws, Regulations and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

El Dorado County General Plan

The General Plan includes standards intended to minimize the risk of wildfire. They are found under Objective 6.2.3 and include the following policies:

> Policy 6.2.2.1: Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.
>
> Policy 6.2.2.2: The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as "urban wildland interface communities within the vicinity of Federal lands that are a high risk for wildfire," as listed in the Federal Register of August 17, 2001, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a Fire Safe Plan prepared by a

Registered Professional Forester (RPF) and approved by the local Fire Protection District and/or California Department of Forestry and Fire Protection.

Policy 6.2.3.1: As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and firefighting personnel and equipment will be available in accordance with applicable State and local fire district standards.

Policy 6.2.3.2: As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.2.3.4: All new development and public works projects shall be consistent with applicable State Wildland Fire Standards and other relevant State and federal fire requirements.

Policy 6.2.4.1: Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.

Policy 6.2.4.2: The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.

Policy 6.2.5.1: The County shall cooperate with the U.S. Forest Service, California Department of Forestry and Fire Protection, and local fire districts in fire prevention education programs.

El Dorado County Grading, Erosion and Sediment Control Ordinance (Chapter 110.14 of the County Ordinance Code)

Chapter 110.14 is enacted to regulate grading within the unincorporated area of El Dorado County to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses; and to ensure that the intended use of a graded site is consistent with the El Dorado County General Plan, any Specific Plans adopted thereto, the adopted Storm Water Management Plan, California Fire Safe Standards and applicable El Dorado County ordinances including the Zoning Ordinance (Title 130 of the County Ordinance Code) and the California Building Code. In addition to standard permitting requirements for grading/soil disturbance activities, this Chapter also provides allowances for emergency work, including grading activities to protect life or property or to implement necessary erosion control measures as a result of emergency situations. The Chapter also provides for approval of plans and inspection of grading construction. This ordinance does not supersede or otherwise preempt any applicable local, state, or federal law or regulation, but provides for additional regulation of soil disturbance at a local level.

Impact Discussion:

(a) Impair An Adopted Emergency Plan: No Impact. Construction and use of the proposed project would not impair implementation of, or interfere with, the County Multi-Jurisdictional Hazard Mitigation Plan. Adequate road design for emergency vehicle access would be provided

as required under General Plan Policy 6.2.3.2 and El Dorado County Fire Department standards. This impact would be less than significant.

(b) - (d) Expose people or structures to wildfire-related hazards: Less Than Significant Impacts. Topography within the project parcel is ranges from flat to moderately steep hillsides. The tower location's elevation is approximately 1,145.5 feet above sea level and the site is virtually flat. The project site is in an area of high fire hazard (Figure HS-1 in the General Plan). The proposed project would be conditioned to meet the current 2019 CA Fire Code, El Dorado County Fire Ordinance 2019-02, National Fire Protection Association (NFPA) standards, and other appropriate standards to ensure site-specific wildland fire risks would be minimized during construction and operation of the proposed project. The proposed project would also be required to comply consistent with the County Grading, Erosion and Sediment Control Ordinance. Therefore, it is not expected that the proposed project would exacerbate wildfire risks, or expose people or structures to fire related or post-fire risks including pollutant concentrations, downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Mitigation Measure: None required.

FINDING: As conditioned, and with adherence to County Code, for this Wildfire category, there would be no significant adverse environmental effect as a result of the proposed project.

MANDATORY FINDINGS OF SIGNIFICANCE (SECTION 15065):

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of 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:

(a) Have The Potential To Substantially Degrade The Quality Of The Environment: Less Than Significant Impact with Mitigation Incorporated. As conditioned and with implementation of mitigation measures included in this Initial Study, the proposed project would not degrade the quality of the environment; result in an adverse impact on fish, wildlife, or plant species including special status species, or prehistoric or historic cultural resources.

(b) Have Impacts That Are Individually Limited, But Cumulatively Considerable: Less Than Significant Impact. This project has the potential to contribute impacts that are individually limited, but cumulatively considerable with respect to air quality, biological resources, and cultural resources. Cumulative impacts to these areas would be mitigated due to the inclusion of project conditions and the Mitigation Measures listed throughout this report. Past, current, and probable future projects in the vicinity of the project site were reviewed to determine if any additional cumulative impacts may occur with the approval of this project. A two-mile radius was used in determining cumulative impacts. No additional cumulative impacts were discovered

(c) Cause Substantial Adverse Effects On Human Beings: Less Than Significant Impact with Mitigation Incorporated. There have been no impacts discovered through the review of this application demonstrating that there would be substantial adverse effects on human beings either directly or indirectly. However, the proposed project has the potential to cause both temporary and future impacts to the area by project-related impacts relating to air, biological resources, and cultural resources. With implementation of mitigation measures included in this

Initial Study and or conditions identified in the associated staff report, these impacts would be effectively mitigated to a less than significant level.

Initial Study Attachments

Attachment 1.....Assessor's Parcel Map
Attachment 2.....Zoning Map
Attachment 3.....General Plan Map
Attachment 4.....Submitted Plan Set
Attachment 5.....Coverage Maps
Attachment 6.....Alternative Sites Analysis
Attachment 7.....Radio Frequency Emissions Compliance Report
Attachment 8.....Photo Simulations
Attachment 9.....Geotechnical Investigation Report
Attachment 10.....Hazardous Materials/Battery Statements

SUPPORTING INFORMATION SOURCE LIST

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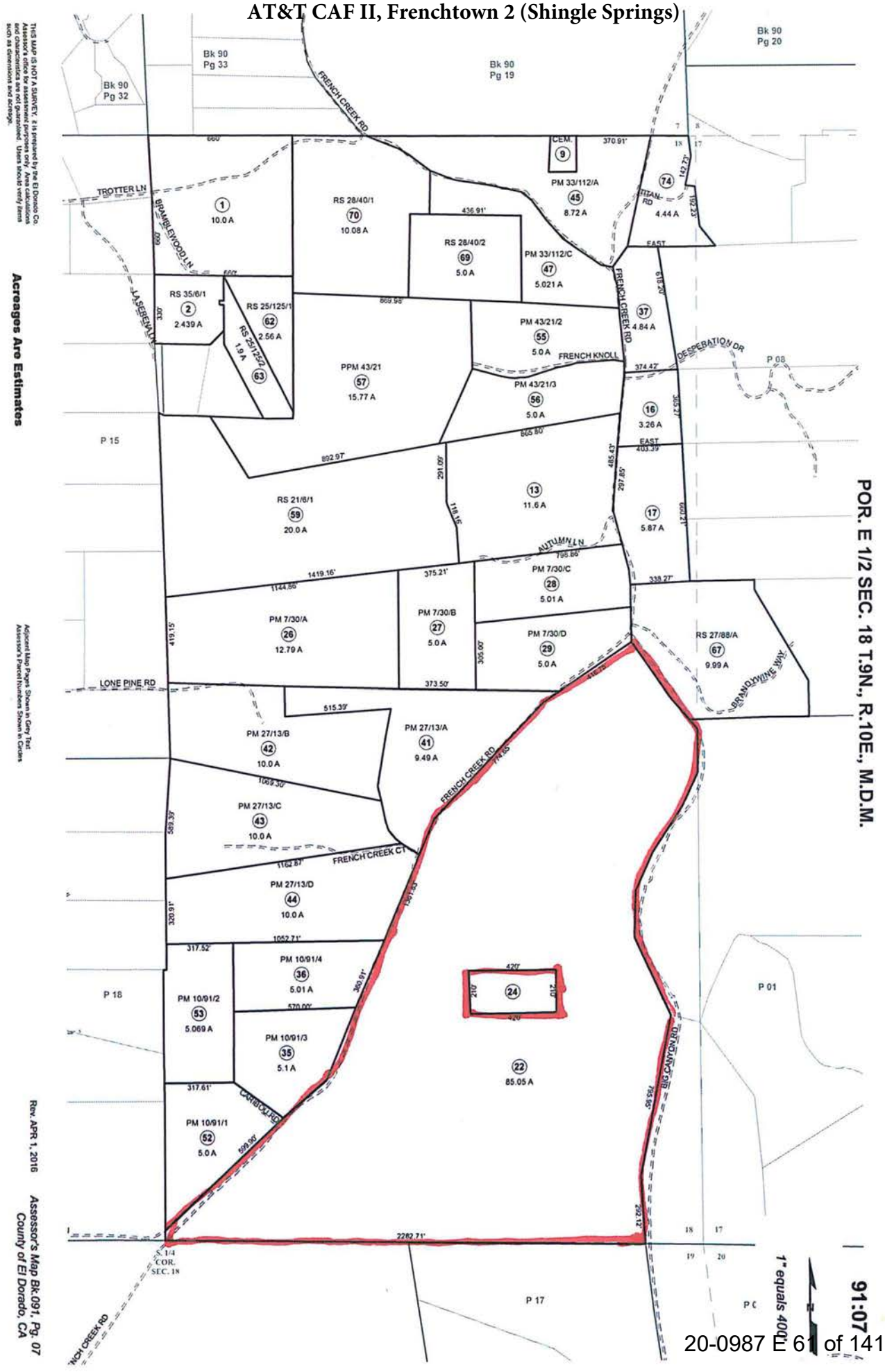
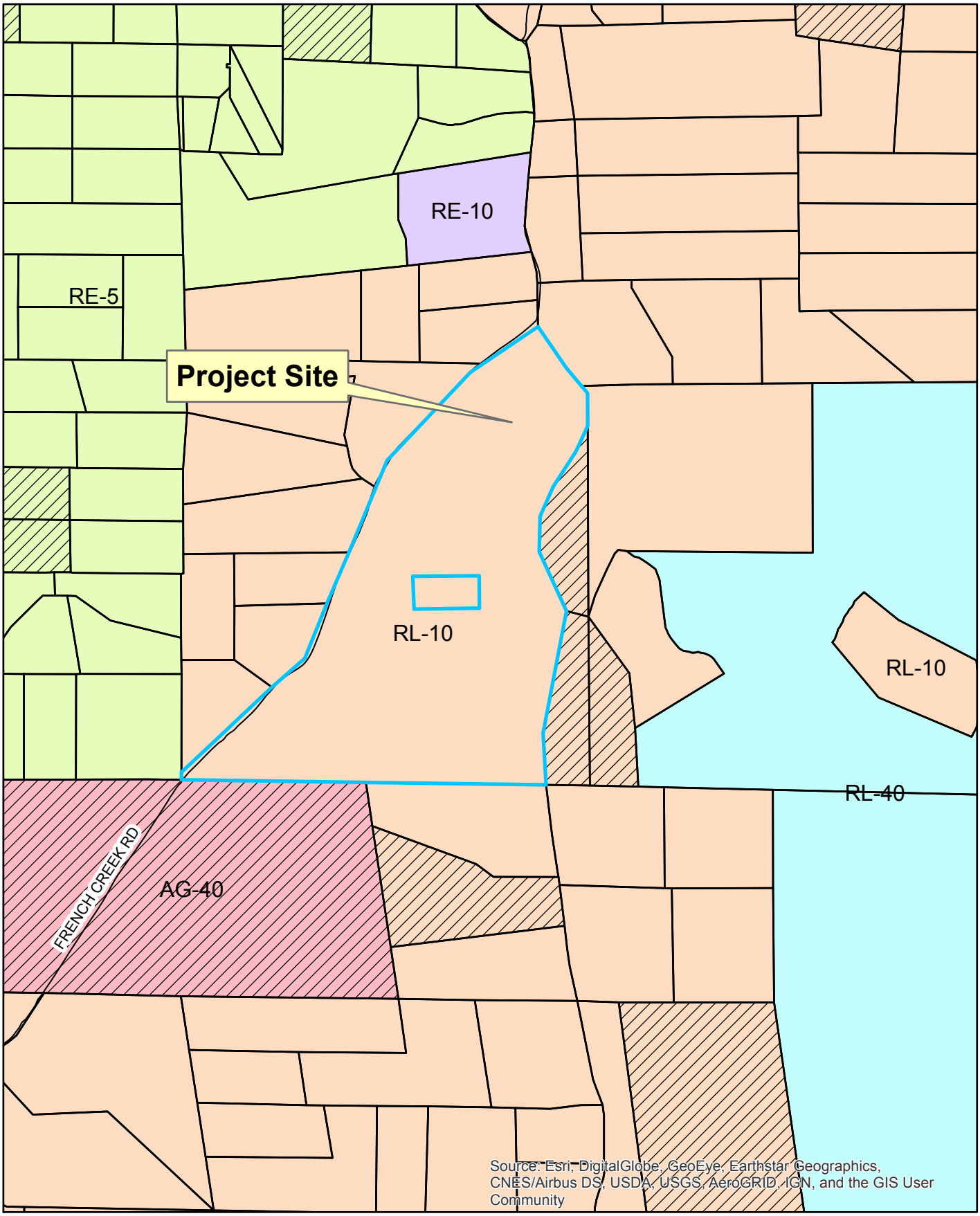
Attachment 1: APN Map
Project CUP19-0007
AT&T CAF II, Frenchtown 2 (Shingle Springs)



Attachment 2: Zoning Map



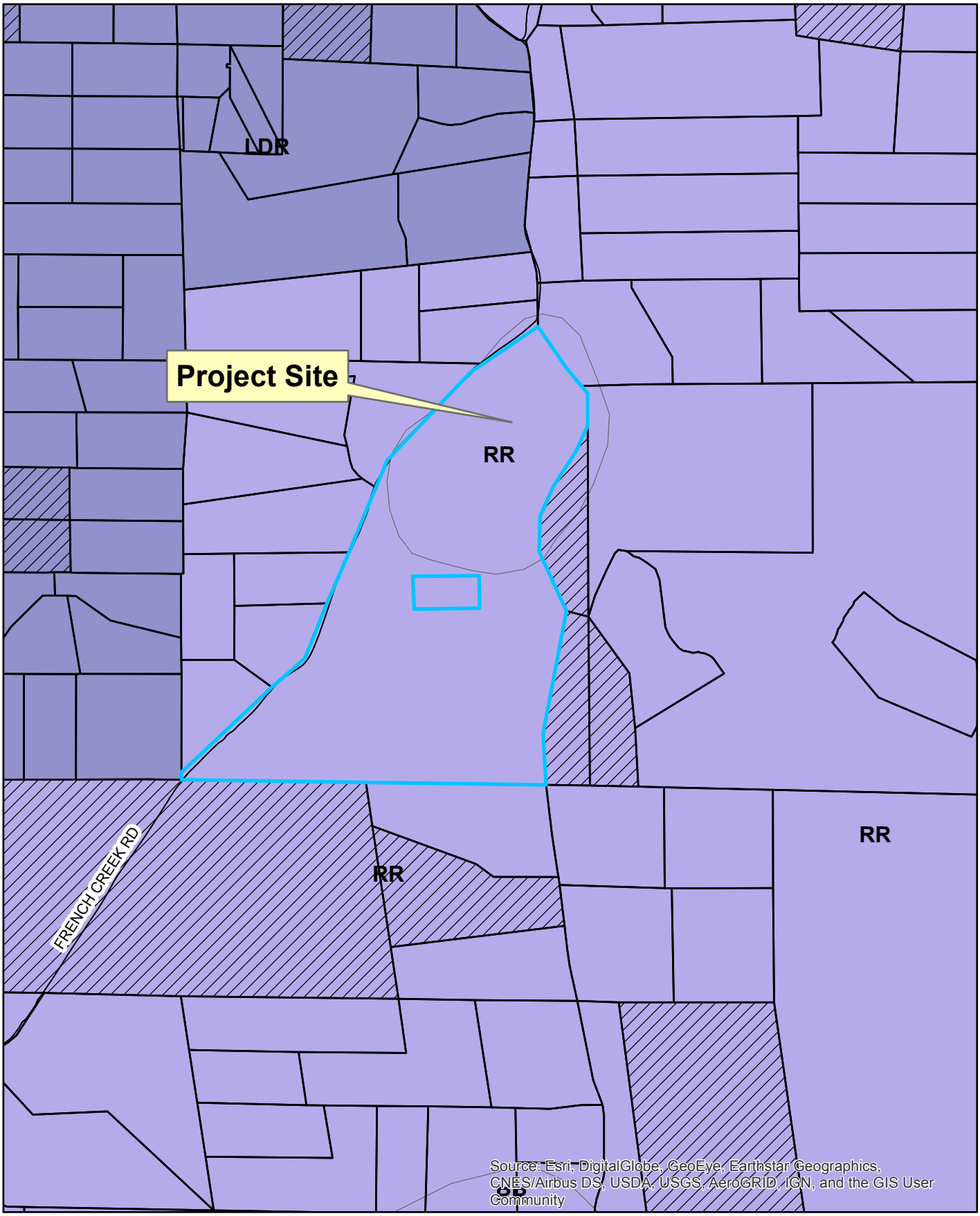
0 355 710 1,420 2,130 Feet

Scale 1:10,000

Project CUP19-0007
AT&T CAF II Frenchtown 2
Wireless Monopine Tower
APN 091-070-022

Map prepared on
May 20, 2020

Attachment 3: General Plan Map



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Scale 1:10,000

Project CUP19-0007
AT&T CAF II Frenchtown 2
Wireless Monopine Tower
APN 091-070-022

Map prepared on
May 20, 2020

Attachment 4: Submitted Site Plan
Project CUP19-0007
AT&T CAF II, Frenchtown 2 (Shingle Springs)

SITE NUMBER: CVL02082
SITE NAME: FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD
SHINGLE SPRINGS, CA 95682
JURISDICTION: EL DORADO COUNTY
APN: 091-070-022-000

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

PROJECT DESCRIPTION

PROPOSED SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. BRING POWER / TELCO / FIBER TO SITE LOCATION
2. DRIVEWAY IMPROVEMENT FROM DRIVEWAY 40'X40' FENCED LEASE AREA
3. INSTALL AT&T APPROVED PRE-MANUFACTURED WALK IN EQUIPMENT SHELTER AND ASSOCIATED INTERIOR EQUIPMENT
4. ADD (1) PROPOSED GPS UNITS
5. ADD ±154'-0" MONOPINE W/ FOLIAGE AT ±160'-0"
6. ADD (12) ANTENNAS (4) PER ALPHA, BETA, GAMMA SECTOR
7. ADD (24) PROPOSED RRUS
8. ADD (4) SURGE SUPPRESSORS
9. ADD 6'-0" HIGH CHAIN LINK FENCE
10. ADD 30KW AC DIESEL GENERATOR WITH ATTACHED 190 GALLON BELLY TANK

CODE COMPLIANCE

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

1. 2016 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R. (CALIFORNIA CODE OF REGULATIONS)
2. 2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (VOLUMES 1 & 2), (2015 INTERNATIONAL BUILDING CODE)
3. 2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, C.C.R., (2014 NATIONAL ELECTRICAL CODE)
4. 2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R., (2015 UNIFORM MECHANICAL CODE)
5. 2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R., (2015 UNIFORM PLUMBING CODE)
6. 2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.
7. 2016 CALIFORNIA HISTORICAL BUILDING CODE, PART 8, TITLE 24, C.C.R., (2015 INTERNATIONAL BUILDING CODE)
8. 2016 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R., (2015 INTERNATIONAL FIRE CODE)
9. 2016 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24, C.C.R., (2015 INTERNATIONAL BUILDING CODE)
10. 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R., (CALGreen)
11. 2016 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
12. ANSI/EIA-TIA-222-G
13. ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS.

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE TITLE 24 PART 2, SECTION 11B-203.4

OCCUPANCY AND CONSTRUCTION TYPE

OCCUPANCY : U (UNMANNED)

CONSTRUCTION TYPE: V-B

PROJECT INFORMATION

PROPERTY INFORMATION:
SITE NAME: FRENCHTOWN 2 - BUTTE MEADOWS

SITE NUMBER: CVL02082

SEARCH RING: FRENCHTOWN 2 - BUTTE MEADOWS

FA# 13787699

SITE ADDRESS: 5101 FRENCH CREEK RD
SHINGLE SPRINGS, CA 95682

A.P.N. NUMBER: 091-070-022-000

CURRENT USE: RL-10

PROPOSED USE: (U) UNMANNED TELECOMMUNICATION FACILITY

JURISDICTION: EL DORADO COUNTY

LATITUDE: N 38° 38' 03.18"
LONGITUDE: W 120° 54' 42.23"

GROUND ELEVATION: ±1145.5' FT. AMSL

RFDS DATED 03/13/2019, ISSUE 1.00.00 REVISION 1.00.00

PROPERTY OWNER:
MATTHEW T. LIPPMAN
911 HOOD FRANKLIN ROAD
HOOD, CA 95639

POWER AGENCY:
PG&E
PG&E CORPORATION
1 MARKET STREET, SPEAR TOWER
SAN FRANCISCO, CA 94105
PH: 1-800-743-5000

TELEPHONE AGENCY:
AT&T
525 MARKET STREET, SPEAR TOWER
SAN FRANCISCO, CA 94105
PH: 1-800-310-2355

VICINITY MAP

SPECIAL INSPECTIONS

PROJECT TEAM

APPLICANT / LESSEE:
AT&T
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 945834

RF ENGINEER:
AT&T CONTACT: ASAD SHAHBAZ
EMAIL: MS455V@US.ATT.COM

PROJECT MGR.:
EPIC WIRELESS
CONTACT: NICK TAGAS
EMAIL: NICK.TAGAS@EPICWIRELESS.NET
PH: (916) 990-1446

SITE ACQUISITION:
COMPANY: EPIC WIRELESS
CONTACT: JARED KEARSLEY (ZONING MGR.)
EMAIL: JARED. KEARSLEY@EPICWIRELESS.NET
CELL: (916) 755-1326

CONSTRUCTION MGR.:
COMPANY: EPIC WIRELESS
CONTACT: ANDREW MEDINA
EMAIL: ANDREW.MEDINA@EPICWIRELESS.NET
PH: (530) 574-4773

A&E DESIGN GROUP:
COMPANY: EPIC WIRELESS
CONTACT: CARL SYLVESTER
CARL.SYLVESTER@EPICWIRELESS.NET
PH: (530) 933-2763

ARCHITECT / ENGINEER:
ADAPTIVE RE-USE ENGINEERING
CONTACT: CRAIG HORNER, PE 84674
EMAIL: CRAIGMHORNER@YAHOO.COM
PH: (214) 407-3184

CIVIL VENDOR.:
VINCULUMS SERVICES, LLC
CONTACT: MICHEAL ELMORE
EMAIL: MICHEAL.ELMORE@VINCULUMS.COM
PH: (916) 798-0228

DIRECTIONS FROM AT&T

DIRECTIONS FROM AT&T'S OFFICE AT 2600 CAMINO RAMON, SAN RAMON, CA

2600 CAMINO RAMON
SAN RAMON, CA 94583

1. DEPART CAMINO RAMON TOWARD BISHOP DR- 0.3 MI
2. TURN RIGHT ONTO BOLLINGER CANYON RD- 0.4 MI
3. TAKE RAMP RIGHT FOR I-680 NORTH TOWARD SACRAMENTO- 36.1 MI
   TOLL ROAD
4. TAKE RAMP RIGHT FOR I-80 EAST TOWARD SACRAMENTO- 41.4 MI
5. KEEP STRAIGHT ONTO I-80 E BR / US-50 E- 5.2 MI
6. KEEP STRAIGHT ONTO US-50 E- 31.6 MI
7. AT EXIT 37, TAKE RAMP RIGHT FOR N. SHINGLE RD / PONDEROSA ROAD TOWARD MOTHER LORD DR- 0.3 MI
8. BEAR RIGHT ONTO MOTHER LODE DR
9. BEAR RIGHT ONTO FRENCH CREEK RD- 2.4 MI
10. BEAR LEFT ONTO BIG CANYON RD

ARRIVE AT
5101 FRENCH CREEK RD
SHINGLE SPRINGS, CA 95682

SITE ACCESS IS ON THE RIGHT

APPROVALS

APPROVED BY:	INITIALS:	DATE:
AT&T:		
VENDOR:		
R.F.:		
LEASING / LANDLORD:		
ZONING:		
CONSTRUCTION:		
POWER / TELCO:		
PG&E:		

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T-1	TITLE SHEET	
GN-1	GENERAL NOTES, ABBREVIATIONS, & NOTES	
C-1	SITE SURVEY (BY OTHERS) FOR REFERENCE ONLY	
C-2	SITE SURVEY (BY OTHERS) FOR REFERENCE ONLY	
C-3	SITE SURVEY (BY OTHERS) FOR REFERENCE ONLY	
A-1	OVERALL SITE PLAN - EXTERIOR EQUIPMENT SHELTER	
A-1.1	SITE PLAN - EXTERIOR EQUIPMENT SHELTER	
A-2	EQUIPMENT AREA PLAN - EXTERIOR EQUIPMENT SHELTER	
A-3	ANTENNA PLAN & DETAILS - MONOPINE	
A-4.1	PROPOSED MONOPINE NORTH - SOUTH ELEVATION	
A-4.2	PROPOSED MONOPINE WEST - EAST ELEVATION	

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24" x 36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.

DIGALERT
800-227-2600
Call 2 Full Working Days In Advance

Issued For:
FRENCHTOWN 2 - BUTTE MEADOWS
5101 FRENCH CREEK RD
SHINGLE SPRINGS, CA 95682

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

AT&T SITE NO:	CVL02082
PROJECT NO:	13787699
DRAWN BY:	SAD
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	05/16/19	ZD 90%
1	07/08/19	ZD 100%

Licensor:
REGISTERED PROFESSIONAL ENGINEER
CRAIG M. HORNER
No. 84674
CIVIL
STATE OF CALIFORNIA

Engineer:
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

GENERAL CONSTRUCTION NOTES:

1. PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

2. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

3. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.

4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC/UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.

6. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT / ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT / ENGINEER.

7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.

8. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.

9. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT / ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.

10. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT / ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT / ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.

11. ALL PROPOSED AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.

12. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED / DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO IT'S ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT / ENGINEER AT COMPLETION OF PROJECT.

13. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.

14. INCLUDE MISC. ITEMS PER AT&T SPECIFICATIONS

APPLICABLE CODES, REGULATIONS AND STANDARDS:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.

THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
- IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63 NETWORK EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS

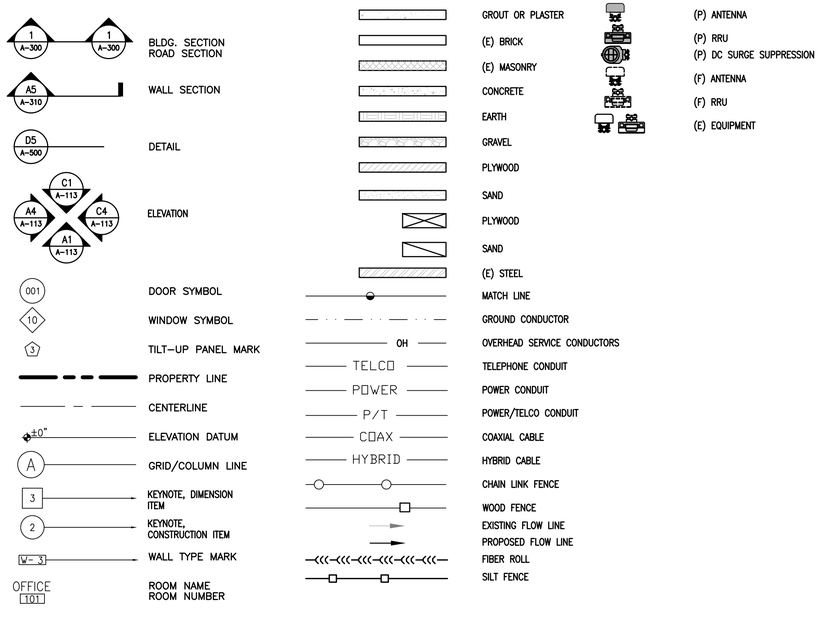
FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

A.B.	ANCHOR BOLT
ABV.	ABOVE
ACCA	ANTENNA CABLE COVER ASSEMBLY
ADD'L	ADDITIONAL
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
ALUM.	ALUMINUM
ALT.	ALTERNATE
ANT.	ANTENNA
APPRX.	APPROXIMATE(LY)
ARCH.	ARCHITECT(URAL)
AWG.	AMERICAN WIRE GAUGE
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.N.	BOUNDARY NAILING
BTCW.	BARE TINNED COPPER WIRE
B.O.F.	BOTTOM OF FOOTING
B/U	BACK-UP CABINET
CAB.	CABINET
CANT.	CANTILEVER(ED)
C.I.P.	CAST IN PLACE
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION(OR)
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
d	PENNY (NAILS)
DBL.	DOUBLE
DEPT.	DEPARTMENT
D.F.	DOUGLAS FIR
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DWG.	DRAWING(S)
DWL.	DOWEL(S)
EA.	EACH
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMT.	ELECTRICAL METALLIC TUBING
E.N.	EDGE NAIL
ENG.	ENGINEER
EQ.	EQUAL
EXP.	EXPANSION
EXST.(E)	EXISTING
EXT.	EXTERIOR
(F)	FUTURE
FAB.	FABRICATION(OR)
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
FIN.	FINISH(ED)
FLR.	FLOOR
FDN.	FOUNDATION
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.S.	FINISH SURFACE
FT.(')	FOOT (FEET)
FTG.	FOOTING
G.	GROWTH (CABINET)
GA.	GAUGE
GI.	GALVANIZE(D)
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER
GLB. (GLU-LAM)	GLUE LAMINATED BEAM
GPS	GLOBAL POSITIONING SYSTEM
GRND.	GROUND
HDR.	HEADER
HGR.	HANGER

HT.	HEIGHT
ICGB.	ISOLATED COPPER GROUND BUS
IN. (")	INCH(ES)
INT.	INTERIOR
LB.(#)	POUND(S)
L.B.	LAG BOLTS
L.F.	LINEAR FEET (FOOT)
L.	LONG(ITUDINAL)
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTL.	METAL
(N)	PROPOSED
NO.(#)	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OPNG.	OPENING
(P)	PROPOSED
P/C	PRECAST CONCRETE
PCS	PERSONAL COMMUNICATION SERVICES
PLY.	PLYWOOD
PPC	POWER PROTECTION CABINET
PRC	PRIMARY RADIO CABINET
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PWR.	POWER (CABINET)
QTY.	QUANTITY
RAD.(R)	RADIUS
REF.	REFERENCE
REINF.	REINFORCEMENT(ING)
REQ'D/	REQUIRED
RGS.	RIGID GALVANIZED STEEL
SCH.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATIONS
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL
TEMP.	TEMPORARY
THK.	THICK(NESS)
T.N.	TOE NAIL
T.O.A.	TOP OF ANTENNA
T.O.C.	TOP OF CURB
T.O.F.	TOP OF FOUNDATION
T.O.P.	TOP OF PLATE (PARAPET)
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.G.	UNDER GROUND
U.L.	UNDERWRITERS LABORATORY
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
W	WIDE (WIDTH)
w/	WITH
WD.	WOOD
W.P.	WEATHERPROOF
WT.	WEIGHT
C	CENTERLINE
P	PLATE, PROPERTY LINE

SYMBOLS LEGEND



Issued For:

FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD

SHINGLE SPRINGS, CA 95682

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

AT&T SITE NO:	CVL02082
PROJECT NO:	13787699
DRAWN BY:	SAD
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	05/16/19	ZD 90%
1	07/08/19	ZD 100%

Licensor:

REGISTERED PROFESSIONAL ENGINEER
CRAIG M. HORNER
No. 84674
CIVIL
STATE OF CALIFORNIA

Engineer:

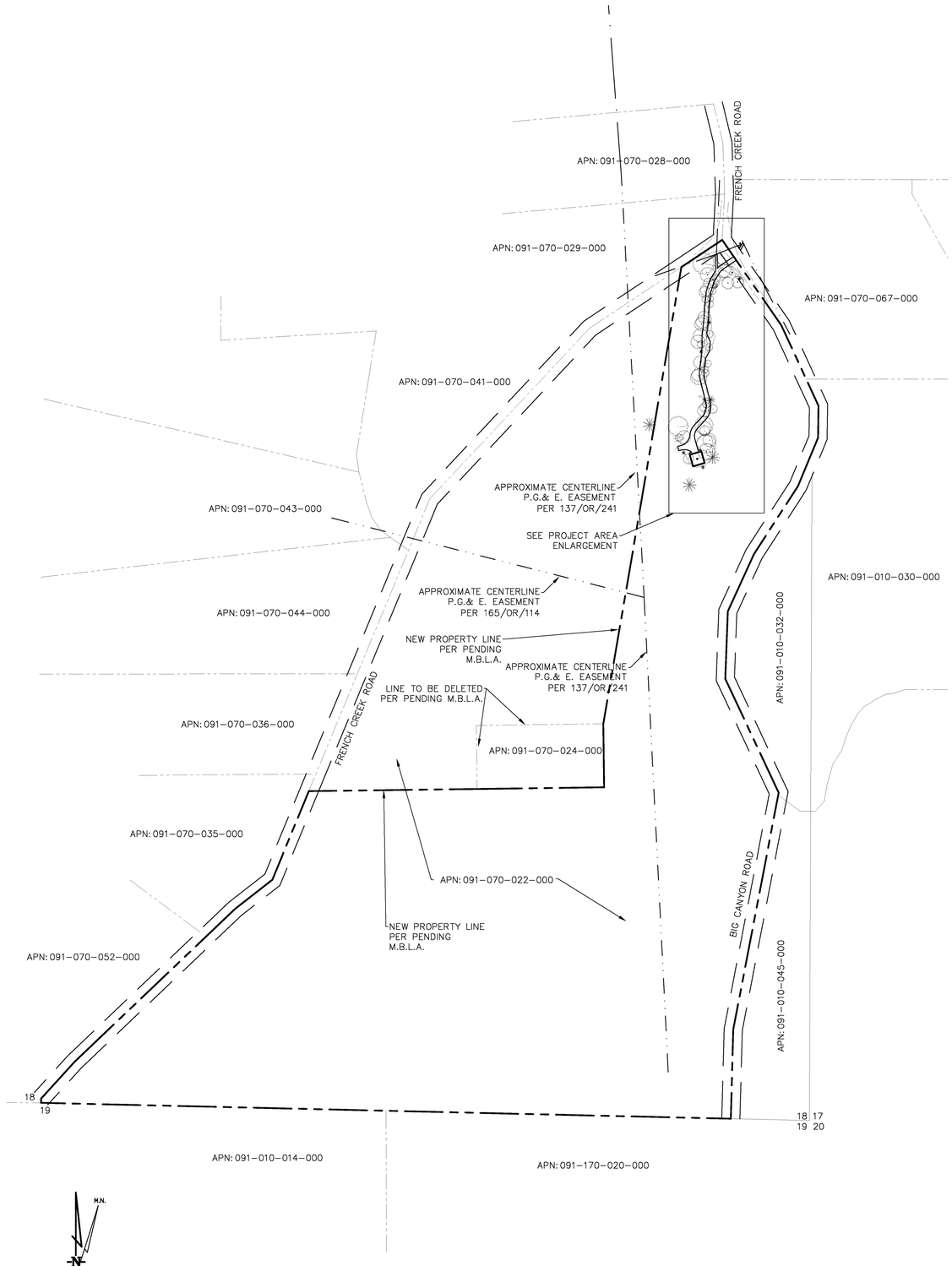
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1



OVERALL PROJECT AREA

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

A.T.& T. Mobility

Project No./Name: CVL02082 / FRENCHTOWN 2

Project Site Location: Inter. of Big Canyon Road
and French Creek Road
Shingle Springs, CA 95682
El Dorado County

Date of Observation: 02-27-19

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

Type of Antenna Mount: Proposed Monopine Tower

Coordinates (Proposed Tower Location)
Latitude: N 38° 38' 03.18" (NAD83) N 38° 38' 03.52" (NAD27)
Longitude: W 120° 54' 42.23" (NAD83) W 120° 54' 38.45" (NAD27)

ELEVATION of Ground at Structure (NAVD88) 1145.5' AMSL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91:003, and that they are true and accurate to the best of my knowledge and belief.

Kenneth D. Geil California RCE 14803

DATE OF SURVEY: 02-27-19

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, RCE 14803

LOCATED IN THE COUNTY OF EL DORADO, STATE OF CALIFORNIA

BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.

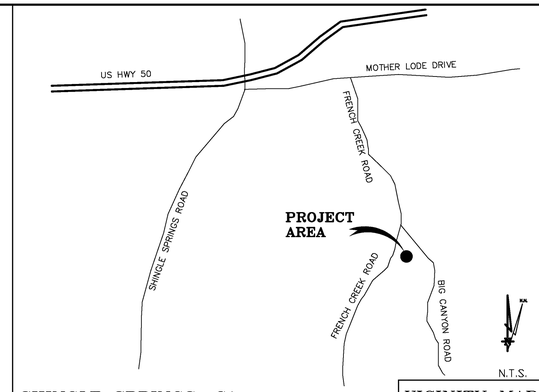
ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S. N.A.V.D. 88 DATUM. ABOVE MEAN SEA LEVEL UNLESS OTHERWISE NOTED.

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.61' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: 1'

ASSESSOR'S PARCEL NUMBER: 091-070-022-000

LANDLORD(S): MATTHEW T. LIPPMAN
911 HOOD FRANKLIN ROAD
HOOD, CA 95639



SHINGLE SPRINGS, CA — VICINITY MAP

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

Lease Area Description

All that certain lease area being a portion of that certain parcel of land described in deed filed for record as Document 2017-51329, Official Records of El Dorado County, and being a portion of Section 18, Township 9 North, Range 10 East, M.D.B. & M., and being located in the County of El Dorado, State of California being more particularly described as follows:

Commencing at 2" CIP stamped LS3423 being set for the East 1/4 corner of the above referenced Section 18 from which a 3/4" Iron Pipe with Spike inside bears South 01°07'31" East 189.64 feet; thence from said point of commencement South 37°22'56" West 587.94 feet to the True Point of Beginning; thence from said point of beginning North 16°01'30" West 40.00 feet; thence South 73°58'30" West 40.00 feet; thence South 16°01'30" East 40.00 feet; thence North 73°58'30" East 40.00 feet to the point of beginning.

Together with a non-exclusive easement for access and utility purposes fifteen feet in width the centerline of which is described as follows: beginning at a point which bears South 73°58'30" West 17.00 feet from the Northeast corner of the above described lease area and running thence North 16°01'30" West 43.94 feet; thence through a tangent curve to the right having a radius of 46.00 feet through an arc distance of 48.12 feet; thence tangent to the last curve North 43°54'23" East 10.66 feet; thence North 42°40'00" East 26.22 feet; thence through a tangent curve to the left having a radius of 60.00 feet through an arc distance of 59.39 feet; thence tangent to the last curve North 14°02'56" West 73.53 feet; thence through a tangent curve to the right having a radius of 100.00 feet through an arc distance of 39.48 feet; thence tangent to the last curve North 08°34'20" East 25.99 feet; thence North 05°01'54" East 24.64 feet; thence North 03°46'50" East 28.41 feet; thence North 00°31'34" West 27.11 feet; thence North 07°06'48" East 30.04 feet; thence North 05°25'27" East 31.42 feet; thence North 02°08'15" East 36.52 feet; thence North 06°47'33" East 50.21 feet; thence through a tangent curve to the right having a radius of 20.00 feet through an arc distance of 3.89 feet; thence tangent to the last curve North 17°55'31" East 28.31 feet; thence through a tangent curve to the right having a radius of 55.00 feet through an arc distance of 13.75 feet; thence tangent to the last curve North 32°14'57" East 19.99 feet to a point hereafter defined as Point "A"; thence continuing North 32°14'57" East 8.88 feet; thence through a tangent curve to the right having a radius of 46.00 feet through an arc distance of 19.07 feet; thence tangent to the last curve North 56°00'21" East 52.40 feet more or less to a point on the Big Canyon Road Southerly right of way and a point hereafter defined as Point "B".

Also together with a non-exlcusive easement for utility purposes six feet in width the centerline of which is described as follows: beginning at Point "A" as previously defined an running thence North 00°06'21" West 64.3 feet more or less to the existing utility pole.

Also together with a non-exlcusive easement for utility purposes six feet in width the centerline of which is described as follows: Commencing at Point "B" as previously defined an running thence North 28°37'04" East 33.56 feet more or less to a point on the Northerly right of way line of Big Canyon Road and the True Point of Beginning; thence from said point of beginning North 30°51'25" East 23.19 feet more or less to the existing utility pole.

Also together with a non-exlcusive easement for utility purposes six feet in width the South line of which is identical to the North line of the above described lease area.

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
EE\IN		
OPS		
EE\OUT		

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

at&t MOBILITY

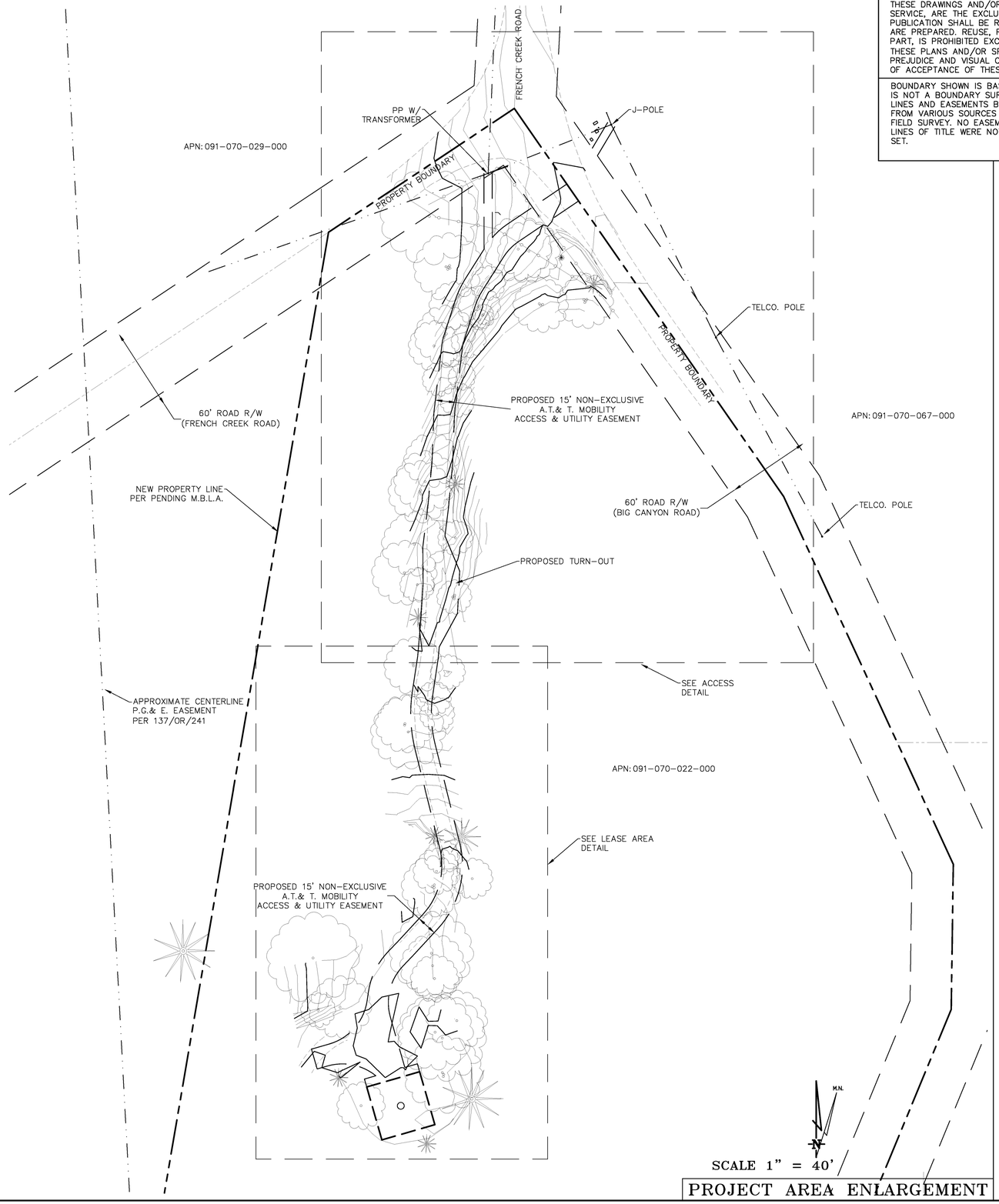
CVL02082
FRENCHTOWN 2
INTER. OF BIG CANYON ROAD
AND FRENCH CREEK ROAD
SHINGLE SPRINGS, CA 95682

PLOT PLAN AND
SITE TOPOGRAPHY

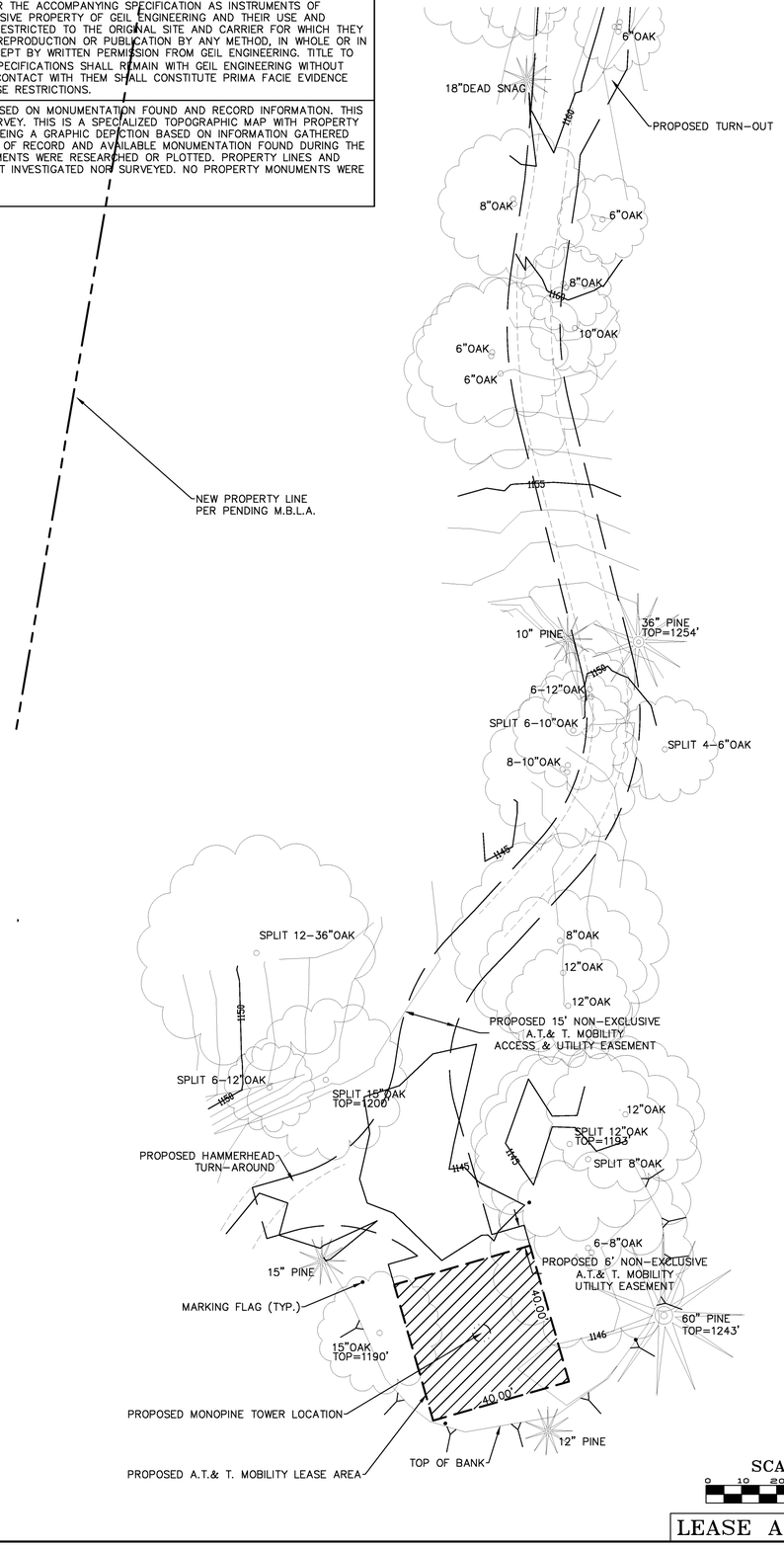
REVISIONS			
03-01-19	Preliminary Drawing	NR	REV
04-03-19	Tower Location Added	NR	REV
05-13-19	Lease Area Added	NR	REV
05-16-19	Easement Mod.	NR	REV
05-24-19	Redlines	NR	REV
05-31-19	M.B.L.A. Recognized	NR	REV

Sheet
C-1

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



PROJECT AREA ENLARGEMENT



LEASE AREA DETAIL

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
EE/IN		
OPS		
EE/OUT		

Surveyor

GEIL ENGINEERING
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at&t MOBILITY

CVL02082
FRENCHTOWN 2
INTER. OF BIG CANYON ROAD
AND FRENCH CREEK ROAD
SHINGLE SPRINGS, CA 95682
PLOT PLAN AND
SITE TOPOGRAPHY

Sheet
C-2

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

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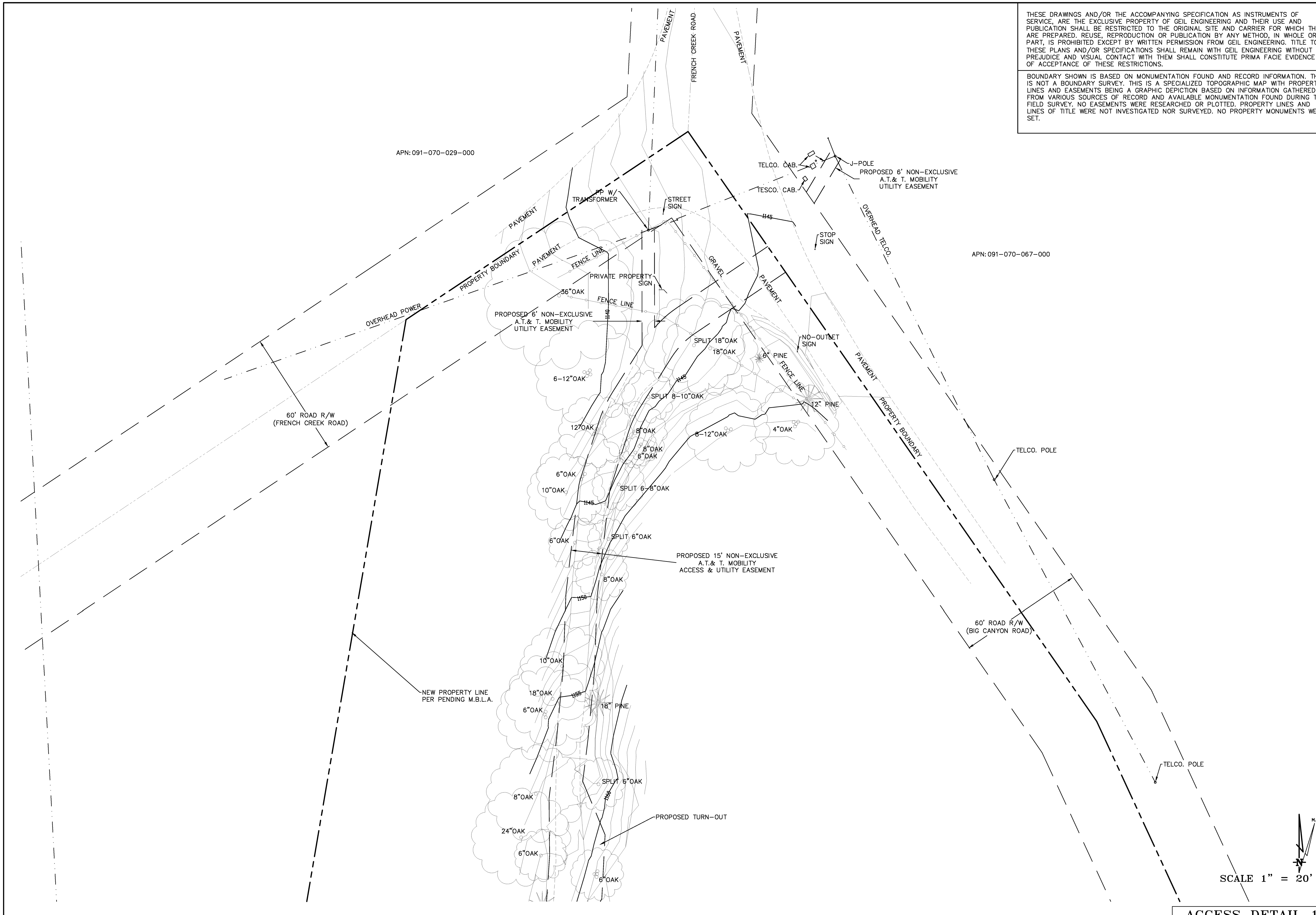

SCALE 1" = 20'

ACCESS DETAIL 1

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
EE\IN		
OPS		
EE\OUT		

Surveyor

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CVL02082
FRENCHTOWN 2
INTER. OF BIG CANYON ROAD
AND FRENCH CREEK ROAD
SHINGLE SPRINGS, CA 95682
PLOT PLAN AND
SITE TOPOGRAPHY

Sheet

C-3

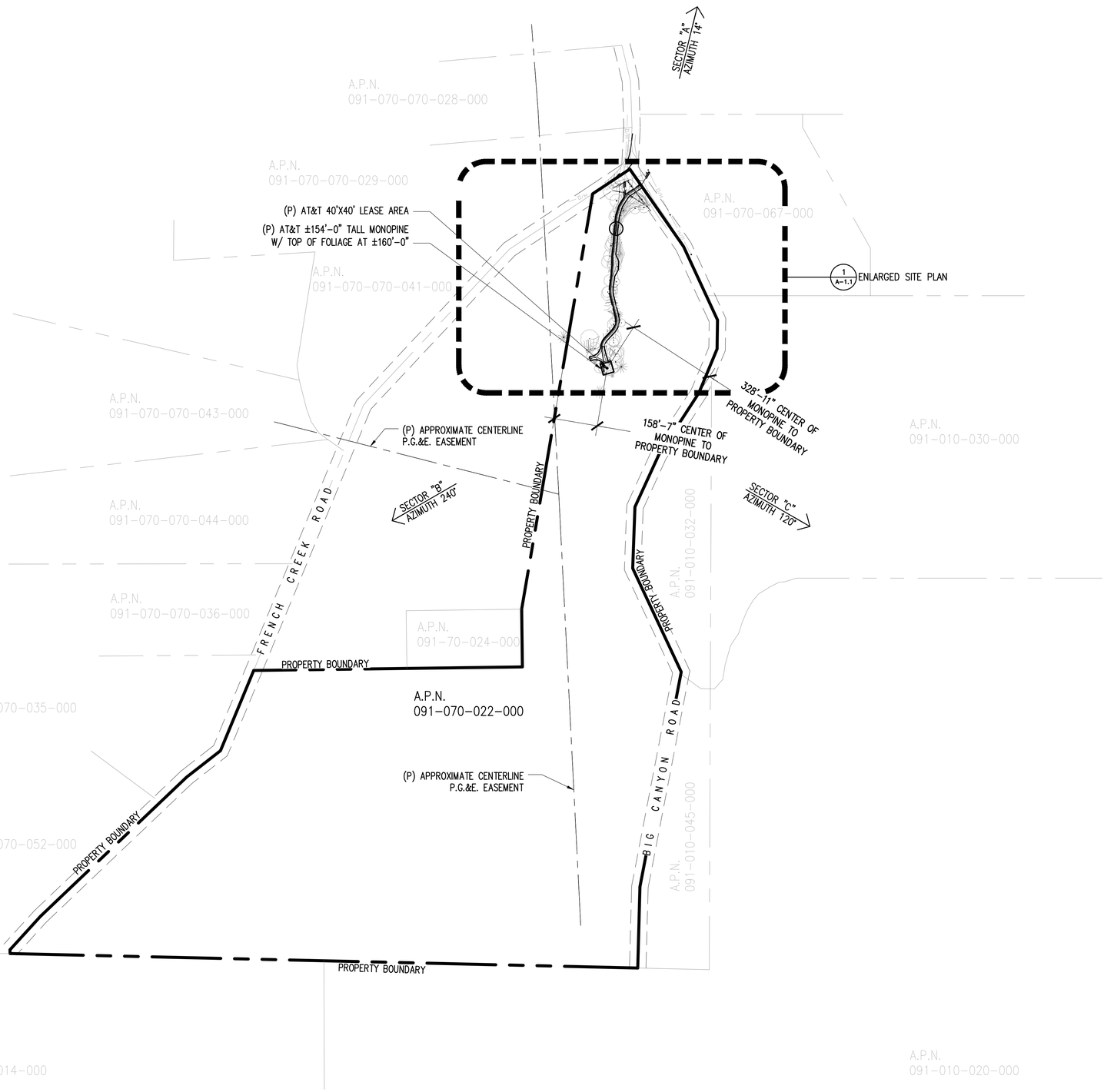
THIS IS NOT A SITE SURVEY

ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET HALF-WIDTHS HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND EXISTING DRAWINGS AND ARE APPROXIMATE.

NOTES:

1. NO GRADING OR PERMANENT CONSTRUCTION SHALL OCCUR WITHIN DRIP LINES OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.

2. PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR TO CONTACT DIGALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES. IN THE EVENT OF CONFLICTS, CONTRACTOR TO CONTACT PDC.



1 OVERALL SITE PLAN
1"=200'-0"

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

Issued For:

FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD

SHINGLE SPRINGS, CA 95682

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

AT&T SITE NO:	CVL02082
PROJECT NO:	13787699
DRAWN BY:	SAD
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	05/16/19	ZD 90%
1	07/08/19	ZD 100%

Licensor:

REGISTERED PROFESSIONAL ENGINEER
CRAIG M. HORNER
No. 84674
CIVIL
STATE OF CALIFORNIA

Engineer:

ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

A-1

THIS IS NOT A SITE SURVEY

ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET HALF-WIDTHS HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND EXISTING DRAWINGS AND ARE APPROXIMATE.

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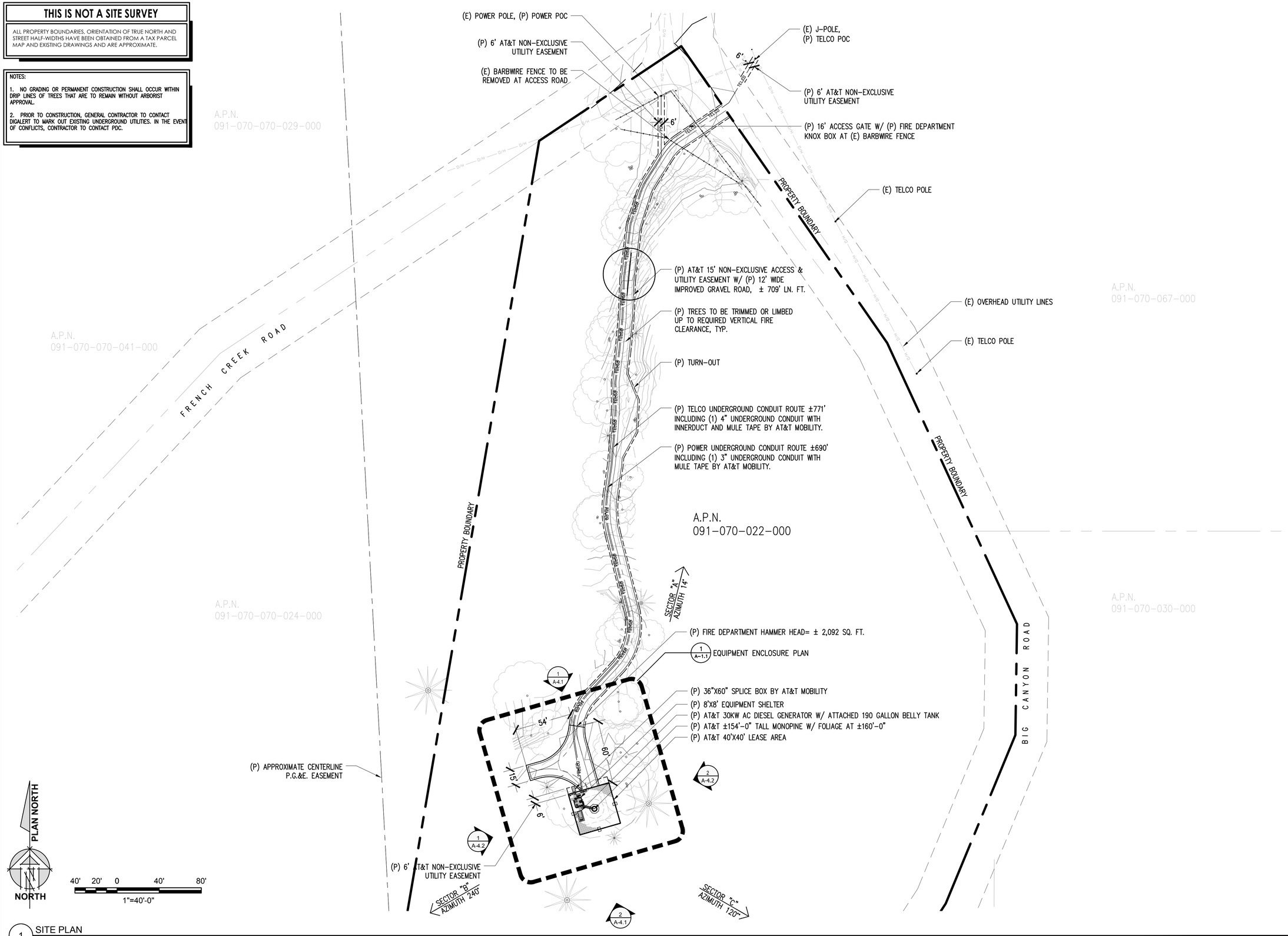

1 SITE PLAN
1"=10'-0"

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

Issued For:

FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD

SHINGLE SPRINGS, CA 95682

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

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Licensor:

REGISTERED PROFESSIONAL ENGINEER CRAIG M. HORNER No. 84674 CIVIL STATE OF CALIFORNIA

Engineer:
ADAPTIVE RE-USE ENGINEERING
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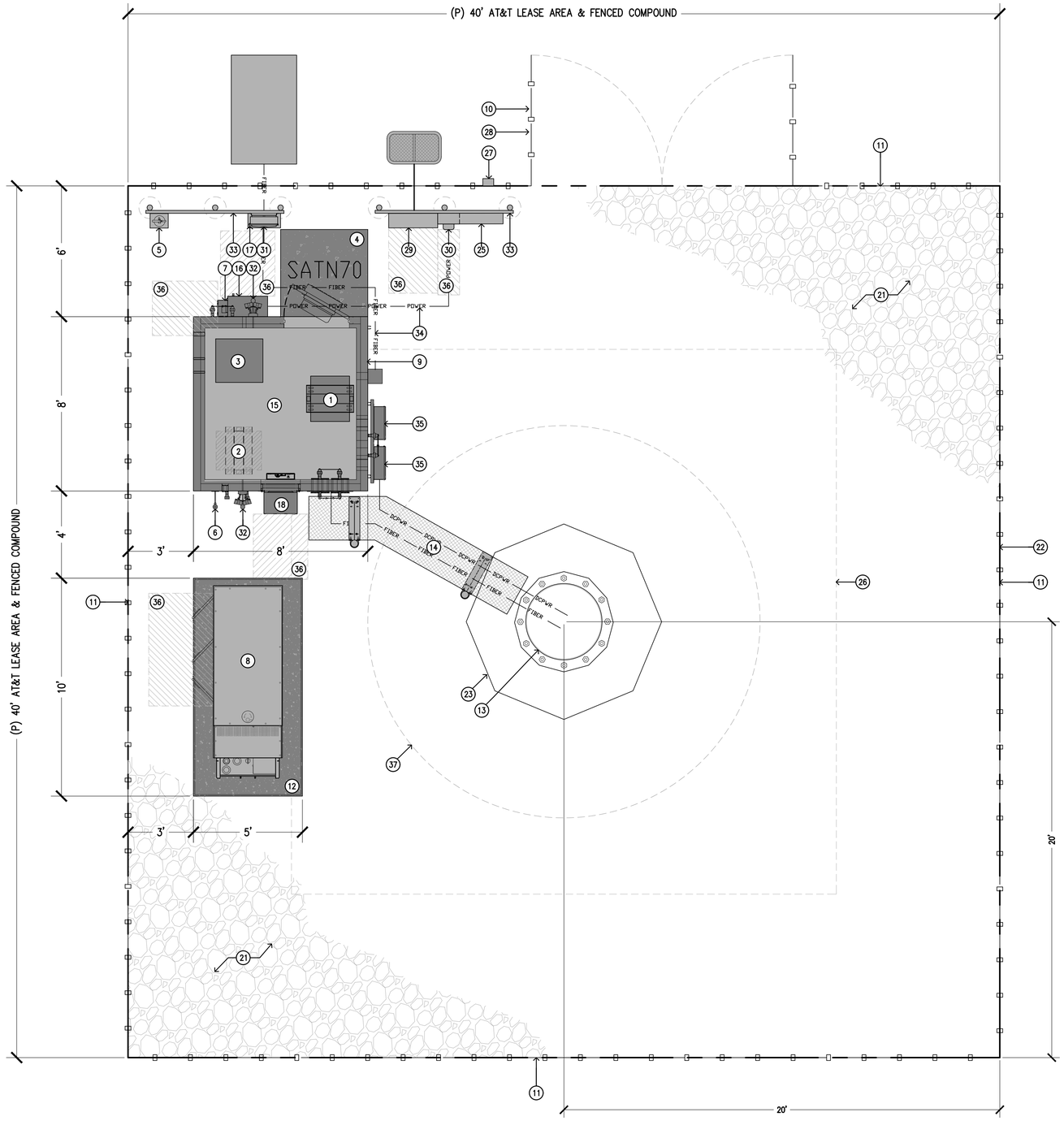
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
A-1.1

KEYNOTES

1. (P) RF RACK #1
2. (F) RF RACK #2
3. (P) POWER PLANT RACK W/ (3) STRING OF BATTERIES
4. (P) 4'X4' CONCRETE STOOP
5. (P) 2A:20BC RATED FIRE EXTINGUISHER IN WEATHER RESISTANT CABINET
6. (P) GPS UNIT
7. (P) CAMLOCK GENERATOR INTERFACE
8. (P) 30KW AC DIESEL STANDBY GENERATOR (SOUND ENCLOSURE RATING TYPE 2) W/ ATTACHED 190 GAL CAPACITY BELLY TANK
9. (P) 8'X8' SHELTER SLAB
10. (P) 12'-0" WIDE ACCESS GATE
11. (P) 6'-0" WOOD FENCE
12. (P) 5'X10' GENERATOR SLAB SLAB
13. (P) ±154'-0" MONOPINE WITH FOLIAGE AT ±160'-0"
14. (P) ± 10'-6" ICE BRIDGE
15. (P) AT&T 8'x8' CONCRETE WIC
16. (P) 200A PANEL W/ MAIN DISCONNECT & AUTOMATIC TRANSFER SWITCH
17. (P) HOFFMAN BOX BELOW CIENNA
18. (P) HVAC UNIT PROVIDED WITH WALK IN EQUIPMENT SHELTER
19. NOTE NOT USED
20. NOTE NOT USED
21. (P) GRAVEL BED OVER MARFI WEED BARRIER THROUGHOUT AT&T COMPOUND
22. (P) AT&T 40'X40' LEASE AREA
23. (P) TOWER PIER (BY OTHERS)
24. NOTE NOT USED
25. (P) ELECTRICAL GUTTER
26. (P) U/G TOWER MATT SLAB (DESIGN BY OTHERS)
27. (P) FIRE DEPARTMENT KNOX BOX
28. (P) CARRIER CONTACT SIGNAGE AT GATE
29. (P) 400AMP PULL SECTION
30. (P) 200AMP ELECTRICAL METER/WITH MAIN DISCONNECT AND TEST BYPASS FACILITIES BELOW ELECTRICAL GUTTER
31. (P) CIENNA CABINET BY AT&T LANDLINE ON (P) H-FRAME
32. (P) SHIELDED DOWN TILT LIGHT WITH MOTION SENSOR AND AUTO SHUTOFF TIMER PROVIDED WITH WALK IN EQUIPMENT SHELTER
33. (P) UTILITY H-FRAME
34. (P) UNDERGROUND UTILITY CONDUITS
35. (P) SURGE SUPPRESSORS, TYP OF (3) STACKED, TOTAL
36. NEC CLEAR WORKING AREA TYPICAL
37. (P) APPROXIMATE MONOPINE FOLIAGE DRIP LINE



1 EQUIPMENT ENCLOSURE PLAN - EXTERIOR WALK IN EQUIPMENT SHELTER
3/8"=1'-0"

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

Issued For:
FRENCHTOWN 2 - BUTTE MEADOWS
5101 FRENCH CREEK RD
SHINGLE SPRINGS, CA 95682

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214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
EQUIPMENT AREA PLAN

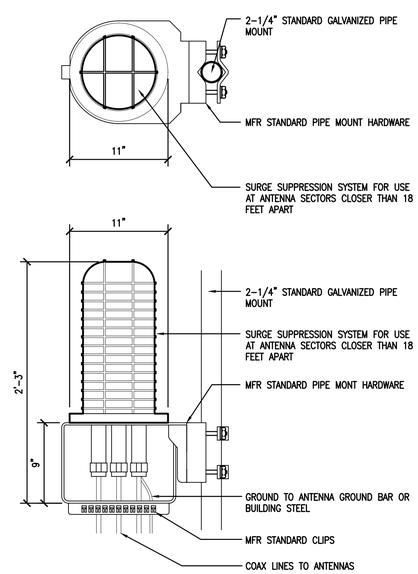
SHEET NUMBER:
A-2

RAYCAP DC6-48-60-18-8C &
DC6-48-60-0-8C SURGE SUPPRESSION SOLUTION

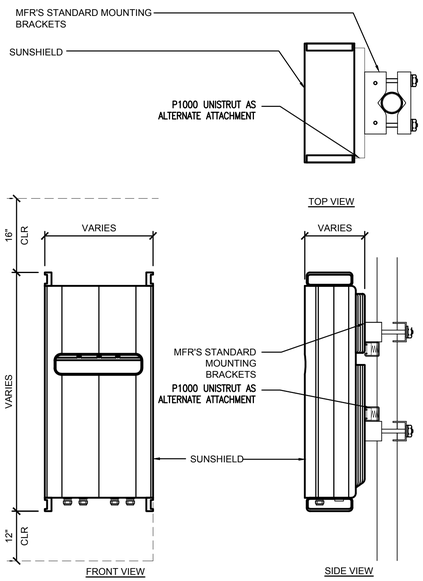
COLOR: BLACK/SILVER

DIMENSIONS: 11" DIA X 27" TALL W/ 9" BASE

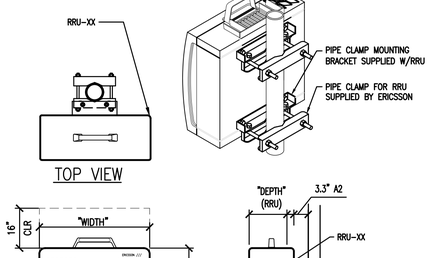
WEIGHT: +/- 50 LBS. (INCLUDING MOUNTING HARDWARE



1 DC SURGE SUPPRESSION (SQUID)
1 1/2"=1'-0"

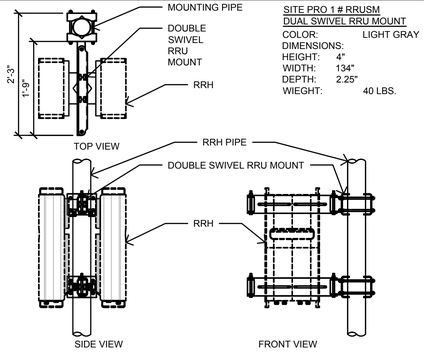


2 TYPICAL RRU MOUNTING
1 1/2"=1'-0"



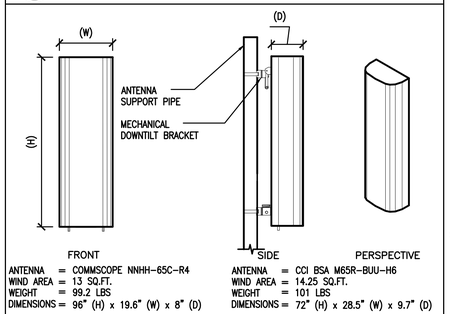
TYPE	HEIGHT	WIDTH	DEPTH	WEIGHT
RRUS-E2	20.4"	18.5"	7.5"	53 LBS
RRUS-4478 B14	18.1"	13.4"	8.26"	59.4 LBS
RRUS-4415 B25	14.96"	13.19"	5.39"	46 LBS
RRUS-4415 B30	14.96"	13.19"	5.39"	46 LBS
RRUS-4449 B5/B12	28"	15"	10"	85 LBS
RRUS-8843 B2/B66	28"	15"	10"	85 LBS

3 ERICSSON RRUS- REMOTE RADIO UNIT
1 1/2"=1'-0"



SITE PRO 1 # RRUSM
DUAL SWIVEL RRU MOUNT
COLOR: LIGHT GRAY
DIMENSIONS:
HEIGHT: 4"
WIDTH: 134"
DEPTH: 2.25"
WIEGHT: 40 LBS.

4 DOUBLE SIDED RRH MOUNT
3/4"=1'-0"



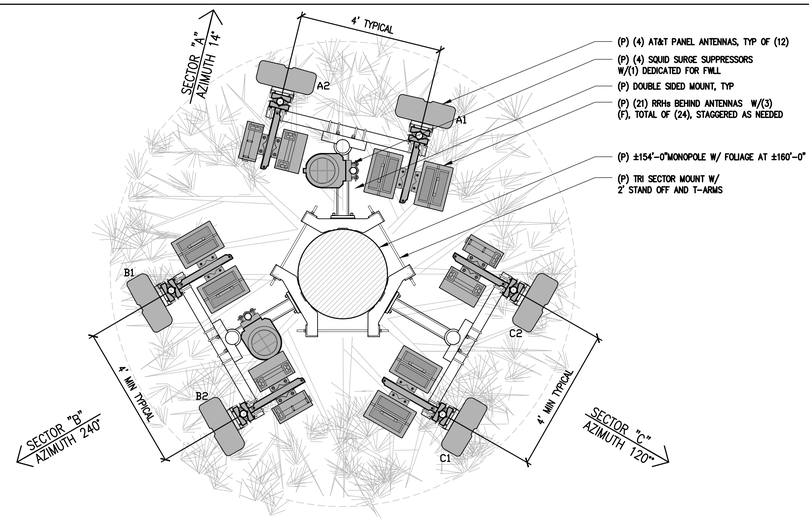
ANTENNA = COMMSCOPE NNHH-65C-R4
WIND AREA = 13 SQ.FT.
WEIGHT = 99.2 LBS
DIMENSIONS = 96" (H) x 19.6" (W) x 8" (D)

ANTENNA = CCI BSA M65R-BUU-H6
WIND AREA = 14.25 SQ.FT.
WEIGHT = 101 LBS
DIMENSIONS = 72" (H) x 28.5" (W) x 9.7" (D)

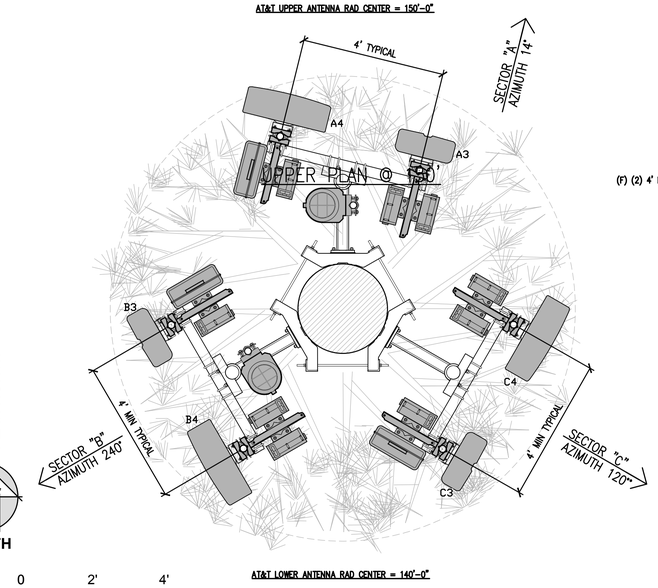
5 ANTENNA SPEC
3/4"=1'-0"

RF SCHEDULE									
SECTOR	ANTENNA MODEL NO.	TECHNOLOGY	AZIMUTH	RAD CENTER	RRU	DIPLEXER	FIBER LENGTH	COAX LENGTH	FIBER NO.
ALPHA	A1	COMMSCOPE NNHH-65C-R4	700/PCS1	14°	± 150'-0"	(2) RRUS	N/A	± 180'	± N/A	TRUNK 1
	A2	COMMSCOPE NNHH-65C-R4	B14/AWS	14°	± 150'-0"	(1) RRUS, (1) (F) RRUS	N/A	± 180'	± N/A	TRUNK 1
	A3	COMMSCOPE NNHH-65C-R4	B29/PCS2	14°	± 140'-0"	(2) RRUS	N/A	± 170'	± N/A	TRUNK 1
	A4	CCI BSA-M65R-BUU-H6-K	FWLL-SPLIT (BSA)	14°	± 140'-0"	(2) RRUS	N/A	± 170'	± N/A	TRUNK 3
BETA	B1	COMMSCOPE NNHH-65C-R4	700/PCS1	240°	± 150'-0"	(2) RRUS	N/A	± 180'	± N/A	TRUNK 2
	B2	COMMSCOPE NNHH-65C-R4	B14/AWS	240°	± 150'-0"	(1) RRUS, (1) (F) RRUS	N/A	± 180'	± N/A	TRUNK 2
	B3	COMMSCOPE NNHH-65C-R4	B29/PCS2	240°	± 140'-0"	(2) RRUS	N/A	± 170'	± N/A	TRUNK 2
	B4	CCI BSA-M65R-BUU-H6-K	FWLL-SPLIT (BSA)	240°	± 140'-0"	(2) RRUS	N/A	± 170'	± N/A	TRUNK 3
GAMMA	C1	COMMSCOPE NNHH-65C-R4	700/PCS1	120°	± 150'-0"	(2) RRUS	N/A	± 180'	± N/A	TRUNK 4
	C2	COMMSCOPE NNHH-65C-R4	B14/AWS	120°	± 150'-0"	(1) RRUS, (1) (F) RRUS	N/A	± 180'	± N/A	TRUNK 4
	C3	COMMSCOPE NNHH-65C-R4	B29/PCS2	120°	± 140'-0"	(2) RRUS	N/A	± 170'	± N/A	TRUNK 4
	C4	COMMSCOPE NNHH-65C-R4	FWLL-SPLIT (BSA)	120°	± 140'-0"	(2) RRUS	N/A	± 170'	± N/A	TRUNK 3
	RFDS DATED 03/13/2019, ISSUE 1.00.00 REVISION 6/19/2019				(21) PROPOSED RRUS				
					(3) FUTURE RRUS				
					(24) TOTAL RRUS				
	(F) (2) 4' MICROWAVES		132'-6"						

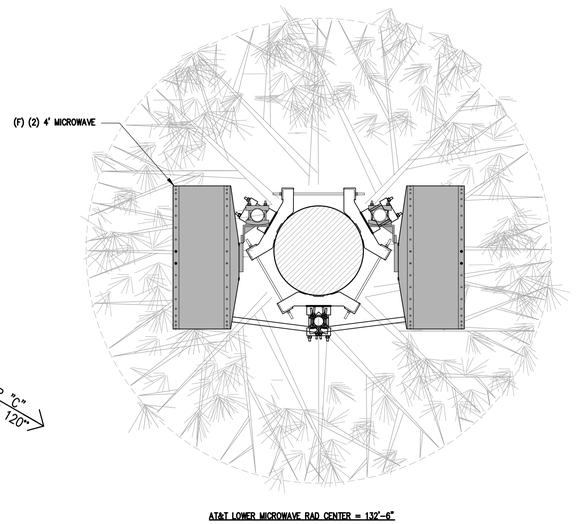
6 RF SCHEDULE
NOT TO SCALE



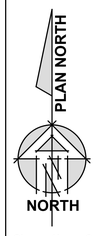
AT&T UPPER ANTENNA RAD CENTER = 150'-0"



AT&T LOWER ANTENNA RAD CENTER = 140'-0"



AT&T LOWER MICROWAVE RAD CENTER = 132'-6"



2' 1' 0 2' 4'
1/2"=1'-0"

7 ENLARGED ANTENNA PLAN
1/2"=1'-0"

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

Issued For:
FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD

SHINGLE SPRINGS, CA 95682

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

AT&T SITE NO:	CVL02082
PROJECT NO:	13787699
DRAWN BY:	SAD
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	05/16/19	ZD 90%
1	07/08/19	ZD 100%

Licensor:
REGISTERED PROFESSIONAL ENGINEER
CRAIG M. HORNER
No. 84674
CIVIL
STATE OF CALIFORNIA

Engineer:
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
ANTENNA PLAN & DETAILS

SHEET NUMBER:
A-3

(P) TOP OF MONOPINE BRANCHES
± EL. ±160'-0" AGL

(P) TOP OF MONOPINE STEEL
± EL. ±154'-0" AGL

(P) AT&T ANTENNA UPPER RAD CENTER
± EL. 150'-0" AGL

(P) AT&T ANTENNA RAD CENTER
± EL. 140'-0" AGL

(P) FUTURE AT&T MICROWAVE CENTER LINE
± EL. 132'-6" AGL

(P) FUTURE CARRIER RAD CENTER
± EL. 125'-0" AGL

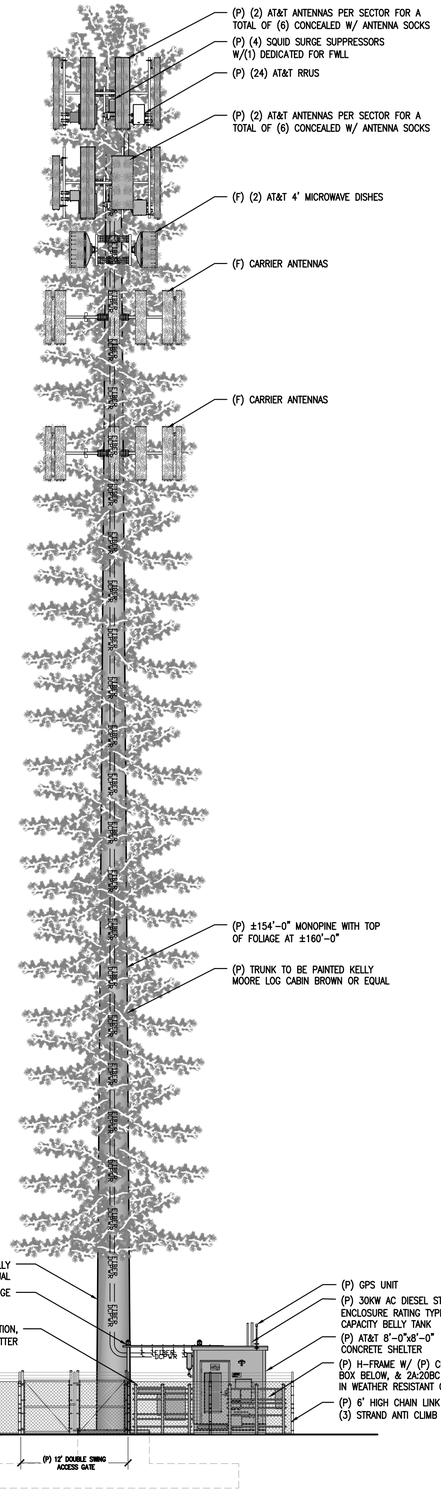
(P) FUTURE CARRIER RAD CENTER
± EL. 110'-0" AGL

(P) FUTURE CARRIER RAD CENTER
± EL. 109' AGL

NOTE:

(P) ANTENNAS & RRU'S TO BE COVERED WITH "SOCKS" UNLESS OTHERWISE SPECIFIED

BRANCHES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. NOT TO SCALE



8' 4' 0 8' 16'
1/8"=1'-0"

1 PROPOSED NORTH ELEVATION
1/8"=1'-0"

(P) TOP OF MONOPINE BRANCHES
± EL. ±160'-0" AGL

(P) TOP OF MONOPINE STEEL
± EL. ±154'-0" AGL

(P) AT&T ANTENNA UPPER RAD CENTER
± EL. 150'-0" AGL

(P) AT&T ANTENNA RAD CENTER
± EL. 140'-0" AGL

(P) FUTURE AT&T MICROWAVE CENTER LINE
± EL. 132'-6" AGL

(P) FUTURE CARRIER RAD CENTER
± EL. 125'-0" AGL

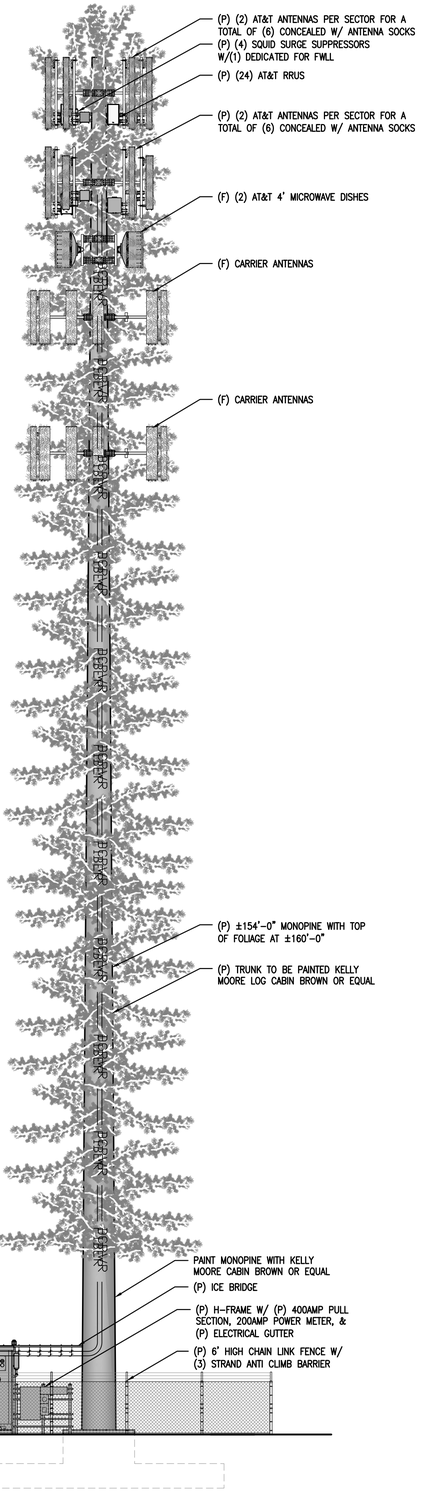
(P) FUTURE CARRIER RAD CENTER
± EL. 110'-0" AGL

(P) FUTURE CARRIER RAD CENTER
± EL. 109' AGL

NOTE:

(P) ANTENNAS & RRU'S TO BE COVERED WITH "SOCKS" UNLESS OTHERWISE SPECIFIED

BRANCHES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. NOT TO SCALE



8' 4' 0 8' 16'
1/8"=1'-0"

2 PROPOSED SOUTH ELEVATION
1/8"=1'-0"

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

Issued For:

FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD

SHINGLE SPRINGS, CA 95682

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

AT&T SITE NO:	CVL02082
PROJECT NO:	13787699
DRAWN BY:	SAD
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	05/16/19	ZD 90%
1	07/08/19	ZD 100%

Licensor:

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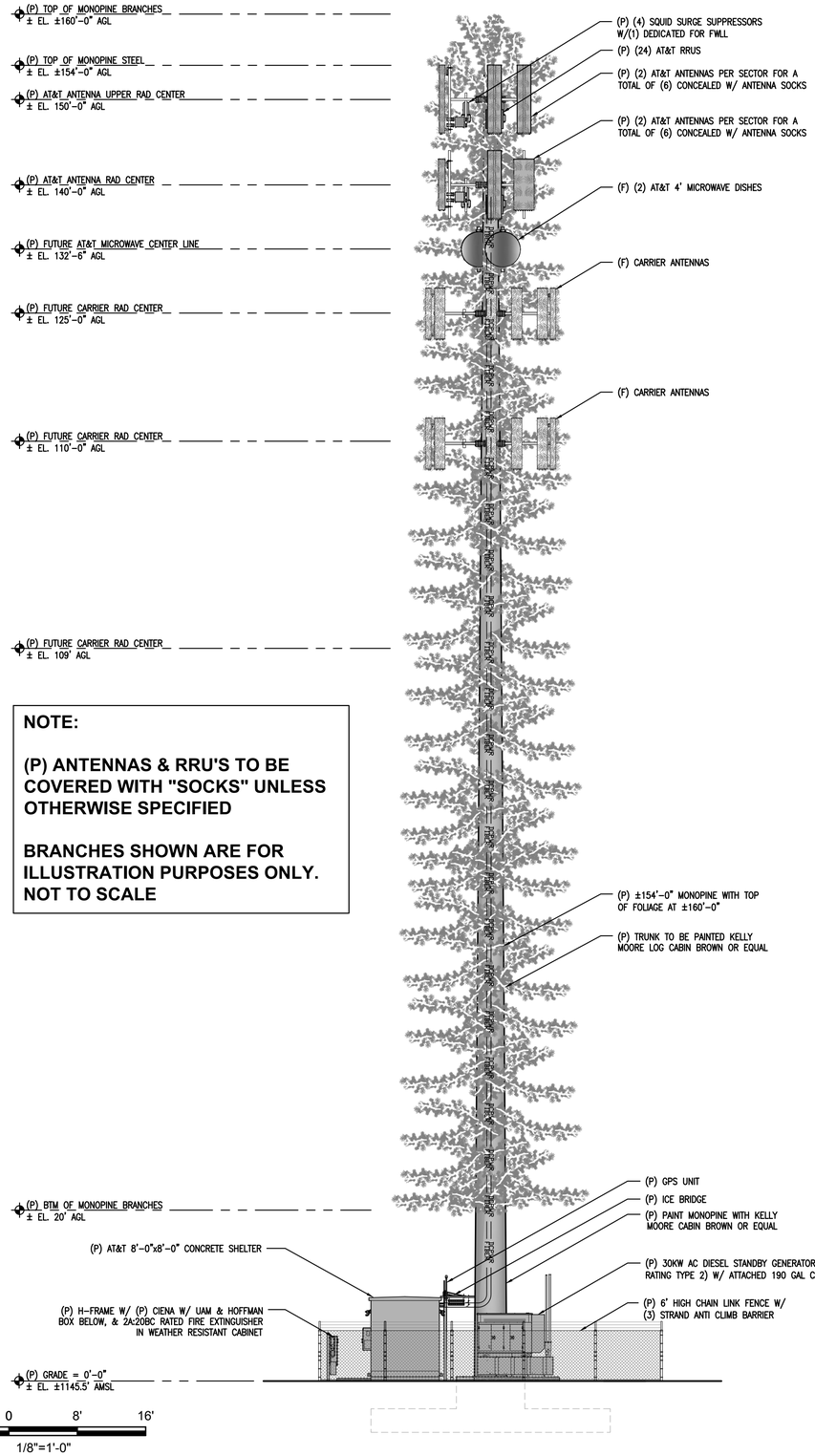
No. 84674
CIVIL
STATE OF CALIFORNIA

Engineer:
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
PROPOSED MONOPINE NORTH - SOUTH ELEVATION

SHEET NUMBER:
A-4.1

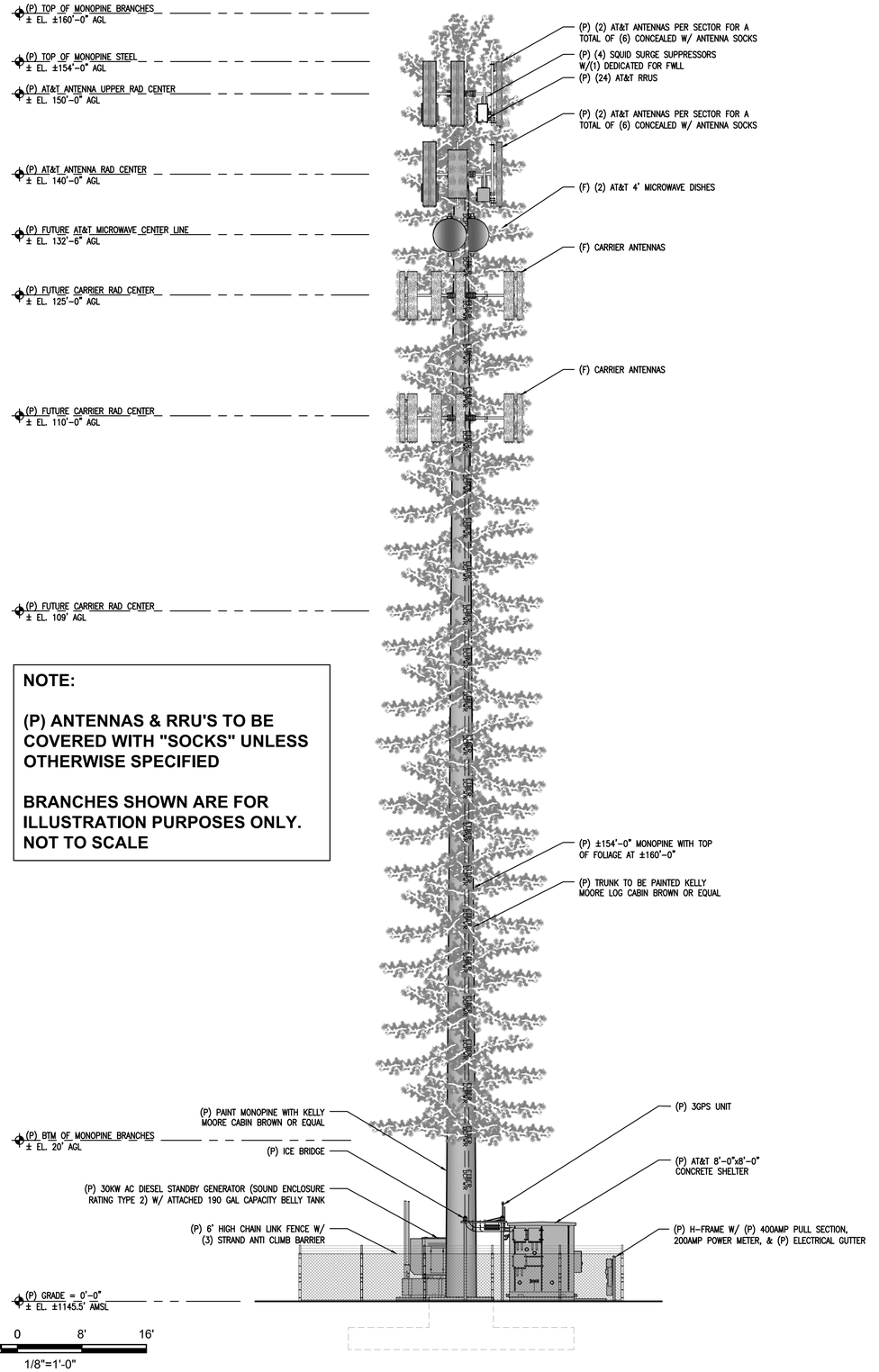


NOTE:

(P) ANTENNAS & RRU'S TO BE COVERED WITH "SOCKS" UNLESS OTHERWISE SPECIFIED

BRANCHES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. NOT TO SCALE

1 PROPOSED EAST ELEVATION
1/8"=1'-0"



NOTE:

(P) ANTENNAS & RRU'S TO BE COVERED WITH "SOCKS" UNLESS OTHERWISE SPECIFIED

BRANCHES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. NOT TO SCALE

2 PROPOSED WEST ELEVATION
1/8"=1'-0"

SITE TYPE: MONOPINE/EQUIPMENT SHELTER

Issued For:

FRENCHTOWN 2 - BUTTE MEADOWS

5101 FRENCH CREEK RD

SHINGLE SPRINGS, CA 95682

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC
Connecting a Wireless World

AT&T SITE NO:	CVL02082
PROJECT NO:	13787699
DRAWN BY:	SAD
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	05/16/19	ZD 90%
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Licensor:

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CRAIG M. HORNER
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Engineer:

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Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
PROPOSED MONOPINE WEST - EAST ELEVATION

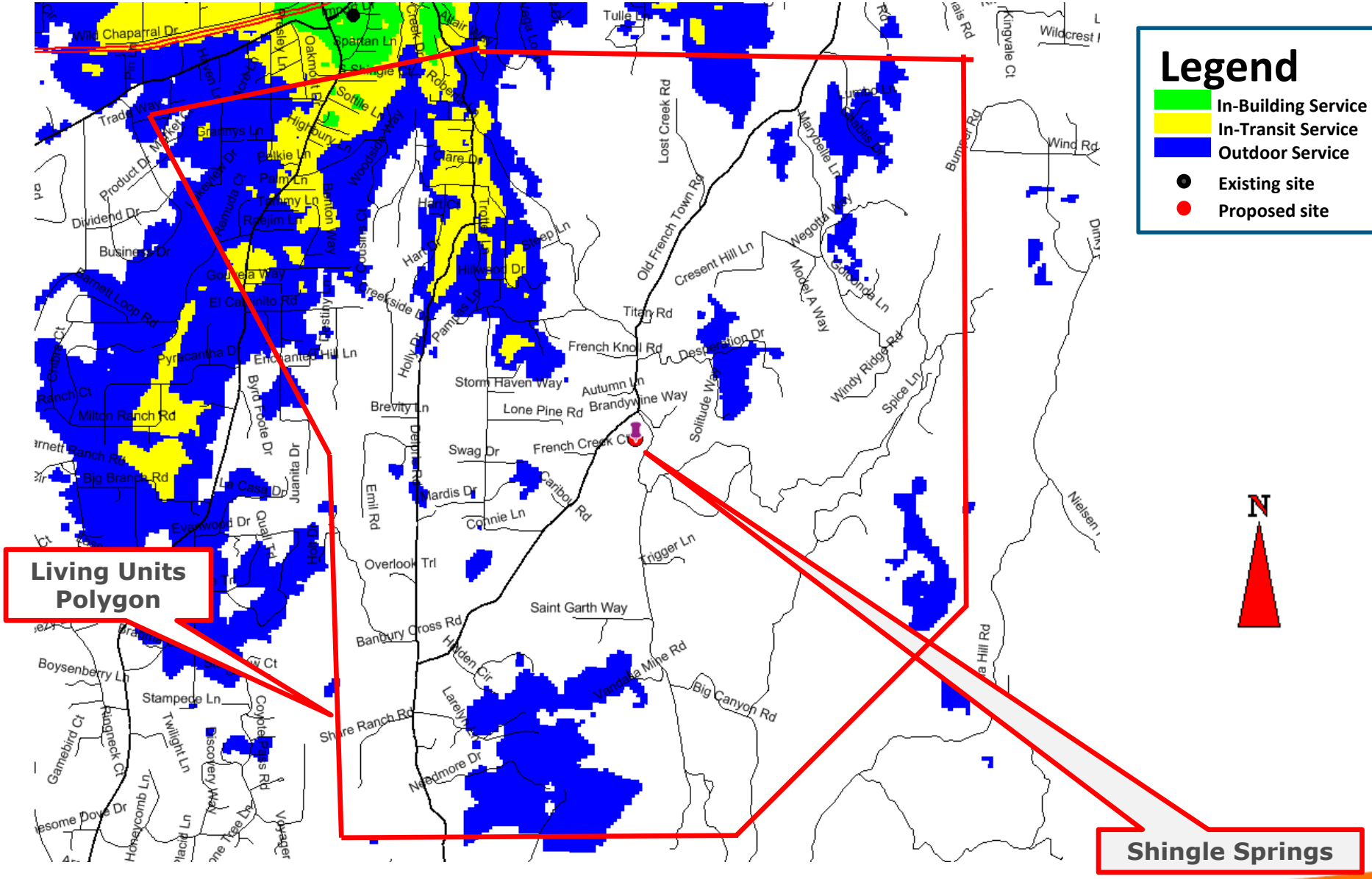
SHEET NUMBER:
A-4.2

Attachment 5: Coverage Maps
Project CUP19-0007
AT&T CAF II, Frenchtown 2 (Shingle Springs)

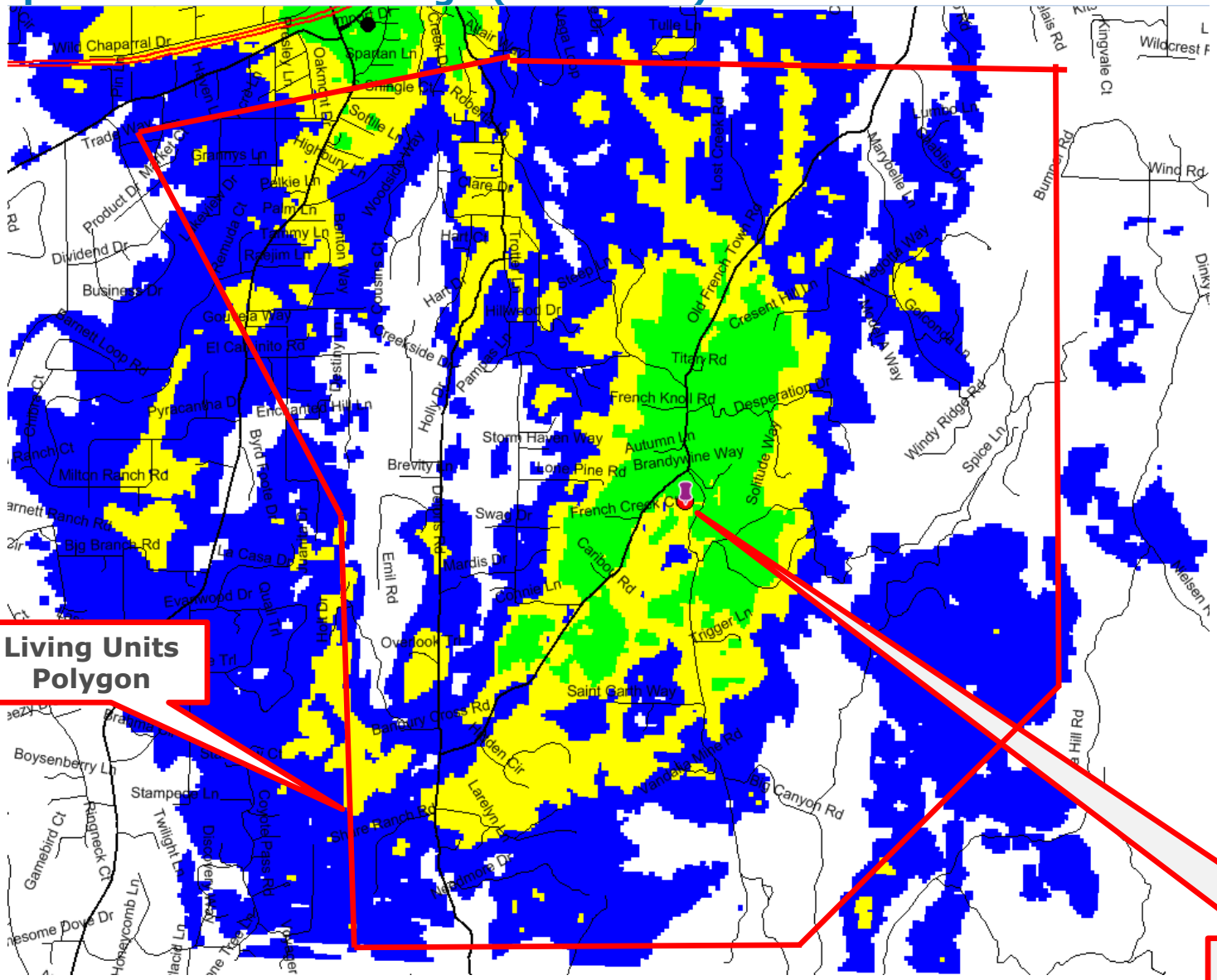
CVL02082 Zoning Propagation Map

July 1, 2019

Existing LTE 700 Coverage



Proposed LTE 700 Coverage (RC = 110')



on Behalf of

PROJECT SUPPORT STATEMENT

AT&T PROJECT NAME: CONNECT AMERICA FUND II (CAF II) PROJECT

DEVELOPMENT APPLICATION FOR AT&T SITE "FRENCHTOWN 2"

AT&T SITE NUMBER: CVL02082

AUTHORIZED AGENT:

EPIC WIRELESS GROUP, LLC

ZONING MANAGER:

JARED KEARSLEY; 916-755-1326; jared.kearsley@epicwireless.net

PROPERTY OWNER: MATT LIPPMAN

415-601-8689

APN: 091-070-022-000

5101 French Creek Rd, Shingle Springs, CA 9568

- **PROJECT'S BACKGROUND AND OBJECTIVES**
- **SEARCH RING'S DESCRIPTION AND OBJECTIVES**
- **POTENTIAL CO-LOCATIONS**
- **ALTERNATIVE SITE ANALYSIS**
- **SUBJECT PARCEL AND SITE DETAILS AND SUPPORTING DOCUMENTS**
- **OPERATIONAL STATEMENT**
- **FIRE SUPPRESSION SYSTEM**
- **OTHER CONSIDERATIONS RELATING TO NEW WIRELESS TELECOMMUNICATION FACILITIES PURSUANT TO 17.14.210 AND 17.22.500 OF THE EL DORADO COUNTY ZONING CODE**

Project Background and objectives:

AT&T is participating in a Federal Government funded project called Connect America Fund (CAF) – which is to provide underserved areas throughout the United States in general and throughout El Dorado County in particular with hi-speed broadband internet. The build-up of hi-speed broadband internet throughout rural/underserved areas will not only drive economic growth in rural America, but will expand the online marketplace nationwide, creating jobs, educational and businesses opportunities across the country. The CAF project is required to provide broadband internet services capable of 10 Mbps download and 1 Mbps upload speeds.

AT&T has the necessary technology that allows them to build out their territory in El Dorado County with the much demanded hi-speed broadband internet to help improve the county's rural infrastructure. AT&T's basis for transmitting and receiving hi-speed broadband internet to residences is executed by providing one site with either a microwave fiber hop or a direct fiber line to the site and transferring the high speeds of fiber to each Living Unit (LU) via wireless signals. Each LU being provided with the service will have a small square antenna located in a vantage point on the property where it has a direct line of site to the tower. The square antenna will send and receive wireless broadband internet providing the LU with a minimum of 10/1 Mbps download and upload speeds, respectively.

AT&T's secondary objective is to provide and enhance AT&T's Wireless Telecommunications services (cellular services) to underserved areas. Cellular services go hand in hand with building the internet infrastructure throughout these underserved areas. People today rely on their mobile devices not only for educational and business purposes, but also for emergency services. Increasing AT&T's cellular coverage and capacity throughout El Dorado County's rural areas while providing wireless broadband internet will greatly assist with enhancing the county's economic growth and the area's infrastructure.

Given the need for direct line of site to residences, a taller than typical tower will be necessary in order to provide wireless broadband internet services to as many homes in the targeted areas as possible. During the tower design phase, the Radio Frequency (RF) engineer study many variables including surrounding tree heights, tree densities, population densities, and surrounding hill tops, in order to properly design a sufficient tower height with the goal of achieving the FCC's track census block mandates of reaching specific LU coverage objectives per area. Living Unit (LU) coverage objectives are provided by the RF engineer using density maps and are based on the area's approximate population. AT&T's goal is not only to reach the coverage objective, but to outperform the coverage objective to ensure that the maximum amount of homes are being provided this service while taking into consideration a small margin of error during the simulation process.

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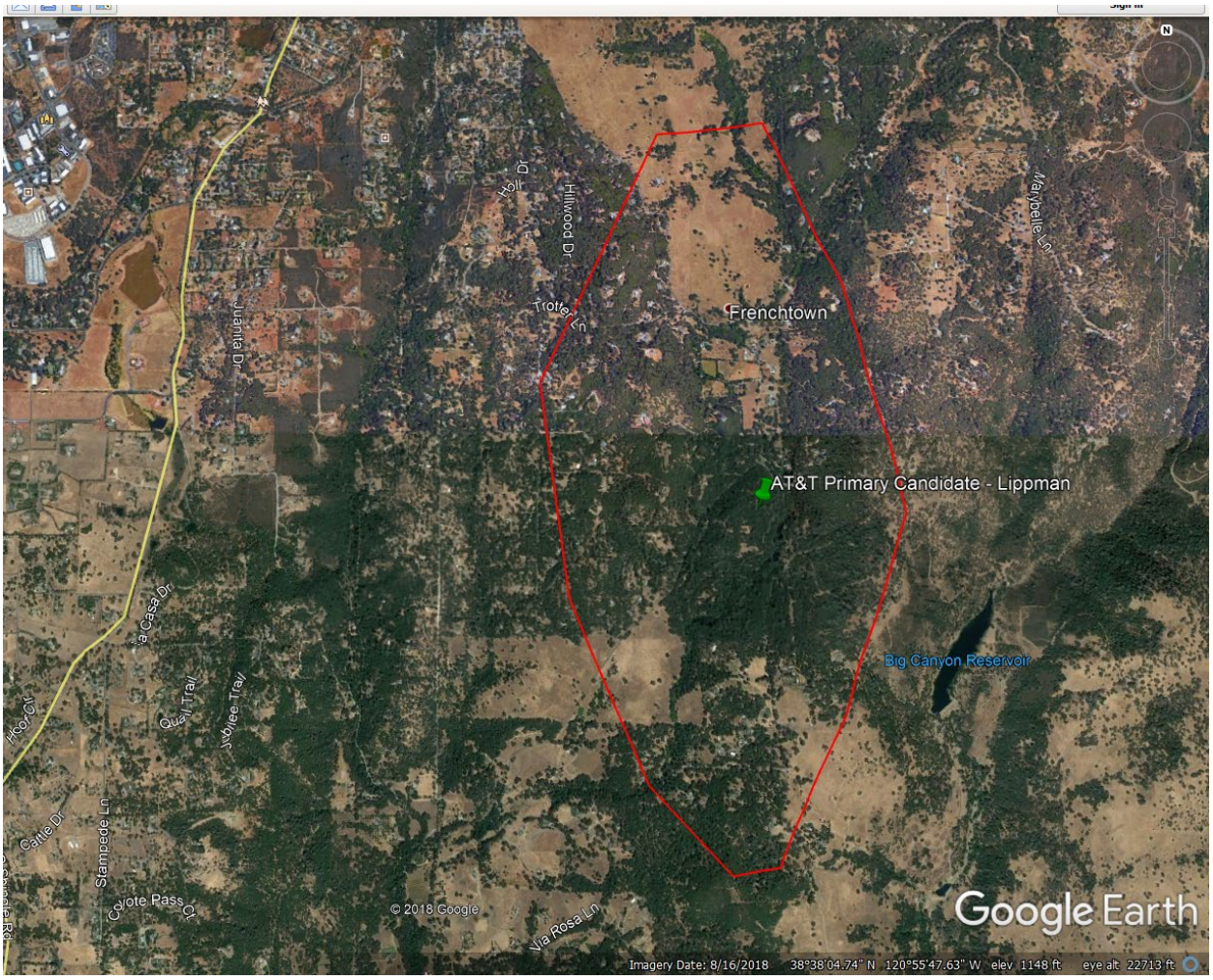
Search Ring's Description and Objectives:



AT&T Mobility is proposing to build and maintain an unmanned wireless telecommunication facility consisting of a 40' x 40', 1,600 square foot enclosed compound (lease area). The compound will include a 160-foot Monopine tower, one pre-manufactured equipment cabinet, and one 30W standby diesel generator with a 190-gallon belly tank. This facility will be located at on a property between French Creek Road and Big Canyon Road, Shingle Springs, within El Dorado County's jurisdiction in a 85.05 acre RL-10 zone. The site is approximately 715 feet south of the intersection of French Creek Road and Big Canyon Road. The area consists of large mixed oak woodlands, and rolling hills with rocky terrain.

AT&T's objective for the Frenchtown 2 site is to provide wireless hi-speed broadband internet to the surrounding community and cellular services to the nearby residences in addition to the nearby public roadways. Just south, west and north of the search ring are relatively dense underserved areas. The site location's elevation is approximately 1,145 feet while the surrounding community's elevation averages around 1,000 feet, giving the homes within the surrounding community great potential for line of site to the tower. After running a coverage simulation at the site location, AT&T is anticipating meeting and beating their FCC objective for the targeted area and will fill significant coverage gap in the targeted area.

Potential Co-locations:

There are no existing towers in the targeted area. This is a relatively low populated area and typical wireless carriers are not present in such areas. AT&T's primary focal point of this project is covering the "underserved" area by servicing the most LUs as possible.

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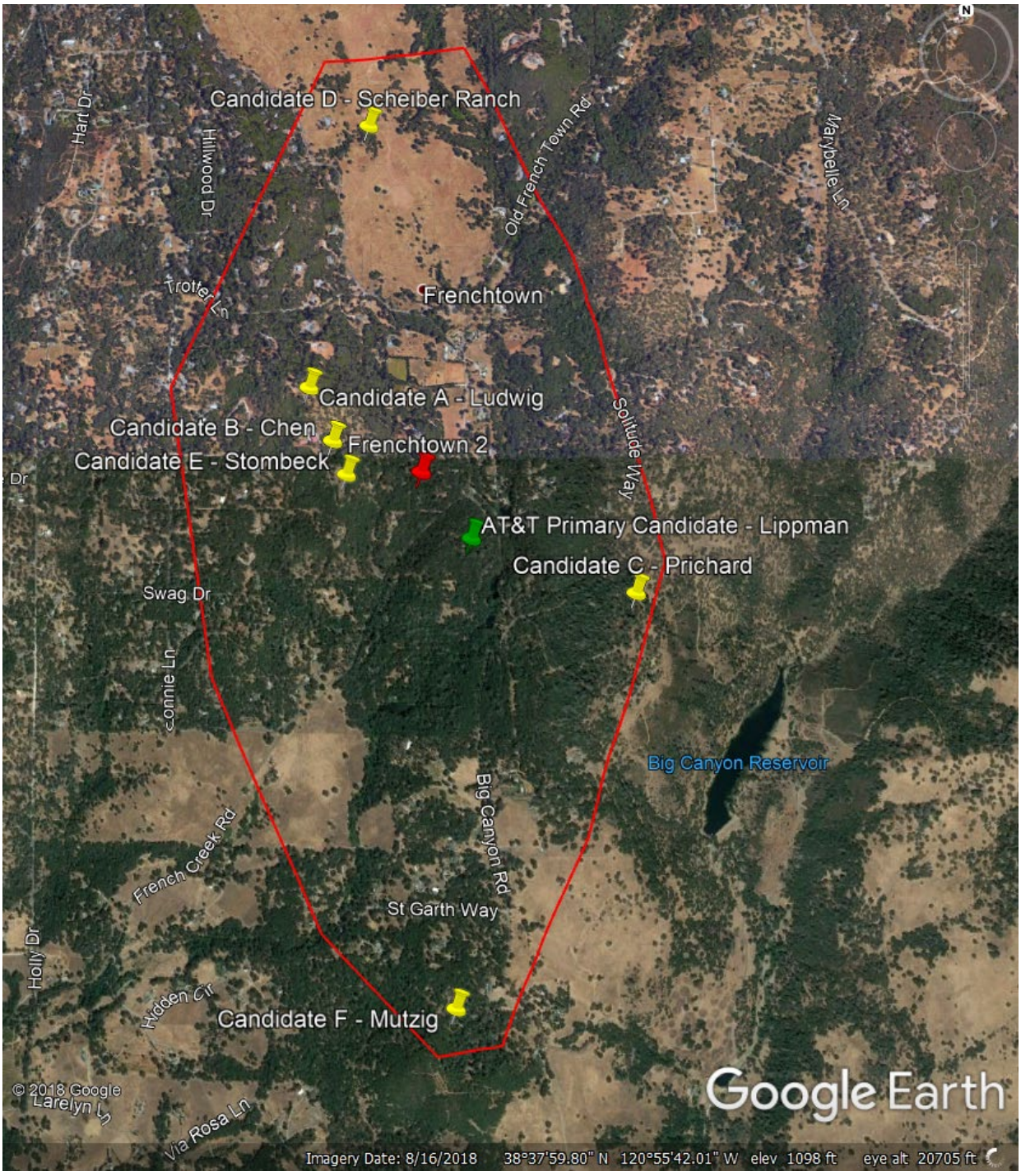
Alternative Site Analysis pursuant to 17.14.210 (B) (1):



Above is a map showing the Search Ring (center is the red pin), Proposed Site (green pin) and the alternative sites (yellow pins) that were considered for placement of the telecommunications facility. Each Alternative Site is discussed below:

on Behalf of

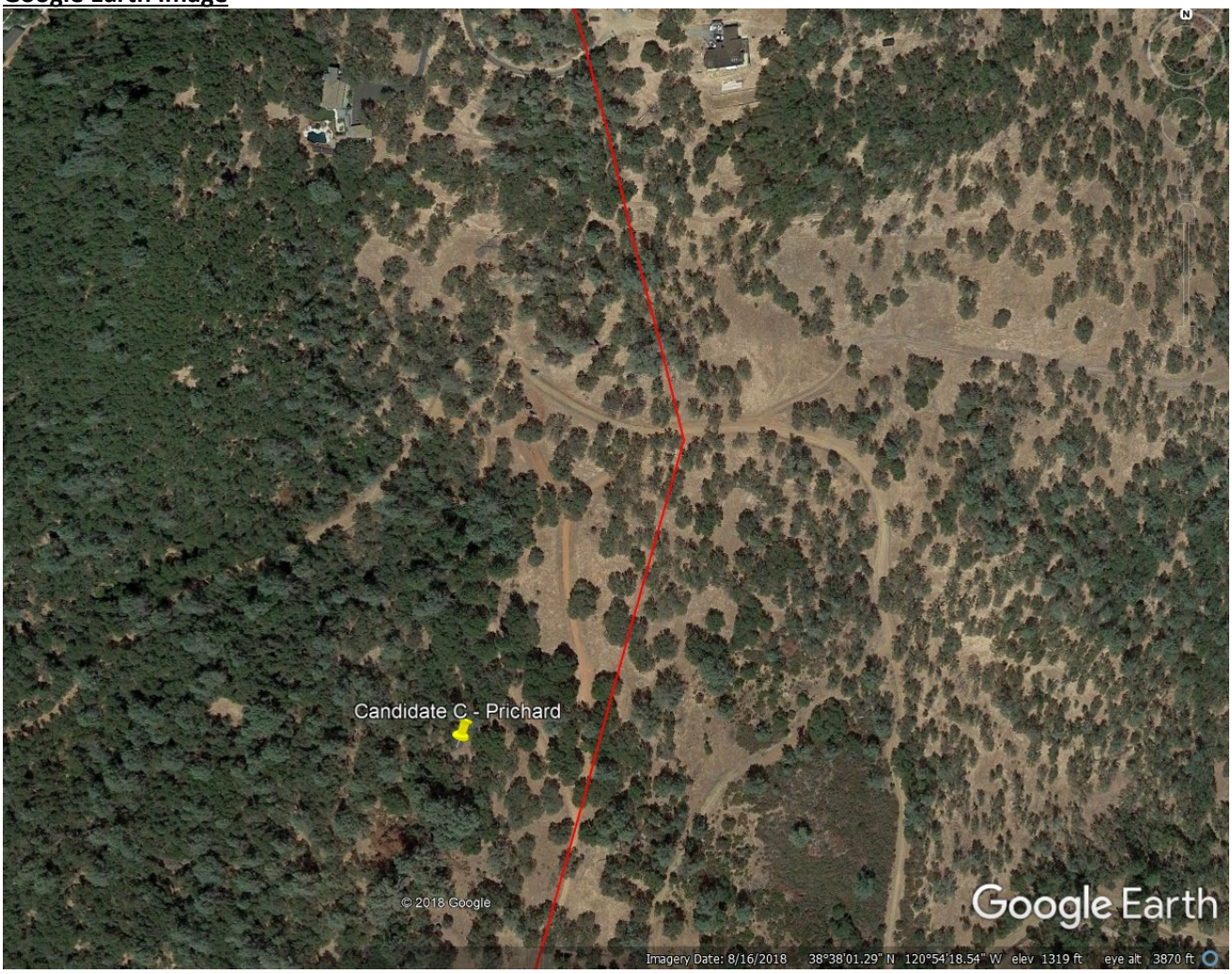
Frenchtown 2 Alternative Candidate Prichard:

APN: 091-010-048-000, Shingle Springs, CA

Latitude/Longitude: 38.632354, -120.905045

Proposal – New Tower

Google Earth Image



Site View:

Considerations:

Candidate Prichard is located approximately 0.50 miles southeast of the center of AT&T's search ring. The proposed tower would be located on a 278 acre, RL-40 zoned property owned by Robert and Lauren Prichard Trust. The property is located on the east side of Big Canyon Road and the site was proposed on the west side of the property. Candidate Prichard was chosen as AT&T's preferred candidate as the RF Engineer's simulation yielded approximately 15% more LU's than the subject site (Lippman). However, after further investigating the real estate side of the transaction, the Prichard's decided they did not want to encumber there many parcels with a long-term leasehold. The Prichard's are interested in building 1 to 3 homes on their lands in the future and do not want a cell tower to interfere with future building locations. Oak resources would be lost at this site location.

Additional alternative sites considered and letters of interest sent out but received either no response by landlords, uninterested landlords, or non-qualified properties included the following parcels:

Candidate A (Ludwig): APN: 091-150-046-000; Owner: William Ludwig – No response from letters of interest.

Candidate B (Chen): APN: 091-070-059-000; Owner: Jason and Lisa Chen– No response from letters of interest.

Candidate D (Scheiber Ranch); APN: 090-190-001-000; Owner: Scheiber Ranch CA LLC – Property owner was interested in leasing space to AT&E, however, a viable placement could not be determined. Locations that property owner suggested were either not constructible or too visible to the public and/or nearby dwellings.

Candidate F (Mutzig); APN: 091-010-039-000; Owner: Mike and Margaret Mutzig – Interested but could not locate a viable and agreed upon site location.

Candidate G (Strombeck) APN: 091-070-026-000; Owner: Christa and Helmut Strombeck – No response from letters of interest.

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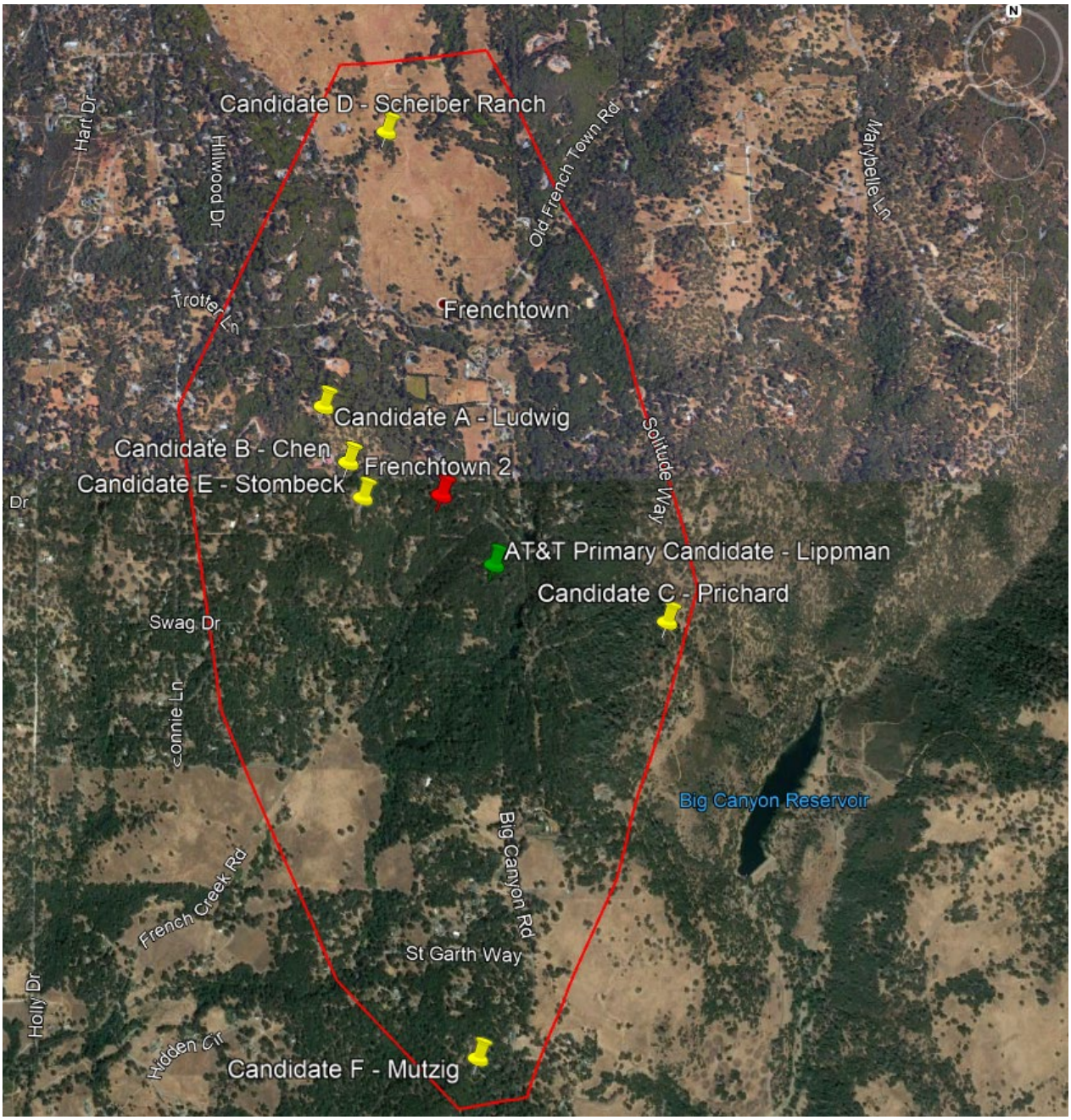
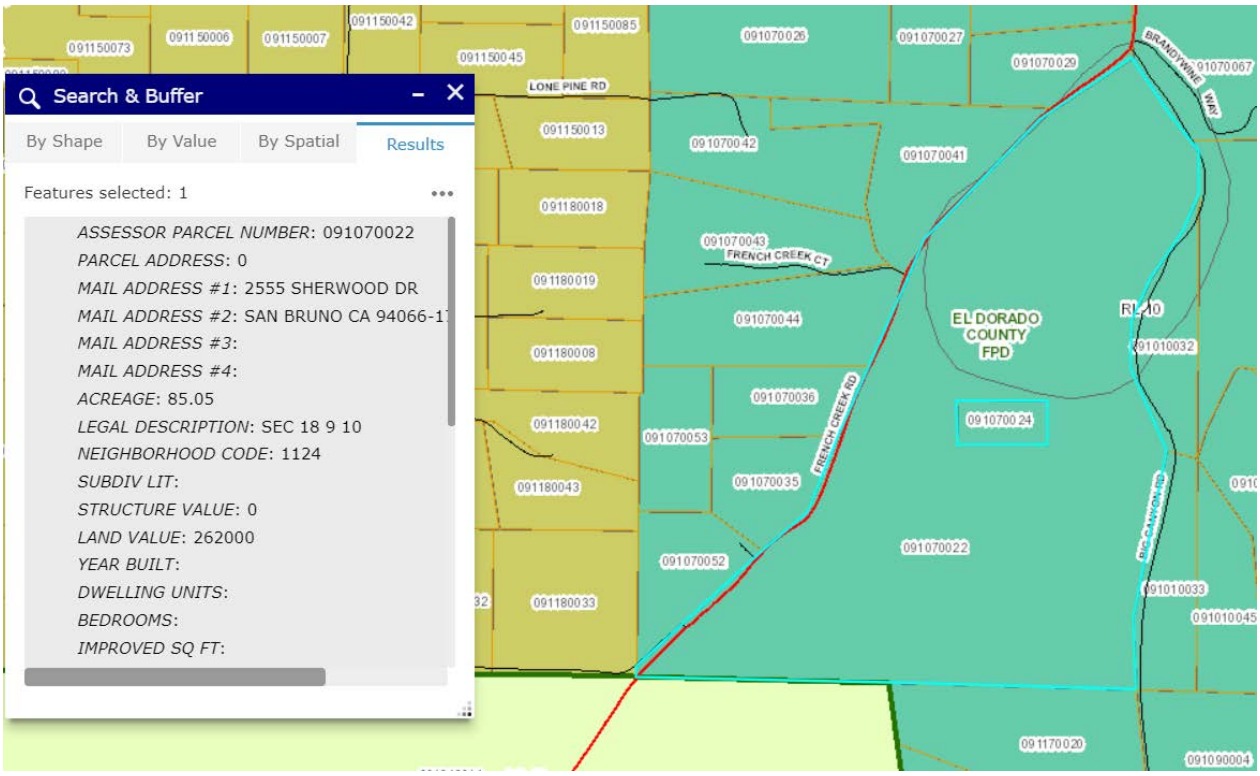
Google Earth Image of Additional Alternative Sites:



Actual View of the Proposed Location:

The proposed lease area is located on the north side of the property. The site will not interfere with the existing use of the property and is an allowed use for the zone subject to an approval of a Conditional Use Permit. Access will be directly off Big Canyon Road. The site is elevated above the surrounding area and has great potential for line of site to the community down below the subject parcel. The site isn't intrusive to nearby residents nor their view points from their properties. The nearest residence is approximately 740 feet to the northwest. The second nearest residence is approximately 780 feet to the northeast. Provided this site meets and exceeds the FCC's requirements for the targeted area and is aesthetically non-intrusive to the surrounding area, this is the best site location for the Frenchtown 2 Search Ring.

Zoning Map: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By Shape
By Value
By Spatial
Results
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PARCEL ADDRESS: 0
MAIL ADDRESS #1: 2555 SHERWOOD DR
MAIL ADDRESS #2: SAN BRUNO CA 94066-1
MAIL ADDRESS #3:
MAIL ADDRESS #4:
ACREAGE: 85.05
LEGAL DESCRIPTION: SEC 18 9 10
NEIGHBORHOOD CODE: 1124
SUBDIV LIT:
STRUCTURE VALUE: 0
LAND VALUE: 262000
YEAR BUILT:
DWELLING UNITS:
BEDROOMS:
IMPROVED SQ FT:
LONE PINE RD
FRENCH CREEK CT
FRENCH CREEK RD
BRANDYWINE WAY
EL DORADO COUNTY FPD
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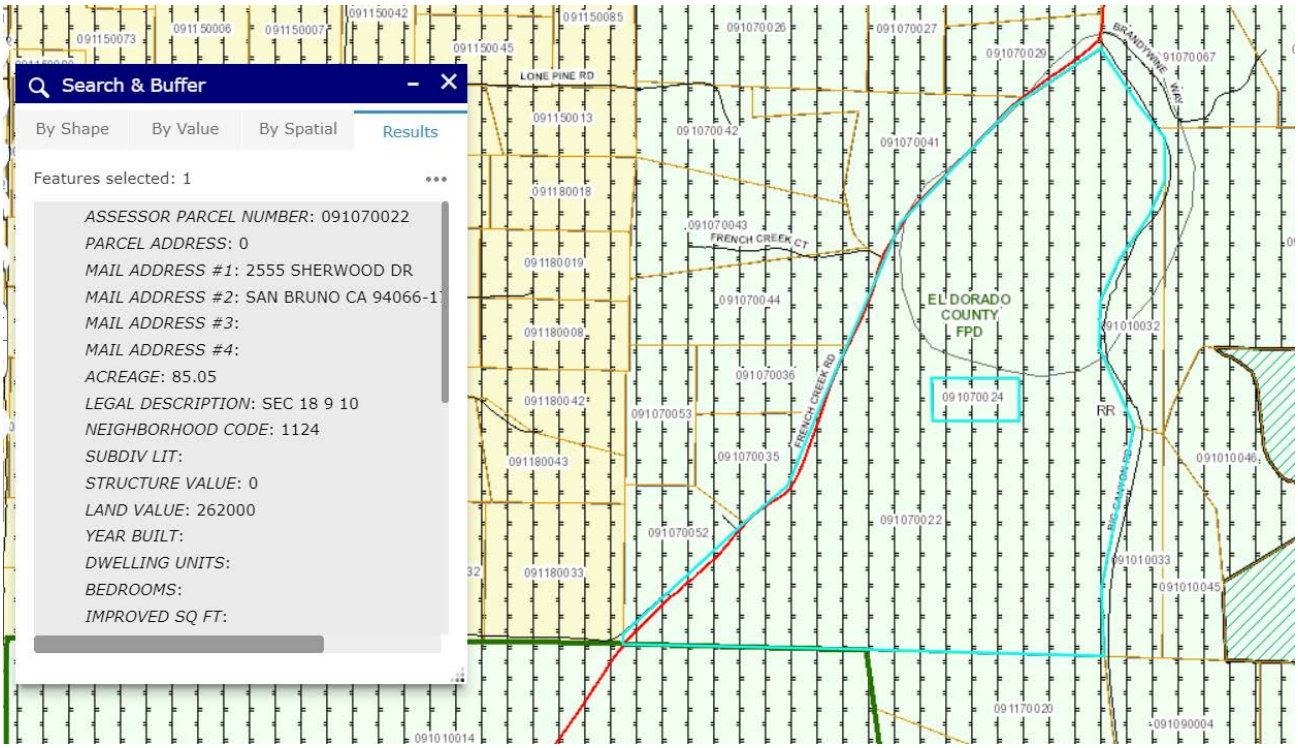
Land Use Map: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By Value
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MAIL ADDRESS #4:
ACREAGE: 85.05
LEGAL DESCRIPTION: SEC 18 9 10
NEIGHBORHOOD CODE: 1124
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STRUCTURE VALUE: 0
LAND VALUE: 262000
YEAR BUILT:
DWELLING UNITS:
BEDROOMS:
IMPROVED SQ FT:
LONE PINE RD
FRENCH CREEK CT
FRENCH CREEK RD
EL DORADO COUNTY FPD
RR
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091150085
091070026
091070027
091070029
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091180043
091070052
091070022
091180033
091010032
091010040
091010033
091010045
091170020
091090004
091010014

on Behalf of

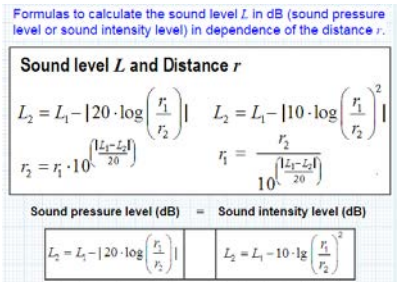
Overhead View of Lease Area and Distances to nearby residences:

Emergency 30kw Diesel Generator and 1 Ton HVAC Noise Analysis:

- **Equation and Calculation Method:**

The sound analysis methods and results are hypothetical only, using Sound Level and Distance calculations. These calculations do not take outside sounds, trees, hills, buildings, and other sound dampening variables into consideration, but, only raw sound levels after specific traveled distances which results in the worst case scenario for the sounds of the onsite backup generator and HVAC systems.

The use of emergency equipment is exempted from these limits per section 130.37.20(B).



Sound Specifications:

- Emergency Generator Model: SD030 Generac
  - Average decibel (dBa) level at 23 feet = 69.8 dBa
- 1 Ton HVAC Model: HVAC MarvairSlimPacECUA12ACA
  - Average decibel (dBa) level at 30 feet = 46.5 dBa
  - HVAC is intrinsically compliant with El Dorado County's Noise Level Standards, per Table 1 below, 130.37.060.1

Findings:

1. **100 feet away from nearest sensitive receptor = 630'**
   a. **Generator Decibel level at 630' = 41.05 dBa**

Conclusion:

After calculating all decibel levels at each nearby property line and residence, the onsite Emergency Backup Generator are within El Dorado County's noise level standards according to El Dorado County Title 130 Zoning and Noise Ordinance, Chapter 130.37 – Noise Standards.

Table 1 – Eldorado County Table 130.37.060.1
Noise Level Performance Standards for Noise Sensitive Land Uses
Affected by Non-Transportation Sources

Noise Level Descriptor	Daytime 7 a.m. – 7 p.m.		Evening 7 p.m. – 10 p.m.		Night 10 p.m. – 7 a.m.	
	Community / Rural Centers	Rural Regions	Community / Rural Centers	Rural Regions	Community / Rural Centers	Rural Regions
Hourly Leq, dBA	55	50	50	45	45	40
Maximum Level, dBA	70	60	60	55	55	50

Operation Statement:

This project is an AT&T Mobility unmanned Telecommunication Wireless Facility. It will consist of the following:

PROPOSED SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. BRING POWER / TELCO / FIBER TO SITE LOCATION
2. DRIVEWAY IMPROVEMENT FROM DRIVEWAY 40'X40' FENCED LEASE AREA
3. INSTALL AT&T APPROVED PRE-MANUFACTURED WALK IN EQUIPMENT SHELTER AND ASSOCIATED INTERIOR EQUIPMENT
4. ADD (1) PROPOSED GPS UNITS
5. ADD ±154'-0" MONOPINE W/ FOLIAGE AT ±160'-0"
6. ADD (12) ANTENNAS (4) PER ALPHA, BETA, GAMMA SECTOR
7. ADD (24) PROPOSED RRUS
8. ADD (4) SURGE SUPPRESSORS
9. ADD 6'-0" HIGH CHAIN LINK FENCE
10. ADD 30KW AC DIESEL GENERATOR WITH ATTACHED 190 GALLON BELLY TANK

The facility will operate 24 hours a day 7 days a week. Maintenance workers will visit the site approximately once a month to once a quarter. A 15-foot-wide access route will be created directly from Big Canyon Road. There will be minimal noise from the standby generator, turning on once a week for 15 minutes for maintenance purposes and during emergency power outages. The Facility is approximately 730 feet southeast of a residence, and approximately 780 feet southwest of another. The location is surrounded by oak woodlands trees which will naturally stealth the facility in addition to being at a higher elevation than the surrounding neighbors. The surrounding area is covered with oak tree backdrops. The tower will be built to provide co-location opportunities. A Monopine tower was chosen provided the natural wooded backdrop of the area. Scrub Oaks will need to be thinned out for the access and utility route. The property is blanketed with oaks, therefore, thinning will reduce fire cause. Refer to the Oak Tree mitigation plan for more details.

Fire Suppression System:

A 15-foot-wide access route will be created directly from Big Canyon Road with one Hammer Head Fire Turnaround at the facility. A Fire Department Knox Box will be located at the Property's access gate and at the Facility's access gate. Additionally, a 2A:20BC Rated Fire Extinguisher in a weather resistant cabinet will be mounted on the exterior wall of the proposed shelter.

Conclusion:

Candidate Lippman, meets the FCC's mandated objectives for the targeted area of Frenchtown 2 and is the best choice for the surrounding area. The chosen location will meet and exceed the FCC's mandated coverage objectives with providing hi-speed broadband internet to homes in the Shingle Spring's Targeted area of El Dorado County. The Monopine Tower design has been chosen to blend into the tree line and skyline and the lower portion of the tower will be totally stealthed by the surrounding trees from all nearby dwellings. This site is the least intrusive location while filling AT&T's gap in coverage. Significant Coverage Gaps will be filled along all of the main corridors and the surrounding community. Impacts of oak woodlands will be impacted/removed for this location which AT&T intents to mitigate for impacts to oak woodlands through payment of an in-lieu fee. No special species or protected animals will be impacted per the completed BRE by Sycamore Environmental Consultants, Inc.

ATTACHMENT 7

Radio Frequency Emissions Compliance Report For AT&T Mobility

Site Name:	**Frenchtown 2-Butte Meadows**	**Site Structure Type:**	**Monopine**
Address:	**Intersection of Big Canyon Road & French Creek Road**	**Latitude:**	**38.634361**
	Shingle Springs, California	**Longitude:**	**-120.911608**
Report Date:	**July 12, 2019**	**Project:**	**Modification**

Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the Frenchtown 2-Butte Meadows installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the monopine to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

David H. Kiser, P. E. 2019.07.19 10:51:38 -04'00'

General Summary

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure. Based on the criteria for these classifications, the FCC General Population limit is considered to be a level that is safe for continuous exposure time. The FCC General Population limit is 5 times more restrictive than the Occupational limits.

Table 1: FCC Limits

Frequency (MHz)	*Limits for General Population/ Uncontrolled Exposure*		*Limits for Occupational/ Controlled Exposure*	
	Power Density (mW/cm^2)	Averaging Time (minutes)	Power Density (mW/cm^2)	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \ (\mathrm{mW/cm^2})$$

where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6-foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left(\frac{180}{\theta_{BW}}\right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \ (\mathrm{mW/cm^2})$$

where P_{in} is the power input to the antenna, θ_{BW} is the horizontal pattern beamwidth and h is the aperture length.

Some antennas employ beamforming technology where RF energy allocated to each customer device is dynamically directed toward their location. In the analysis presented herein, predicted exposure levels are based on all beams at full utilization (i.e. full power) simultaneously focused in any direction. As this condition is unlikely to occur, the actual power density levels at ground and at adjacent structures are expected to be less that the levels reported below. These theoretical results represent worst-case predictions as all RF emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

Analysis

AT&T Mobility proposes the following installation at this location:

- INSTALL AT&T APPROVED PRE-MANUFACTURED WALK IN EQUIPMENT SHELTER ANO ASSOCIATED INTERIOR EQUIPMENT
- ADD (12) ANTENNAS (4) PER ALPHA, BETA, GAMMA SECTOR
- ADD (24) PROPCSED RRUS

The antennas will be mounted on a 154-foot monopine with centerlines 140 and 150 feet above ground level. The antennas will be oriented towards 14, 120 and 240 degrees. The radio equipment to be operated at this location is capable of a maximum of 40W per 4G channel at 700 MHz, 40W per 4G channel at 850 MHz, 40W per 4G channel at 1900 MHz, 40W per 4G channel at 2100 MHz, and 25W per 4G channel at 2300 MHz. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. No other antennas are known to be operating in the vicinity of this site.

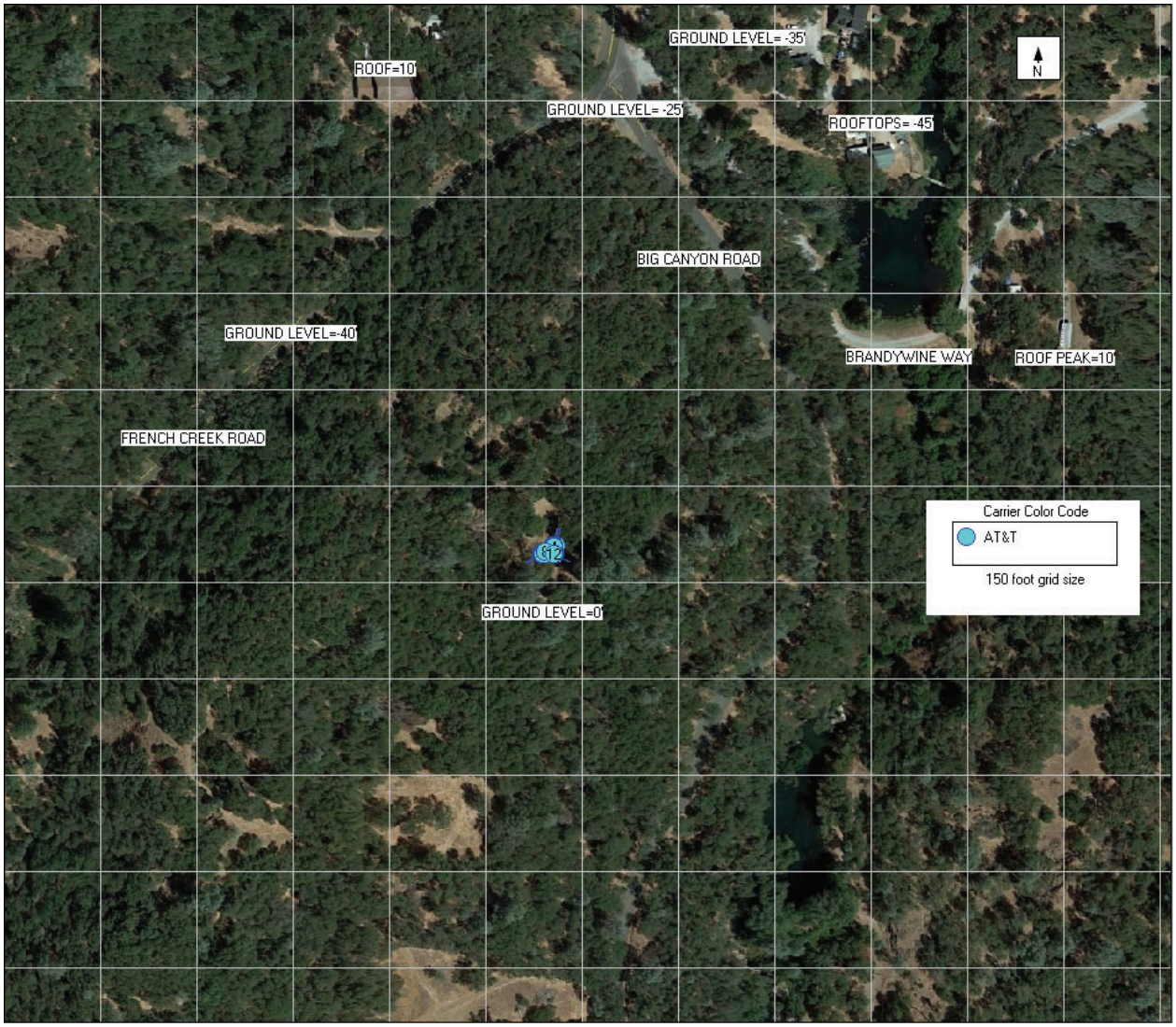


Figure 1: Antenna Locations

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.4694% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.0675% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting RF alerting signage with contact information (Caution 2B) at the base of the monopine to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.

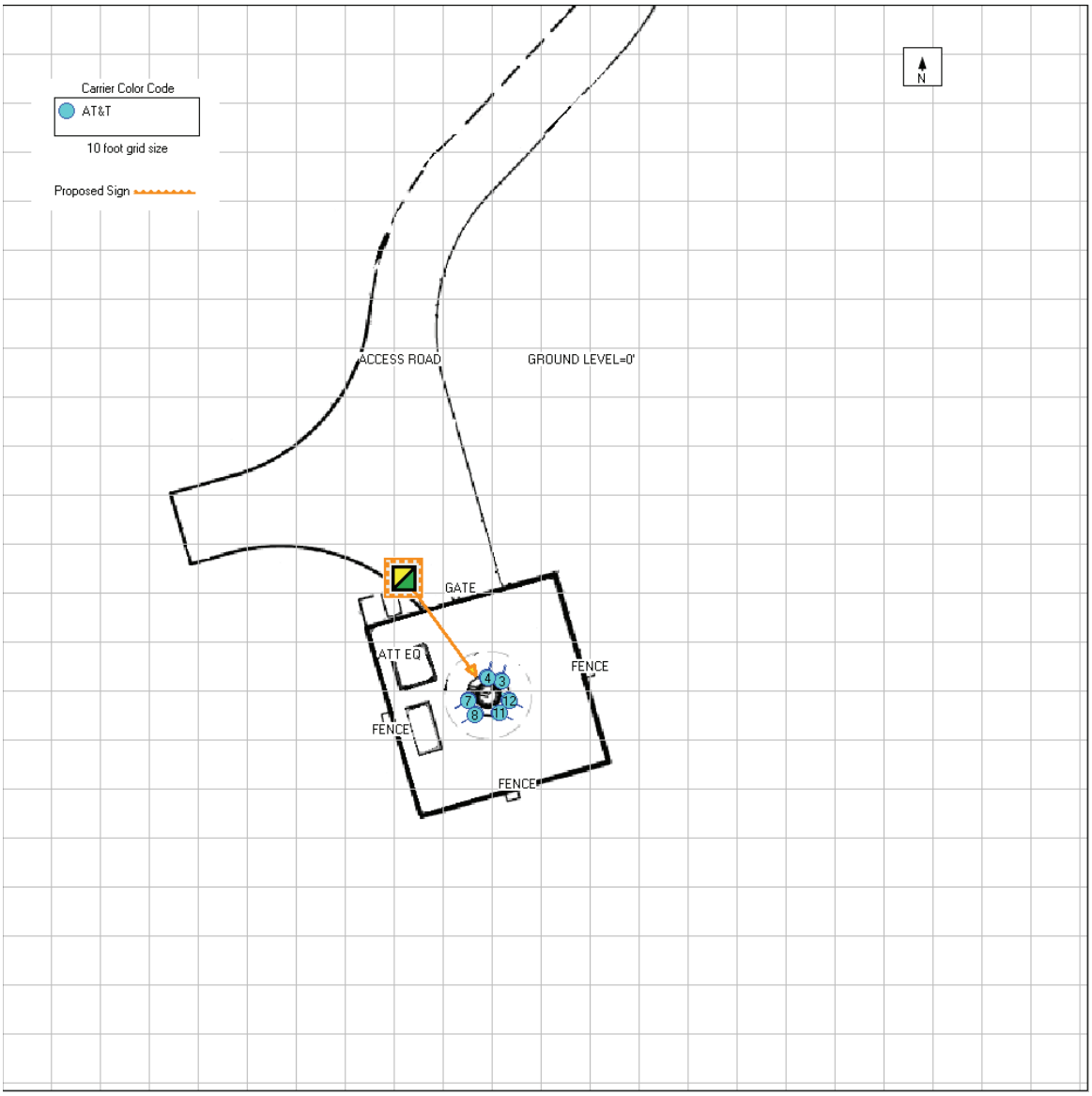
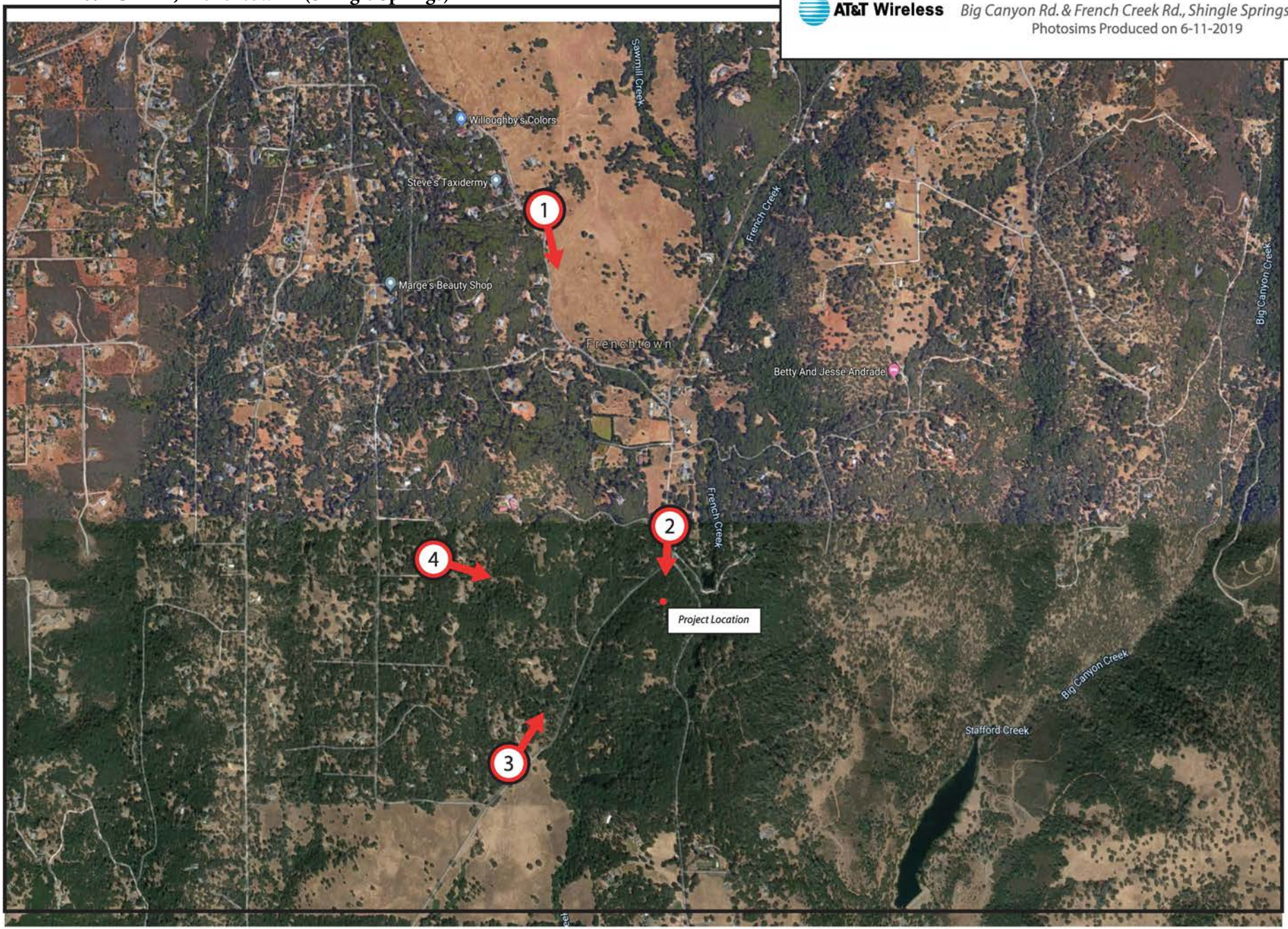


Figure 2: Mitigation Recommendations
Caution 2B posted at base of monopine

Caution 2B



AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

Shot Point Map

Existing

Proposed

view from French Creek Road looking southeast at site

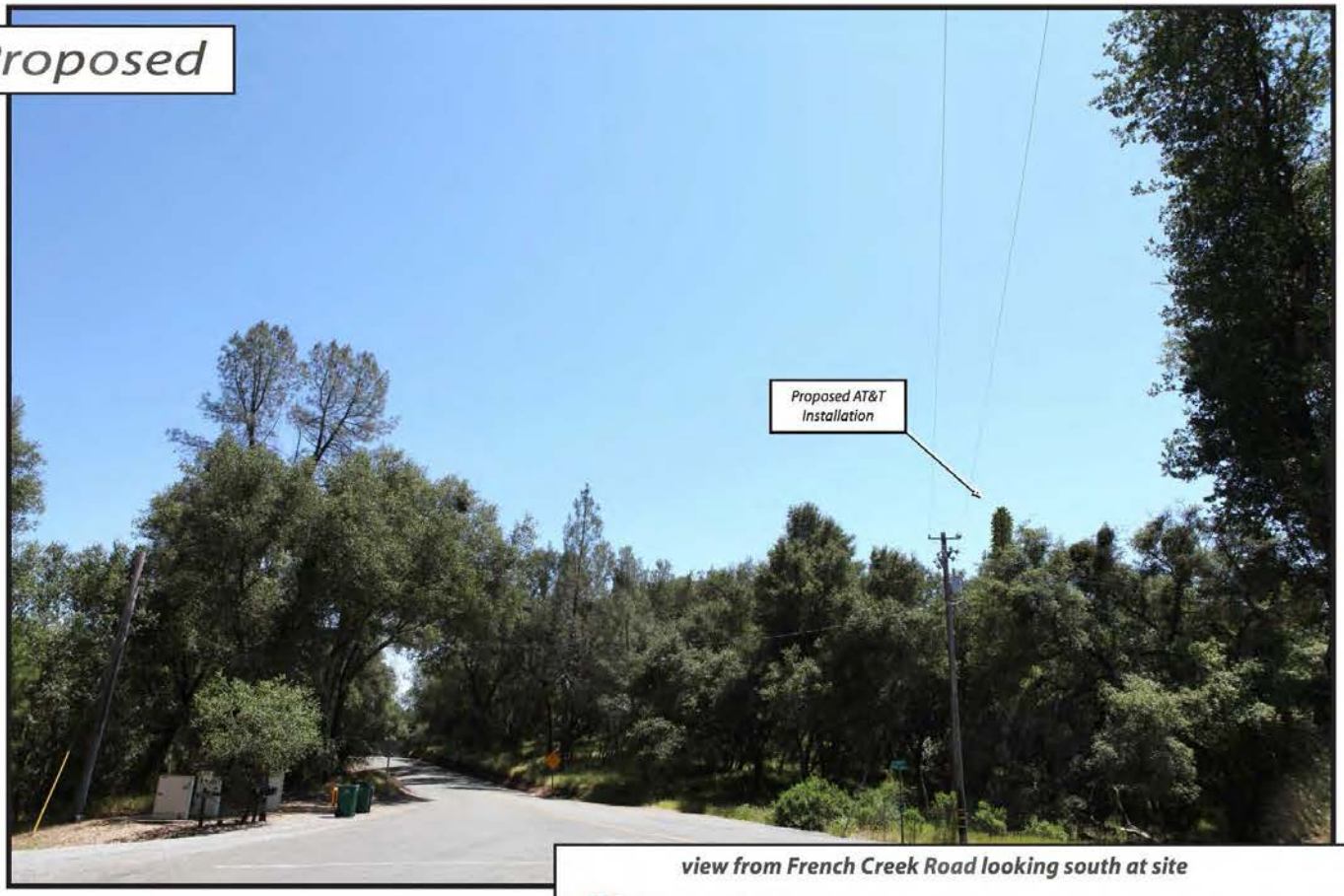
AT&T Wireless

CVL02082 Frenchtown 2 - Butte Meadows
Big Canyon Rd. & French Creek Rd., Shingle Springs, CA
Photosim Prepared on 6/1/2020

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

Existing

Proposed



view from French Creek Road looking south at site

AT&T Wireless

CVL02082 Frenchtown 2 - Butte Meadows
Big Canyon Rd. & French Creek Rd., Shingle Springs, CA
Photo Simulation Created On: 2019

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

Existing

Proposed

view from West Mono Road looking north at site

AT&T Wireless

CVL02082 Frenchtown 2 - Butte Meadows
Big Canyon Rd. & French Creek Rd., Shingle Springs, CA
Photos[illegible]

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

Existing

Proposed

view fromLone Pine Road looking east at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

AT&T Wireless

CVL02082 Frenchtown 2 - Butte Meadows
Big Canyon Rd. & French Creek Rd., Shingle Springs, CA
Photo Simulation Completed: 2-20-19

GEOTECHNICAL INVESTIGATION REPORT

PROPOSED TELECOMMUNICATIONS FACILITY

FRENCHTOWN 2 - BUTTE MEADOWS, SITE NUMBER: CVL02082
5101 FRENCH CREEK ROAD
EL DORADO COUNTY, CALIFORNIA
MPE NO. 04902-01

MPE
MID PACIFIC ENGINEERING, INC.

REDDING
530-246-9499 p
530-246-9527 f

WEST SACRAMENTO
916-927-7000 p
916-372-9900 f

GEOTECHNICAL ENGINEERING | EARTHWORK TESTING | MATERIALS ENGINEERING AND TESTING | SPECIAL INSPECTIONS

February 5, 2020
MPE No. 04902-01

Mr. Andrew Medina
Epic Wireless Group, LLC
605 Coolidge Drive, Suite 100
Folsom, California 95630

Subject: Geotechnical Investigation
Proposed Telecommunications Facility
Frenchtown 2 - Butte Meadows, Site Number: CVL02082
5101 French Creek Road
El Dorado County, California

Dear Mr. Medina:

Mid Pacific Engineering is pleased to present the attached geotechnical investigation report for a proposed telecommunications facility to be located at 5101 French Creek Road in the Shingle Springs area of El Dorado County, California. Results of our study indicate the site is not within a current Earthquake Fault Zone. We anticipate conventional grading practices may be used for most site earthwork activities (if any) and that a mat foundation may be used for support of the proposed steel monopole tower; foundation support for the planned prefabricated equipment shelter may be provided using shallow spread footings and/or a mat foundation.

Though we anticipate the site may be developed generally using conventional grading and foundation construction techniques, it should be noted conditions were identified by our field exploration program that may require special design and/or construction provisions for some project components. A brief summary of these conditions, as well as possible design and/or construction provisions to address these potential concerns, are outlined below.

- Soils containing cobble-to-boulder size rock fragments were encountered during our field investigation from near-surface to an approximate depth of approximately 11 feet below existing site grades. In addition, completely-to-slightly metavolcanic rock was initially encountered during our field exploration program between approximate depths of two and 11 feet below existing site grade (approximately 11 feet below existing grades within the lease area). In our opinion, the presence of soils

containing cobble-to-boulder size rock fragments and on-site rock will hinder some site excavations, necessitating the use of a mat foundation to support the planned tower (i.e., a drilled pier foundation system would not be applicable for this site).

- The presence of shallow rock may also impact trench (and other shallow) excavations into these materials. In our opinion a large, track-mounted excavator, possibly equipped with a single ripper tooth, hydraulic percussion hammer, rock wheel, or other similar equipment specifically intended for rock removal may be required to advance excavations within some areas of the site or which extend to depth greater than 11 feet.

- In addition to excavation difficulties, perched water may develop above on-site rock subsequent to wet weather. The presence of perched groundwater could hinder trenching operations and may necessitate the use of a sump or other type of dewatering system for some trench and/or other earthwork excavations.

- Existing fill materials were encountered during our field exploration program to a minimum depth of 11 feet below existing site grade. Based on our findings, we provided the following options to representatives of Epic Wireless that may be best suitable for the project:

    - Option 1: Excavate through the existing artificial fill and embed a mat foundation a minimum of two feet into competent undisturbed bedrock. Based on our subsurface investigation, a minimum of 11 feet of artificial fill are present within the project lease area.
    - Option 2: Over-excavate and remove all existing artificial fill and replace with properly moisture conditioned and compacted engineered fill. A typical matt tower foundation could then be constructed on and supported by the engineered fill.
    - Option 3: Relocate the proposed monopole tower to an area with shallower, less extensive quantities of artificial fill.

  Based on these three options, representatives of Epic Wireless has elected to move forward with the first option.

- Based on the existing fill materials indicated above, we will recommend over-excavation of at least 24 inches below existing grade, and replaced with moisture conditioned and compacted engineered fill, as recommended in the ENGINEERED FILL section of this report, for support for the proposed equipment shelter foundation. If the nature of the proposed construction changes (i.e., foundation type, buildings, pavements, or other improvements sensitive to settlement are to be constructed at the site), special design and construction provisions may be required.

Specific comments regarding the conditions outlined above, as well as recommendations regarding the geotechnical aspects of project design and construction, are presented in the

following report.

We appreciate the opportunity of providing our services for this project. If you have questions regarding this report or if we may be of further assistance, please contact the undersigned.

Sincerely,

Mid Pacific Engineering, Inc.

Martin S. Osier, P.E.
Project Engineer

Todd G. Kamisky, G.E.
Principal Engineer

cc: Client (One copy sent via email)

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MPE
MID PACIFIC ENGINEERING, INC.

REDDING
530-246-9499 p
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WEST SACRAMENTO
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916-372-9900 f

GEOTECHNICAL ENGINEERING | EARTHWORK TESTING | MATERIALS ENGINEERING AND TESTING | SPECIAL INSPECTIONS

GEOTECHNICAL INVESTIGATION REPORT
PROPOSED TELECOMMUNICATIONS FACILITY
FRENCHTOWN 2 - BUTTE MEADOWS, SITE NUMBER: CVL02082
5101 FRENCH CREEK ROAD
EL DORADO COUNTY, CALIFORNIA
MPE NO. 04902-01

INTRODUCTION

GENERAL

This report presents the results of our geotechnical investigation for a proposed telecommunications facility to be located at 5101 French Creek Road in the Shingle Springs area of El Dorado County, California. The purpose of our investigation was to explore and evaluate the subsurface conditions at the site in order to develop recommendations related to the geotechnical aspects of project design and construction.

The project site is located within the southeast portion of the U.S. Geological Survey (USGS) 7.5 minute *Shingle Springs quadrangle* at coordinates[1] N 38° 38' 03" (38.6342), W 120° 54' 42" (120.9117). The approximate site location relative to existing topographic features and roads is shown on Figure 1.

PROPOSED CONSTRUCTION

We understand the proposed project will involve construction of a telecommunications facility which will include the installation of a 160-foot-high, steel monopole tower (configured to resemble a pine tree) as well as a prefabricated equipment shelter supported-on-grade. Appurtenant construction may include underground utilities and possibly a partially improved site access roadway.

Due to the presence of undocumented artificial fill underlying the project site, Mid Pacific Engineering, Inc. discussed potential options for site preparation and foundation construction with Epic Wireless Group, LLC prior to preparing this report. The site preparation and foundation construction options consisted of the following:

[1] Datum reference: North American Datum of 1983.

- Option 1: Excavate through the existing artificial fill and embed a mat foundation a minimum of two feet into competent rock. Based on our subsurface investigation, a minimum of 11 feet of artificial fill are present within the project area.
- Option 2: Over-excavate and remove all existing artificial fill and replace with properly moisture conditioned and compacted engineered fill. A typical tower foundation could then be constructed on and supported by the engineered fill.
- Option 3: Relocate the proposed monopole tower to an area with shallower, less extensive quantities of artificial fill.

Based on conversations with Epic Wireless Group, LLC, is it our understanding Option 1 was chosen for site preparation and construction.

Plans indicating final site grades were not available at the time this report was prepared; however, based on our experience with projects and sites similar to the proposed project, we anticipate earthwork cuts and fills required to achieve a level building pad (or pads), provide for site access and drainage, or other similar purpose will generally be less than approximately three feet in vertical extent. Excavations for below-grade utilities are not anticipated to exceed approximately five feet below final site grades.

A Test Pit Location Map indicating the proposed project area is presented on Figure 2.

SCOPE OF SERVICES

The scope of our services was outlined in our proposal dated September 27, 2019, and included the following:

- Review readily available (and relevant) literature pertaining to site geology, faulting, and seismicity.

- Exploration of the subsurface conditions at the site by excavating, logging, and sampling five exploratory test pits.

- Preparation of this report which includes:

  - A description of the proposed project;

  - A summary of our field exploration program;

  - A description of site surface and subsurface conditions encountered during our field investigation;

- Our comments regarding potential geologic hazards which could affect the site or proposed project;
- California Building Code (CBC, 2019 edition) seismic parameters; and
- Recommendations related to the geotechnical aspects of site preparation and engineered fill, temporary excavations and trench backfill, foundation design and construction, concrete slabs supported-on-grade, and a partially improved site access roadway.

FIELD INVESTIGATION

Subsurface conditions at the site were explored on October 24, 2019 and November 21, 2019 by excavating five test pits (designated TP-1 through TP-5) to approximate depths of three to 14 feet below existing site grade. The initial test pits (TP-1 and TP-2) were excavated using a track-mounted Kubota U27-4 mini-excavator with a 12-inch bucket. Test pits TP-3 through TP-5 were excavated using a John Deere 310, tractor-mounted backhoe equipped with a 24-inch-wide bucket. The approximate locations of the test pits excavated for this investigation are shown on Figure 2.

Note: Two of the five test pits (TP-3 and TP-5) excavated for this investigation were prematurely terminated (i.e., reached depths less than initially planned) due to essential bucket refusal on undisturbed, slightly weathered rock.

Our engineer maintained a log of the test pits, visually classified the soils and rock encountered according to the Unified Soil Classification System (see Figure 3) or Rock Classification Legend (see Figure 4), respectively, and obtained representative samples of the subsurface materials. After the test pits were completed, they were loosely backfilled with the excavated material. Logs of the exploratory test pits excavated for this investigation are presented on Figures 5 through 7.

SITE CONDITIONS

GEOLOGY AND SEISMICITY

Geologic Setting

The project site is located within the west-central portion of the Sierra Nevada geomorphic province of California, a strongly asymmetric mountain range with a long gentle western slope and a high and steep eastern escarpment. The Sierra Nevada is 50 to 80 miles wide, and runs through eastern California for more than 400 miles (from the Mojave Desert on the south to the Cascade Range and the Modoc Plateau on the north).

In the north half of the range the batholith is flanked on the west by the western metamorphic belt, a terrane of strongly deformed, but weakly metamorphosed sedimentary and volcanic rocks of Paleozoic and Mesozoic age. Farther south, scattered remnants of metamorphic rock are found within the batholith, especially in the western foothills and along the crest in the east-central Sierra Nevada.

Geologic mapping of the Shingle Springs area compiled by D.L. Wagner, E.J. Bortugno and R.D. McJunkin [2] indicates the site lies within an area of Paleozoic-age metavolcanic rock. Results of our subsurface investigation generally confirmed the presence of metavolcanic rock underlying the site overlain by recent artificial fill.

Faulting and Seismicity

The project site is located within an area of California generally not characterized by an abundance of active faulting. No active faults (or fault zones) are located within the site vicinity, nor is the site within a current Earthquake Fault Zone. In general, seismic ground shaking at the site would be due to movement on more distant faults.

SURFACE

The project site consists of a square shaped area located at 5101 French Creek Road in the Shingle Springs area of El Dorado County, California. The site is bounded to all sides by mature trees. At the time of our field investigation, the site area was covered with low grasses, weeds, and mature trees. Existing topography within the immediate site area sloped gently down towards the southeast.

[2] Reference: "Geologic Map of the Sacramento Quadrangle," California, California Division of Mines and Geology, compiled by D.L. Wagner, E.J. Bortugno and R.D. McJunkin, 1990.

SUBSURFACE

Earth materials encountered in the test pits excavated for this investigation consisted of undocumented artificial fill composed predominantly of sandy silt with cobble-to boulder-sized rock fragments to an approximate depth of 11 feet below existing site grade. Based on our observations of the site area, we suspect encountered fill represents tailing spoils from an abandoned mine. Below these near-surface fill soils, completely-to-slightly weathered metavolcanic rock was encountered to the maximum depth explored (approximately 14 feet below existing site grade).

No free groundwater was encountered during our field investigation. However, it should be recognized groundwater conditions can vary depending on location, time of the year, duration and amount of recent (and past) precipitation, runoff conditions (both on- and off-site), and possibly other factors either not present or readily apparent at the time of our field investigation. Therefore, groundwater conditions presented in this report may not be representative of those which may be encountered during or subsequent to construction.

A more detailed description of the subsurface conditions encountered during our field investigation is provided on the attached logs.

CONCLUSIONS AND RECOMMENDATIONS

GENERAL

Results of our study indicate the site is not within a current Earthquake Fault Zone. However, the site is underlain by a minimum of 11 feet of undocumented artificial fill which may possess a significant geologic risk to site development. We anticipate conventional grading practices may be used for most site earthwork activities (if any) and that a mat foundation may be used for support of the proposed steel monopole tower; foundation support for the planned prefabricated equipment shelter may be provided using shallow spread footings and/or a mat foundation.

Though we anticipate the site may be developed generally using conventional grading and foundation construction techniques, it should be noted conditions were identified by our field exploration program that may require special design and/or construction provisions for some project components. A brief summary of these conditions, as well as possible design and/or construction provisions to address these potential concerns, are outlined below.

- Soils containing cobble-to-boulder size rock fragments were encountered during our field investigation from near-surface to an approximate depth of approximately 11 feet below existing site grades. In addition, completely-to-slightly metavolcanic rock

was initially encountered during our field exploration program between approximate depths of two and 11 feet below existing site grade (approximately 11 feet below existing grades within the lease area). In our opinion, the presence of soils containing cobble-to-boulder size rock fragments and on-site rock will hinder some site excavations, necessitating the use of a mat foundation to support the planned tower (i.e., a drilled pier foundation system would not be applicable for this site).

- The presence of shallow rock may also impact trench (and other shallow) excavations into these materials. In our opinion a large, track-mounted excavator, possibly equipped with a single ripper tooth, hydraulic percussion hammer, rock wheel, or other similar equipment specifically intended for rock removal may be required to advance excavations within some areas of the site or which extend to depth greater than 11 feet.

- In addition to excavation difficulties, perched water may develop above on-site rock subsequent to wet weather. The presence of perched groundwater could hinder trenching operations and may necessitate the use of a sump or other type of dewatering system for some trench and/or other earthwork excavations.

- Existing fill materials were encountered during our field exploration program to a minimum depth of 11 feet below existing site grade. Based on our findings, we provided the following options to representatives of Epic Wireless that may be best suitable for the project:

    - Option 1: Excavate through the existing artificial fill and embed a mat foundation a minimum of two feet into competent undisturbed rock. Based on our subsurface investigation, a minimum of 11 feet of artificial fill are present within the project lease area.
    - Option 2: Over-excavate and remove all existing artificial fill and replace with properly moisture conditioned and compacted engineered fill. A typical tower mat foundation could then be constructed on and supported by the engineered fill.
    - Option 3: Relocate the proposed monopole tower to an area with shallower, less extensive quantities of artificial fill.

      Based on these three options, representatives of Epic Wireless has elected to move forward with the first option.

- Based on the existing fill materials indicated above, we will recommend over-excavation of at least 24 inches below existing grade, and replaced with moisture conditioned and compacted engineered fill, as recommended in the ENGINEERED FILL section of this report, for support for the proposed equipment shelter

foundation. If the nature of the proposed construction changes (i.e., foundation type, buildings, pavements, or other improvements sensitive to settlement are to be constructed at the site), special design and construction provisions may be required.

Specific comments regarding the conditions outlined above, as well as recommendations regarding the geotechnical aspects of project design and construction, are presented in the following report.

GEOLOGIC HAZARDS

Ground Rupture

No active faults are known to cross the site area, nor is the site within a current Earthquake Fault Zone. Therefore, it is our professional opinion that the potential for ground rupture (or other similar effect) at the site in the event of a seismic event is low.

CBC Seismic Design Parameters

In the event the California Building Code (CBC, 2019 edition) is used for seismic design, it is our opinion encountered subsurface conditions (and those suspected below the maximum depth explored) would warrant a type C (i.e., very dense soil and soft rock) Site Classification. Further, using software provided by the Structural Engineers Association of California in association with the California Office of Statewide Health Planning and Development (SEAOC/OSHPD), site-specific spectral response acceleration parameters were obtained for the maximum considered earthquake and are summarized in the following table.

Spectral Response Acceleration Parameters		Value
Mapped spectral acceleration for short periods	S_S	0.402g
Mapped spectral acceleration at 1-second period	S_1	0.203g
Site coefficient for short periods	F_a	1.300
Site coefficient at 1-second period	F_v	1.500
Adjusted earthquake spectral response acceleration for short periods	S_{MS}	0.523g
Adjusted earthquake spectral response acceleration at 1-second period	S_{M1}	0.304g
Design earthquake spectral response acceleration for short periods	S_{DS}	0.349g
Design earthquake spectral response acceleration at 1-second period	S_{D1}	0.203g

Liquefaction

Liquefaction is a phenomenon whereby loose, saturated, granular soil deposits lose a significant portion of their shear strength due to excess pore water pressure buildup resulting from cyclic loading, such as that caused by an earthquake. Among other effects, liquefaction can result in densification of such deposits after an earthquake as excess pore pressures are dissipated (and hence settlements of overlying deposits). The primary factors deciding liquefaction potential of a soil deposit are: (1) the level and duration of seismic ground motions; (2) the type and consistency of the soils; and (3) the depth to groundwater.

Subsurface earth materials encountered during our field investigation generally consisted of undocumented fill consisting of sandy silt underlain by completely-to-slightly weathered metavolcanic rock. No free groundwater was encountered during our field investigation.

Given the presence of shallow rock encountered during our field investigation, it is our professional opinion that the potential for liquefaction at the site during or subsequent to a seismic event is unlikely.

Ground Subsidence

Ground subsidence within the site area would typically be due to densification of subsurface soils during or subsequent to a seismic event. Generally, loose, granular soils would be most susceptible to densification, resulting in ground subsidence.

Given the presence of shallow rock encountered during our field investigation, it is our professional opinion that the potential for significant ground subsidence at the site during or subsequent to a seismic event is unlikely.

Landslides

No landslides or indications of slope instability were visually identified during our field investigation nor is the site within an area of mapped landslide activity. Since earthwork grading for the project will likely only result in shallow, sloped (or braced) excavations, it is our professional opinion that landsliding is unlikely at the site and that earthwork grading (if implemented using accepted construction practices) should not result in a potential for slope instability within or in the immediate vicinity of the site.

EXISTING, ON-SITE FILL

Based on the results of our field investigation and site observations, it appears existing undocumented artificial fill are present within the site area to a minimum depth of 11 feet below existing site grade.

Based on discussions with representatives from Epic Wireless Consulting, it is our understanding the option of excavating through the existing artificial fill and embedding a mat foundation (for the support of the proposed tower) a minimum of two feet into competent rock has been selected.

In addition, we will recommend over-excavation of at least 24 inches below existing grade within the area of the equipment shelter, and replacement with moisture conditioned and compacted engineered fill, as recommended in the ENGINEERED FILL section of this report. The over-excavation should extend at least five feet beyond the equipment shelter foundation footprint.

SHALLOW ROCK

Completely-to-slightly weathered metavolcanic rock was encountered in the test pits excavated for this investigation between an approximate depths of two and 11 feet below existing site grade. Based on this experience, as well as our general knowledge of the site area, we anticipate trench (and other shallow) excavations into these materials may be difficult with a conventional backhoe. Therefore, a large, track-mounted excavator, possibly equipped with a single ripper tooth, hydraulic percussion hammer, rock wheel, or other similar equipment specifically intended for rock removal may be required to advance excavations within some areas of the site or which extend to deeper depths.

In addition to excavation difficulties, perched water may develop above on-site rock subsequent to wet weather. The presence of perched groundwater could hinder trenching operations and may necessitate the use of a sump or other type of dewatering system for some trench and/or other earthwork excavations (see section below titled: "TEMPORARY DEWATERING").

SITE PREPARATION

Stripping

Within the area of proposed construction, any existing vegetation, organic soil, or debris should be stripped and disposed of off-site or outside the construction limits. In the event organic soils or tree roots are encountered (or suspected) at or beneath the stripped

surface, deep stripping or grubbing will be required to remove these (or other similar) deleterious materials.

Existing Utilities

If abandoned (or to be abandoned), below-grade utility lines, septic tanks, cesspools, wells, and/or foundations are encountered or are known to exist within the area of construction, they should be removed and disposed of off-site. Existing, below-grade utility pipelines (if any) which extend beyond the limits of the proposed construction and will be abandoned in-place should be plugged with cement grout to prevent migration of soil and/or water. All excavations resulting from removal activities should be cleaned of all loose or disturbed material (including previously placed backfill) prior to placing any fill or backfill.

Exploratory Test Pit Backfill

Backfill used to fill the exploratory test pits excavated for this investigation was loosely placed and, therefore, may be compressible or susceptible to future subsidence. If planned improvements will be located over this area, we recommend all backfill associated with this test pit be excavated and replaced with engineered fill. The approximate locations of the test pits excavated for this investigation is shown on Figure 2.

Scarification and Compaction

If engineered fill is required for this project, we recommend the ground surface upon which this fill will be placed be scarified to a depth of eight inches, uniformly moisture conditioned to between zero and five percent above the optimum moisture content, and compacted to a minimum of 90 percent of the maximum dry density as determined by ASTM (American Society for Testing and Materials) Test Method D 1557[3]. In the event the exposed subgrade consists of undisturbed on-site rock, scarification and compaction may be omitted if approved by the project Geotechnical Engineer.

Over-excavation of Loose or Disturbed Material

Within areas grubbed or otherwise disturbed below an approximate depth of 12 inches, in-place scarification and compaction may not be adequate to densify all disturbed soil. Therefore, over-excavation of the disturbed soil, scarification and compaction of the exposed subgrade, and replacement with engineered fill may be required in these areas.

[3] This test procedure should be used wherever relative compaction, maximum dry density, or optimum moisture content is referenced within this report.

Wet/Unstable Soil Conditions

If site preparation or earthwork grading (if any) is performed in the winter or spring season, or shortly after significant precipitation or irrigation, near-surface site soils may be significantly over optimum moisture content. Further, perched water may be encountered above on-site rock regardless of the season. These conditions could hinder equipment as well as efforts to compact site soils to a specified level of compaction. If soils with over optimum moisture content are encountered during construction, disking to aerate, replacement with imported material, chemical treatment, stabilization with a geotextile fabric or grid, and/or other methods will likely be required to facilitate earthwork operations. The applicable method will depend on the contractor's capabilities as well as other project-related factors beyond the scope of this study. Therefore, if over-optimum soil conditions and/or perched water are encountered during construction, the project Geotechnical Engineer should review these conditions (as well as the contractor's capabilities) and, if appropriate, provide recommendations for their treatment.

TEMPORARY DEWATERING

Though no free groundwater was encountered during our field investigation, we anticipate even shallow excavations may encounter groundwater perched over on-site rock during or subsequent to wet weather. If perched groundwater is encountered during construction, dewatering may be required to facilitate construction. In our opinion dewatering of narrow trench excavations which penetrate less than a few feet below the groundwater surface and do not encounter loose and/or cohesionless soil or highly fractured rock may be possible using a sump system. Dewatering of more extensive excavations, or excavations which encounter loose and/or cohesionless soil or highly fractured rock, will likely require well points, deep wells, and/or deep sumps. To help maintain the stability of these types of excavations, groundwater levels should be drawn down a minimum of two feet below the lowest portion of the excavation prior to excavating.

Since temporary dewatering will impact and be dependent on construction methods and scheduling, we recommend the contractor be solely responsible for the design, installation, maintenance, and performance of all temporary dewatering systems. Further, perched water conditions can be highly dependent on the season, precipitation, runoff conditions, and possibly other factors. Therefore, groundwater conditions presented in this report may not be representative of those which may be encountered at the time of construction. We recommend the contractor verify groundwater conditions and evaluate dewatering requirements prior to bidding and/or construction.

TEMPORARY EXCAVATIONS

General

All excavations must comply with applicable local, state, and federal safety regulations including the current OSHA Excavation and Trench Safety Standards. Construction site safety generally is the responsibility of the contractor, who should be solely responsible for the means, methods, and sequencing of construction operations.

Construction Considerations

Construction equipment, building materials, excavated soil, vehicular traffic, and other similar loads should not be allowed near the top of any un-shored or un-braced excavation. Where the stability of adjoining buildings, walls, pavements, or other similar improvements is endangered by excavation operations, support systems such as shoring, bracing, or underpinning may be required to provide structural stability and to protect personnel working within the excavation. Since excavation operations are dependent on construction methods and scheduling, the contractor should be solely responsible for the design, installation, maintenance, and performance of all shoring, bracing, underpinning, and other similar systems. Under no circumstances should comments provided herein be inferred to mean that Mid Pacific Engineering is assuming any responsibility for temporary excavations, or for the design, installation, maintenance, and performance of any shoring, bracing, underpinning, or other similar systems.

During wet weather, earthen berms or other methods should be used to prevent runoff water from entering all excavations. All runoff water within or adjacent to any excavations should be collected and disposed of outside the construction limits.

Excavation Conditions

Shallow rock was encountered in the test pits excavated for this investigation between approximate depths of two and 11 feet below existing site grade. Based on this experience, as well as our general knowledge of the site area, we anticipate trench (and other shallow) excavations into these materials may be difficult with a conventional backhoe. Therefore, a large, track-mounted excavator, possibly equipped with a single ripper tooth, hydraulic percussion hammer, rock wheel, or other similar equipment specifically intended for rock removal may be required to advance excavations within some areas of the site or which extend to deeper depths.

In addition to excavation difficulties, perched water may develop above on-site rock subsequent to wet weather. The presence of perched groundwater could hinder trenching operations and may necessitate the use of a sump or other type of dewatering system for

some trench and/or other earthwork excavations (see section above titled: "TEMPORARY DEWATERING").

BENCHING REQUIREMENTS

If fill is to be placed on slopes steeper than 5(h):1(v), the slope to receive this fill should be benched prior to or during fill placement. In general, benches should extend through any loose or disturbed soil or rock, extend a minimum of two feet (measured horizontally) into the existing slope, and be offset no more than four feet vertically.

ENGINEERED FILL

Materials - General

If engineered fill is required for this project, we recommend this material consist of soil and/or soil-aggregate mixtures generally less than three inches in maximum dimension, free of organic or other deleterious debris, and essentially non-plastic. Typically, mixtures of gravel, sand, silt, low plasticity clay, and/or rock fragments are acceptable for use as engineered fill. Specific requirements for engineered fill as well as applicable test procedures to verify material suitability are provided on the table on the following page.

Soil Property		ASTM Test Procedure	
Gradation		Test Designation	Test Description
Sieve Size	Percent Passing		
3-inch	100	D 422	Particle-Size Analysis of Soils
¾-inch	70 to 100	D 422	Particle-Size Analysis of Soils
200	Greater than approximately 10	D 422	Particle-Size Analysis of Soils
Plasticity			
Liquid Limit	Plasticity Index	D 4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
Less than 35	Less than 15		
Expansion Potential			
Less than 20		D 4829	Expansion Index of Soils
Organic Content			
Less than 3 percent		D 2974	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
Maximum Dry Unit Weight			
More than 100 pounds per cubic foot		D 1557	Laboratory Compaction Characteristics of Soil Using Modified Effort

On-Site Soil Materials

In general, we anticipate near-surface, on-site soils free of organic or other deleterious debris may be used for engineered fill.

On-Site Rock Materials

On-site rock may require special handling and/or processing to reduce the size of the excavated material and meet the requirements provided above for engineered fill (i.e., engineered fill should be generally less than three inches in maximum dimension). In order to use on-site rock for engineered fill, we recommend these materials either be: (1) processed (i.e., pulverized) with heavy equipment to reduce individual rock fragments to generally less than approximately three inches in maximum dimension; or (2) screened, raked, or selectively processed to remove individual rock fragments more than approximately three inches in maximum dimension. In general, we recommend all rock in

excess of approximately three inches in maximum dimension be disposed of off-site or outside the construction limits.

Imported Materials

All imported soil and/or soil-aggregate mixtures used for engineered fill should: (1) meet the material requirements outlined above (see section titled "Materials - General"); and (2) be sampled, tested and approved by the project Geotechnical Engineer prior to being transported to the site.

Placement and Compaction

Soil, processed on-site rock, and/or soil-aggregate mixtures used for engineered fill should be uniformly moisture conditioned to between zero and five percent above the optimum moisture content, placed in horizontal lifts less than eight inches in loose thickness, and compacted to a minimum of 90 percent relative compaction. In pavement areas, engineered fill placed within 12 inches of finished subgrade[4] should be compacted to a minimum of 95 percent relative compaction.

Comments Regarding Utility Trenches within Steeply-Sloped Areas

We anticipate it may be necessary to route below-grade utilities across steeply sloped areas. In the event utility trenches are to be routed at a steep gradient, use of a cementious mixture should be considered for trench backfill to reduce the possibility of erosion or sloughing of this material.

TRENCH BACKFILL

Materials

Pipe zone backfill (i.e., material beneath and in the immediate vicinity of the pipe) should consist of on-site or imported soil less than one inch in maximum dimension; trench zone backfill (i.e., material placed between the pipe zone backfill and finished subgrade) may consist of on-site soil and/or processed rock which meets the material requirements previously provided for engineered fill.

[4] Within this report, finished subgrade refers to the top surface of undisturbed on-site rock, on-site soil compacted during site preparation, compacted trench backfill, and/or engineered fill.

If imported material is used for pipe or trench zone backfill, we recommend it consist of fine-grained sand. In general, use of coarse-grained sand and/or gravel is not recommended due to the potential for soil migration into, and water seepage along, trenches backfilled with this type of material.

Recommendations provided above for pipe zone backfill are minimum requirements only. More stringent material specifications may be required to fulfill local codes and/or bedding requirements for specific types of pipe. We recommend the project Civil Engineer develop these material specifications based on planned pipe types, bedding conditions, and other factors beyond the scope of this study.

Placement and Compaction

Trench backfill should be placed and compacted in accordance with recommendations previously provided for engineered fill. Mechanical compaction is strongly recommended; ponding or jetting should not be allowed unless specifically reviewed and approved by the project Geotechnical Engineer prior to construction.

Important Note: All pipe zone backfill should be placed on undisturbed earth materials. In the event earth materials located directly beneath the planned pipe zone backfill are disturbed during construction, these materials should either be compacted in-place (if the depth of disturbance is less than approximately 12 inches deep), or removed (if the depth of disturbance is greater than approximately 12 inches) and replaced in accordance with recommendations previously provided for engineered fill.

EARTHEN SLOPES

General

Earthen cut and fill slopes less than five feet in height may be constructed at a gradient of 2(h):1(v) or flatter; slopes in excess of five feet should be constructed at a gradient of 2½(h):1(v) or flatter. All cut and fill slopes should be revegetated with deep rooted, perennial grasses or other suitable method soon after construction. To further reduce the potential for erosion, surface runoff should not be allowed to flow onto, over, or across any on-site slope(s) more than a few feet in height. Typically, surface runoff water may be intercepted and redirected using a small berm or shallow gutter (placed at the top of the slope), or by grading adjacent areas to drain away from the top of all downward trending slopes.

Setbacks

Structures located near the top (or bottom) of a slope steeper than 3(h):1(v) should maintain a minimum set-back in accordance with requirements outlined in Section 1808.7 of the California Building Code (CBC, 2019 edition), or ten feet (measured horizontally from the top or bottom of slope to the closest point of approach of the structure), whichever is greater. All other planned surface improvements (including pavements, sidewalks, etc.) should not be placed any closer than three feet (measured horizontally) from the top of any slope steeper than 3(h):1(v). In the event below-grade improvements (such as underground utilities) are to be located within the vicinity (and parallel) to any slope faces steeper than 3(h):1(v), these features should not be placed any closer than five feet (measured horizontally) from the nearby slope face.

TOWER FOUNDATION - MAT

General

Based on discussions with representatives from Epic Wireless Consulting, it is our understanding the option of excavating through the existing artificial fill and embedding a mat foundation (for the support of the proposed tower) a minimum of two feet into competent rock has been selected.

The geotechnical parameters provided below are for the design and construction of a mat foundation. In general, we recommend this proposed mat be constructed of reinforced concrete, a minimum of five feet wide, embedded a minimum of 13 feet below the lowest adjacent original subgrade, or a minimum of two feet into competent undisturbed rock, whichever is deeper.

Allowable Bearing Pressure

An allowable bearing pressure of 2,500 pounds per square foot (psf) may be used for the design of a mat foundation with the above minimum dimensions. The allowable bearing pressure provided is a net value; therefore, the weight of the foundation (which extends below finished subgrade) may be neglected when computing dead loads. The allowable bearing pressure provided herein applies to dead plus live loads, includes a calculated minimum factor of safety of three, and may be increased by 1/3 for short-term loading due to wind or seismic forces. For a mat foundation subject to overturning, the maximum edge pressure should not exceed the allowable bearing pressure.

Estimated Settlement

Based on anticipated foundation dimensions and loads, we estimate maximum settlement of the proposed mat foundation to be on the order of ½-inch. Settlement of this foundation is expected to occur rapidly, and should be essentially complete shortly after initial application of the loads.

Overturning Resistance

Overturning tower forces may be resisted by the weight of the proposed concrete mat foundation (and any soil and/or processed on-site rock placed over this foundation) and edge bearing of the foundation on undisturbed on-site rock. If soil (and/or processed on-site rock) is to be placed over the proposed mat, the unit weight of this material may be taken as 100 pounds per cubic foot.

Lateral Resistance

Resistance to lateral loads (including those due to wind or seismic forces) may be provided by frictional resistance between the bottom of the proposed concrete mat foundation and the underlying rock, and by passive earth pressure against the sides of the foundation. A coefficient of friction of 0.25 may be used between cast-in-place concrete foundations and the underlying rock; passive pressure available in undisturbed on-site soil, rock, and/or engineered fill may be taken as equivalent to the pressure exerted by a fluid weighing 250 pounds per cubic foot (pcf). To account for the possible future loss of subgrade support due to surface disturbance, we recommend earth materials located within the uppermost one foot of the embedded portion of the proposed tower mat foundation be neglected when evaluating passive resistance.

Friction and passive pressure parameters provided above are ultimate values. Therefore, a suitable factor of safety should be applied to these values for design purposes. The appropriate factor of safety will depend on the design condition and should be determined by the project Structural Engineer. Depending on the application, typical factors of safety could range from 1.0 to 1.5. Frictional and passive resistance may be used in combination, provided a suitable factor of safety is applied to these values during design.

Construction Considerations

Excavations for the proposed tower mat foundation should be cleaned of all debris, loose or disturbed soil, and any water. In addition, a representative from Mid Pacific Engineering should observe the excavation prior to the installation of rebar and placement of concrete to verify that subsurface conditions are consistent with those encountered during our field investigation.

EQUIPMENT SHELTER FOUNDATIONS

General

Based on the existing fill present at the site, we will recommend over-excavation of at least 24 inches below existing grade within the area of the equipment shelter, and replacement with moisture conditioned and compacted engineered fill, as recommended in the ENGINEERED FILL section of this report. The over-excavation should extend at least five feet beyond the equipment shelter foundation footprint.

Foundation support for the planned equipment shelter may be provided using either spread footings or a mat foundation (mat foundations should typically consist of a slab with thickened edges). In general, these proposed foundations should be constructed of reinforced concrete and founded on undisturbed on-site soil, on-site rock, and/or engineered fill. In addition, we recommend all spread footings be a minimum of 12 inches wide and embedded a minimum of 12 inches below the lowest adjacent final subgrade; the thickened edge of all mat slab foundations should also be embedded a minimum of 12 inches below the lowest adjacent final subgrade.

Allowable Bearing Pressure

An allowable bearing pressure of 1,500 pounds per square foot (psf) may be used for the design of proposed spread and/or mat foundations which possess the above minimum dimensions. The allowable bearing pressure provided is a net value; therefore, the weight of the foundation (which extends below finished subgrade) may be neglected when computing dead loads. The allowable bearing pressure provided herein applies to dead plus live loads, includes a calculated minimum factor of safety of three, and may be increased by 1/3 for short-term loading due to wind or seismic forces. For mat foundations subject to overturning forces, the maximum edge pressure should not exceed the allowable bearing pressure.

Lateral Resistance

Resistance to lateral loads (including those due to wind or seismic forces) may be provided by frictional resistance between the bottom of proposed concrete foundations and the underlying soil or rock, and by passive earth pressure against the sides of the foundations. A coefficient of friction of 0.25 may be used between cast-in-place concrete foundations and the underlying soil or rock; passive pressure available in undisturbed native soil, on-site rock, and/or engineered fill may be taken as equivalent to the pressure exerted by a fluid weighing 250 pounds per cubic foot (pcf). To account for possible future loss of subgrade support due to surface disturbance, we recommend earth materials located within the uppermost

six inches of the embedded portion of all shallow foundations be neglected when evaluating passive pressures.

Lateral resistance parameters provided above are ultimate values. Therefore, a suitable factor of safety should be applied to these values for design purposes. The appropriate factor of safety will depend on the design condition and should be determined by the project Structural Engineer. Depending on the application, typical factors of safety could range from 1.0 to 1.5.

Construction Considerations

Prior to placing steel or concrete, foundation excavations should be cleaned of all debris, loose or disturbed soil or rock, and any water.

CONCRETE SLABS SUPPORTED-ON-GRADE

Subgrade Preparation

Subgrade soils supporting concrete floor slabs should be scarified to a depth of eight inches, uniformly moisture conditioned to between zero and five percent above the optimum moisture content, and compacted to a minimum of 90 percent relative compaction. Scarification and compaction may be omitted if slabs are to be placed directly on undisturbed on-site rock and/or engineered fill and if approved by the project Geotechnical Engineer.

Surrounding Grades

It has been our experience that ground surface grades surrounding structures can affect the post-construction presence and quantity of water beneath such structures, as well as vapor emissions from interior concrete floor slabs. In order to reduce the possibility for these potentially adverse conditions, we recommend areas adjacent to all structures be graded, or floor slabs raised, so that the bottoms of all interior concrete floor slabs are elevated a minimum of four inches above adjacent, finished pad grades.

Rock Capillary Break

Interior concrete floor slabs supported-on-grade should be underlain by a capillary break consisting of free draining durable rock a minimum of four inches thick, graded such that 100

percent passes the one-inch sieve and less than five percent passes the No. 4 sieve[5]. This rock should be compacted to the extent possible using light vibratory equipment prior to placing any vapor membranes or slab concrete. Further, precautions should be taken during construction to reduce contamination of the rock with soil or other materials. Contamination of the rock with soil or other materials may significantly reduce the effectiveness of the capillary break, possibly resulting in excessive (and adverse) free water transmission to the bottom of the overlying slab.

Vapor Emission Considerations

Though generally not a geotechnical consideration, it has been our experience that a plastic or vinyl membrane is often placed directly over the rock capillary break to reduce water migration from the subgrade soils up to the overlying concrete floor slab. If used, we suggest this membrane be installed in a manner to reduce punctures and penetrations. Where penetrations are unavoidable, or adjacent to footings or other similar obstructions, the vapor membrane should be placed tightly against these features. Further, it has been our experience that sand, one to two inches thick, is often placed on top of the membrane prior to placing slab concrete to promote more uniform curing of the slab. If used, we strongly suggest that concrete not be placed if sand overlying the vapor membrane has become wet (due to precipitation or excessive moistening), or if standing water is present above the membrane. It has been our experience that excessive water beneath interior floor slabs can result in significant, post-construction vapor transmission through the slab, adversely affecting floor coverings, and possibly resulting in potentially hazardous molds.

In addition to a capillary break and vapor membrane, it has also been our experience that concrete quality is critical to the ability of concrete floor slabs to resist vapor transmission. As a minimum, we suggest that concrete used for floor slab construction possess a maximum water/cement ratio of 0.5. Since water is often added to uncured concrete to increase workability, it is important that strict quality control be exercised during the installation of all slab concrete to insure water/cement ratios are not altered prior or during placement.

It must be recognized comments provided above are suggestions only. These comments are intended to assist the project Architect, Structural Engineer, or other design professional, and should not be inferred to mean that Mid Pacific Engineering is assuming the design responsibility for interior concrete floor slabs or appurtenant vapor reduction provisions. In all cases, it is solely the responsibility of the project Architect, Structural

[5] In general, Caltrans Class 2 aggregate base (or other similar material) will not meet the gradation requirements provided above for a capillary break. Therefore, we recommend this material not be used for a capillary break beneath interior concrete slabs supported-on-grade.

Engineer, or other design professional to determine the design based on project specific requirements (which were beyond our knowledge or involvement with the project). In the event the project Architect, Structural Engineer, or other design professional is unfamiliar with concrete slab-on-grade issues, or if the project will include floor coverings sensitive to slab vapor emissions, a professional specializing in vapor transmission should be consulted to provide project specific recommendations and design provisions.

SITE ACCESS ROADWAY

General

We anticipate the proposed facility may be accessed using a new, partially improved roadway. Further, we anticipate a conventional surfacing material (such as asphalt concrete) would not be considered applicable due to cost and possibly other considerations beyond the scope of this study. Therefore, provided below are our comments regarding surfacing these areas with gravel.

Note: Comments and recommendations provided below are intended to assist the project Civil Engineer in the design of a partially improved roadway to service the site subsequent to construction. In general, we anticipate such use will involve infrequent automobile traffic. Recommendations provided below are not intended for the design of roadways to be utilized by cranes and other similar equipment during construction. If such use is anticipated, we recommend the project Civil Engineer prepare a design based on anticipated loads and other relevant conditions (which were not available at the time this report was prepared and completely beyond the scope of this study).

Surface Drainage

Areas to be surfaced with gravel, as well as adjoining areas, should be adequately graded to provide positive drainage such that surface water is not allowed to accumulate on or near areas intended to carry vehicular traffic.

Subgrade Preparation

Subgrade areas to be surfaced with gravel should be scarified to a depth of eight inches below finished subgrade, uniformly moisture conditioned to between one and three percent above the optimum moisture content, and compacted to a minimum of 95 percent relative compaction. In the event the exposed subgrade consists of undisturbed on-site rock, scarification and compaction may be omitted if approved by the project Geotechnical Engineer.

Gravel Surfacing - Materials and Placement

To provide increased subgrade support, dust control, and a wearing surface, we anticipate gravel (such as Caltrans Class 2 aggregate baserock or other similar material) may be spread and compacted over the area of the possible (or planned) site access roadway. Should Caltrans Class 2 aggregate baserock (or other similar material) be used, we recommend it be a minimum of six inches thick. Baserock used as surfacing material should be compacted to a minimum of 95 percent relative compaction.

Depending on the frequency of use and vehicle loading, it may be desirable to underlay gravel surfacing material (such as Caltrans Class 2 aggregate baserock) with a geotextile stabilization fabric. The primary purpose of this fabric would be to reduce migration of subgrade soil into the baserock and redistribute concentrated loads, thereby extending the service life of this type of surfacing material. If a geotextile fabric is used, we recommend it consist of Mirafi 500X or other equivalent fabric approved by the project Geotechnical Engineer.

ADDITIONAL SERVICES

We recommend Mid Pacific Engineering review final earthwork grading (if any) and/or foundation plans and specifications to evaluate that recommendations contained herein have been properly interpreted and implemented during design. Further, all site earthwork activities, including site preparation, placement of engineered fill and trench backfill, construction of roadway subgrades, and all foundation excavations should be monitored by a representative from Mid Pacific Engineering.

Monitoring services are an essential component of our design services. Monitoring allows us to observe the soil conditions encountered during construction, evaluate the applicability of the recommendations presented in this report to the soil conditions encountered, and recommend appropriate changes in design or construction procedures if conditions differ from those described herein.

LIMITATIONS

This report has been prepared in substantial accordance with the generally accepted geotechnical engineering practice as it existed in the site area at the time our services were rendered. No warranty is either expressed or implied.

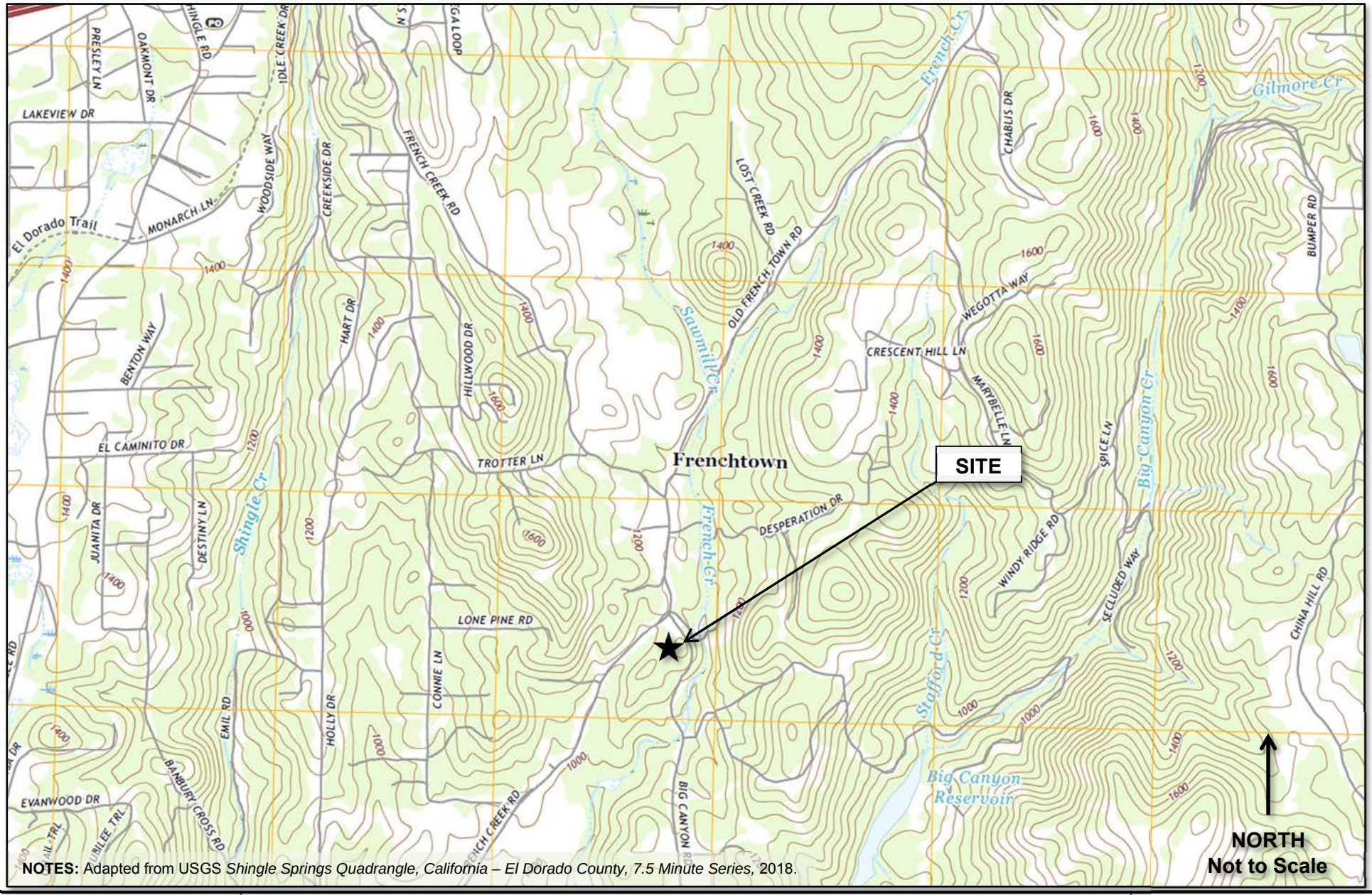
Conclusions and recommendations contained in this report were based on the conditions encountered during our field investigation and are applicable only to those project features described above (see section titled "PROPOSED CONSTRUCTION"). It is possible subsurface conditions could vary beyond the point explored. If conditions are encountered during construction which differ from those described in this report, or if the scope or nature of the proposed construction changes, we should be notified immediately in order to review and, if deemed necessary, conduct additional studies and/or provide supplemental recommendations.

Recommendations provided in this report are based on the assumption that an adequate program of tests and observations will be conducted by Mid Pacific Engineering during the construction phase in order to evaluate compliance with our recommendations.

The scope of services provided by Mid Pacific Engineering for this project did not include the investigation and/or evaluation of toxic substances, or soil or groundwater contamination of any type. If such conditions are encountered during site development, additional studies may be required. Further, services provided by Mid Pacific Engineering for this project did not include the investigation and/or evaluation of soil corrosivity. Depending on planned pipe types, bedding conditions, and other factors beyond the scope of this study, it may be appropriate to evaluate soil corrosivity prior to development.

This report may be used only by our client, and only for the purposes stated herein, within a reasonable time from its issuance. Land use, site conditions, and other factors may change over time which may require additional studies. In the event a significant period of time elapses between the date of this report and construction, Mid Pacific Engineering shall be notified of such occurrence in order to review current conditions. Depending on that review, additional studies and/or an updated or revised report may be required prior to completion of final design.

Any party other than our client who wishes to use all or any portion of this report shall notify Mid Pacific Engineering of such intended use. Based on the intended use, as well as other site-related factors, Mid Pacific Engineering may require that additional studies be conducted and that an updated or revised report be issued. Failure to comply with any of the requirements outlined above by the client or any other party shall release Mid Pacific Engineering from any liability arising from the unauthorized use of this report.



NOTES: Adapted from USGS *Shingle Springs Quadrangle, California – El Dorado County, 7.5 Minute Series*, 2018.

MPE
MID PACIFIC ENGINEERING, INC.

VICINITY MAP

PROPOSED TELECOMMUNICATIONS FACILITY

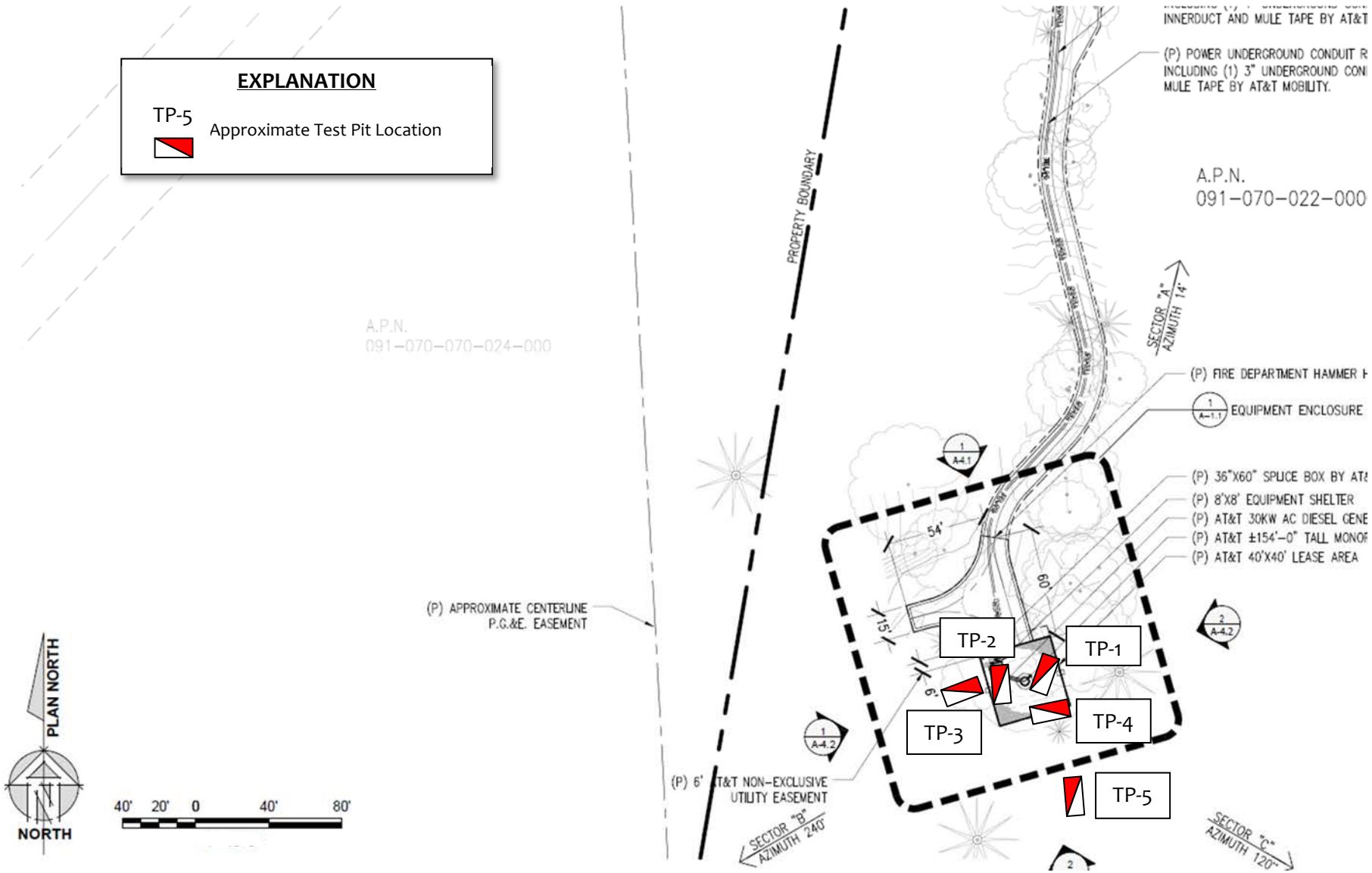
Frenchtown 2 – Butte Meadows, Site Number: CVL02082

Shingle Springs, California

FIGURE 1

Date: 02/20

MPE No. 04902-01



NOTES: Adapted from *Frenchtown 2 – Butte Meadows, Site Plan,* Sheet A-1.1, prepared by Adaptive Re-Use Engineering, dated July 8, 2019.

MPE
MID PACIFIC ENGINEERING, INC.

TEST PIT LOCATION MAP

PROPOSED TELECOMMUNICATIONS FACILITY

Frenchtown 2 – Butte Meadows, Site Number: CVL02082
Shingle Springs, California

FIGURE 2

Date: 02/20

MPE No. 04902-01

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		SYMBOL	CODE	TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of soil > no. 200 sieve size)	GRAVELS (More than 50% of coarse fraction > no. 4 sieve size)	GW		Well graded gravels or gravel - sand mixtures, little or no fines
		GP		Poorly graded gravels or gravel - sand mixtures, little or no fines
		GM		Silty gravels, gravel - sand - silt mixtures
		GC		Clayey gravels, gravel - sand - silt mixtures
	SANDS (50% or more of coarse fraction < no. 4 sieve size)	SW		Well graded sands or gravelly sands, little or no fines
		SP		Poorly graded sands or gravelly sands, little or no fines
		SM		Silty sands, sand - silt mixtures
		SC		Clayey sands, sand clay mixtures
FINE GRAINED SOILS (More than 50% of soil < no. 200 sieve size)	SILTS & CLAYS LL< 50	ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL		Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays
		OL		Organic silts and organic silty clays of low plasticity
	SILTS & CLAYS LL ≥ 50	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH		Inorganic clays of high plasticity, fat clays
		OH		Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS		Pt		Peat and other highly organic soils
ROCK		RX		Rocks, weathered to fresh
FILL		FILL		Artificially placed fill material

OTHER SYMBOLS

= Drive Sample: 2-1/2" O.D. Modified California sampler

= Hand Driven Sample

=SPT Sampler

= Initial Water Level

= Final Water Level

= Estimated or gradational material change line

= Observed material change line

Laboratory Tests

PI = Plasticity Index
EI =Expansive Index
UCC = Unconfined Compression Test
TR = Triaxial Compression Test
GR = Gradation Analysis (Sieve)
K = Permeability Test

GRAIN SIZE CLASSIFICATION

CLASSIFICATION	RANGE OF GRAIN SIZES	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12"	Above 305
COBBLES	12" to 3"	305 to 76.2
GRAVEL coarse (c) fine (f)	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76
SAND coarse (c) Medium (m) fine (f)	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.074 4.76 to 2.00 2.00 to 0.420 0.420 to 0.074
SILT & CLAY	Below No. 200	Below 0.074

MPE
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UNIFIED SOIL CLASSIFICATION SYSTEM
PROPOSED TELECOMMUNICATIONS FACILITY
Frenchtown 2 - Butte Meadows, Site Number: CVL02082
Shingle Springs, California

FIGURE 3
Date: 02/20
MPE No. 04902-01

FRACTURING	
LOG TERM	DEFINITION
Very Wide	> 6 feet
Wide	2 to 6 feet
Moderately	8 to 24 inches
Closely	2 1/2 to 8 inches
Very Closely	3/4 to 2 1/2 inches

ROCK QUALITY DESIGNATION (ROD)	
ROD (%)	ROCK QUALITY
90 to 100	Excellent
75 to 90	Good
50 to 75	Fair
25 to 50	Poor
0 to 25	Very Poor

WEATHERING	
LOG TERM	DESCRIPTION/DEFINITION
Fresh	No visible sign of decomposition or discoloration. Rings under hammer impact
Slightly Weathered	Slight discoloration inwards from open fractures; otherwise similar to fresh
Moderately Weathered	Discoloration throughout. Strength less than fresh rock, specimens cannot be broken by hand or scraped with knife
Highly Weathered	Specimens can be broken by hand with effort and shaved with knife. Textures becoming indistinct but fabric preserved
Completely Weathered	Mineral decomposed to soil but fabric and structure preserved. Specimens easily crumbled or penetrated.

COMPETENCY			
CLASS	LOG TERM	DESCRIPTION/DEFINITION	APPROXIMATE RANGE OF UNCONFINED COMPRESSIVE STRENGTHS (tsf)
I	Extremely Strong	Many blows with geologic hammer required to break intact specimens	>2000
II	Very Strong	Hand held specimens break with pick end of hammer under more than one blow	1000 to 2000
III	Strong	Hand held specimens can be broken with singer, moderate blow with pick end of hammer	500 to 1000
IV	Moderately Strong	Specimens can be scraped with knife; light blow with pick end of hammer causes indentations	250 to 500
V	Weak	Specimens crumble under moderate blow with pick end of hammer	10 to 250
VI	Friable	Specimens crumble in hand	N/A

LOGS OF TEST PITS 1 and TP-2

Kubota U27-4 Mini-Excavator with a 12-inch Bucket

October 24, 2019

Test Pit 1

Depth (bgs)

Artificial Fill

0 – 8½' Brown, slightly moist to moist, slightly clayey, fine sandy silt (ML) with coarse gravel to boulder sized, highly-weathered rock fragments. 1/8 to ¼-inch diameter roots to depth of 2 feet. Relatively easy to excavate.

8½ – 9' Light brown, red, gray.

Total depth = 9 feet.
No groundwater encountered.
Backfilled with excavated soil and rock.

Test Pit 2

Depth (bgs)

Artificial Fill

0 – 6' Brown, slightly moist to moist, clayey silt (ML) with coarse gravel to boulder sized, highly-weathered rock fragments. 1/8 to ¼-inch diameter roots to depth of 2 feet.

6 – 8½' Light brown, red, gray.

Total depth = 8½ feet.
No groundwater encountered.
Backfilled with excavated soil and rock.

LOGS OF TEST PITS 3 and TP-4

John Deere 310 Backhoe with a 24-inch Bucket

November 21, 2019

Test Pit 3

Depth (bgs)

Artificial Fill

0 – 4' Brown, slightly moist to moist, fine sandy silt (ML) with coarse gravel to boulder sized, highly-to-slightly weathered rock fragments. Roots from depth of 1 to 4 feet.

4 – 11' Light brown, larger roots. 24-inch diameter boulder at 7 feet. Relatively easy to excavate.

Metavolcanic Rock

11 – 13½' Completely weathered. Weathers to reddish-brown, moist, slightly sandy, clayey silt (ML) with highly-to slightly-weathered rock fragments.

Bucket refusal on moderately-to slightly-weathered rock at 13½ feet.

Total depth = 13½ feet.

No groundwater encountered.

Backfilled with excavated soil and rock.

Test Pit 4

Depth (bgs)

Artificial Fill

0 – 11' Brown, slightly moist to moist, slightly clayey, fine sandy silt (ML) with coarse gravel to boulder sized, highly-to-slightly weathered rock fragments. ¼- to 1-inch diameter roots.

Metavolcanic Rock

11 – 14' Completely weathered. Weathers to reddish-brown, moist, slightly sandy, clayey silt (ML) with highly-to slightly-weathered rock fragments.

Total depth = 14 feet.

No groundwater encountered.

Backfilled with excavated soil and rock.

LOG OF TEST PIT TP-5

John Deere 310 Backhoe with a 24-inch Bucket

November 21, 2019

Test Pit 7

Depth (bgs)

0 – 2' Reddish-brown, slightly moist to moist, slightly sandy, clayey silt (ML) with some highly-to slightly-weathered rock fragments.

Metavolcanic Rock

2 – 3' Gray, moderately-to-slightly-weathered.

Bucket refusal at 3 feet.

Total depth = 3 feet.

No groundwater encountered.

Backfilled with excavated soil and rock.

COUNTY OF EL DORADO - ENVIRONMENTAL MANAGEMENT DEPARTMENT

2850 FAIRLANE COURT, PLACERVILLE, CA 95667 (530) 621-5300
3368 LAKE TAHOE BLVD. #303, SOUTH LAKE TAHOE, CA 96150 (530) 573-3450

Hazardous Materials Statement

Solid Waste/Hazardous Materials Division (SW/HM)

Owners Name: Matt Lippman	**Date:**	**Time:**
Operators Name: AT&T Mobility	**Business Lic. or Permit/Plan Check #:**	
Facility/Business Name: Epic Wireless Group, LLC	**Phone:** 916-755-1326	
Physical Address: 5101 French Creek Rd, Shingle Springs, CA 95682	**Mailing Address:** 911 Hood Franklin Road, Hood, CA 95639	

Brief Business Description:
AT&T CAF II Project; Site: Frenchtown 2; New Site Build Unmanned Telecommunications Facility. 40' x 40' Leased Compound.

160' Monopine Tower. 30kw Diesel Generator with 190 Gallon Belly Tank. 6'-0" Chain Link Fence.

Please answer Yes or No to the following questions:

Note: The term "hazardous materials" includes gasoline, diesel, lubricating oils, solvents, flammable liquids and solids, toxic liquids and solids , corrosive liquids and solids, explosives, radioactive materials, and compressed gases, including propane when used for purposes other than facility heating.

A. Will this facility have on site for any purpose individual liquid hazardous materials in quantities equal to or greater than 55 gallons regardless of container size?	**Yes** ☒ **No** ☐
B. Will this facility have on site for any purpose individual solid hazardous materials quantities equal to or greater than 500 pounds regardless of container size?	**Yes** ☐ **No** ☒
C. Will this facility handle individual compressed gases in quantities equal to or greater than 200 standard cubic feet regardless of container pressure?	**Yes** ☐ **No** ☒
D. Will this facility have on site for any purpose extremely hazardous substances in any quantity as specified in 40 CFR Part 355?	**Yes** ☐ **No** ☒
E. Do you own or operate any underground storage tanks?	**Yes** ☐ **No** ☒
F. Will this facility generate or treat hazardous waste in any quantity?	**Yes** ☐ **No** ☒

If your facility will store reportable quantities of hazardous materials (55 gallons) or generate hazardous waste, prior to commencing operations the owner/operator must:
Prepare, submit and implement a hazardous materials business plan and pay appropriate fees.

- Obtain a hazardous waste generator identification number from the California Department of Toxic Substances Control.
- Train all employees to properly handle hazardous materials and wastes.
- Implement proper hazardous materials and hazardous waste storage methods in accordance with the Uniform Fire Code and Uniform Building Code.

Business owners and operators intending to handle hazardous materials in excess of reportable quantities are required by law to complete and file a hazardous materials business plan with our Department **prior to obtaining a business license or prior to having the materials onsite, whichever comes first**. Hazardous Materials Business Plan forms are available at http://www.edcgov.us/emd/solidwaste/bus_plan_index.html

Certification: By signing below I acknowledge my responsibility to comply with the hazardous material and hazardous waste laws and regulations enforced by the EDC Environmental Management Department and agree to prepare and submit a plan when required.

Applicant: Epic Wireless Group, LLC; Jared Kearsley **Date:** 7/8/2019

SW/HM Approval:	**Date:**