Biological Resources Assessment

AT&T CCL06249/PSTC Site # CANC-NLAKE01
Telecommunications Project
Lake County, California

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SUMMARY

The proposed project is situated 1.24 miles north of the City of Lakeport and 14.36 miles east of the City of Ukiah in unincorporated Lake County, California. The proposed tower project site is located approximately 200 feet west of State Highway 29 (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communications tower and associated equipment. Synthesis Planning was contracted by the project proponent to perform this Biological Resources Assessment for the proposed project.

Three (3) vegetation communities were observed within the study area and include the following: 1. *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance, 2. *Quercus garryana* Forest and Woodland Alliance, and 3. Ruderal-disturbed vegetation. As part of this Biological Resources Assessment the potential for occurrence of special-status plant species and special-status wildlife species was evaluated.

Best Construction Practices and Avoidance and Minimization Measures as well as Standard Construction Conditions to prevent take of individuals discussed above are included in this report.

List of Acronyms and Abbreviations

BMP	Best Management Practices
BRA	Biological Resources Assessment
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife (formerly CDFG)
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRLF	California red-legged frog
CSC	California Species of Concern
DBH	Diameter breast height
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
USACE	US Army Corps of Engineers
UTM	Universal Trans Mercator
WHR	Wildlife Habitat Relationships

1.0 INTRODUCTION

The purpose of this Biological Resources Assessment is to provide technical information and to review the proposed project study area, 1.24 miles north of the City of Lakeport and 14.36 miles east of the City of Ukiah in unincorporated Lake County, California. The proposed tower project site is located approximately 200 feet west of State Highway 29 (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communications tower and associated equipment Synthesis Planning prepared this Biological Resources Assessment (BRA) to provide sufficient detail to determine the potential effects of the proposed project on federally- and state-listed wildlife and plant species. This BRA was conducted to determine the potential for special-status vegetation communities, plant and animal species to occur within the project study area, and to identify the limitations to potential development of the project. The BRA is prepared in accordance with legal requirements found in Section 7 (a)(2) of the Endangered Species Act (16 U.S. C 1536(c)) and also provides information required for the California Environmental Quality Act (CEQA) review process for the project. The document presents technical information upon which later decisions regarding project affects are developed.

The project area is located in Section 11 of the Lakeport 7.5- minute topographic quadrangle. The project site is located within Township 14N and Range 10W. Surrounding land uses consist of agricultural, recreational, rural residences, and open space.

1.1 Project Description

A review of zoning drawings indicated that the proposed project would include:

- Construction of 35 feet by 35 feet (1,225 square feet, or 0.03 acres of ground disturbance) level pad area. The pad area would be covered with gravel on portions not used for equipment installation. 100 % of the tower site would occur within undisturbed annual grassland habitat;
- Construction of a driveway to the tower site from an existing gravel all weather access roadway. The access roadway would measure 20 feet by 398 feet (7,960 square feet, or 0.19 acres). The driveway would occur within undisturbed annual grassland habitat;
- Construction of a hammerhead turnaround area adjacent to the cell tower site encompassing approximately 1,056 square feet, or 0.02 acres. The hammerhead turnaround area would occur within undisturbed annual grassland habitat;
- Installation of a 80-foot Monopine tower on the pad area;
- Installation of telecommunications equipment and other related equipment within various areas of the gravel pad;
- Installation of a six (6) foot tall chain link fence around the telecommunications site;
- Installation of underground power and fiber optic cable between the tower site and an existing connection point near the PG&E power substation facility. These cables will be installed in the new and existing disturbed areas discussed above, but will also result in temporary impacts to an area measuring 105 feet long by 10 feet wide (1,050 square feet, or 0.02 acres) and within undisturbed annual grassland habitat.

The proposed project will permanently disturb approximately 10,241 square feet (0.24 acres) and temporarily disturb 1,050 square feet (0.02 acres) of undisturbed land that is currently vegetated with annual grassland habitat. All other project activities would occur within existing disturbed areas.

Staging Areas and Fueling

Storage areas for contractor equipment and materials will be determined prior to project construction activities. The project proponent, with the assistance of a biologist, will review the local project area and locate staging areas that are in previously disturbed areas that will not have potential to affect wildlife habitat or species. Staging areas will be located in pre-disturbed areas and will be approved by Lake County prior to use. The proposed project site will be used as a staging area for project activities as well. In addition, to prevent contamination of fuel and other project materials into adjacent habitat areas, the following best management measures will be implemented:

- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into adjacent habitat areas, including waters of the State and U.S.,

- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location outside of sensitive habitat areas,

- Wash sites must be located in upland locations to ensure wash water does not flow into stream channels or wetlands.

- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity.

- Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a spill occurs, no additional work shall occur until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) CDFW, RWQCB and Lake County are contacted and have evaluated the impacts of the spill.

Construction Scheduling

The estimated time period for construction is 90 working days for the entire project. Work will begin as soon as all regulatory clearances and permits are obtained.

Operations and Maintenance

The facilities would be constructed to current construction-industry standards and codes.

Construction Best Management Practices

Construction BMPs will be incorporated in the construction of the project and include, but are not limited to, the following:

- To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices will be placed around construction sites in these areas to contain spoils from construction excavation activities.

- Surveys for identified special-status species shall be conducted by qualified biologists at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action other than the Best Management Practices identified above are required. If individuals are found, including nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individual species.

- Due to the potential for special-status species to occur, move through, or into the project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. All pipes or tubing Four (4) inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.

- Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the California and Federal Endangered Species Acts, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat areas during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

2.0 STUDY METHODOLOGY

This Biological Resources Assessment used the best available scientific and commercial data to evaluate the potential effects to biological resources from the proposed project. Literature review, aerial imagery and field surveys informed the descriptions of the vegetation communities, identification of present and past occurrences of special-status species in the vicinity of the proposed project, and the assessment of habitats for special-status animal species.

2.1 Literature Search

Information on special-status plant and animal species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the Lakeport U.S. Geologic Service 7.5-minute topographic quadrangle. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the project site:

- U.S. Fish and Wildlife Service (USFWS) quadrangle species lists (USFWS 2024)
- USFWS list of special-status animals for Lake County (USFWS 2024)
- California Natural Diversity Database records (CNDDB) (CNDDB 2024)
- California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW 2024)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2024)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2024)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)

The USFWS electronic list of Endangered and Threatened Species was queried electronically (www.fws.gov/sacramento/es_spp_lists-overview.htm). The CalFish IMAPS Viewer (www.calfish.org/DataandMaps/CalFishGeographicData), developed by CDFW Biogeographic Branch for analysis of fisheries, was also reviewed.

The CDFW BIOS website and the *California Essential Habitat Connectivity Project: A strategy for conserving a connected California* (Spencer et al. 2010) were reviewed for wildlife movement information. The CDFW BIOS website and the CNDDB were review for documented nursery sites. Other sources of information regarding reported occurrences include locations previously reported to the U.C Berkeley Museum of Vertebrate Zoology and the California Academy of Sciences.

2.2 Field Surveys

Cord Hute, Senior Biologist for Synthesis Planning, conducted botanical and biological surveys of the project site and buffer area on May 24, 2024. Mr. Hute analyzed on-site and buffer area habitats for suitability for special-status plant and animal species during these surveys.

A reconnaissance-level biological survey of the project site was conducted. Habitat types encountered during the surveys were characterized primarily by dominant and subdominant plant

species, and wildlife use was described based on known and anticipated occurrences. Species were recorded as present if they were observed, if species' vocalizations were heard, or if diagnostic field signs were found (i.e., scat, tracks, pellets). Surveys were conducted on the project site and in an area approximately 200 feet wide around the project site (hereafter referred to as the project buffer area).

Special-status wildlife species, in particular, were surveyed for to determine the presence or absence of such species or their habitat.

The survey was conducted to identify the following:

- Suitability of habitat(s) to support sensitive wildlife species;
- Presence of wildlife species and their habitats;
- Potential of the site to contain sensitive habitats, including vernal pools, natural wetlands, etc.;
- Potential of the site to support sensitive small mammal species;
- Potential of the site to support sensitive avian species (e.g., migratory birds, raptors, waterfowl, etc.);
- Habitat condition, quality and vegetation associations; and
- On-site, adjacent and surrounding land uses.

Synthesis utilized the guidance of Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2024). Plant surveys were conducted using demographic survey techniques/guidelines including conducting floristically based surveys, identifying to species level for all plants encountered, and identifying to the level necessary to detect sensitive plants, if present. When possible, the surveys were conducted within the correct phenological time to detect targeted sensitive plant species. The identity of plant species not currently blooming were determined, where feasible, by other characteristics or features of the plants structure. Botanical field surveys were conducted in a manner which maximized the likelihood of locating special status plants and sensitive natural communities that were present. Botanical field surveys were floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. Surveys were limited to habitats known to support special status plants. During field surveys, the entire project site and a 200-foot buffer area around the project site were surveyed on 30 foot transects through the entire survey area. Botanical field surveys were conducted at the times of year when plants will be both evident and identifiable (during flowering or fruiting). See Section 5 for survey results and impacts discussion.

Synthesis utilizes GIS Pro, a mobile software program, to collect field data on plant and animal species identified during surveys. The program is installed on an Apple iPad. Aerial topographic maps and satellite photographic images are loaded into the GIS Pro program on the iPad in order to provide as accurate location data as possible during the documentation of individual plant species populations. In addition, the iPads operate on an internal GIS locater independent of cellular service data coverage, which ensures the most accurate location possible during remote field work. When a special-status plant species or population was observed, the surveying biologist creates a population polygon (or area) in GIS Pro. The polygon is drawn corresponding to the location and shape and size of boundaries

of the population. The date the species is observed, the biologist's name, and species name are recorded in the polygon record. Data on the estimated number of individual plants observed in each population may also be collected. A CNDDB field survey form is completed for each special-status species or population identified. In the case of the proposed project, no sensitive wildlife species were observed during surveys.

2.3 Impact Assessment Methodology

The on-site vegetation communities, present and past occurrence locations of federally and state listed species and federal and state species of concern within close proximity of the proposed project area, and habitats for special-status plant and animal species were examined. Based on the current site conditions, the potential for occurrence on the site for special-status biological resources was evaluated and the project description was used to determine any potential direct or indirect effects.

The determination of whether the proposed project may result in adverse impacts to federally-listed special-status species was based on guidelines established by the USFWS under Section 7(a) of the Federal Endangered Species Act (FESA), under which a project that may have an adverse effect impact on listed biological resources must be assessed. FESA states that, "each federal agency shall...insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered or threatened or result in the destruction or adverse modification of habitat of such species." Thus, components of the proposed project were deemed to have an adverse impact on special-status biological resources if they could result in effects as described in the above statement to any listed species or its habitat.

The determination of whether the proposed project may result in adverse impacts to State special-status species was based on CEQA, the CDFW and the CNPS guidelines for special status plants and animals.

Potential impacts from the project to habitats not occupied by species but for which habitats occurred was also evaluated.

3.0 ENVIRONMENTAL BASELINE

The project area is located within the North Coast Bioregion, a bioregion that encompasses the area from southwestern Oregon to southern Monterey County and contains the southern extent of the mixed hardwood forest with redwood. The North Coast Bioregion is delineated by the Pacific Ocean on the west and the Coast Ranges Mountains on the east and encompasses those lands west of the highest ridgeline dividing areas that drain directly into the Pacific Ocean from those areas that drain toward the interior. Habitats within this bioregion include both mesic (moist) habitats, such as freshwater marsh, and xeric (dry) habitats, such as chaparral, and are typical of a Mediterranean type climate. Average rainfall in the area is 40 inches (Welsh 1994).

3.1 Wetlands and Waters of the U.S. and State

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards have been developed as a method of defining wetlands through consideration of three criteria: hydrology, soils, and vegetation (USACE 1987).

The U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. Jurisdiction of the Corps is established through the provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into "waters" of the United States without a permit, including certain wetlands and unvegetated "other waters of the U.S." The Corps also has jurisdiction over navigable waters, including tidally influenced ones below Mean High Water, under Section 10 of the Rivers and Harbors Act. Jurisdictional authority of the CDFG is established under Section 1602 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code states that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake" without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. The Wetlands Resources Policy of the CDFW states that the Fish and Game Commission will "strongly discourage development in or conversion of wetlands... unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage." Jurisdictional authority of the RWQCB is established pursuant to Section 401 of the Clean Water Act, which typically requires a water quality certification when an individual or nationwide permit is issued by the Corps. The RWQCB also has jurisdiction over "waters of the State" under the Porter-Cologne Water Quality Control Act.

In addition to the definition and classification procedures developed by federal agencies, some California resource and regulatory agencies have developed their own wetland definition and classification procedures. Although these State agency procedures are generally based on the USFWS and USACE definition and classification procedure described above, they do differ in specific details.

Numerous State agencies regulate, manage, or otherwise control natural resources within California through a wide variety of general and specific laws and directives, which are carried out by resource departments, commissions, and boards.

The Keene–Nejedly California Wetlands Preservation Act (1976) is the only State legislation besides the Coastal Act to define wetlands. The act states there "is a need for an affirmative and sustained public policy and program directed at their [wetlands] preservation, restoration, and enhancement, in order that such wetlands shall continue in perpetuity". The act provided for acquisition of ten important wetlands, using funds from several sources, and was intended to support preparation of a statewide wetlands plan. However, acquisition funds were not allocated in 1976.

The State Regional Water Quality Control Boards primary role is to enforce the federal Clean Water Act, and in doing so, assert regulatory authority over development activities affecting the water quality of navigable water and wetlands. Under Section 401(a)(1) of the Clean Water Act:
Any applicant for a Federal license or permit to conduct any activity...which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State...that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of this Act.

In turn, California Code of Regulations Section 3831(k) defines the State certification required under Section 401 as:

> *'Water Quality Certification' means a certification that there is a reasonable assurance that an activity which may result in a discharge to navigable waters of the United States will not violate water quality standards, where the activity requires a federal license or permit.*

In practice, the regional boards have applied their authority over water quality standards to all waters of the State, including wetlands. Discharge to wetlands and riparian wetlands may violate water quality objectives (e.g., turbidity, temperature, or salinity); impair beneficial uses (e.g., groundwater recharge, recreation, wildlife habitat, fish migration, and shellfish harvesting); and conflict with the anti-degradation policy.

The California Department of Fish and Wildlife has Statewide resource responsibilities and authority that directly and indirectly influence projects and activities in coastal zone wetlands. In addition to being responsible for the maintenance and protection of California's fish and wildlife, the CDFW has authorities under California's Public Resources Code, and the federal Fish and Wildlife Coordination Act to regulate or comment on activities in wetland and riparian areas. The CDFW also assumes primary responsibility for implementation of the California State Endangered Species Act, and the Streambed Alteration Agreement (Fish and Game Code Sections 1601–1603). This agreement is one of the State's few direct legal instruments for the protection of streams, rivers, and lakes. The CDFW also comments directly to the USACE concerning fish and wildlife aspects of Section 10 and Section 404 permits. CDFW's official position regarding the protection of wetlands is that development projects should not result in a net loss of either wetland acreage or wetland habitat value.

A delineation of wetlands and watercourses within the project study area was conducted by a Synthesis Planning wetland ecologist during the site visit. Synthesis Planning did not identify wetland habitat or stream courses within the proposed project site or buffer area.

3.2 Vegetation Communities and Wildlife Habitat

Wildlife habitat classifications for this report is based on the California Department of Fish and Game's Wildlife Habitat Relationships (WHR) System (CDFG 1988) which places an emphasis on dominant vegetation, vegetation diversity and physiographic character of the habitat. The value of a site to wildlife is influenced by a combination of the physical and biological components of the immediate environment, and includes such features as type, size, and diversity of vegetation communities present and their degree of disturbance. As a plant community is degraded by loss of understory species, creation of openings, and a reduction in canopy area, a loss of structural diversity generally results. Degradation of the structural diversity of a community typically diminishes wildlife habitat quality, often resulting in a reduction of wildlife species diversity.

Vegetation communities are often classified based on the dominant plant species within the community. Wildlife habitats are typically distinguished by vegetation type, with varying combinations of plant species providing different resources for use by wildlife. As a result, wildlife habitats are often classified on a more inclusive manner of the structure of the habitat rather than the specifics of the plant species, resulting in several vegetation communities occurring under one type of wildlife habitat.

The following is a discussion of existing vegetation communities found within the proposed project site and buffer area. Three (3) vegetation community types were observed within the study area. Where appropriate vegetation community types are described using The Manual of California Vegetation Online Website (CNPS 2024). Vegetation types observed were: 1. *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance, 2. *Quercus garryana* Forest and Woodland Alliance, and 3. Ruderal-disturbed vegetation. For a list of plant species observed in these vegetative communities during biological surveys, please refer to Appendix B.

1. *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance was observed within the entire tower pad area, proposed access road, proposed utility alignment, and large portions of the project buffer area. Common species found in this community were composed of introduced grasses and broadleaf weedy species, which quickly re-colonize disturbed areas.

Grasslands support a variety of mammals, birds, and reptiles, and provide foraging habitat for raptors. Many species use the grassland for only part of their habitat requirements, foraging in the grassland and seeking cover in surrounding tree and scrub cover. Grassland cover provides foraging, nesting, and denning opportunities for resident species such as western fence lizard (*Sceloporus occidentalis*), northern alligator lizard (*Elgaria coerulea*), gopher snake (*Pituophis melanoleucus*), western meadowlark (*Sturnella neglecta*), goldfinch (*Carduelis tristis*), ring-necked pheasant (*Phasianus colchicus*), red-winged blackbird (*Agelaius phoeniceus*), California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), pocket gophers

(*Thomomys* spp.), black-tailed jackrabbit (*Lepus californicus*), and occasionally black-tailed deer (*Odocoileus hemionus columbianus*).

The rodent, bird, and reptile populations offer foraging opportunities for avian predators such as the northern harrier hawk (*Circus cyaneus*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), barn owl (*Tito alba*), and great horned owl (*Bubo virginianus*). Mammalian predators which utilize grasslands include gray fox (*Urocyon cinereoargenteus*) and long-tailed weasel (*Mustela frenata*).

2. *Quercus garryana* Forest and Woodland Alliance is widely distributed from British Columbia to this zone, with outlying scattered populations further east and south to the Sierra Nevada Mountains and southern California. This tree species forms the canopy of broadleaved forest located in the southern area of the project buffer area. Often developing on poor, exposed or droughty soils in inland valleys, foothills or rocky ridges, this vegetation community is also found in poorly drained areas having occasional standing water or next to stream terraces. This vegetation community contains a grassy understory.

3. Ruderal-disturbed vegetation was observed within the disturbed areas of the proposed project site and buffer area, primarily along the existing gravel access road to the south of the project site, and within portions of the proposed access road. This vegetation type is comprised mostly of non-native weedy herbaceous forb plants.

4.0 SPECIAL-STATUS SPECIES AND THEIR HABITATS

4.1 Regulatory Requirements

4.1.1 Federal Endangered Species Act (FESA)

To determine whether the proposed project may result in adverse effects to federally listed species, the criteria used was based on guidelines established by the USFW under Section 7(a) of the FESA, in which a project that may have an adverse effect on listed biological resources must be assessed. FESA (16 U.S. Code [USC 1531–1544) provides for the conservation of species that are Endangered or Threatened throughout all or a significant portion of their range, as well as the protection of habitats on which they depend.

Section 7 requires federal agencies to consult with USFWS or NMFS, or both, before performing any action (including actions such as funding a program or issuing a permit) that may affect listed species or designated Critical Habitat. The section 7 consultations are designed to assist Federal agencies in fulfilling their duty to ensure federal actions "do not jeopardize" the continued existence of a species or destroy or adversely modify Critical Habitat.

The USFWS defines temporary and permanent effects as areas denuded, manipulated, or otherwise modified from their pre-project conditions, thereby removing one or more essential components of a listed species' habitat as a result of project activities that include, but are not limited to, construction, staging, storage, lay down, vehicle access, parking, etc. According to the USFWS, temporary effects are limited to one construction season and, at a minimum, are fully restored to baseline habitat values or better within one year following initial disturbance. Permanent effects are not temporally limited and include all effects not fulfilling the criteria for temporary effects.

4.1.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 Code of Federal Regulations [CFR] 21, 50 CFR 10). Most actions that result in taking of, or the permanent or temporary possession of, a protected species constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests (without eggs or nestlings) is permissible under the MBTA; exceptions include nests of federally threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). USFWS is responsible for overseeing compliance with the MBTA.

4.1.3 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA (FGC §§ 2050–2116) is administered by CDFW. The CESA prohibits the "taking" of listed species except as otherwise provided in state law. The

CESA includes FGC Sections 2050–2116, and policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat. The CESA requires mitigation measures or alternatives to a proposed project to address impacts to any State listed endangered, threatened or candidate species, or if a project would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy. Section 86 of the FGC defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Unlike the ESA, CESA applies the take prohibitions to species under petition for listing (state candidates) in addition to listed species. Section 2081 of the FGC expressly allows CDFW to authorize the incidental take of endangered, threatened, and candidate species if all of the following conditions are met:

- The take is incidental to an otherwise lawful activity.
- The impacts of the authorized take are minimized and fully mitigated.
- Issuance of the permit will not jeopardize the continued existence of the species.
- The permit is consistent with any regulations adopted in accordance with §§ 2112 and 2114 (legislature-funded recovery strategy pilot programs in the affected area).
- The applicant ensures that adequate funding is provided for implementing mitigation measures and monitoring compliance with these measures and their effectiveness.

The CESA provides that if a person obtains an incidental take permit under specified provisions of the ESA for species also listed under the CESA, no further authorization is necessary under CESA if the federal permit satisfies all the requirements of CESA and the person follows specified steps (FGC § 2080.1).

4.1.4 California Fish and Game Code

The California Constitution establishes the California Fish and Game Commission (Commission) (CA Constitution Article 4, § 20). The California Fish and Game Code (FGC) delegates the power to the Commission to regulate the taking or possession of birds, mammals, fish, amphibian and reptiles (FGC § 200). The Commission has adopted regulations setting forth the manner and method of the take of certain fish and wildlife in the California Code of Regulations, Title 14.

4.1.5 California Fish and Game Code- Species Protection

The FGC establishes CDFW (FGC § 700) and states that the fish and wildlife resources of the state are held in trust for the people of the state by and through CDFW (FGC § 711.7(a)). All licenses, permits, tag reservations and other entitlements for the take of fish and game authorized by FGC are prepared and issued by CDFW (FGC § 1050 (a)).

Provisions of the FGC provide special protection to certain enumerated species such as:

§ 3503 protects eggs and nests of all birds.
§ 3503.5 protects birds of prey and their nests.
§ 3511 lists fully protected birds.
§ 3513 protects all birds covered under the federal Migratory Bird Treaty Act.

§ 3800 defines nongame birds.
§ 4150 defines nongame mammals.
§ 4700 lists fully protected mammals.
§ 5050 lists fully protected amphibians and reptiles.
§ 5515 lists fully protected fish species.

4.1.6 Lake County Regulations

The Open Space, Conservation and Recreation Chapter (Chapter 9) of the Lake County General Plan contains goals, policies, and programs designed to address biological resources, along with other resources in the County. The purpose of the Biological Resources section (Section 9.1) is to preserve and protect environmentally sensitive significant habitats, enhance biodiversity, and promote healthy ecosystems throughout the County. Policies commit the County to protect resources such as rare and endangered species, environmentally sensitive habitats, riparian corridors and wetlands.

4.2 Special-Status Species Reviewed

For the purposes of this Biological Resources Assessment, special-status species include those that are federally listed as Endangered, Threatened or Proposed for federal listing (candidate) under the USFWS. Other species also evaluated in this Biological Assessment include non-listed federal and California Special Species of Concern (CSC) and those species that fall under the jurisdiction of the USFWS such as the MBTA and the CDFW, such as CEQA Section 15380(d).

Impacts to special-status species were assessed if: (1) those species occurred in habitats similar to those of the project sites and buffer areas, and (2) were known to occur within the general vicinity of the proposed project sites.

Federally and State-Listed Plant Species. Review of the USFWS (USFWS 2024), the CNPS (CNPS 2024), and the CNDDB (CNDDB 2024) revealed that 18 listed plant species and species of concern have potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. Potential habitat is present for 12 of these 18 plant species within the project site and buffer area. Botanical surveys were conducted on May 24, 2024.

Table 1. Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Birds					
Tricolored blackbird	*Agelaius tricolor*	-	CT	The species is found throughout the Central Valley, in the San Francisco Bay Area, along the California coast, and in portions of the desert regions with scattered northern populations in Oregon and Washington state. Inhabits wetland areas and agricultural fields. Species is highly social, and forms large colonies.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Double-crested cormorant	*Nannopterum auritum*	-	Watch List	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Osprey	*Pandion haliaetus*	-	Watch List	Nests along open shores, bays, freshwater lakes, and larger streams. Build large nests in treetops within 15 miles of good fish-producing body of water.	**Potentially present.** This species is not expected to be present nesting in the general project area and is not likely to be found in the proposed project site. Potential nesting habitat was observed in the general project area outside of the project site and buffer (Burger Lake to the south). No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2023) (see Figure 3).
Northern spotted owl	*Strix occidentalis caurina*	FT	CT	Northern spotted owls are very territorial and intolerant of habitat disturbance. They prefer old-growth forests with tree canopies that are high and open enough for the owls to fly between and underneath the trees. Preferred areas have large trees with broken tops, deformed limbs or large holes used as nesting sites. Each pair needs a large amount of land for hunting and nesting, and although they do not migrate, spotted owls may shift their ranges in response to seasonal changes that make hunting difficult.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Mammals					
Fisher	*Pekania pennanti*	-	CSC	Intermediate to large tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
American badger	*Taxidea taxus*	-	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Potentially present. Potential habitat for this species was observed throughout the proposed project site and buffer area. No individuals of this species or active/inactive burrowing sites were observed during biological surveys. This species has not been documented within the vicinity of the proposed project area (CDFW 2024) (see Figure 3).
Amphibians and Reptiles					
Western pond turtle	*Emys marmorata*	Candidate Threatened	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Require basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Insects					
Monarch - California overwintering population	*Danaus plexippus pop. 1*	Candidate	CSC	Closed-cone coniferous forest Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Fish					
Sacramento perch	*Archoplites interruptus*	-	CSC	Prefers warm water, aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Clear Lake tule perch	*Hysterocarpus traskii lagunae*	-	CSC	Found in low-elevation lakes, streams, and estuarine environments. They typically require cool, well oxygenated water. These fish prefer water temperatures below 22°C and are scarce in water that exceeds 25°C. Tule Perch have a high salinity tolerance and have been found in water with a salinity as high as 30 ppt. Within a river or stream tule perch tend to occupy deep pools that have complex cover in	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				the form of aquatic and overhanging vegetation. They feed on invertebrates, plants, and zooplankton, mostly by swimming along the bottom of the stream. The perch may move into faster water for feeding by occupying small eddies and backwaters behind rocks and boulders. Tule perch tend to share habitat with other native fish. In lakes tule perch favor deep water and areas where a slight flow might exist from water entering and exiting the basin. In addition these fish are found near tules in areas where the lake floor is made up of gravel and or sand. Tule Perch may form shoals or schools, and are often found associated with centrarchids. While the perch focus their feeding on the bottom of a lake, they may also forage in the water column. Dietary components in various types of water may include shrimp, crabs, clams, chironomid midges, and aquatic insects.	
Clear Lake hitch	*Lavinia exilicauda chi*	-	CT	Found only in Clear Lake, Lake County, and associated ponds. Spawns in streams flowing into Clear Lake.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Plants					
Bent-flowered fiddleneck	*Amsinckia lunaris*	-	List 1B.2	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland. Blooms March to June. Elevation: 3-500 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Konocti manzanita	*Arctostaphlos Manzanita ssp. elegans*	-	List 1B.3	Chaparral, cismontane woodland, and lower montane coniferous forest. Blooms January to July. Elevation: 225-1,830 meters.	**Potentially present.** Potential habitat for this species occurs within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Brewer's milk-vetch	*Astragalus breweri*	-	List 4.2	Chaparral, cismontane woodland, meadows, seeps, and valley and foothill grassland. Blooms April to June. Elevation: 90-730 m.	**Potentially present.** Potential habitat for this species occurs within grassland habitat in the project site and buffer area, and within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Watershield	*Brasenia schreberi*	-	List 2B.3	Marshes and swamps. Blooms June to September. Elevation: 30-2,200 meters.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Grassland suncup	*Camissonia lacustris*	-	1B.2	Valley and foothill grassland, cismontane woodland, lower montane coniferous forest, and chaparral. Blooms March to June. Elevation: 180-1,220 meters.	**Potentially present.** Potential habitat for this species occurs within grassland habitat in the project site and buffer area, and within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Tracy's clarkia	*Clarkia gracilis ssp. tracyi*	-	List 4.2	Chaparral. Blooms April to July. Elevation: 65-650 m.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Serpentine cryptantha	*Cryptantha dissita*	-	List 1B.2	Serpentine outcrops in chaparral. Blooms April to June. Elevation: 135-735 m.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Bare monkeyflower	*Erynthranthe nudata*	-	List 4.3	Chaparral and cismontane woodland. Blooms May through June. Elevation: 200-700 meters.	**Potentially present.** Potential habitat for this species occurs within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Purdy's fritillary	*Fritillaria purdyi*	-	List 4.3	Chaparral, cismontane woodland, and lower montane coniferous forest. Blooms March to June. Elevation: 175-2,255 m.	**Potentially present.** Potential habitat for this species occurs within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Glandular western flax	*Hesperolinon adenophyllum*	-	1B.2	Native to California and grows in brushy slopes and chaparral on serpentine soils. Also occurs in cismontane woodland and valley and foothill grassland. Blooms May through August. Elevational range: 425 – 1,345 meters.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Burke's goldfields	*Lasthenia burkei*	FE	CE, List 1B.1	Vernal pools, meadows, and seeps. Blooms April to June. Elevation: 15-600 meters.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Colusa layia	*Layia septentrionalis*	-	List 1B.2	Found in chaparral, cismontane woodland, valley and foothill grassland. Elevational range: 100 to 1095 meters. Blooming period: April through May.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Bristly leptosiphon	*Leptosiphon aureus*	-	List 4.2	Found in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland. Elevational range: 55 to 1,500 meters. Blooming period: April through July.	**Potentially present.** Potential habitat for this species occurs within grassland habitat in the project site and buffer area, and within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Broad-lobed leptosiphon	*Leptosiphon latisectus*	-	4.3	Broadleaved upland forest and cismontane woodland.	**Potentially present.** Potential habitat for

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				Blooms April through June. Elevation: 170-1,500 meters.	this species occurs within woodland habitat approximately 70 feet to the south of the proposed project site. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Lassics Lupine	*Lupinus constancei*	FE	CE, List 1B.1	Lower montane coniferous forest. Blooms July. Elevation: 1,500-2,000 meters.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Mayacamas popcornflower	*Plagiobothrys lithocaryus*	-	List 1A	Chaparral, cismontane woodland, and valley and foothill grassland. Elevation range: 285 - 415 meters. Blooms April through May.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Lobb's aquatic buttercup	*Ranunculus lobbii*	-	4.2	Cismontane woodland, north coast coniferous forest, vernal pools, and valley and foothill grassland. Elevation range: 15 - 470 meters. Blooms February through May.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Beaked tracyina	*Tracyina rostrata*	-	List 1B.2	Dry, grassy slopes, predominantly within coastal prairie communities, occasionally in valley and foothill grassland or foothill/cismontane woodland communities. Elevation range: 90 - 790 meters. Blooms May through June.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has been documented approximately 0.9 miles northwest of the proposed project site (CDFW 2024) (see Figure 3).
Environmentally Sensitive Habitat Areas					
Coastal and Valley Freshwater Marsh (Not present in project site or buffer)					

Status Codes:

Federal
FE = Federally listed as Endangered
FT = Federally listed as Threatened

State
CE = California listed as Endangered
CT = California listed as Threatened

FC = Federal Candidate species

CR = California listed as Rare
CFP = California Fully Protected
CSC = Species of Special Concern
WL = CDFW Watch List
FP = Fully Protected

California Rare Plant Rank (formerly known as CNPS Lists)
California Rare Plant Rank 1A = Plants presumed extinct in California
California Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
California Rare Plant Rank 2A = Plants presumed extirpated from California, but more common elsewhere
California Rare Plant Rank 2B = Plants rare or endangered in California, but more common elsewhere
California Rare Plant Rank 3 = Plants about which we need more information; a review list
California Rare Plant Rank 4 = Plants of limited distribution; a watch list.
California Rare Plant Rank Rarity Status of .1 = Seriously endangered in California
California Rare Plant Rank Rarity Status of .2 = Fairly endangered in California

Status, distribution, and habitat information from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CDFW 2024); California Native Plant Society, California Rare Plant Electronic Inventory (CNPS 2024); and USFWS Online Endangered Species Database (USFWS 2024).

Our botanical surveys were conducted within the blooming period of all 12 targeted special-status plant species identified as potentially occurring within the project site and buffer area. Survey findings were negative for all 12 of the targeted special-status plant species. Therefore, special-status plant species are considered absent from the project site and buffer area, and no additional surveys are required. Special-status plant species are not discussed further in the BRA.

4.3 Special-Status Wildlife Species

The following is a discussion of species having potential to occur on site and/or are species that are prominent in today's regulatory environment. This document does not address impacts to species that may occur in the region but for which no habitat occurs on site. Species-specific information described below is primarily from USFWS 2024 and CDFW 2024, unless otherwise noted.

Osprey - The osprey is a diurnal, fish-eating bird of prey with a cosmopolitan range. It is a large raptor, reaching more than 24 inches in length and 71 inches across the wings. It is brown on the upperparts and predominantly greyish on the head and underparts. The upperparts are a deep, glossy brown, while the breast is white and sometimes streaked with brown, and the underparts are pure white. The head is white with a dark mask across the eyes, reaching to the sides of the neck. The irises of the eyes are golden to brown, and the transparent nictitating membrane is pale blue. The bill is black, with a blue cere, and the feet are white with black talons. A short tail and long, narrow wings with four long, finger-like feathers, and a shorter fifth, give it a very distinctive appearance.

The osprey tolerates a wide variety of habitats, nesting in any location near a body of water providing an adequate food supply. It is found on all continents except Antarctica, although in South America it occurs only as a non-breeding migrant.

The osprey is piscivorous, with fish making up 99% of its diet. It typically takes fish weighing 150–300 grams (5.3–10.6 ounces) and about 25–35 centimeters (9.8–13.8 inches) in length, but the weight can range from 50 grams (1.8 ounces) to 2 kilograms (4.4 pounds). Virtually any type of fish in that size range are taken.

Ospreys have vision that is well adapted to detecting underwater objects from the air. Prey is first sighted when the osprey is 10–40 m (33–131 ft) above the water, after which the bird hovers momentarily then plunges feet first into the water. Occasionally, the osprey may prey on rodents, rabbits, hares, other birds, and small reptiles.

The osprey breeds near freshwater lakes and rivers, and sometimes on coastal brackish waters. Rocky outcrops just offshore are also used. The nest is a large heap of sticks, driftwood, turf or seaweed built in forks of trees, rocky outcrops, utility poles, artificial platforms or offshore islets. Generally, ospreys reach sexual maturity and begin breeding around the age of three to four, though in some regions with high osprey densities, such as Chesapeake Bay in the U.S., they may not start breeding until five to seven years old, and there may be a shortage of suitable tall structures. If there are no nesting sites available, young ospreys may be forced to delay breeding.

This species is not expected to be present nesting in the general project area and is not likely to be found in the proposed project site. Potential nesting habitat was observed in the general project area outside of the project site and buffer (Burger Lake 400 feet to the southwest of the tower site). No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).

American Badger - American Badger is widespread across the drier portions of the western United States where suitable habitat is characterized by most open vegetation communities with dry, friable soils. These include grassland and shrub communities, and open stages of some woodland communities. Home range estimates vary geographically and seasonally, but have ranged between 338 and 1,549 acres. Badgers mate in summer and early fall, and most young are born in March and April. The most common signs of habitat occupation by badgers include dens and fresh diggings. Badger dens exhibit characteristics that are diagnostic of the species (e.g., dome-shaped entrance with claw marks in the upper portion of the entrance).

The proposed project area supports suitable habitat for this species. However, focused surveys for the taxon found no evidence of the taxon within the project area. No burrows with suitable dimensions for use by the taxon were found within the survey area. Therefore, there is no evidence to suggest that the taxon occurs within the project area. This species has not been documented within the boundaries of or in proximity to the proposed project area (CDFW 2024) (see Figure 3).

4.4 Critical Habitat

No Federally-designated critical habitat was identified within the proposed project site or buffer area (USFWS 2024).

4.5 Special Status Natural Communities

No special-status natural communities were identified within the proposed project site.

5.0 IMPACTS ANALYSIS AND STANDARD CONSTRUCTION CONDITIONS

This section summarizes the potential biological impacts from implementation of the proposed project. The analysis of these effects is based on a reconnaissance-level biological survey of the project site and buffer area, a review of existing databases and literature, and personal professional experience with biological resources of the region. Potential effects to federally- and state-listed special-status animal species may occur from the proposed project. Standard Construction Conditions for these biological impacts are provided below. A synopsis of the species potentially affected is presented in Table 2, and is followed by Standard Construction Conditions to avoid "take" of individuals.

Table 2: Special Status Animal Species Potentially Affected by the Proposed Project

Species	Status (Federal/State)	Habitat Present/Absent	Avoidance Yes/No
American badger	-/CSC	Present	Yes

Potential Impacts to Common Wildlife and Plant Populations from Project Activities

Direct mortality or injury to common wildlife and plant populations could occur during ground disturbance activities associated with implementation of the project. Small vertebrate, invertebrate, and plant species are particularly prone to impact during project implementation because they are much less to non-mobile and cannot easily move out of the path of project activities. Other more mobile wildlife species, such as most birds and larger mammals, can avoid project-related activities by moving to other adjacent areas temporarily. Increased human activity and vehicle traffic in the vicinity may disturb some wildlife species. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Potential Impacts to Nesting Special-Status Avian Species from Project Activities

Implementation of the proposed project could potentially impact individual, foraging, and nesting migratory birds, and raptor species should they become established within the proposed project site or buffer area prior to project implementation. Impacts to these species could occur through crushing by construction equipment during implementation of project activities. Actively nesting birds could also be affected due to noise and vibration from project activities, if nests are located close enough to project activities. Project related noise and vibration could cause the abandonment of active nest sites. Impacts to these species would be considered significant. In the event that nesting birds become established in the proposed project site or buffer area, the following Standard Construction Conditions measures will be implemented.

If ground disturbing activities occur during the breeding season of these avian species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, project activities may proceed and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250 foot no disturbance buffer around migratory birds;
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species;
- and 0.5-mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e. CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

Potential Impacts to American Badger from Project Activities

Implementation of the proposed project could potentially result in impacts on individual American badgers or potential burrows/natal sites if they are present in the project area or buffer area during project construction activities. Impacts could occur during ground disturbance and other construction related activities. Impacts to American badgers would occur primarily through the crushing of badgers by construction equipment and vehicles. These impacts could result in direct mortality to live individuals or small populations of this species, or could result in the destruction of potential or occupied burrows/dens. Project activities could also cause vibration, which could lead to the abandonment of occupied burrows in the project buffer area. Impacts to American badgers and their potential/known burrows would be considered a potentially significant impact.

Prior to the implementation of any project construction activities, the following measures shall be implemented to protect this species from potential impacts:

- A pre-construction biological survey of the project area and areas immediately adjacent to the project area shall be conducted by a qualified biologist at least two (2) weeks prior to implementation of the proposed project and ground disturbance activities to determine if potentially active or know den sites are present.
- If potential dens are found during pre-construction surveys, a qualified biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction.
- If the qualified biologist determines that potential dens may be active, the entrances of the dens shall be blocked with soil, sticks, and debris for three (3) to five (5) days to discourage the use of these dens prior to project disturbance activities. The den entrances shall be blocked to an incrementally greater degree over the three (3) to five (5)-day period. After the qualified biologist determines that badgers have stopped using active dens, the dens shall be hand-excavated with a shovel to prevent re-use during construction.

Once project operations are established, it is expected that wildlife species (including American badgers) will become acclimated to the presence of humans and project operations. Therefore, the above measures will no longer be necessary after the initial construction stage of setting up the proposed project.

General Project Measures to be Incorporated

Implementation of the following general project avoidance/minimization measures is recommended to avoid or reduce potential impacts to common and special-status wildlife and plant species:

1. Worker Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project area. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered Species Acts, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

2. As close to the beginning of project activities as possible, but not more than 14 days prior, a qualified biologist shall conduct a final pre-construction survey of the proposed project area and buffer to verify that no special-status wildlife species have become established in the project area or buffer. A qualified biologist shall be present immediately prior to project activities that have potential to impact sensitive species to identify and protect potentially sensitive resources.

3. Project area boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project area to restrict access of vehicles and equipment unrelated to project-related operations.

4. A project representative shall establish restrictions on project-related traffic to approved project areas, storage areas, staging and parking areas via signage. Off-road traffic outside of designated project area shall be prohibited.

5. Project-related traffic shall observe a 10-mph speed limit in the project area except on County roads and State and federal highways to avoid impacts to special-status and common wildlife species.

6. Hazardous materials, fuels, lubricants, and solvents that spill accidentally during project-related activities shall be cleaned up and removed from the project as soon as possible according to applicable federal, state and local regulations.

7. All equipment storage and parking during site development and operation shall be confined to the proposed project area or other offsite previously disturbed areas.

8. All excavated steep-walled holes or trenches in excess of three (3) feet in depth shall be provided with one or more escape ramps constructed of earth fill to prevent entrapment of endangered species or other animals. Ramps shall not be less than 45-degree angles. Trenches shall be inspected for entrapped wildlife each morning prior to onset of project activities and immediately prior to the end of each working day. Before such holes or trenches are filled, they shall be inspected thoroughly for entrapped animals. Any animals discovered shall be allowed to escape voluntarily without harassment before project activities related to the trench resume or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

9. All food-related trash items such as wrappers, cans, bottles, or food scraps generated during project activities shall be disposed of only in closed containers and regularly removed from the proposed project area. Food items may attract wildlife species onto the proposed project area, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

10. To prevent harassment or mortality of wildlife species via predation, or destruction of their dens or nests, no domestic pets shall be permitted on-site.

6.0 CONCLUSIONS AND DETERMINATIONS

This project will incorporate reasonable and prudent measures for avoidance and minimization, described in Section 1.0, and species-specific avoidance and minimization measures. As a result, the project is not anticipated to result in take of any of the listed species or habitats described in this biological assessment.

Provided the precautions outlined above are followed, it has been concluded by Synthesis that the proposed project would:

- Have less than significant impacts upon federal and California endangered, threatened, proposed or candidate species;

- Not result in destruction or adverse modification of a critical habitat area of a federal or California endangered or threatened species; and

- Not result in "take" of migratory birds protected under the Migratory Bird Treaty Act and other state, local or federal laws.

7.0 LITERATURE CITED

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Appendix A
Project Figures

Figure 1. Project Vicinity Map

Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone: (415) 328-7923

Figure 1. Project Vicinity Map

Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone: (415) 328-7923

Figure 3. CNDDB Species Occurrences in the Vicinity of the Project Site

Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone: (415) 328-7923

Appendix B
List of Plant Species Observed During Biological Surveys

Common Name (Scientific Name)
Bigflower agoseris (*Agoseris grandiflora*)
Common fiddleneck (*Amsinckia menziesii*)
Slender wild oat (*Avena barbata*)
Mediterranean lineseed (*Bellardia trixago*)
Black mustard (*Brassica nigra*)
Rattlesnake grass (*Briza maxima*)
Harvest brodiaea (*Brodiaea elegans*)
California brome (*Bromus carinatus carinatus*)
Ripgut grass (*Bromus diandrus*)
Soft chess (*Bromus hordeaceus*)
Smooth brome (*Bromus inermis*)
Red brome (*Bromus rubens*)
Italian thistle (*Carduus pycnocephalus*)
Yellow star-thistle (*Centaurea solstitialis*)
Pineappleweed (*Chamomilla suaveolens*)
Winecup clarkia (*Clarkia purpurea*)
Bristly dogstail-grass (*Cynosurus echinatus*)
American wild carrot (*Daucus pusillus*)
Stinkwort (*Dittrichia graveolens*)
Broadleaf filaree (*Erodium botrys*)
Red-stem filaree (*Erodium cicutarium*)
Hayfield tarweed (*Hemizonia congesta ssp. lutescens*)
Wall barley (*Hordeum murinum*)
Smooth cat's ear (*Hypochaeris glabra*)
Perennial ryegrass (*Lolium perenne*)
Common mallow (*Malva neglecta* Wallr.)
Cheeseweed (*Malva parviflora*)
Pennyroyal (*Mentha pulegium*)
Tiny mouse-tail (*Myosurus minimus*)
Balbous canary grass (*Phalaris aquatica*)
Timothy grass (*Phleum pratense*)
Bristly ox tongue (*Picris echioides*)
English plantain (*Plantago lanceolata*)
Common plantain (*Plantago major*)
Scarlet firethorn (*Pyracantha coccinea*)
Blue oak (*Quercus douglasii*)
Oregon white oak (*Quercus garryana*)
Radish (*Raphanus sativus*)
Skunkbush (*Rhus trilobata*)
Mediterranean hairgrass (*Rostraria cristata*)
Himalayan blackberry (*Rubus armeniacus*)
Dandelion (*Taraxacum officinale*)
Poison-oak (*Toxicodendron diversilobum*)
Narrowleaf crimson clover (*Trifolium angustifolium*)
Lesser trefoil (*Trifolium dubium*)
Wheat (*Triticum aestivum*)

Hairy vetch (*Vicia villosa*)

Appendix C
Site Photos

Proposed tower site. View looking south from center of site.

Proposed tower site. View looking west from center of site.

Proposed tower site. View looking north from center of site.

Proposed tower site. View looking east from center of site. Proposed access road and power/fiber route can be seen in center of photo.

Appendix D

Engineering Drawings

AT&T

FIRSTNET/AT&T SITE ID: CCL06249
FIRSTNET/AT&T SITE NAME: HILL ROAD AND PARKWAY INTERSECTION
FA LOCATION CODE: 15532196
USID: 319474
PACE ID: MRSFR077622

PSTC SITE #: CANC-NLAKE01
SITE ADDRESS: 3275 HILL RD AND PARKWAY INTERSECTION LAKEPORT, CA 95453
COUNTY: LAKE
SITE TYPE: MONOPINE
TOWER HEIGHT: 80'-0"

SITE INFORMATION

PSTC SITE NAME:	HILL ROAD AND PARKWAY INTERSECTION
SITE ADDRESS:	3275 HILL RD LAKEPORT, CA 95453
COUNTY:	LAKE
MAP/PARCEL #:	005-015-410-0000
AREA OF CONSTRUCTION:	13,843 SQ FT
LATITUDE:	N 39° 04' 40.04" (39.077789°)
LONGITUDE:	W 122° 55' 59.75" (-122.933264°)
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	1470.1'±
CURRENT LAND USE:	AGRICULTURE
JURISDICTION:	LAKE COUNTY
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	VB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	CARPENTER JAMES M 200 NORTH MAIN ST #C LAKEPORT, CA 95453
TOWER OWNER:	PUBLIC SAFETY TOWERS, LLC 1903 WRIGHT PLACE, SUITE 140 CARLSBAD, CA 92008
CARRIER/APPLICANT:	AT&T 5005 EXECUTIVE PKWY SAN RAMON, CA 94583
ELECTRIC PROVIDER:	PG&E
TELCO PROVIDER:	TBD

PROJECT TEAM

PUBLIC SAFETY TOWERS, LLC CONTACT:	1903 WRIGHT PLACE, SUITE 140 CARLSBAD, CA 92008 STEPHANIE VANDERVEEN S.VANDERVEEN@PSTCTOWERS.COM (619) 417-9925
TEP PROJECT TEAM:	TOWER ENGINEERING PROFESSIONALS 4710 E ELWOOD ST, STE 9 PHOENIX, AZ 85040
SITE ACQUISITION CONTACT:	CAROL KINCHELOE CKINCHELOE@TEPGROUP.NET (619) 488-0933
CIVIL ENGINEER:	ANDREW T. HALDANE, PE AHALADANE@TEPGROUP.NET (919) 661-6351
ELECTRICAL ENGINEER:	MARK QUAKENBUSH, PE MQUAKENBUSH@TEPGROUP.NET (919) 661-6351
AT&T PROJECT TEAM:	
RF ENGINEER:	EDWIN AVILES EA5477@ATT.COM

DRAWING INDEX

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 24x36. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

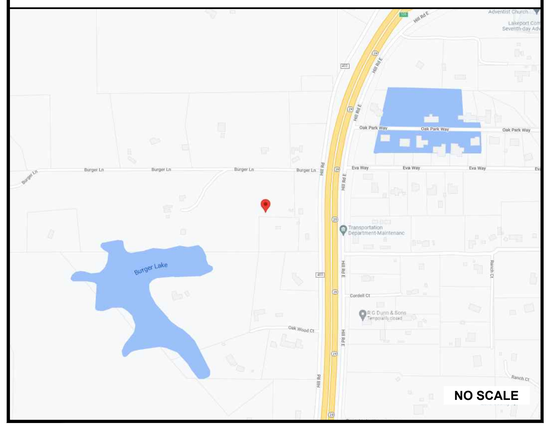
PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY IN THE AREA FOR EMERGENCY SERVICE AND WIRELESS CUSTOMERS.

TOWER SCOPE OF WORK
- INSTALL 80'-0" MONOPINE TOWER
- INSTALL (15) ANTENNAS
- INSTALL (15) RADIOS
- INSTALL (3) DC9 SQUIDS
- INSTALL (9) DC POWER TRUNKS
- INSTALL (3) FIBER TRUNKS
- INSTALL (3) SECTOR MOUNTS
- INSTALL (3) MODIFIED RRH MOUNTS

GROUND SCOPE OF WORK
- INSTALL 33'-0"x33'-0" CHAIN-LINK FENCED COMPOUND
- INSTALL (1) 600A GUTTER AND 200A METER ON PROPOSED H-FRAME\
- INSTALL 17'-7"x10'-4" CONCRETE PAD
- INSTALL (1) EQUIPMENT PLATFORM
- INSTALL (1) WALK-UP-CABINET (WUC)
- INSTALL (1) 30 KW DIESEL GENERATOR
- INSTALL (1) RAYCAP DC50 BOX
- INSTALL (1) 30"x30"x12" HOFFMAN BOX WITH CIENA ABOVE
- INSTALL ICE BRIDGE

LOCATION MAP



NO SCALE

APPROVALS

AT&T (RF): _____
DATE: _____

AT&T OPERATIONS: _____
DATE: _____

SITE AQUISITION: _____
DATE: _____

CONSTRUCTION MANAGER: _____
DATE: _____

PROPERTY OWNER: _____
DATE: _____

ZONING: _____
DATE: _____

PROJECT MANAGER: _____
DATE: _____

DIRECTIONS FROM 5005 EXECUTIVE PARKWAY SAN RAMON,CA 95843: GET ON I-680 N IN DANVLLE FROM CAMINO RAMON (1.9 MI), CONTINUE ON I-680 N. TAKE CA-29 TO HWY 175 W IN MIDDLETOWN (91.6 MI) TAKE BOTTLE ROCK RD TO CA-29 N/HWY 175 W IN KELSEYVILLE (19 MI) FOLLOW CA-29 N TO PARK WAY IN NORTH LAKEPORT. TAKE EXIT 106 FROM CA-29 N. (12.8 MI) FOLLOW HILL RD E TO YOUR DESTINATION (1.9 MI)

APPLICABLE CODES/REFERENCE DOCUMENTS

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

CODE TYPE	CODE
BUILDING	2022 CBC (2021 IBC)
MECHANICAL	2022 CMC (2021 UMC)
ELECTRICAL	2022 CEC (2020 NEC)
STRUCTURAL	EIA/TIA-222H

REFERENCE DOCUMENTS:

RFDS VERSION: 1.00
UPDATED: 07/07/2023

811 Know what's below. Call before you dig.

CALL CALIFORNIA ONE CALL
(800) 227-2600
CALL 3 WORKING DAYS
BEFORE YOU DIG!

PUBLIC SAFETY TOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

TOWER ENGINEERING PROFESSIONALS
4710 E ELWOOD ST, STE 9
PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID:
CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0"
MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
F	03-24-23	SSO	ZONING	HMM
G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

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

SHEET TITLE:
TITLE SHEET

SHEET NUMBER: T-1
REVISION: J

TEP #: 314197.336183

PROJECT NOTES:

1. ALL REFERENCES MADE TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED PUBLIC SAFETY TOWERS, LLC OR ITS DESIGNATED REPRESENTATIVE.

2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING TO HAVE SUFFICIENT EXPERIENCE AND ABILITY, IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE THE TOWER IS LOCATED.

3. THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-H AND CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE.

4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2022 CALIFORNIA BUILDING CODE.

5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.

6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTION SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.

7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.

8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OF CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTIONS OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.

9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK. RENTAL CHARGES, SAFETY, PROTECTION, AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE OWNER PROJECT MANAGER. THIS INCLUDES ALL SPECIFIC MILITARY INSTALLATION INSTRUCTIONS INCLUDING STAFF ACCESS AND GATE SPECIFIC INSTRUCTIONS.

12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/OWNER. CONTRACTOR/OWNER SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.

13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.

14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER AS WELL AS ANY REQUIRED NOTICES SPECIFIC TO THE MILITARY INSTITUTION.

15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIALS HALL BE REWORKED OR REPLACED.

16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.

17. THE OWNER OR OWNERS REPRESENTATIVE SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

18. ANY BUILDINGS ON THIS SITE ARE INTENDED TO SHELTER EQUIPMENT WHICH WILL ONLY BE PERIODICALLY MAINTAINED AND ARE NOT INTENDED FOR HUMAN OCCUPANCY.

19. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

20. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH OWNER SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO OWNER PRIOR TO THE START OF THE WORK ON THE PROJECT.

21. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING.

22. THE CONTRACTOR SHALL MAINTAIN THE JOB CLEAR OF TRASH AND DEBRIS. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE SITE PRIOR TO THE SUBSTANTIAL COMPLETION AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL FURNISH ONE 55 GALLON BARREL OR EQUIVALENT, AND TRASH BAGS, AND SHALL REMOVE TRASH, DEBRIS, ETC., ON A DAILY BASIS.

23. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING THE PROPOSAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE AT THE SITE. ANY VARIATION WHICH REQUIRES PHYSICAL CHANGE SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PROJECT ENGINEER FOR FACILITIES/CONSTRUCTION.

24. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF RETAINAGE. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

25. THE CONTRACTOR SHALL PROVIDE DAILY UPDATES IN THE FORM OF WRITTEN NOTIFICATION VIA EMAIL OR APP PHOTOS TO THE BOINGO CONSTRUCTION MANAGER.

UTILITY NOTES:

1. APPLY FOR THE UTILITY SERVICE (ELECTRIC) NO LATER THAN THE NEXT BUSINESS DAY FOLLOWING AWARD OF CONTRACT. COORDINATE WITH THE ELECTRIC UTILITY COMPANY FOR EXACT TRANSFORMER LOCATION, METERING REQUIREMENTS, AND THE SERVICE ROUTING. COORDINATE WITH THE TELEPHONE UTILITY COMPANY FOR EXACT TELEPHONE REQUIREMENTS AND ROUTING OF SERVICE.

2. ALL UTILITY RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE UTILITY REQUIREMENTS. FIELD TO VERIFY EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

3. THE CONTRACTOR SHALL CONTACT UTILITIES AND LOCATOR SERVICE A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.

4. CONTRACTOR SHALL PROVIDE TRENCHING AND CONDUITS AS SHOWN OR AS REQUIRED BY LOCAL UTILITY.

5. NO PENETRATIONS TO THE TOWER FOUNDATION OF ANY KIND.

PUBLICSAFETYTOWERS COMPANY
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AT&T
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ZONING
DO NOT USE FOR CONSTRUCTION

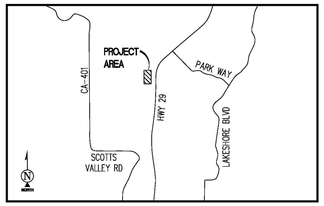
SHEET TITLE:

GENERAL NOTES

SHEET NUMBER: GN-1

REVISION: J

TEP #: 314197.336183



VICINITY MAP
N.T.S.

UTILITY NOTES
SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS ARE DEFINITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT 811 AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

SURVEYOR'S NOTES
CONTOURS DERIVED FROM DIRECT FIELD OBSERVATIONS AND FOLLOW THE CURRENT NATIONAL MAP STANDARDS FOR VERTICAL ACCURACY.

THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.

ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES.

SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE ISSUED.

LEGEND
- NG — NATURAL GRADE
- GUY WIRE
- TREES
- PINE TREES
- UTILITY POLE
- POSITION OF GEODETIC COORDINATES
- XXXX.X NG — SPOT ELEVATION
- X X X X X X — BARBED WIRE FENCE
- // // // // // // — "HOG-WIRE" FENCE
- O/H O/H O/H — OVERHEAD LINES
- SUBJECT PROPERTY LINE
- ADJACENT PROPERTY LINE
- LEASE AREA LIMITS
- MAJOR CONTOUR INTERVAL
- MINOR CONTOUR INTERVAL

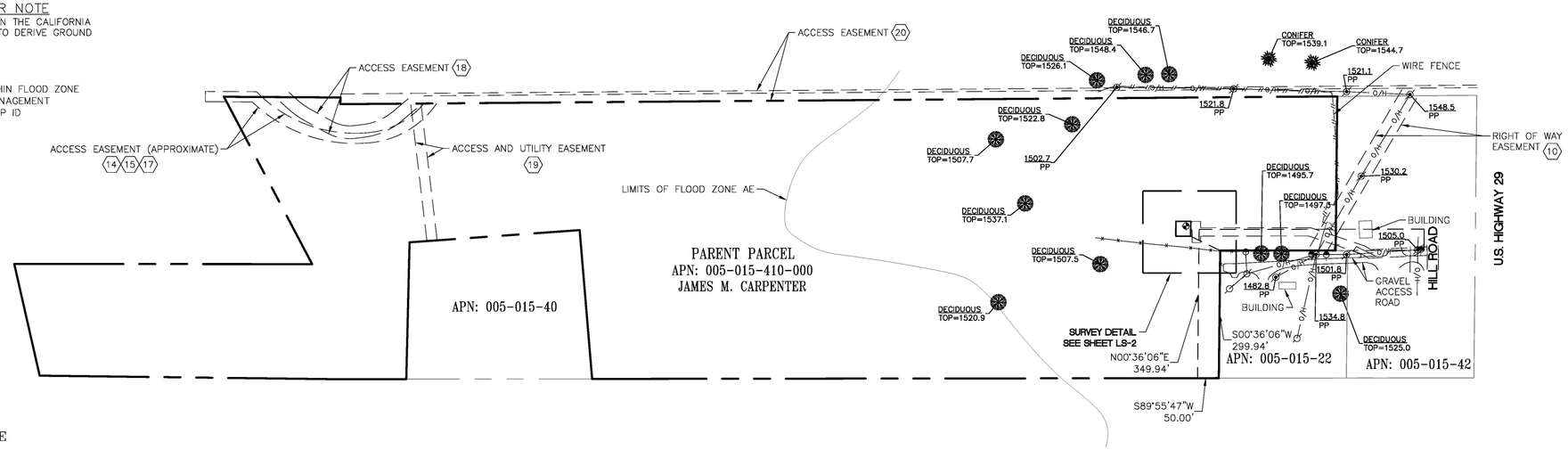
SURVEY DATE
10/04/2022

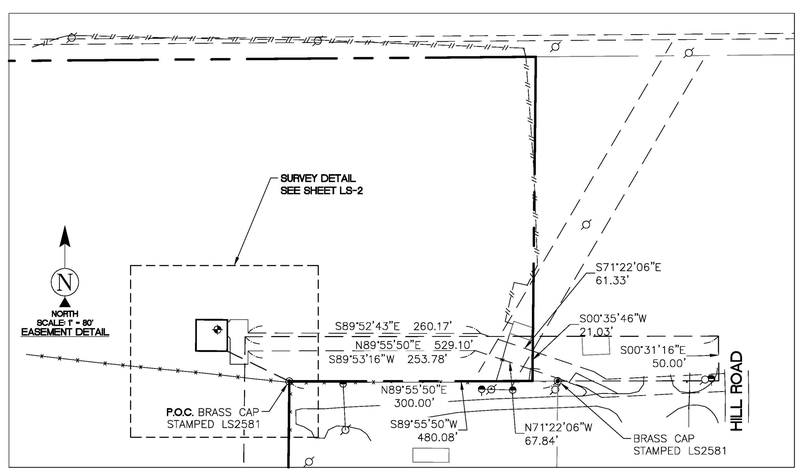
BASIS OF BEARING
BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA ZONE 2 STATE PLANE COORDINATE SYSTEM BASED ON THE NORTH AMERICAN DATUM OF 1983(2011) (EPOCH 2019.25). DETERMINED BY GLOBAL POSITIONING SYSTEM EQUIPMENT ON THE SMARTNET REFERENCE NETWORK.

BENCHMARK
PROJECT ELEVATIONS ESTABLISHED FROM GPS DERIVED ORTHOMETRIC HEIGHTS BY APPLICATION OF NGS 'GEOID 12B' MODELED SEPARATIONS TO ELLIPSOID HEIGHTS DETERMINED BY OBSERVATIONS OF THE 'SMARTNET' REAL TIME NETWORK. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD88.

GRID-TO-GROUND SCALE FACTOR NOTE
ALL BEARINGS AND DISTANCES ARE BASED ON THE CALIFORNIA TWO STATE PLANE COORDINATE ZONE GRID. TO DERIVE GROUND DISTANCES DIVIDE BY 0.99984976

FLOOD ZONE
THIS PROJECT APPEARS TO BE LOCATED WITHIN FLOOD ZONE "X". ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP(S), MAP ID #06033C0483D, DATED 9/30/2005





at&t

PROJECT INFORMATION:

CCL06249
HILL ROAD AND PARKWAY INTERSECTION
3275 HILL ROAD
LAKEPORT, CA 95453

LAKE COUNTY

ORIGINAL ISSUE DATE:

10/06/2022

REV.:	DATE:	DESCRIPTION:	BY:
A	10/06/22	PRELIMINARY	CK
0	1/05/23	LEGALS (C)	CK
1	05/15/2023	NEW DESIGN (C)	SB
2	12/15/2023	NEW DESIGN (C)	PD

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
(919) 661-6351

CONSULTANT:

428 MAIN STREET
SUITE 206
HUNTINGTON BEACH, CA 92648
PH. (480) 659-4072
www.ambitconsulting.us
ambit consulting

DRAWN BY:	CHK.:	APV.:
CK	NS (P)	PD

LICENSER:

LICENSED LAND SURVEYOR
PATRICK B. DONOHOE
No. 9332
STATE OF CALIFORNIA
12/15/2023

SHEET TITLE:

SITE SURVEY

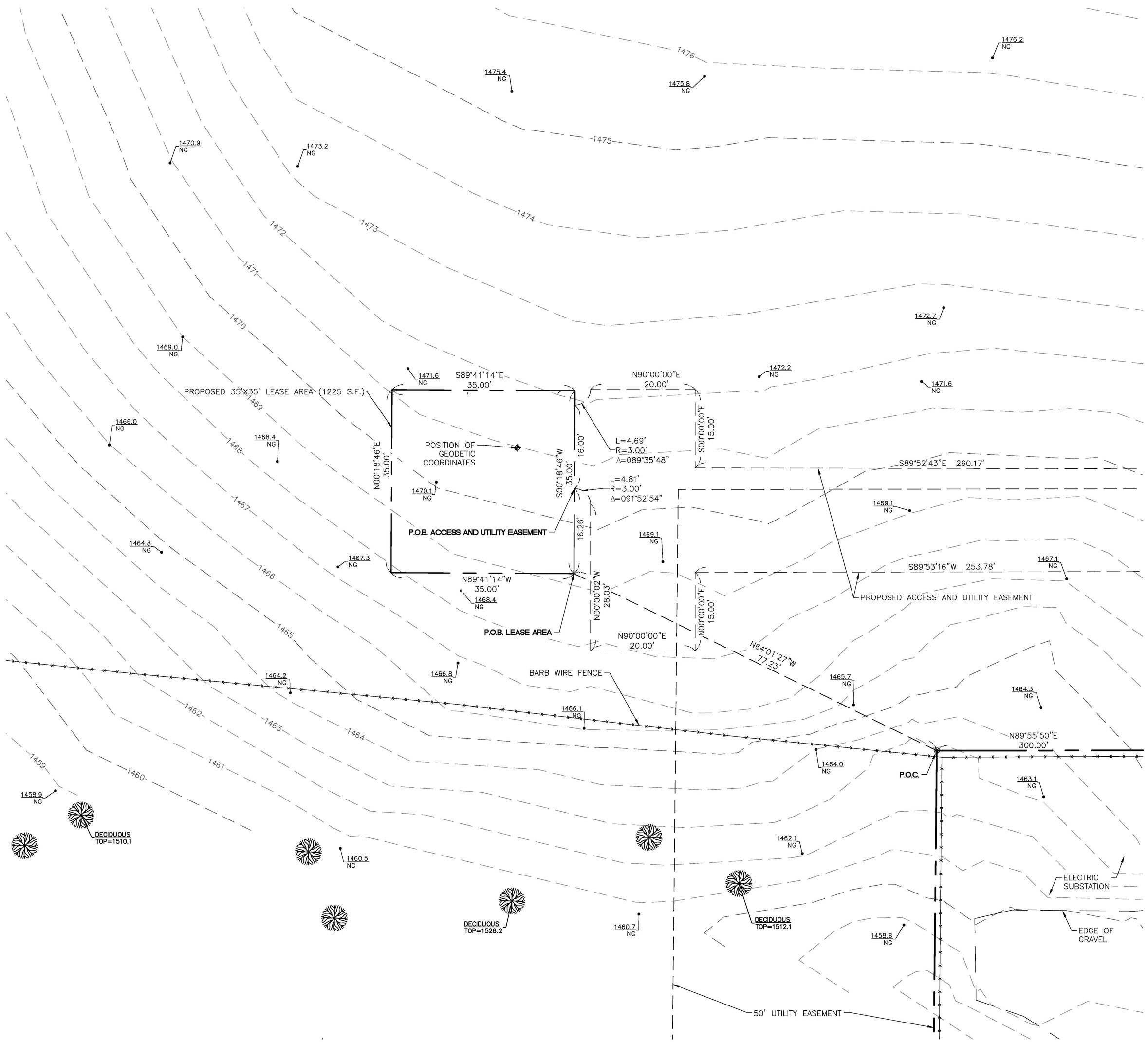
SHEET NUMBER:

LS-1

POSITION OF GEODETIC COORDINATES
LATITUDE 39° 04' 40.04" (39.077789°) NORTH (NAD83)
LONGITUDE 122° 55' 59.75" (122.933264°) WEST (NAD83)
GROUND ELEVATION @ 1471.0' (NAVD88)

LEGEND

NG	NATURAL GRADE
	GUY WIRE
	TREES
	PINE TREES
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
	UTILITY POLE
	POSITION OF GEODETIC COORDINATES
XXXX.X NG	SPOT ELEVATION
—x—x—x—x—x—x—	BARBED WIRE FENCE
—//—//—//—//—//—//—	"HOG-WIRE" FENCE
—O/H—O/H—O/H—	OVERHEAD LINES
	SUBJECT PROPERTY LINE
	ADJACENT PROPERTY LINE
	LEASE AREA LIMITS
	MAJOR CONTOUR INTERVAL
	MINOR CONTOUR INTERVAL



GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

at&t

PROJECT INFORMATION:

CCL06249
HILL ROAD AND PARKWAY INTERSECTION
3275 HILL ROAD
LAKEPORT, CA 95453

LAKE COUNTY

ORIGINAL ISSUE DATE:
10/06/2022

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DRAWN BY:	CHK.:	APV.:
CK	NS (P)	PD

LICENSER:

LICENSED LAND SURVEYOR
PATRICK B. DONOHOE
No. 9332
STATE OF CALIFORNIA
12/15/2023

SHEET TITLE:
SITE SURVEY

SHEET NUMBER:
LS-2

SCHEDULE "B" NOTE

REFERENCE IS MADE TO THE TITLE REPORT ORDER #TEP–138435–I, ISSUED BY TOWER TITLE AND CLOSING, DATED AUGUST 5, 2022. ALL EASEMENTS CONTAINED WITHIN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED.

ITEMIZED NOTES:
1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS REPORT, INCLUDING:
A. TAXES OR ASSESSMENTS THAT ARE NOT SHOWN AS EXISTING LIENS BY THE RECORDS OF ANY TAXING AUTHORITY THAT LEVIES TAXES OR ASSESSMENTS ON REAL PROPERTY OR BY THE PUBLIC RECORDS;
B. PROCEEDINGS BY A PUBLIC AGENCY THAT MAY RESULT IN TAXES OR ASSESSMENTS, OR NOTICES OF SUCH PROCEEDINGS, WHETHER OR NOT SHOWN BY THE RECORDS OF SUCH AGENCY OR BY THE PUBLIC RECORDS. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

2. THE LIEN OF SUPPLEMENTAL OR ESCAPED ASSESSMENTS OF PROPERTY TAXES, IF ANY. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

3. ANY FACTS, RIGHTS, INTERESTS, OR CLAIMS THAT ARE NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY AN INSPECTION OF THE LAND OR THAT MAY BE ASSERTED BY PERSONS IN POSSESSION OF THE LAND. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

4. EASEMENTS, LIENS OR ENCUMBRANCES, OR CLAIMS THEREOF, NOT SHOWN BY THE PUBLIC RECORDS. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

5. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND AND NOT SHOWN BY THE PUBLIC RECORDS, INCLUDING:
A. UNPATENTED MINING CLAIMS;
B. RESERVATIONS OR EXCEPTIONS IN PATENTS OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF;
C. WATER RIGHT, CLAIMS OR TITLE TO WATER,
WHETHER OR NOT THE MATTERS EXCEPTED UNDER (A), (B) OR (C) ARE SHOWN BY THE PUBLIC RECORDS. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

6. ANY LIEN OR RIGHT TO LIEN FOR SERVICES, LABOR OR MATERIAL NOT SHOWN BY THE PUBLIC RECORDS. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

7. TAXES FOR THE CURRENT FISCAL YEAR AND SUBSEQUENT YEARS, A LIEN NOT YET DUE AND PAYABLE. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

8. RIGHTS OF FEE SIMPLE OWNERS IN AND TO THE SUBJECT PROPERTY. (EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE SHOWN HEREON)

9. EASEMENT FOR RIGHT OF WAY BETWEEN JAMES C. BURGER, A SINGLE MAN; AND QUINT C. THOMPSON, DATED NOVEMBER 25, 1916 AND RECORDED NOVEMBER 25, 1916 IN (BOOK) 54 (PAGE) 363, IN LAKE COUNTY, CALIFORNIA. (DOES NOT AFFECT PARENT PARCEL)

10. RIGHT OF WAY EASEMENT BETWEEN GENE F. BURGER AND LOIS BURGER, HUSBAND AND WIFE; AND PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION, DATED MARCH 19, 1970 AND RECORDED MAY 29, 1970 IN (BOOK) 630 (PAGE) 620 (INSTRUMENT) 2414–10–0385, IN LAKE COUNTY, CALIFORNIA. (AS SHOWN ON SURVEY)

11. PACIFIC GAS AND ELECTRIC COMPANY BETWEEN FRED BURGER AND BARBARA BURGER, HUSBAND AND WIFE; AND PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION, AND PACIFIC BELL, A CALIFORNIA CORPORATION, DATED APRIL 17, 1999 AND RECORDED OCTOBER 8, 1999 IN (INSTRUMENT) 99–018015, IN LAKE COUNTY, CALIFORNIA. (EASEMENT UNDEFINED – NOT PLOTTED)

12. ANY AND ALL MATTERS DISCLOSED ON THE MAP ENTITLED "RECORD OF SURVEY"DATED NOVEMBER 26, 2001 AND RECORDED NOVEMBER 26, 2001 IN (BOOK) 71 (PAGE) 09, IN LAKE COUNTY, CALIFORNIA. (NOTHING TO PLOT)

13. CERTIFICATE OF COMPLIANCE DATED NOVEMBER 30, 2001 AND RECORDED NOVEMBER 30, 2001 IN (INSTRUMENT) 01–024495, IN LAKE COUNTY, CALIFORNIA. (DOES NOT AFFECT PARENT PARCEL)

14. TOGETHER WITH EASEMENTS AND RIGHTS RESERVED IN GRANT DEED TO MICHAEL D. SVEHLA AND NANCY SVEHLA, HUSBAND AND WIFE IN A DEED DATED OCTOBER 24, 2002 RECORDED OCT 30, 2002 AS INSTRUMENT NO. 02–024627 (AS SHOWN ON SURVEY)

SCHEDULE "B" NOTE

15. ROAD MAINTENANCE AGREEMENT BETWEEN CARPENTER ORCHARD, INC., A CALIFORNIA CORPORATION AND JAMES M. CARPENTER, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY AND MICHAEL AND NANCY SVEHLA, HUSBAND AND WIFE, DATED OCTOBER 28, 2002 AND RECORDED OCTOBER 30, 2002 IN (INSTRUMENT) 02–024628, IN LAKE COUNTY, CALIFORNIA.
AFFECTED BY A(N) ADDENDUM #1 TO ROAD MAINTENANCE AGREEMENT BETWEEN JAMES M. CARPENTER, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, AND CARPENTER ORCHARD, INC., A CALIFORNIA CORPORATION AND MICHAEL B. GARGUILO AND MELISSA M. GARGUILO, TRUSTEES OF THE MICHAEL & MELISSA GARGUILO FAMILY TRUST DATED 11/13/03, DATED MARCH 1, 2005 AND RECORDED MARCH 2, 2005 IN (INSTRUMENT) 2005005582, IN LAKE COUNTY, CALIFORNIA.
AFFECTED BY A(N) ADDENDUM #2 TO ROAD MAINTENANCE AGREEMENT BETWEEN JAMES M. CARPENTER, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, AND CARPENTER ORCHARD, INC., A CALIFORNIA CORPORATION AND SAMUEL V. CONNELL, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, DATED DECEMBER 20, 2005 AND RECORDED JANUARY 20, 2006 IN INSTRUMENT) 2006001601, IN LAKE COUNTY, CALIFORNIA. (AS SHOWN ON SURVEY)

16. LOT LINE ADJUSTMENT DATED DECEMBER 7, 2004 AND RECORDED DECEMBER 7, 2004 IN (INSTRUMENT) 2004033783, IN LAKE COUNTY, CALIFORNIA. (NOTHING TO PLOT)

17. EASEMENTS AS DESCRIBED IN GRANT DEED TO SAMUEL V. CONNELL, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, IN A DEED DATED DECEMBER 20, 2005 AND RECORDED JANUARY 20, 2006 AS INSTRUMENT NO. 2006001602 (AS SHOWN ON SURVEY)

18. EASEMENT GRANT DEED BETWEEN JAMES M. CARPENTER, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, AND CARPENTER ORCHARD, INC., A CALIFORNIA CORPORATION AND CHAD H. LYON AND SHELLY C. LYON, TRUSTEES OF THE CHAD H. LYON AND SHELY C. LYON REVOCABLE TRUST OF 2009, AND RAYMOND COX AND JOAN COX, HUSBAND AND WIFE AS JOINT TENANTS AND MICHAEL D. SVEHLA AND NANCY SVEHLA, HUSBAND AND WIFE AND NICOLE L. KALIS, AN UNMARRIED WOMAN AND SAMUEL V. CONNEL, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, DATED OCTOBER 5, 2011 AND RECORDED OCTOBER 14, 2011 IN (INSTRUMENT) 2011014833, IN LAKE COUNTY, CALIFORNIA. (AS SHOWN ON SURVEY)

19. EASEMENT GRANT DEED BETWEEN JAMES M. CARPENTER, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, AND CARPENTER ORCHARD, INC., A CALIFORNIA CORPORATION AND SAMUEL V. CONNELL, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, DATED NOVEMBER 15, 2013 AND RECORDED DECEMBER 10, 2013 IN (INSTRUMENT) 2013018340, IN LAKE COUNTY, CALIFORNIA.
AFFECTED BY A(N) CORRECTION EASEMENT GRANT DEED BETWEEN JAMES M. CARPENTER, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, AND CARPENTER ORCHARD, INC., A CALIFORNIA CORPORATION AND SAMUEL V. CONNELL, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, DATED NOVEMBER 15, 2013 AND RECORDED APRIL 22, 2014 IN (INSTRUMENT) 2014004789, IN LAKE COUNTY, CALIFORNIA. (AS SHOWN ON SURVEY)

20. TOGETHER WITH EASEMENTS AND RIGHTS RESERVED IN GRANT DEED TO DAVID RAY CONATSER AND SABRINA LEE CONASTER, HUSBAND AND WIFE, AS JOINT TENANTS, IN A DEED DATED JUNE16, 2007 AND RECORDED JUNE 21, 2017 AS INSTRUMENT NO. 2017–8135 (AS SHOWN ON SURVEY)

LESSOR'S LEGAL DESCRIPTION

REAL PROPERTY IN THE UNINCORPORATED AREA OF THE COUNTY OF LAKE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:
THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 10 WEST, MOUNT DIABLO MERIDIAN,
EXCEPTING THEREFROM ALL THAT PORTION THEREOF DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT IN THE SOUTHERLY BOUNDARY LINE OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 10 WEST, MOUNT DIABLO MERIDIAN, WHICH POINT IS DETERMINED BY RUNNING NORTH 00°11'07" WEST, 2657.80 FEET AND THENCE SOUTH 89°19'40" WEST, 300.00 FEET FROM THE 1 1/4 INCH IRON MONUMENT MARKING THE SOUTHEAST CORNER OF SAID SECTION 11 AND RUNNING THENCE FROM THE POINT OF BEGINNING AS SO DETERMINED SOUTH 89°19'40" WEST, ALONG THE SOUTHERLY BOUNDARY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 11, A DISTANCE OF 300.00 FEET; THENCE NORTH 00°00'04" WEST, 300.00 FEET; THENCE NORTH 89°19'40" EAST, 300.00 FEET; THENCE SOUTH 00°00'04" EAST, 300.00 FEET, MORE OR LESS, TO THE POINT OF BEGINNING; BEING A PORTION OF THE NORTHEAST QUARTER OF SAID SECTION 11.
ALSO EXCEPTING THEREFROM ALL THAT PORTION DESCRIBED IN THE DEED FROM GENE F. BURGER AND LOIS BURGER, HUSBAND AND WIFE, TO THE STATE OF CALIFORNIA DATED AUGUST 13, 1968, RECORDED OCTOBER 24, 1968, IN BOOK 569 OF OFFICIAL RECORDS OF LAKE COUNTY AT PAGE 522.
ALSO EXCEPTING THEREFROM ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF LAKE, STATE OF CALIFORNIA AS DESCRIBED IN THE CERTIFICATE OF COMPLIANCE FILED NOVEMBER 30, 2001, AS DOCUMENT NUMBER 01–024495, LAKE COUNTY RECORDS.
ALSO EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND COMMENCING AT THE SOUTHWEST CORNER OF THE SAID NORTHEAST QUARTER OF SECTION 11 AS SHOWN ON A MAP FILED IN BOOK 71 OF RECORD OF SURVEYS, PAGE 09, LAKE COUNTY RECORDS; THENCE NORTH 89°55'00" EAST ALONG THE SOUTH LINE OF THE SAID NORTHEAST QUARTER OF SECTION 11, 162.93 FEET TO THE POINT OF BEGINNING; THENCE LEAVING THE SAID SOUTH LINE OF THE NORTHEAST QUARTER OF SECTION 11, NORTH 01°22'41" EAST, 321.87 FEET; THENCE NORTH 85°51'48" EAST, 401.17 FEET; THENCE SOUTH 04°48'35" EAST, 351.32 FEET TO THE SAID SOUTH LINE OF THE NORTHEAST QUARTER OF SECTION 11; THENCE SOUTH 89°55'00" WEST ALONG THE SAID SOUTH LINE OF THE NORTHEAST QUARTER, 437.33 FEET TO THE POINT OF BEGINNING.

PARCEL TWO:
BEGINNING AT THE CENTER OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 10 WEST, MOUNT DIABLO MERIDIAN, AND RUNNING THENCE WEST, ALONG THE HALF SECTION LINE RUNNING EAST AND WEST THROUGH THE CENTER OF SAID SECTION 11, 10.60 CHAINS TO THE CENTER OF SCOTTS CREEK; THENCE ALONG THE CENTER OF SAID CREEK NORTH 12°49' WEST, 10.77 CHAINS, MORE OR LESS, TO THE SOUTHWEST CORNER OF THAT CERTAIN TRACT HERETOFORE CONVEYED BY G. F. BURGER, ET UX, TO LELAND L. BURGER, BY DEED DATED OCTOBER 16, 1919, OF RECORD IN BOOK 57 OF DEEDS AT PAGE 367, LAKE COUNTY RECORDS THENCE EAST, ALONG THE SOUTH LINE OF SAID TRACT SO CONVEYED TO LELAND L. BURGER, AND ALONG THE SOUTH LINE OF THAT CERTAIN TRACT HERETOFORE CONVEYED BY JAMES C. BURGER, A SINGLE MAN, TO QUINT C. THOMPSON, BY DEED DATED NOVEMBER 25, 1916, OF RECORD IN BOOK 54 OF DEEDS AT PAGE 363, LAKE COUNTY RECORDS, 13.75 CHAINS TO THE LINE RUNNING NORTH AND SOUTH THROUGH THE CENTER OF SAID SECTION 11, THENCE SOUTH, 10.46 CHAINS TO THE POINT OF BEGINNING.
EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND:
BEGINNING AT THE SOUTHWEST CORNER OF THAT CERTAIN TRACT OF LAND CONVEYED BY JAMES C. BURGER, A SINGLE MAN, TO QUINT C. THOMPSON, BY DEED DATED NOVEMBER 25, 1916, OF RECORD IN BOOK 54 OF DEEDS AT PAGE 363, LAKE COUNTY RECORDS; THENCE EASTERLY ALONG THE SOUTH LINE OF THE ABOVE REFERRED TO DEED, 60.00 FEET; THENCE LEAVING THE SAID SOUTH LINE OF THE ABOVE REFERRED TO DEED SOUTH 27°48'28" EAST, 427.41 FEET, MORE OR LESS, TO AN EXISTING FENCE; THENCE WESTERLY ALONG THE SAID EXISTING FENCE, 700 FEET , MORE OR LESS, TO THE CENTER OF SCOTT CREEK; THENCE NORTHWESTERLY, DOWNSTREAM, ALONG THE SAID CENTER OF SCOTT CREEK, 380 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF PARCEL OF LAND DESCRIBED IN DOCUMENT NO. 02–024627, LAKE COUNTY RECORDS.THENCE LEAVING THE SAID CENTER OF SCOTT CREEK, EASTERLY ALONG THE SOUTH LINE OF THE LAST ABOVE REFERRED TO DEED, 39 RODS, MORE OR LESS, TO THE POINT OF BEGINNING.
PURSUANT TO THAT CERTAIN "LOT LINE ADJUSTMENT"RECORDED DECEMBER 7, 2004 AS INSTRUMENT NO. 2004033783 OF OFFICIAL RECORDS OF LAKE COUNTY.
TOGETHER WITH EASEMENTS AND RIGHTS RESERVED IN GRANT DEED TO SAMUEL V. CONNELL, A MARRIED MAN DEALING WITH HIS SEPARATE PROPERTY, IN A DEED DATED DECEMBER 20, 2005 AND RECORDED JANUARY 20, 2006 AS INSTRUMENT NO. 2006001602
TOGETHER WITH EASEMENTS AND RIGHTS RESERVED IN GRANT DEED TO DAVID RAY CONATSER AND SABRINA LEE CONATSER, HUSBAND AND WIFE, AS JOINT TENANTS, IN A DEED DATED JUNE16, 2007 AND RECORDED JUNE 21, 2017 AS INSTRUMENT NO. 2017–8135

PARCEL ID: 005–015–410–000

BEING THE SAME PROPERTY CONVEYED TO JAMES M. CARPENTER, A MARRIED MAN, DEALING WITH HIS SEPARATE PROPERTY AND CARPENTER ORCHARD, INC IN A DEED FROM GENE FRED BURGER AND BARBARA BURGER, HUSBAND AND WIFE DATED SEPTEMBER 30, 1998 AND RECORDED OCTOBER 1, 1998 AS INSTRUMENT NO. 98–017168.

LEASE AREA LEGAL DESCRIPTION

A PORTION OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN GRANT DEED RECORDED IN DOCUMENT NO. 2004033786, OFFICIAL RECORDS OF LAKE COUNTY, CALIFORNIA, BEING LOCATED IN THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 10 WEST, MOUNT DIABLO MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A BRASS CAP STAMPED LS 2581 AT THE NORTHWEST CORNER OF 456 O.R. 306 AS SHOWN ON RECORD OF SURVEY RECORDED BOOK 71, PAGE 09 OFFICIAL RECORDS OF SAID COUNTY, FROM WHICH A BRASS CAP STAMPED LS 2581 AT THE NORTHEAST CORNER OF SAID LOT BEARS NORTH 89°55'50" EAST, 300.00 FEET; THENCE FROM SAID POINT OF COMMENCEMENT NORTH 64°01'27" WEST, 77.23 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 89°41'14" WEST, 35.00 FEET; THENCE NORTH 00°18'46" EAST, 35.00 FEET; THENCE SOUTH 89°41'14" EAST, 35.00 FEET; THENCE SOUTH 00°18'46" WEST, 35.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 1225 SQUARE FEET (0.028 ACRES) OF LAND, MORE OR LESS.

ACCESS AND UTILITY EASEMENT LEGAL DESCRIPTION

A PORTION OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN GRANT DEED RECORDED IN DOCUMENT NO. 2004033786, OFFICIAL RECORDS OF LAKE COUNTY, CALIFORNIA, BEING LOCATED IN THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 10 WEST, MOUNT DIABLO MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A BRASS CAP STAMPED LS 2581 AT THE NORTHWEST CORNER OF 456 O.R. 306 AS SHOWN ON RECORD OF SURVEY RECORDED BOOK 71, PAGE 09 OFFICIAL RECORDS OF SAID COUNTY, FROM WHICH A BRASS CAP STAMPED LS 2581 AT THE NORTHEAST CORNER OF SAID LOT BEARS NORTH 89°55'50" EAST, 300.00 FEET; THENCE FROM SAID POINT OF COMMENCEMENT NORTH 64°01'27" WEST, 77.23 FEET; THENCE NORTH 00°18'46" EAST, 16.26 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING NORTH 00°18'46" EAST, 16.00 FEET TO THE BEGINNING OF A NON–TANGENT CURVE WITH A RADIUS OF 3.00 FEET, CONCAVE NORTHEAST, THE CENTER OF WHICH BEARS NORTH 00°13'20" EAST; THENCE ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 89°35'48", A DISTANCE OF 4.69 FEET; THENCE NORTH THENCE NORTH 90°00'00" EAST, 20.00 FEET; THENCE SOUTH 00°00'00" EAST, 15.00 FEET; THENCE SOUTH 89°52'43" EAST, 260.17 FEET; THENCE SOUTH 71°22'06" EAST, 61.33 FEET TO A POINT ON THE EASTERLY BOUNDARY OF SAID PARCEL; THENCE SOUTH 00°35'46" WEST, ALONG SAID EAST LINE, 21.03 FEET; THENCE DEPARTING SAID EAST LINE NORTH 71°22'06" WEST, 67.84 FEET; THENCE NORTH 89°53'16" WEST, 253.78 FEET; THENCE SOUTH 00°00'00" WEST, 15.00 FEET; THENCE NORTH 90°00'00" WEST, 20.00 FEET; THENCE NORTH 00°00'02" WEST, 28.03 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT WITH A RADIUS OF 3.00 FEET; THENCE ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 91°52'54", A DISTANCE OF 4.81 FEET RETURNING TO THE POINT OF BEGINNING.

50' UTILITY EASEMENT LEGAL DESCRIPTION

A PORTION OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN GRANT DEED RECORDED IN DOCUMENT NO. 2004033786, OFFICIAL RECORDS OF LAKE COUNTY, CALIFORNIA, BEING LOCATED IN THE SOUTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 14 NORTH, RANGE 10 WEST, MOUNT DIABLO MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A BRASS CAP STAMPED LS 2581 AT THE NORTHWEST CORNER OF 456 O.R. 306 AS SHOWN ON RECORD OF SURVEY RECORDED BOOK 71, PAGE 09 OFFICIAL RECORDS OF SAID COUNTY, FROM WHICH A BRASS CAP STAMPED LS 2581 AT THE NORTHEAST CORNER OF SAID LOT BEARS NORTH 89°55'50" EAST, 300.00 FEET; THENCE FROM SAID POINT OF BEGINNING SOUTH 00°36'06" WEST, 299.94 FEET; THENCE SOUTH 89°55'47" WEST, 50.00 FEET; THENCE NORTH 00°36'06" EAST, 394.94 FEET; THENCE NORTH 89°55'50" EAST, 529.10 FEET; THENCE SOUTH 00°31'16" EAST, 50.00 FEET; THENCE SOUTH 89°55'50" WEST, 480.08 FEET TO THE POINT OF BEGINNING.

at&t

PROJECT INFORMATION:

CCL06249
HILL ROAD AND PARKWAY INTERSECTION
3275 HILL ROAD
LAKEPORT, CA 95453

LAKE COUNTY

ORIGINAL ISSUE DATE:

10/06/2022

REV.:	DATE:	DESCRIPTION:	BY:
A	10/06/22	PRELIMINARY	CK
0	1/05/23	LEGALS (C)	CK
1	05/15/2023	NEW DESIGN (C)	SB
2	12/15/2023	NEW DESIGN (C)	PD

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
(919) 661-6351

CONSULTANT:

428 MAIN STREET
SUITE 206
HUNTINGTON BEACH, CA 92648
PH. (480) 659-4072
www.ambitconsulting.us
ambit consulting

DRAWN BY:	CHK.:	APV.:
CK	NS (P)	PD

LICENSER:

LICENSED LAND SURVEYOR
PATRICK B. DONOHOE
No. 9332
STATE OF CALIFORNIA
12/15/2023

SHEET TITLE:

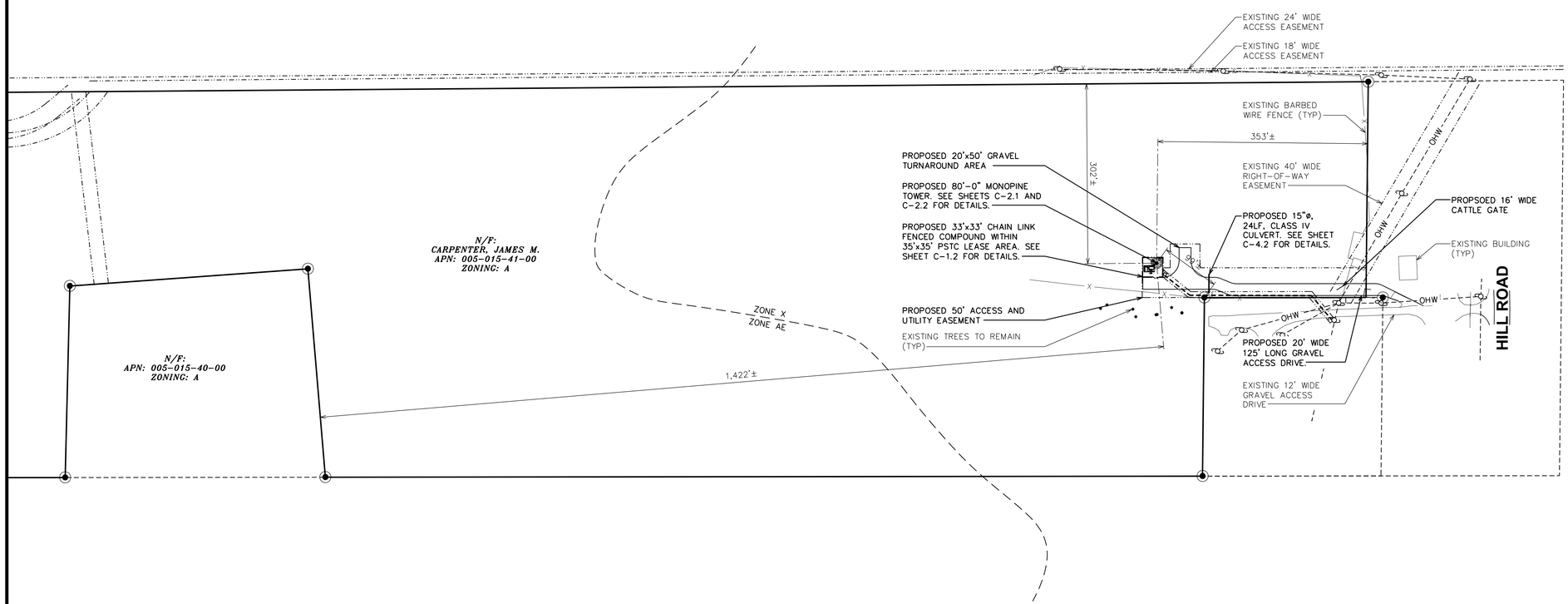
NOTES

SHEET NUMBER:

LS–3

NOTES:

1. ANTENNAS NOT SHOWN FOR CLARITY.
2. FIBER AND POWER ROUTES SHOWN ARE PRELIMINARY AND TO BE VERIFIED BY COORDINATION WITH THE UTILITY COMPANY PRIOR TO CONSTRUCTION.
3. ACCESS WILL BE PROVIDED IN COMPLIANCE WITH PRC 4290.
4. ADDRESS POSTING REQUIRED FOR BOTH CELL TOWER LEASE SITE AND PRIMARY PROPERTY (RESIDENCE). POSTED REFLECTIVE ADDRESS SIGN(S) OF CONTRASTING COLORS, RETRO-REFLECTIVE OF REQUIRED SIZE; PERPENDICULAR TO THE ROAD, VISIBLE FROM BOTH DIRECTIONS AT THE ROADWAY FOR EACH ADDRESS ACCESSED FROM DRIVEWAY. ADDITIONAL POSTED REFLECTIVE ADDRESS SIGN(S) OF CONTRASTING COLORS, RETRO-REFLECTIVE OF REQUIRED SIZE; PERPENDICULAR TO THE DRIVEWAY POSTED AT EACH ADDRESSED PROPERTY AND/OR STRUCTURE FROM THE DRIVEWAY.



1 **EXISTING OVERALL SITE PLAN**

SCALE: 1" = 100' (24x36)
SCALE: 1" = 200' (11x17)

0 100 200
SCALE IN FEET

PUBLICSAFETYTOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

TOWER ENGINEERING PROFESSIONALS
4710 E ELWOOD ST, STE 9
PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
F	03-24-23	SSO	ZONING	HMM
G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:

SITE PLAN

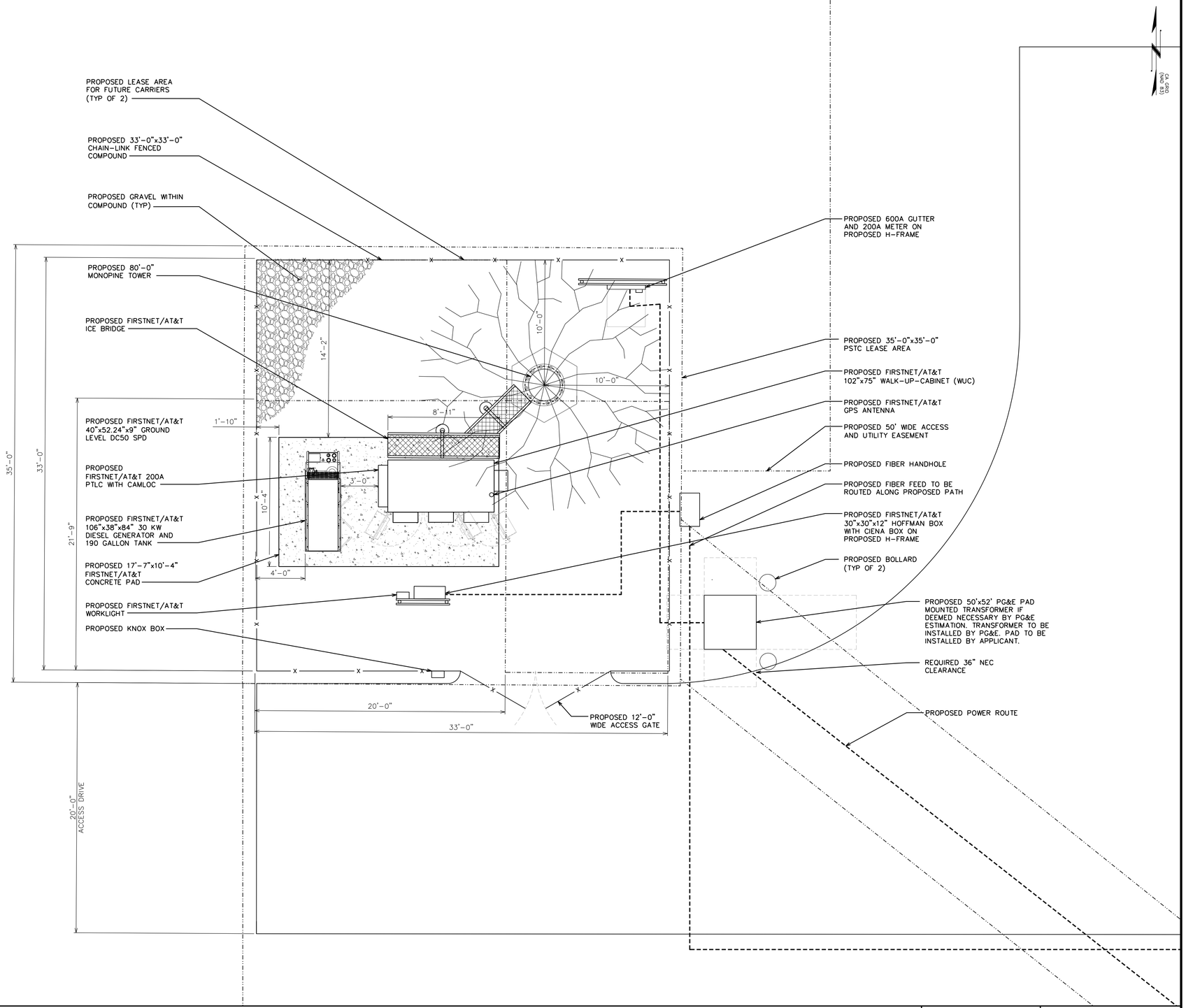
SHEET NUMBER: C-1.1

REVISION: J

TEP #: 314197.336183

NOTES:

1. CONTRACTOR TO VERIFY ALL EXISTING INFORMATION IS AS INDICATED ON SITE PLAN. CONTRACTOR IS TO ESTABLISH THE EXISTENCE AND LOCATION OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES. IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES.
2. CONTRACTOR TO ENSURE THAT ALL FIRSTNET/AT&T EQUIPMENT IS INSTALLED INSIDE FIRSTNET/AT&T'S LEASE AREA, INCLUDING BUT NOT LIMITED TO, EQUIPMENT CABINETS, UTILITY CABINETS, H-FRAMES, ETC.
3. ANTENNAS NOT SHOWN FOR CLARITY.
4. ACCESS WILL BE PROVIDED IN COMPLIANCE WITH PRC 4290.



1 **FINAL COMPOUND DETAIL**

SCALE: ¼" = 1'-0" (24x36)
SCALE: ⅛" = 1'-0" (11x17)

0 4 8
SCALE IN FEET

PUBLICSAFETYTOWERS COMPANY
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PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

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(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
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H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:

COMPOUND LAYOUT

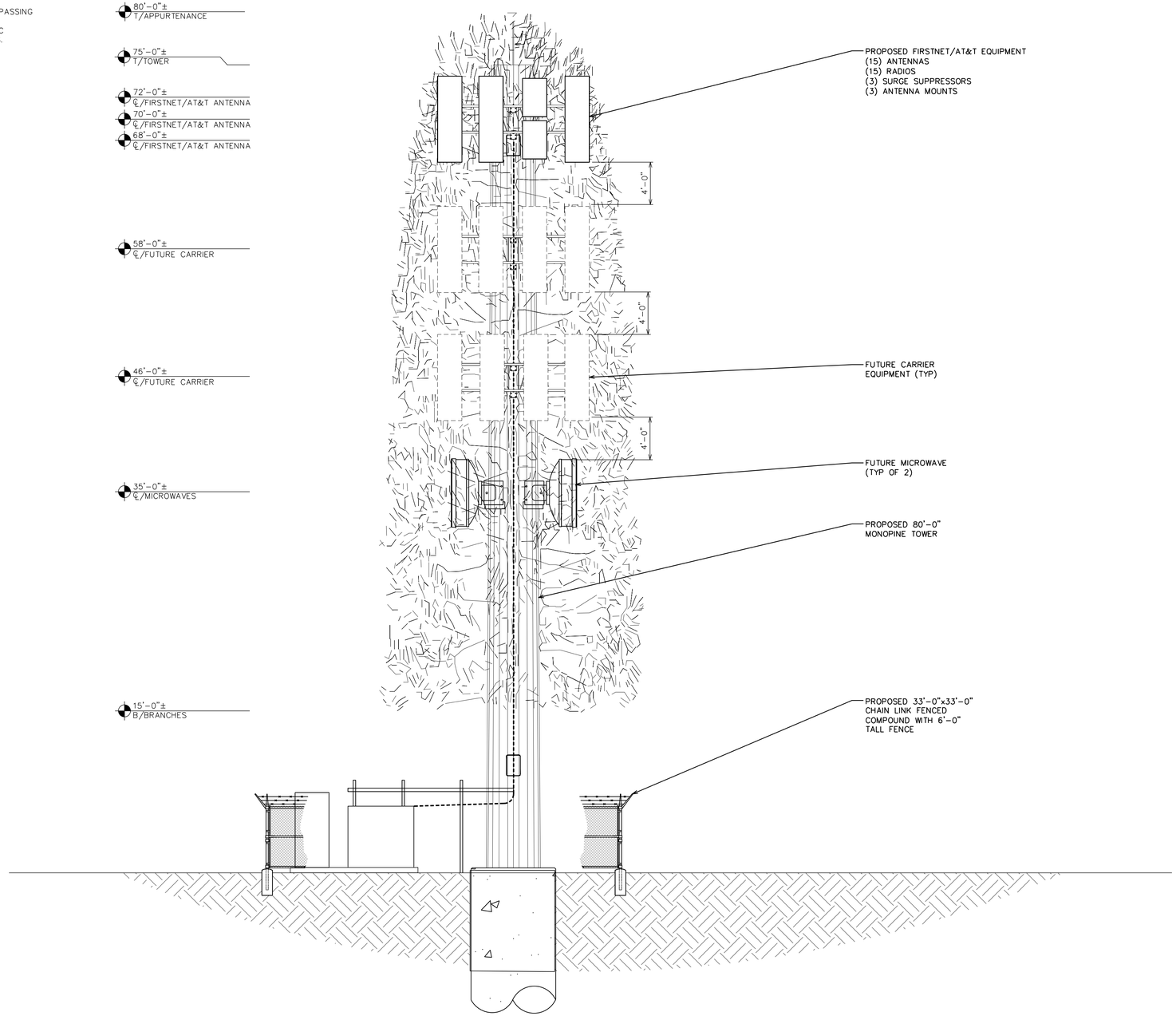
SHEET NUMBER: C-1.2

REVISION: J

TEP #: 314197.336183

NOTES:

1. PROPOSED CABLES TO BE ROUTED PER SPECIFICATIONS OF PASSING STRUCTURAL ANALYSIS.
2. TOWER ELEVATION IS FOR SCHEMATIC PURPOSES ONLY. TEP DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO ANTENNA HEIGHTS, ANTENNA AZIMUTHS, AND MOUNT CONFIGURATIONS.
3. CONTRACTOR TO VERIFY PROPOSED LOADING WITH PASSING STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION. CONTRACTOR TO CONTACT FIRSTNET/AT&T OR PSTC IMMEDIATELY IN THE EVENT OF ANY DISCREPANCIES.



1 **PROPOSED SOUTH ELEVATION**

SCALE: 3/16" = 1'-0" (24x36)
SCALE: 3/32" = 1'-0" (11x17)

0 4 8
SCALE IN FEET

PUBLICSAFETYTOWERS COMPANY
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FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

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G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:

FINAL ELEVATION

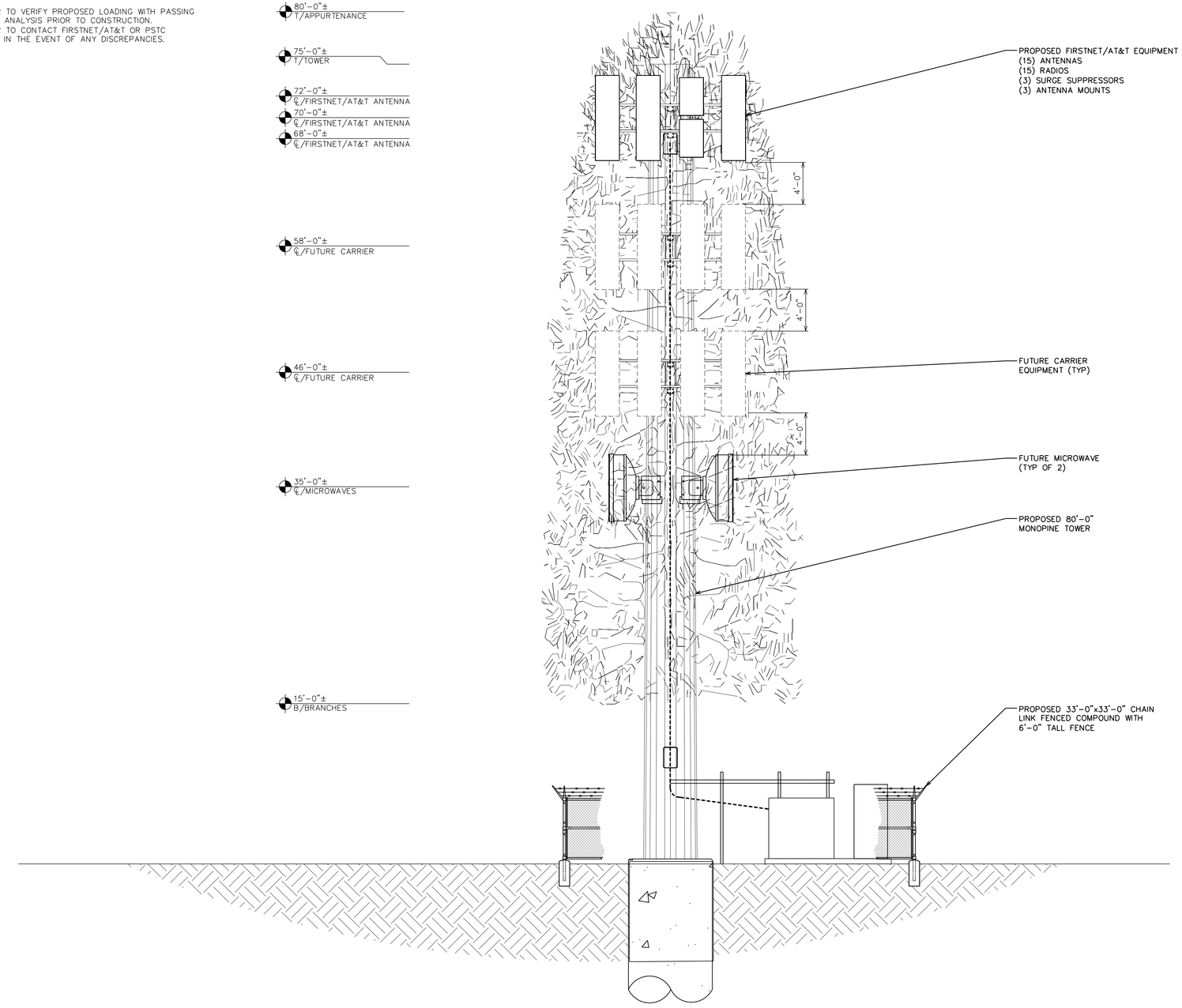
SHEET NUMBER: C-2.1

REVISION: J

TEP #: 314197.336183

NOTES:

1. PROPOSED CABLES TO BE ROUTED PER SPECIFICATIONS OF PASSING STRUCTURAL ANALYSIS.
2. TOWER ELEVATION IS FOR SCHEMATIC PURPOSES ONLY. TEP DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO ANTENNA HEIGHTS, ANTENNA AZIMUTHS, AND MOUNT CONFIGURATIONS.
3. CONTRACTOR TO VERIFY PROPOSED LOADING WITH PASSING STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION. CONTRACTOR TO CONTACT FIRSTNET/AT&T OR PSTC IMMEDIATELY IN THE EVENT OF ANY DISCREPANCIES.



1 **PROPOSED NORTH ELEVATION**

SCALE: 3/16" = 1'-0" (24x36)
SCALE: 3/32" = 1'-0" (11x17)

0 4 8
SCALE IN FEET

PUBLICSAFETYTOWERS COMPANY
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AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

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PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
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G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:

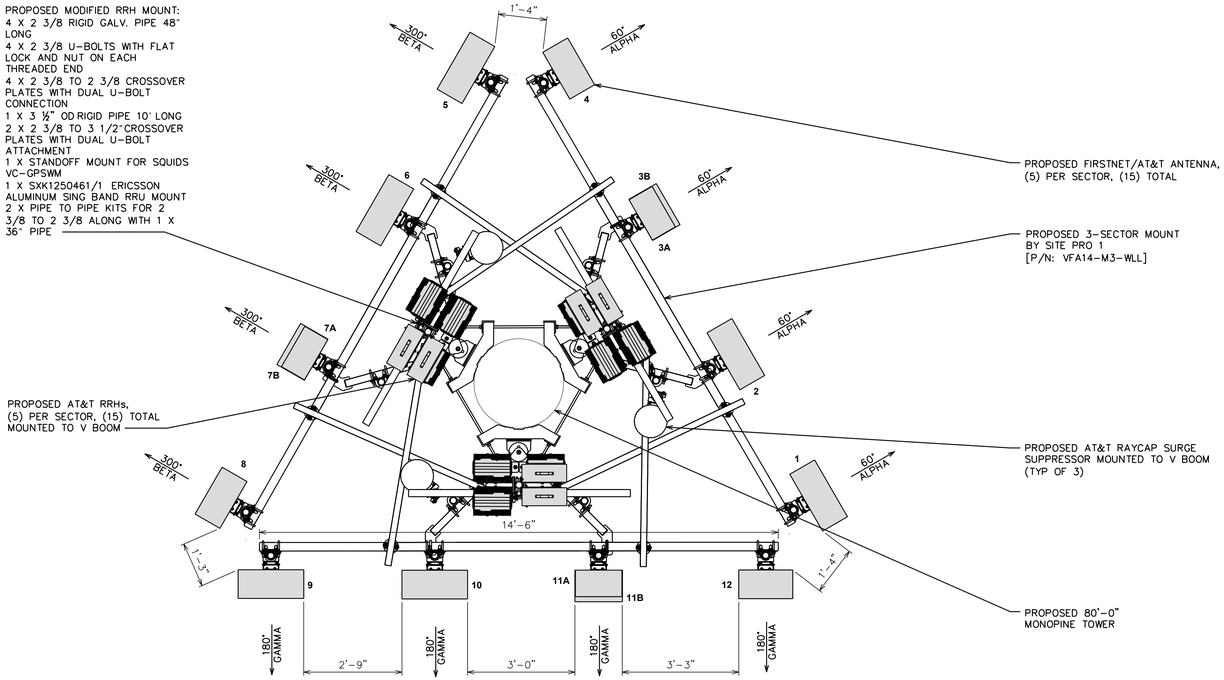
FINAL ELEVATION

SHEET NUMBER: C-2.2

REVISION: J

TEP #: 314197.336183

NOTE:
TEP DID NOT ANALYZE THE PROPOSED MOUNT SHOWN.



1 FINAL ANTENNA LAYOUT

SCALE: ½" = 1'-0" (24x36)
SCALE: ¼" = 1'-0" (11x17)
0 2 4
SCALE IN FEET

FINAL ANTENNA/FEEDLINE SCHEDULE

SECTOR	POS.	MANUFACTURER (MODEL #)	MOUNTING HEIGHT	AZIMUTH (TN)	CABLE SIZE	CABLE LENGTH	OVP/RRH/TMA/DIPLEXER [MODEL #]
ALPHA	1	QUINTEL (QD868-3D)	℄ @ 70'-0"±	60°	(9) DC POWER TRUNKS (3) FIBER TRUNKS	121'±	(1) RADIO 4478 B12A (1) RADIO 4890 B25/B66 (1) RADIO 4478 B14 (1) RADIO 2012 B29 (1) RADIO 4415 B30 (1) DC9-48-60-24-8C-EV
ALPHA	2	QUINTEL (QD868-3D)	℄ @ 70'-0"±	60°			
ALPHA	3A	ERICSSON (AIR6419 B77G)	℄ @ 72'-0"±	60°			
ALPHA	3B	ERICSSON (AIR6449 B77M)	℄ @ 68'-0"±	60°			
ALPHA	4	QUINTEL (QD868-3D)	℄ @ 70'-0"±	60°			
BETA	5	QUINTEL (QD868-3D)	℄ @ 70'-0"±	300°			(1) RADIO 4478 B12A (1) RADIO 4890 B25/B66 (1) RADIO 4478 B14 (1) RADIO 2012 B29 (1) RADIO 4415 B30 (1) DC9-48-60-24-8C-EV
BETA	6	QUINTEL (QD868-3D)	℄ @ 70'-0"±	300°			
BETA	7A	ERICSSON (AIR6419 B77G)	℄ @ 72'-0"±	300°			
BETA	7B	ERICSSON (AIR6449 B77M)	℄ @ 68'-0"±	300°			
BETA	8	QUINTEL (QD868-3D)	℄ @ 70'-0"±	300°			
GAMMA	9	QUINTEL (QD868-3D)	℄ @ 70'-0"±	180°			(1) RADIO 4478 B12A (1) RADIO 4890 B25/B66 (1) RADIO 4478 B14 (1) RADIO 2012 B29 (1) RADIO 4415 B30 (1) DC9-48-60-24-8C-EV
GAMMA	10	QUINTEL (QD868-3D)	℄ @ 70'-0"±	180°			
GAMMA	11A	ERICSSON (AIR6419 B77G)	℄ @ 72'-0"±	180°			
GAMMA	11B	ERICSSON (AIR6449 B77M)	℄ @ 68'-0"±	180°			
GAMMA	12	QUINTEL (QD868-3D)	℄ @ 70'-0"±	180°			

2 FINAL ANTENNA SCHEDULE

SCALE: N.T.S.

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OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

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H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

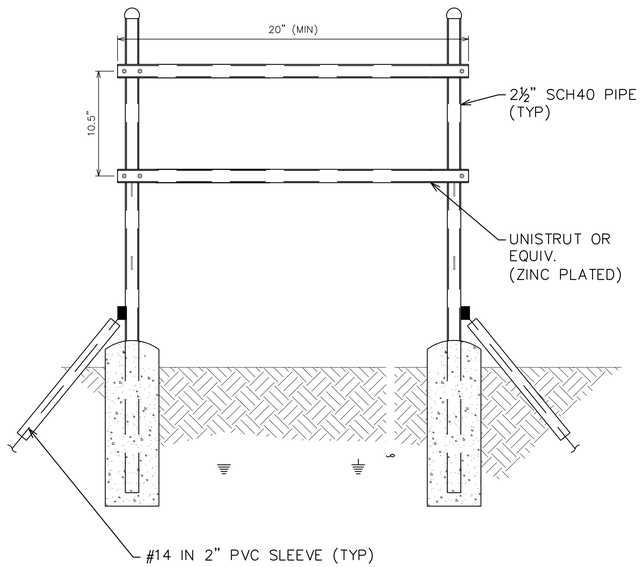
SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:
ANTENNA LAYOUT & SCHEDULE

SHEET NUMBER: C-3
REVISION: J

TEP #: 314197.336183



1 H-FRAME DETAIL

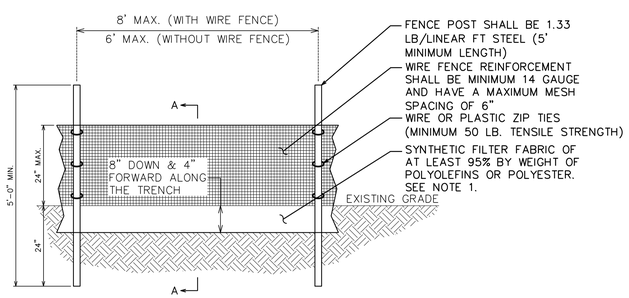
SCALE: N.T.S.

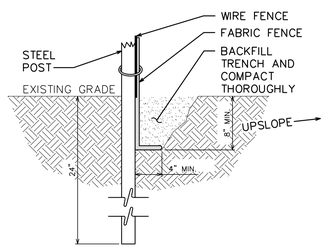
2 NOT USED

SCALE: N.T.S.

NOTES:

1. FILTER FABRIC SHALL CONFORM TO THE REQUIREMENTS LISTED IN ASTM D 6461.
2. ENDS OF INDIVIDUAL FILTER FABRIC SHALL BE SECURELY FASTENED AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
3. PLACE 12 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
4. INSPECT SEDIMENT FENCE(S) AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL.
5. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
6. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND PROPERLY STABILIZE THE SITE.

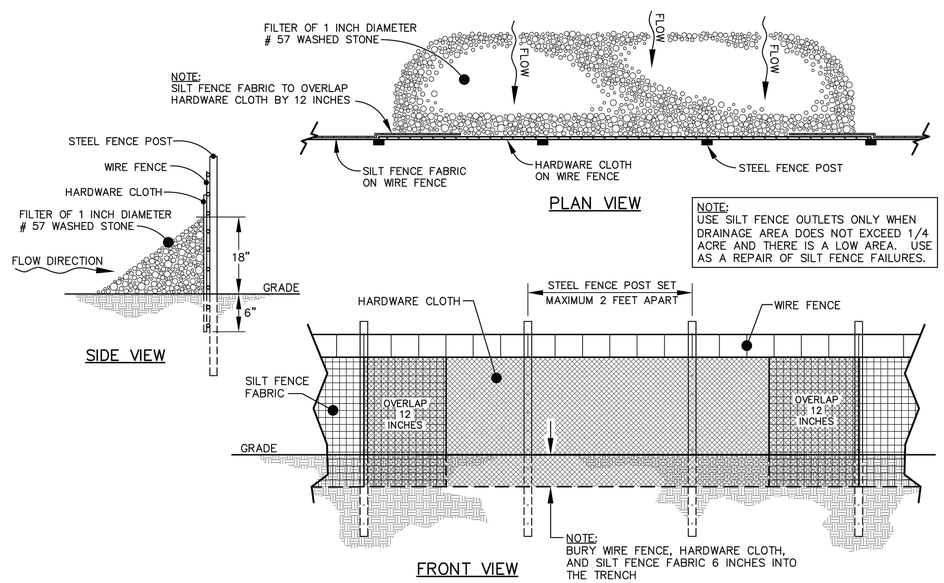




SECTION A-A

3 SILT FENCE DETAILS

SCALE: N.T.S.



4 STANDARD SILT FENCE OUTLET DETAIL

SCALE: N.T.S.

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HILL ROAD AND PARKWAY INTERSECTION

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I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

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

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: C-4.1

REVISION: J

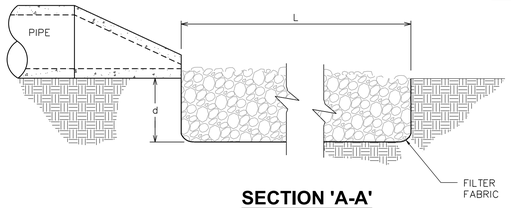
TEP #: 314197.336183

NOTES:

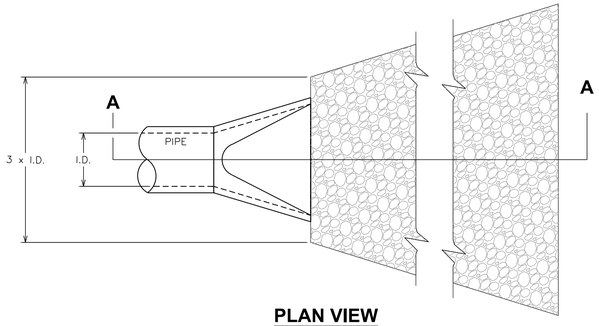
1. L = THE LENGTH OF THE RIPRAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).
3. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

DISSIPATOR PAD SIZING

RIP-RAP APRON NO.	CULVERT DIAMETER (IN)	WIDTH (FT)	LENGTH (FT)	DEPTH (IN)	D_{50} (IN)
1	15	4	5	18	6



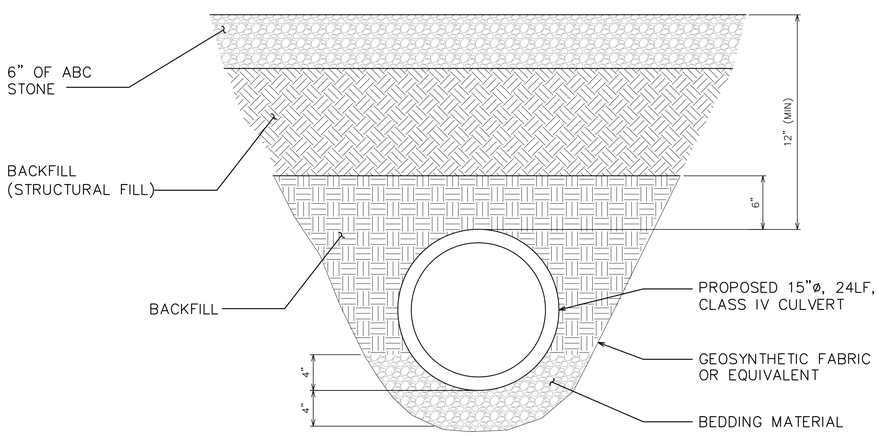
SECTION 'A-A'



PLAN VIEW

1 DISSAPATOR PAD DETAILS

SCALE: N.T.S.



2 CULVERT DETAIL

SCALE: N.T.S.

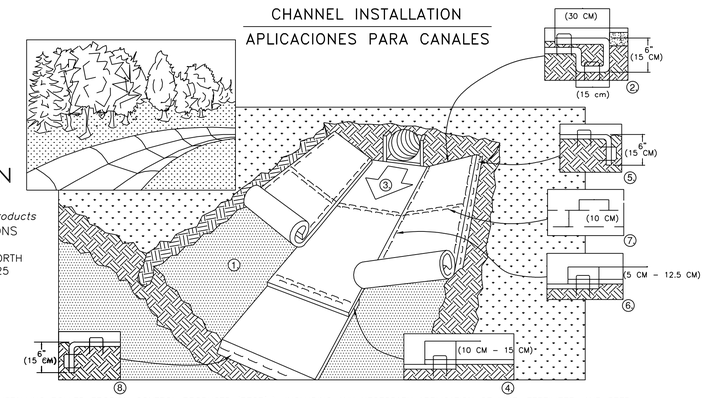
NORTH AMERICAN GREEN

EROSION CONTROL *Products Guaranteed* SOLUTIONS

14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-2040
www.nagreen.com

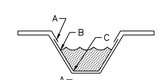
CHANNEL INSTALLATION

APLICACIONES PARA CANALES



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMAPCT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" (10 CM –15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (5 CM –12.5 CM) (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M – 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

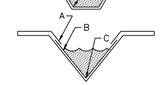


CRITICAL POINTS

A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



PUNTOS CRITICOS

A. TRASLAPES Y JUNTAS
B. LINEAS DE AGUA PROYECTADA
C. FONDO DEL CANAL/VERTICES DE LAS PENDIENTES LATERALES

NOTA:
* LA SEPARACION HORIZONTAL DE LAS GRAPAS SE DEBE ALTERAR SI SE NECESITA, PARA PERMITIR QUE LAS GRAPAS ASEGUREN LOS PUNTOS CRITICOS A LO LARGO DE LA SUPERFICIE DEL CANAL.

** EN CONDICIONES DE SUELO SUELTO, PUEDE QUE SE NECESITEN GRAPAS O ESTACAS DE MAS DE 6" (15 CM) DE LARGO PARA ASEGURAR LAS MANTAS CORRECTAMENTE.

1. PREPARE EL SUELO DE COLOCAR LAS MANTAS, INCLUYENDO LA APLICASION DE CAL, FERTILIZANTE SEMILLA. NOTA: CUANDO ESTE USANDO CELL-O-SEED NO SIEMBRE EL AREA PREPARADA. CELL-O-SEED TIENE QUE INSTALARSE CON EL LADO DE PAPEL HACIA ABAJO.
2. COMIENCE EN LA CABECERA DEL CANAL SUJETANDO LA MANTA EN UNA ZANJA DE 6" (15 CM) DE PROFUNDIDAD POR 6" (15 CM). DE ANCHO CON APROXIMADAMENTE 12" (30 CM) DE LA MANTA EXTENDIDA MAS ALLA DE LA PENDIENTE ALTA DE LA ZANJA. SUJETE RELLENE Y COMPACTE LA ZANJA DESPUES DEL ENGRAPE. RIEGUE LA SEMILLA EN EL SUELO COMPACTADO Y DOBLE LAS 12" (30 CM) REMANENTES DE MANTA SOBRE LA SEMILLA Y EL SUELO COMPACTADO. ASEGURE LA MANTA SOBRE EL SUELO CON UNA LINEADE GRAPAS O ESTACAS APROXIMADAMENTE 12" (30 CM) UNA DE LA OTRA A TRAVES DEL ANCHO DE LA MANTA.
3. DESENROLLE LA MANTA DEL MEDIO EN EL FONDO DEL CANAL Y EN LA DIRECCION DEL FLUJO DE AGUA CON EL LADO APROPIADO HACIA LA SUPERFICIE DEL SUELO. TODAS LAS MANTAS DEBERAN ASEGURARSE A LA SUPERFICIE DEL SUELO POR MEDIO DE GRAPAS O ESTACAS EN LUGARESAPROPIADOS TAL Y COMO SE INDICA EN EL PATRON GUIA DE ENGRAPADO. CUANDO ESTE USANDO EL DOT SYSTEM™. LAS GRAPAS O ESTACAS DEBEN COLOCARSE A TRAVES DE CADA UNO DE LOS PUNTOS CON COLOR CORRESPONDIENTES AL PATRON DE ENGRAPADO APROPIADO.
4. COLOQUE LAS MANTAS CONSECUTIVAS BORDE SOBRE BORDE (TIPO ESCALONADO) CON UN TRASLAPE DE 4" – 6" (10 CM – 15 CM). USE UNA LINEA DOBLE DE GRAPAS ESCALONADAS, SEPARADAS POR 4" (10 CM) Y CADA 4" (10 CM) SOBRE EL CENTRO PARA ASEGURAR LAS MANTAS.
5. EN EL TOPE DE LAS DOS PENDIENTES LATERALES DEL CANAL, SE DEBE SUJETAR TODO EL LARGO DE LA ORILLA DE LAS MANTAS CON UNA LINEA DE GRAPAS O ESTACAS APROXIMADAMENTE CADA 12" (30 CM) UNA DE LA OTRA EN UNA ZANJA DE 6" (15 CM) DE PROFUNDIDAD POR 6" (15 CM) DE ANCHO. RELLENE Y COMPACTE LA ZANJA DESPUES DEL ENGRAPE.
6. LAS MANTAS ADYACENTES DEBEN TRASLAPARSE APROXIMADAMENTE DE 2" – 5" (5 CM– 12.5 CM) (DEPENDIENDO DEL TIPO DE. MANTA) Y ENGRAPPARSE.
7. EN APLICACIONES PARA CANALES DE FLUJO ALTO, SE RECOMIENDA DEJAR UNA RANURA PARA EL CHEQUEO DE LAS GRAPAS A INTERVALOS DE 30 A 40 PIES (9 M – 12 M). USE UNA LINEA DOBLE DE PRAPAS ESCALONADAS, SEPARADAS POR 4" (10 CM) Y CADA 4" (10 CM) SOBRE EL CENTRO A TRAVES DE TODO EL ANCHO DEL CANAL.
8. LOS BORDES FINALES DE LAS MANTAS DEBEN SUJETARSE CON UNA LINEA DE GRAPAS O ESTACAS APROXIMADAMENTE CADA 12" 30 CM) UNA DE LA OTRA EN UNA ZANJA DE 6" (15 CM) DE PROFUNDIDAD POR 6" (15 CM) DE ANCHO. RELLENE Y COMPACTE DESPUES DEL ENGRAPADO.

NOTA:
* EN CONDICIONES DE SUELTO, PUEDE QUE SE NECESITEN GRAPAS O ESTACAS DE MAS DE 6" (15 CM) DE LARGO PARA ASEGURAR LAS MANTAS CORRECTAMENTE.

REV. 01/05

3 EROSION CONTROL MATTING DETAIL

SCALE: N.T.S.

PUBLICSAFETYTOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

TOWER ENGINEERING PROFESSIONALS
4710 E ELWOOD ST, STE 9
PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
F	03-24-23	SSO	ZONING	HMM
G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: C-4.2

REVISION: J

TEP #: 314197.336183

2.2 System Configuration

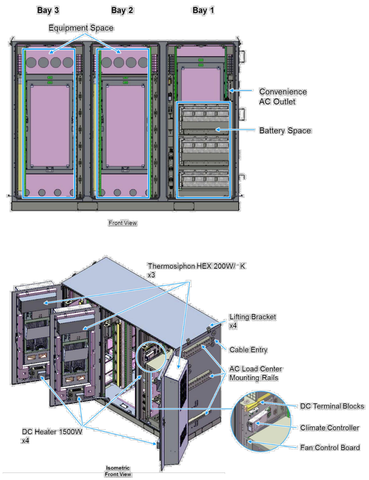


Figure 2-2 Multi-Bay Cabinet (Front View)

2.3 Cabinet Specifications

The cabinet is arranged for installation of a Delta or third-party AC Load Center and front access DC Power System. Table 2-1 below contains the input power specifications.

Table 2-1 Cabinet Specifications

Item	Specification/Function
AC Input Range	
AC Input Voltage	1W+N+FG 100~120V_{AC}
AC Input Current (maximum)	12A (Max.)
AC Input Frequency	50/60Hz
DC Input Range	
DC Input Voltage	40 - 60V_{DC} (54V typical)
DC Input Current Rating	224A (max)
Battery Section	
Battery Trays	(3) Trays arranged for -48V battery strings, designed for: GNB Marathon M12V180FT Enersys SBS190F Enersys SBS170F
Climate Control	
Control & Supervisor Unit	Delta controller
Cooling	(3) 200W/°K Thermosiphon HEX Cooling Capacity 9.1kW Maintains equipment inlet <65°C with exterior ambient <46°C
Heating	(4) 1500W DC Heaters
Environmental	
Operating Temperature	-40°C to +46°C (-40°F to +115°F)
Storage Temperature	-40°C to +75°C (-40°F to +167°F)
Relative Humidity	0~95% Relative Humidity, Non-Condensing
Altitude	-100 feet to +10,000 feet
Acoustic noise	≤ 65dBA @ +40°C equipment inlet
Protection Class	IP55 (EN 60529) NEBS III (GR-487)

2.4 Dimensions and Weight

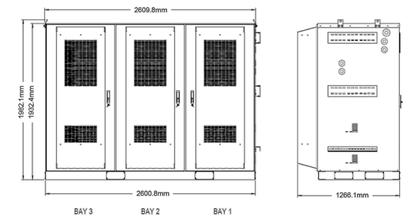


Figure 2-3 Cabinet Dimensions

Item	Specification/Function
Dimensions	2600.8W x 1932.4H x 1266.1D mm (102"W x 72"H x 49.5"D + 4" plinth)
Weight	2270* lbs. (* Batteries, Power System and Load Equipment excluded)

3.6 Cabinet Installation

Use the following steps to install the cabinet.

Step 1 Use the provided Template to mark anchor hole locations.

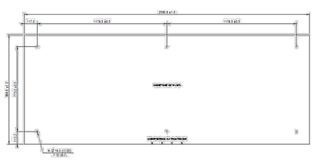


Figure 3-11 Mounting Template

Step 2 Drill anchor holes per specifications from the anchor manufacturer.

Step 3 Install anchors per instructions from the anchor manufacturer.

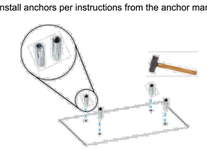


Figure 3-12 Insert anchors

Step 4 Place the pad separator (not provided) on the concrete pad aligned with the mounting holes. (A pad separator provides separation between the concrete pad and the base of the cabinet to prevent corrosion of the cabinet metal.)

Step 5 Mount the cabinet to the concrete pad with anchor bolts, lock washers and flat washers (not provided) per instructions from the anchor manufacturer.

Step 6 Close and secure hinged anchor access covers.

3.8 AC Load Center Installation

The cabinet provides mounting rails for AC Load Center mounting and corresponding cable entry ports for wiring from the AC Load Center into the cabinet. Follow Load Center requirements for installation.

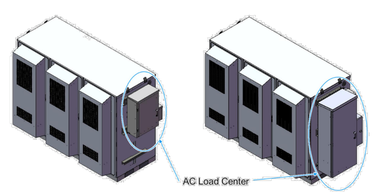


Figure 3-16 Cabinet with AC Load Center

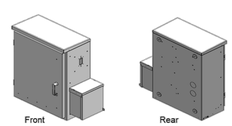


Figure 3-17 AC Load Center - MTS

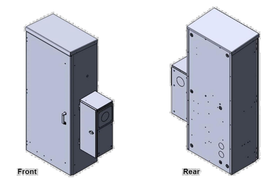


Figure 3-18 AC Load Center - ATS

Note! The cabinet provides mounting rails and AC cable entry ports arranged for mounting of Intersect PTLC-MTS-12200-CL or equivalent AC Load Center. An AC Load Center and related fittings are not provided with the cabinet and must be provided as integration or site materials.

Use the following steps to install the Load Center on the cabinet:

Step 1 Provide suitable sealed fittings from the AC Load Center for entry into the Cabinet. Install on the Load Center before installing the Load Center onto the Cabinet. Delta recommends using Size 2" x 4" long outdoor rated pipe nipples and sealing conduit nuts (not provided)

Step 2 Provide Intersect PTLC-MTS-12200-CL or equivalent AC Load Center. Secure the Load Center to mounting rails per Load Center vendor instructions.

Step 3 Secure and seal fittings from the AC Load Center into entry ports on the cabinet

Step 4 Confirm the Site Utility and Load Center Main AC input breakers are in the 'off' position

Step 5 Connect Site Utility 2W+N+G to the Load Center per Load Center vendor instructions, NEC, and local codes.

Note! Detailed AC Load Center position planning should include future equipment additions and changes

1 **3-BAY WALK-UP-CABINET (WUC) DETAIL**
SCALE: N.T.S.

PUBLICSAFETYTOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

TOWER ENGINEERING PROFESSIONALS
4710 E ELWOOD ST, STE 9
PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01 HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD LAKEPORT, CA 95453 (LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
F	03-24-23	SSO	ZONING	HMM
G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

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

SHEET TITLE:
WALK-UP-CABINET DETAILS

SHEET NUMBER: C-5
REVISION: J

TEP #: 314197.336183

NOTES:

1. DETAILS SHOWN WERE PROVIDED BY OTHERS AND ARE NOT CARRIED UNDER SIGNATURE AND SEAL OF TOWER ENGINEERING PROFESSIONALS ENGINEERING SERVICES AND/OR ITS ENGINEERS
2. REFER TO MANUFACTURER'S INSTALLATION SPECIFICATIONS FOR FURTHER DETAILS ON INSTALLATION OF EXTENSION KIT.
3. INSTALL EXHAUST VENT EXTENSION ASREQUIRED TO PROVIDE 12' CLEARANCE FROM GROUND LEVEL IN ACCORDANCE WITH CALIFORNIA STATE CODE.

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC INDUSTRIAL POWER

Standby Power Rating
30 kW, 38 kVA, 60 Hz

Prime Power Rating*
27 kW, 34 kVA, 60 Hz

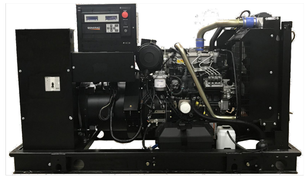


Image used for illustration purposes only

*EPA Certified Prime ratings are not available in the US or its Territories

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

- UL2200, UL6200, UL1236, UL489, UL142
- CSA C22.2, ULC S601
- BS5514 and DIN 6271
- SAE J1349
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41

Powering Ahead

For over 60 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency
GENERAC INDUSTRIAL POWER

STANDARD FEATURES

ENGINE SYSTEM
- Oil Drain Extension
- Air Cleaner
- Level 1 Fan and Belt Guards (Open Set Only)
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer (Enclosed Unit Only)
- Engine Coolant Heater

FUEL SYSTEM
- Fuel Lockoff Solenoid
- Primary Fuel Filter

COOLING SYSTEM
- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze

ELECTRICAL SYSTEM
- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM
- UL2200 GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearing
- Rotor Dynamically Spin Balanced
- Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator
- Protective Thermal Switch

GENERATOR SET
- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Unit Only)

ENCLOSURE (If Selected)
- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)
- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

CONTROL SYSTEM

Digital H Control Panel- Dual 4x20 Display

Program Functions
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display
- Power Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency
GENERAC INDUSTRIAL POWER

CONFIGURABLE OPTIONS

ENGINE SYSTEM
- Oil Heater
- Critical Silencer (Open Set Only)
- Radiator Stone Guard
- Level 1 Fan and Belt Guards (Enclosed Units Only)

FUEL SYSTEM
- NPT Flexible Fuel Line

ELECTRICAL SYSTEM
- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET
- Extended Factory Testing
- 8 Position Load Center
- Pad Vibration Isolation

CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE
- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Open Alarm Switch
- Enclosure Heater
- Damper Alarm Contacts

WARRANTY (Standby Gensets Only)
- 2 Year Extended Limited Warranty
- 3 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM
- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 100 dB Alarm Horn
- Ground Fault Annunciation
- 120V GFCI and 240V Outlets
- Remote Communication - Modem
- 10A Engine Run Relay

FUEL TANKS (Size On Last Page)
- 8 in (203.2 mm) Fill Extension
- 13 in (330.2 mm) Fill Extension
- 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- 5 Gallon Spill Box Return Hose
- 5 Gallon Spill Box
- Tank Risers
- Fuel Level Switch and Alarm
- 12' Vent System
- Fire Rated Stainless Steel Fuel Hose

ENGINEERED OPTIONS

ENGINE SYSTEM
- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM
- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM
- 3rd Breaker System

GENERATOR SET
- Special Testing

FUEL TANKS
- UL2085 Tank
- Stainless Steel Tanks
- Special Fuel Tanks
- Vent Extensions

SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency
GENERAC INDUSTRIAL POWER

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	In-Line
Displacement - in³ (L)	135 (2.22)
Bore - in (mm)	3.3 (84)
Stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged
Cylinder Head	Cast Iron
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - qt (L)	11.2 (10.6)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed - RPM	1,980
Fan Diameter - in (mm)	18 (457)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel #2
Fuel Specifications	ASTM
Fuel Filtering (Microns)	5
Fuel Inject Pump	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line - in (mm)	0.31 (7.9) ID
Fuel Return Line - in (mm)	0.2 (4.8) ID

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0035124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase Only)
Telephone Interference Factor (TIF)	< 50
Standard Excitation	Synchronous Brushless
Bearings	Single Sealed
Coupling	Direct via Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency
GENERAC INDUSTRIAL POWER

OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/240 VAC @1.0pf	30 kW	Amps: 125
Three-Phase 120/208 VAC @0.8pf	30 kW	Amps: 104
Three-Phase 120/240 VAC @0.8pf	30 kW	Amps: 90
Three-Phase 277/480 VAC @0.8pf	30 kW	Amps: 45
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

120/240 VAC 1Ø	30%	277/480 VAC 3Ø	30%	208/240 VAC 3Ø	30%
A0035044N21	20	K0035124Y21	61	K0035124Y21	46
A0040044N21	24	K0040124Y21	76	K0040124Y21	58
A0050044N21	31	K0050124Y21	98	K0050124Y21	75

FUEL CONSUMPTION RATES*

Fuel Pump Lift- ft (m): 3 (1)

Total Fuel Pump Flow (Combustion + Return) - gph (Lph): 16.6 (63)

Diesel - gph (Lph)

Percent Load	Standby
25%	1.0 (3.7)
50%	1.4 (5.2)
75%	2.0 (7.5)
100%	2.8 (10.5)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	14.9 (56.2)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	128,638 (136)
Inlet Air	cfm (m³/hr)	2,800 (4,757)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 0199280SSD
Maximum Additional Radiator Backpressure	In H_2O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power - cfm (m³/min)	88 (2.5)

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1,181 (360)
BMEP	psi (kPa)	159 (1,098)

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m³/min)	296.6 (8.4)
Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)
Exhaust Temperature (Rated Output)	°F (°C)	892 (478)

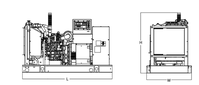
** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.
Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards.
Standby - See Bulletin 0187500SSB
Prime - See Bulletin 0187510SSB

SPEC SHEET

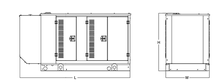
SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency
GENERAC INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



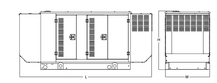
OPEN SET

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,456 - 1,641 (661 - 745)
19	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	1,936 - 2,121 (879 - 963)
47	132 (500)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	2,166 - 2,351 (983 - 1,067)
67	190 (719)	76.0 (1,930) x 37.4 (950) x 79.3 (2,014)	2,380 - 2,565 (1,081 - 1,165)
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,375 - 2,560 (1,078 - 1,162)
107	300 (1,136)	92.9 (2,360) x 37.4 (950) x 85.3 (2,167)	2,438 - 2,623 (1,106 - 1,190)



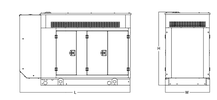
WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	372 (169)	241 (109)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
47	132 (500)	106.0 (2,692) x 38.0 (965) x 84.0 (2,134)		
67	190 (719)	94.8 (2,409) x 38.0 (965) x 84.0 (2,134)		
75	211 (799)	76.0 (1,930) x 38.0 (965) x 86.5 (2,198)		
107	300 (1,136)	92.9 (2,360) x 38.0 (965) x 90.0 (2,287)		



LEVEL 1 SOUND ATTENUATED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)	505 (229)	338 (153)
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,588)		
47	132 (500)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)		
67	190 (719)	112.5 (2,857) x 38.0 (965) x 84.0 (2,134)		
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 90.0 (2,287)		



LEVEL 2 SOUND ATTENUATED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	510 (231)	341 (155)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
47	132 (500)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)		
67	190 (719)	106.0 (2,692) x 38.0 (965) x 84.0 (2,134)		
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)		
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 90.0 (2,287)		

PROPOSED 30 KW GENERATOR WITH 190 GALLON TANK AND LEVEL 2 ACOUSTIC ENCLOSURE

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

Generac Power Systems, Inc. | P.O. Box 8 | Waukesha, WI 53189
P: (262) 544-4811

Part No. 10000024842
Rev. C 10/19/2020

SPEC SHEET

1 **PROPOSED GENERATOR DETAILS**
SCALE: N.T.S.

PUBLICSAFETYTOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

TOWER ENGINEERING PROFESSIONALS
4710 E ELWOOD ST, STE 9
PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
F	03-24-23	SSO	ZONING	HMM
G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

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

SHEET TITLE:
GENERATOR DETAILS

SHEET NUMBER: C-6
REVISION: J

TEP #: 314197.336183

connect@alpinepowersystems.com
877-993-8855

ALPINE POWER SYSTEMS
A Division of TTI, Inc. Est. 1963

Click to view product web page

PowerSafe® SBS Front Terminal

Telecommunications *NEBS™ Certified*

Battery Range Summary

The PowerSafe® SBS® Front Terminal battery further extends the technical leadership of PowerSafe SBS battery product line: not only do PowerSafe SBS Front Terminal monoblocs retain the benefits typically associated with Thin Plate Pure Lead (TPPL) Technology such as long life, high energy density, superior shelf life, etc., they also deliver exceptional cyclic performance in both float and fast charge applications, even in the hottest and harshest operating environments.

Where conventional Valve Regulated Lead Acid (VRLA)/Absorbed Glass Mat (AGM) batteries struggle to cope with harsh conditions and frequent power outages, cutting edge (TPPL) technology makes PowerSafe 12V batteries the perfect solution for the challenging operating conditions of today's telecommunication networks.

PowerSafe SBS batteries are designed to high quality standards and a unique manufacturing methods means superior energy and power, high performance and proven reliability, there is no substitute to PowerSafe SBS Front Terminal batteries.

Features and Benefits

- Capacity range 31-190Ah
- 12V monobloc configurations
- Multiple string configurations available
- Two year shelf life
- SR4228 compliant
- Proven long service life
- High energy density and cycling capability

Construction

- Robust positive plates are designed to prolong service life and enhance corrosion resistance
- Separators are low resistance microporous (AGM). The electrolyte is absorbed within the AGM, preventing acid spills in case of accidental damage
- Container and cover in flame retardant UL94-V0 material, highly resistant to shock and vibration
- Terminals are stainless steel front access with top access copper alloy insert. Top and front access terminations provide maximum conductivity
- Self-regulating one way pressure relief valves prevents ingress of atmospheric oxygen

Installation and Operation

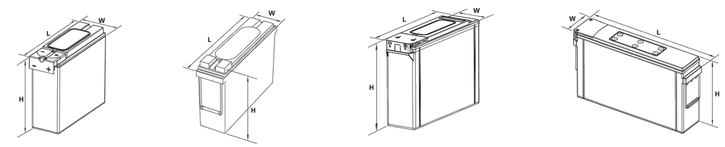
- Space efficient footprint
- VRLA design, reduces maintenance requirements
- Lifting handles for easy handling
- Greater than 10 year life expectancy in float service at 77°F (25°C)
- Increased active material surface area yields great cycling capability
- Operating temperature: -40°F (-40°C) to 122°F (50°C) Recommended temperature: 68°F (20°C) to 86°F (30°C)

Standards

- Meets criteria for "non-spillable" batteries
- Complies with Telcordia® SR-4228, Network Equipment Building System (NEBS™) Criteria Levels
- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

General Specifications

Cell Type	Nominal Capacity (Ah)		Nominal Dimensions						Weight - Volumes	
	10 hr rate to 1.80Vpc @20°C	8 hr rate to 1.75Vpc @77°F	Length		Width		Height		Unpacked	
			in	mm	in	mm	in	mm	lbs	kg
SBS B8F	31	31	11.9	303	3.8	97	6.3	159	22.7	10.3
SBS B10F	38	38	11.9	303	3.8	97	7.2	184	28.2	12.8
SBS B14F	62	62	11.9	303	3.8	97	10.4	264	42.0	19.1
SBS C11F	92	91	16.4	417	4.1	105	10.1	256	61.6	28.0
SBS 100F	100	100	15.6	395	4.3	108	11.3	287	71.9	32.6
SBS 112F	112	112	22.1	561	4.9	125	9.0	228	90.4	41.1
SBS 145F	145	145	17.9	455	6.8	173	9.4	238	105.0	47.7
SBS 165F	165	165	17.9	455	6.8	173	10.8	273	117.4	53.3
SBS 170F	170	170	22.1	561	4.9	125	11.1	283	115.7	52.5
SBS 190F	190	190	22.1	561	4.9	125	12.4	316	132.3	60.0



SBS B8F-B14F SBS C11F SBS 100F-112F SBS 145F - 190F

MANUFACTURER:	ALPINE POWER SYSTEMS
MODEL:	POWERSAFE SBS 190F
BATTERY QTY.:	8 UNITS
TOTAL BATTERY KWH:	18.24
TOTAL BATTERY WEIGHT (KG/LBS):	480 / 1058.4
TOTAL ELECTROLYTE VOLUME (GAL):	18.72
TOTAL ELECTROLYTE WEIGHT (KG/LBS):	129.5 / 285.4

EnerSys® Power/Full Solutions | RESERVE POWER

Publication No: US-SBSF-RS-004 - January 2014

1 **PROPOSED BATTERY DETAILS**
SCALE: N.T.S.

PUBLICSAFETYTOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

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PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

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H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

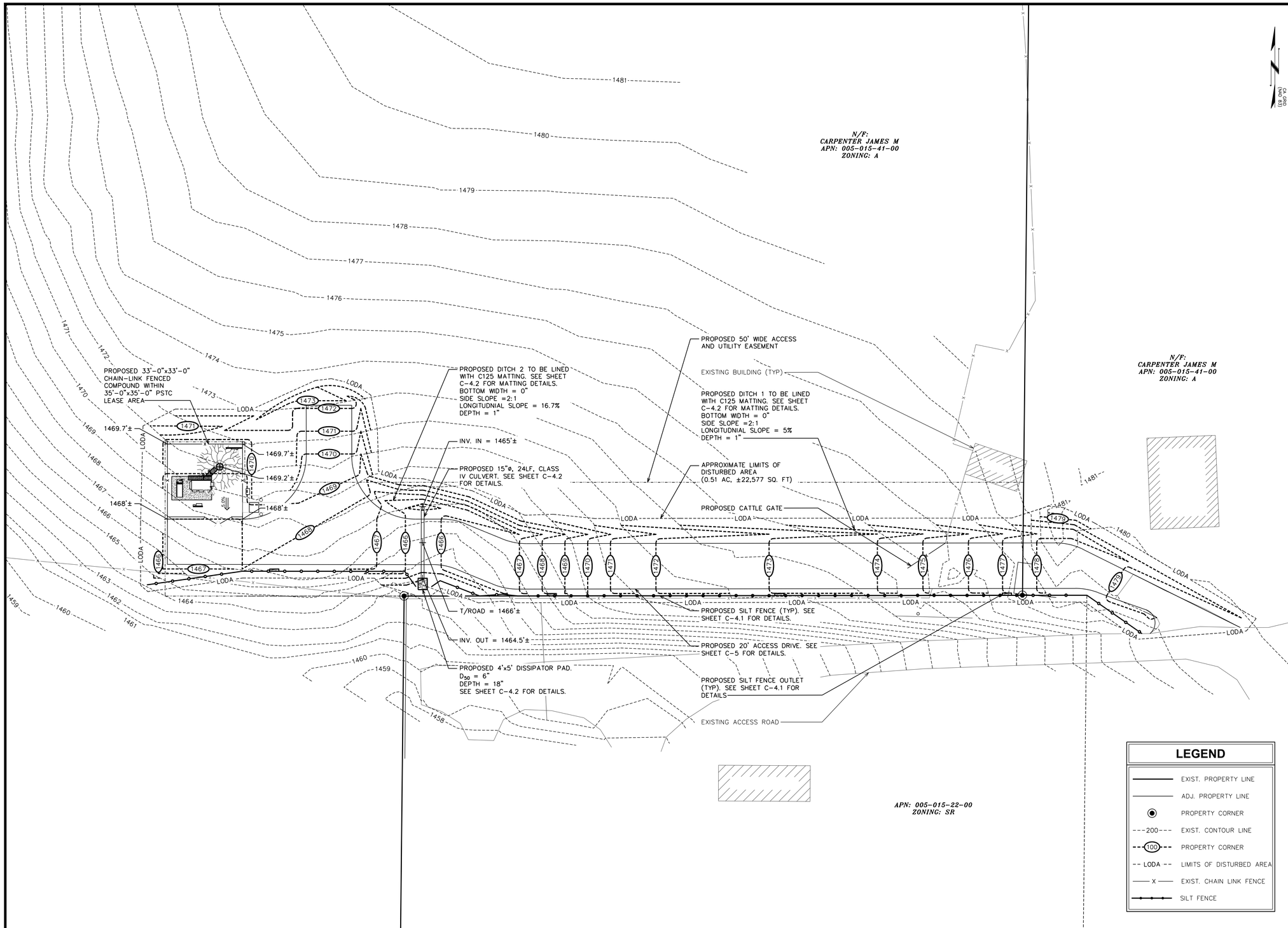
SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:
BATTERY DETAILS

SHEET NUMBER: C-7
REVISION: J

TEP #: 314197.336183



1 **EROSION CONTROL PLAN**

SCALE: 1" = 20' (24x36)
SCALE: 1" = 40' (11x17)

0 20 40
SCALE IN FEET

PUBLICSAFETYTOWERS COMPANY
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CARLSBAD, CA 92008

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SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:
EROSION CONTROL PLAN

SHEET NUMBER: C-8
REVISION: J

TEP #: 314197.336183

AC POWER PANEL A (PROPOSED)

120/240 VOLTS, 1-PHASE, 3-WIRE, 200A

MAIN BREAKER RATING (A) : 200 | SYSTEM VOLTAGE (V) : 240

DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	POSN	BKR	c/nc	VA	DESCRIPTION
RECTIFIERS #1 & 2	1410	c	30/2	1	2820		2	30/2	c	1410	RECTIFIERS #3 & 4
	1410	c		3		2820	4		c	1410	
RECTIFIERS #5 & 6	1410	c	30/2	5	2820		6	30/2	c	1410	RECTIFIERS #7 & 8
	1410	c		7		2820	8		c	1410	
RECTIFIERS #9 & 10	1410	c	30/2	9	2820		10	30/2	c	1410	RECTIFIERS #11 & 12
	1410	c		11		2820	12		c	1410	
SPARE / OFF	0	nc	30/2	13	0		14	30/2	nc	0	SPARE / OFF
	0	nc		15		0	16		nc	0	
SPARE / OFF	0	nc	30/2	17	0		18	30/2	nc	0	SPARE / OFF
	0	nc		19		0	20		nc	0	
SPARE / OFF	0	nc	30/2	21	0		22	30/2	nc	0	SPARE / OFF
	0	nc		23		0	24		nc	0	
BLANK				25	1000		26	20/1	nc	1000	*GEN BLOCK HEATER
BLANK				27		650	28	20/1	nc	650	*GEN BATT CHARGER
PTLC RECEPTACLES	720	nc	20/1	29	900		30	20/1	nc	180	WUC GFCI
PHASE TOTALS (VA):					10360	9110					
PHASE TOTALS (A):					86	76					
CURRENT PER PHASE W/ 125% Continuous Loads(A):					104	94	Amperes/phase cannot exceed main breaker rating				
PANEL TOTAL (VA):					19470		Legend: c = continuous, nc = non-continuous				
PANEL TOTAL W/ 125% Continuous Loads (VA):					23700						
TOTAL LOAD FOR GEN OPERATION:					17820		*Generator loads are not in operation while generator is running				

PROPOSED LOADING = 23.7 KVA

1 **AC PANEL SCHEDULE**
SCALE: N.T.S.

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FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

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H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

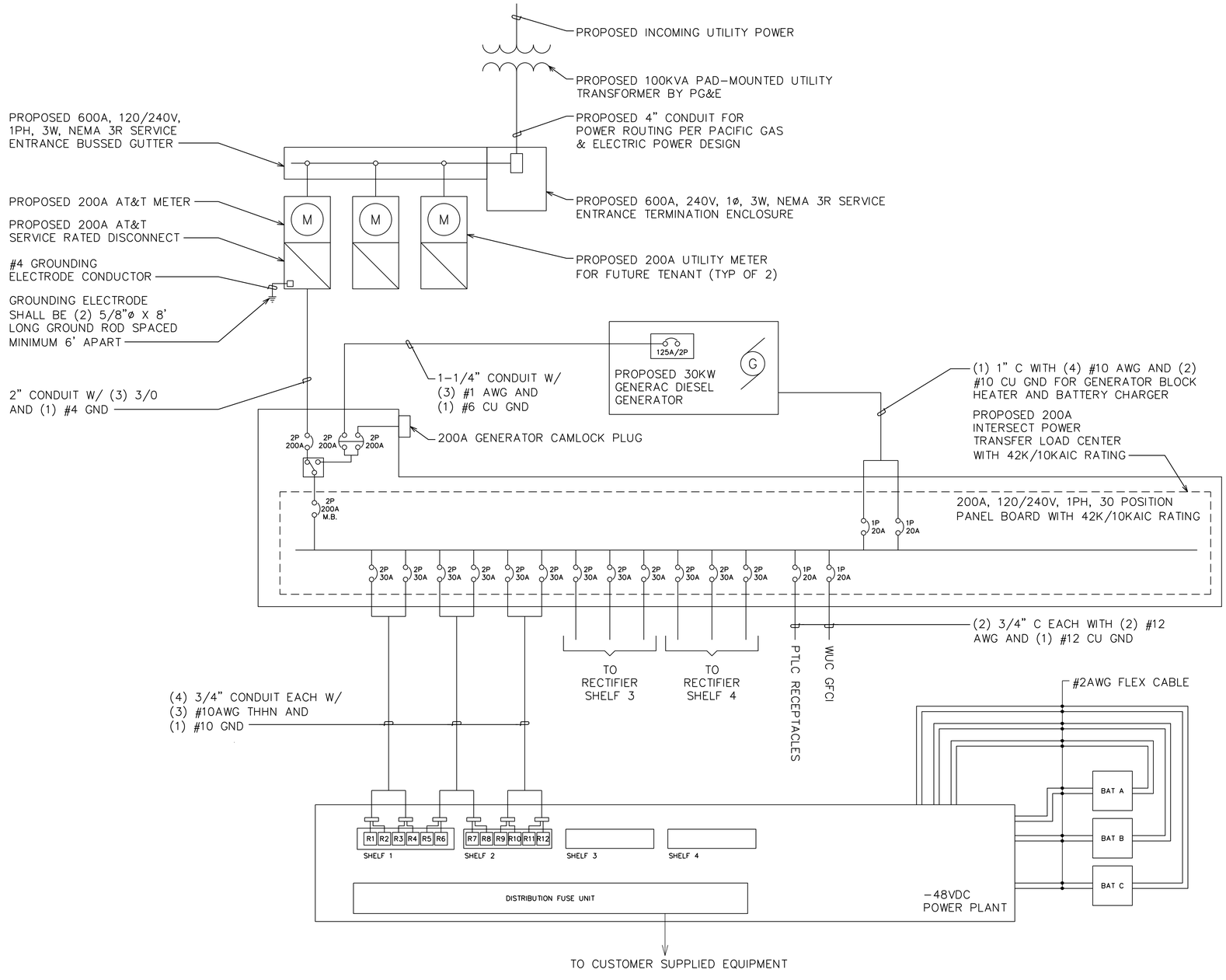
SHEET TITLE:
AC PANEL SCHEDULE

SHEET NUMBER: E-1
REVISION: J

TEP #: 314197.336183

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH POWER COMPANY AND ENSURE ALL ELECTRICAL EQUIPMENT IS SUITABLE FOR AVAILABLE FAULT CURRENT.
2. CONTRACTOR SHALL COORDINATE UTILITY SERVICES WITH LOCAL UTILITY COMPANIES. VERIFY ALL REQUIREMENTS WITH UTILITY COMPANY STANDARDS.
3. ONE-LINE DIAGRAM IS FOR SCHEMATIC PURPOSES ONLY AND IS NOT INDICATIVE OF THE ACTUAL EQUIPMENT LAYOUT.
4. CONTRACTOR SHALL LABEL METER SOCKET WITH SERVICE OWNER NAMEPLATE WITH ½" HEIGHT MINIMUM LETTERS.
5. CONTRACTOR TO DETERMINE AVAILABLE FAULT CURRENT BEFORE ENERGIZING EQUIPMENT. THE AMOUNT OF AVAILABLE FAULT CURRENT SHALL BE MARKED ON THE SERVICE EQUIPMENT PER NEC 110.24.
6. CONTRACTOR WILL NOTIFY UTILITY COMPANY OF CHANGES IN ELECTRICAL LOAD.



1 **ONE-LINE DIAGRAM**
SCALE: N.T.S.

PUBLICSAFETYTOWERS COMPANY
1903 WRIGHT PLACE, SUITE 140
CARLSBAD, CA 92008

AT&T
5005 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

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4710 E ELWOOD ST, STE 9
PHOENIX, AZ 85040
OFFICE: (480) 285-0036
www.tepgroup.net

FIRSTNET/AT&T SITE ID: CCL06249

PSTC #: CANC-NLAKE01
HILL ROAD AND PARKWAY INTERSECTION

3275 HILL RD
LAKEPORT, CA 95453
(LAKE COUNTY)

PROPOSED 80'-0" MONOPINE TOWER

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QA
F	03-24-23	SSO	ZONING	HMM
G	11-16-23	SSO	ZONING	HMM
H	11-21-23	CAM	ZONING	HMM
I	01-11-24	CAM	ZONING	HMM
J	02-19-24	SJA	ZONING	HMM

SEAL:

ZONING
DO NOT USE FOR CONSTRUCTION

SHEET TITLE:
ONE-LINE DIAGRAM

SHEET NUMBER: E-2
REVISION: J

TEP #: 314197.336183

Appendix E

Biologist Profile

Cord E. Hute, Principal, Project Manager, Senior Project Biologist / Senior Environmental Planner

Mr. Hute has 29 years of experience in environmental permitting, planning, biological surveys, biological monitoring, and project management. His expertise includes environmental planning and project permitting; aquatic and terrestrial ecological surveys; endangered species surveys; Environmental Impact Reports (EIRs) and Environmental Impact Statements (EISs) under CEQA and NEPA; Biological Assessments and Environmental Assessments (EAs); environmental oversight/monitoring of construction projects; state and federal Endangered Species Act (ESA) consultations; wetland delineation and permitting; and wetland mitigation. He has provided services to both the private and public sectors— including telecommunications, utilities, oil and gas, public transportation projects, and residential and commercial development.

Cord has adeptly handled planning, permitting, and construction-monitoring projects throughout California, Nevada, Utah, Arizona, and New Mexico. He has managed and prepared innumerable environmental documents required to satisfy local, state, and federal agencies. And he has consulted and successfully negotiated with a variety of agencies, including the U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), NOAA Fisheries, California Department of Fish and Game (CDFG), California Regional Water Quality Control Boards (RWQCB), California State Lands Commission (CSLC), California Public Utilities Commission (CPUC), and the San Francisco Bay Conservation and Development Commission (BCDC).

Fields of Competence

- Regulatory permitting
- NEPA and CEQA compliance
- Wetland and water course delineation
- Threatened and Endangered species consultations
- Botanical and wildlife field surveys
- Biological, habitat, and environmental assessments
- Regulatory and resource agency consultations and negotiations
- Environmental oversight and monitoring of construction projects
- Clean Water Act Section 401 and 404 compliance
- Mitigation and monitoring plans
- Horizontal directional drilling impacts and mitigation
- Project management

Education

- B.S., Environmental Science and Biology, University of Dubuque, 1995

Professional Affiliations

- Society of Wetland Scientists
- Society for Ecological Restoration
- The Wildlife Society

Key Projects

Pacific Gas and Electric (PG&E) Intergrated Vegetation Management Program Project (2016 - Present), Butte, Plumas, and Yuba Counties, California. As a consultant to North State Forestry, conducted special-status nesting avian, plant, frog surveys, and water quality sampling for the PG&E Integrated Vegetation Management Program within the Plumas National Forest. Monitored vegetation clearing and herbicide application activities after completion of biological surveys. Managed a crew of 6 biologists to complete the project tasks.

Pacific Gas and Electric (PG&E) Intergrated Vegetation Management Program Project (2013 - Present), Nevada, Sonoma, Glenn, Alameda, Contra Costa, Butte, Plumas, and Yuba Counties, California. As a consultant to High Country Forestry, conducted special-status plant, frog, and nesting avian surveys for the PG&E Routine and Integrated Vegetation Management Program within multiple Counties within California. Monitored vegetation clearing and herbicide application activities after completion of biological surveys. Managed a crew of biologists to complete the project tasks.

Pacific Gas and Electric Company Nesting Avian Species Surveys and Wetland Streamcourse Delineations (2014-2015), The Geysers, Sonoma and Lake County, California. Under contract to High Country Forestry, provided nesting avian species surveys and stream course/wetland delineation of vegetation planned for removal under power lines. In support of the project, prepared daily survey reports for submittal to High Country Forestry and Pacific Gas and Electric.

Bottlerock Energy Nesting Avian Species Surveys (2010-present), The Geysers, Lake County, California. In support of Bottlerock Energy's compliance with California Energy Commission's permit to operate their geothermal power plant in the Geyser's, Lake County, California, provided yearly nesting avian species surveys for 104 constructed wooden nesting boxes and surrounding forest habitat. Surveys have included three (3) rounds of surveys per year between April and May of the year. Nesting avian species identified during the efforts included ash-throated flycatcher, chestnut-backed chickadee, tree swallows, violet green swallow, western bluebird, and red-tailed hawk. As part of the survey effort, prepared an annual survey report for submission to the California Energy Commission.

BLM, Bakersfield Field Office Cuyama River Dumps Cleanup Project (2017), Cuyama Valley, Santa Barbara County, California. Conducted biological surveys of proposed project site. Conducted protocol-level surveys for sensitive botanical species, nesting avian species, blunt-nosed leopard lizard, coast horned lizard, San Joaquin antelope squirrel, giant kangaroo rat, San Joaquin kit fox, and Kern spinx moth. Prepared biological resources assessment report for proposed project.

Crown Castle California State-Wide Fiber-Fed Distributed Antenna Communications System Projects (2016 - Present), Los Angeles, Orange, Riverside, San Diego,

San Mateo, San Luis Obispo, Monterey, Santa Barbara, Ventura, San Francisco, Alameda, Contra Costa, and San Joaquin Counties, California. Conducted biological and archaeological studies and surveys for over 6,000 individual fiber trenching, boring, pole placement, and node locations. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Prepared and submitted NEPA EA reports, NEPA checklists, and Section 106 SHPO packages for numerous locations. Consulted with local, state, and federal resource agencies. Participated in the CEQA and NEPA environmental review process for the projects.

Geist Engineering and Environmental Group Cell Tower Installation Projects (2015 to Present), Mendocino, Sonoma, Napa, Lake, San Francisco, Alameda, Marin, Santa Clara, Tehama, Shasta, and Contra Costa County, California. As a consultant to Geist Engineering and Environmental Group, conducted biological surveys of 45 proposed cellular tower sites for clients such as AT&T, Verizon, and Incline Partners. Surveys included nesting birds and special-status mammal, amphibian, reptile, insect, fish, and plant species. Prepared biological resources survey reports for proposed projects. Prepared and submitted NEPA EA reports, NEPA checklists, and Section 106 SHPO packages for numerous locations. Consulted with local, state, and federal resource agencies. Participated in the CEQA and NEPA environmental review process for the projects. Secured necessary permits to build and operate projects.

Crown Castle San Diego County (Lake Murray, Caso Serra, and Blue Cypress Projects) Fiber-Fed Distributed Antenna Communications System Project (2016), San Diego County, California. Conducted biological and archaeological studies and surveys for 40 individual fiber trenching locations within the City of San Diego, California. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

Crown Castle Palo Alto Fiber-Fed Distributed Antenna Communications System Project (2016), Palo Alto, Santa Clara County, California. Conducted biological and archaeological studies and surveys for 20 individual fiber trenching locations. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

Crown Castle Pacific Grove Fiber-Fed Distributed Antenna Communications System Project (2016), Pacific Grove, Monterey County, California. Conducted biological and archaeological studies and surveys for 12 individual fiber trenching locations within the City of Pacific Grove, California. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

Horizon Tower, LLC. Napa Valley expo Communications Tower Installation Project, City of Napa, Napa County, California. In support of project, conducted biological surveys of the project area and prepared a biological assessment report. Prepared a draft Initial Study/Negative Declaration for submittal to the 25th District Agricultural Association. Consulted with local, state, and federal agencies regarding the proposed project.

Crown Castle San Diego County Fiber-Fed Distributed Antenna Communications System Project (2014-2015), San Diego County, California. Conducted biological and archaeological studies and surveys for 141 individual fiber trenching locations throughout San Diego County. Prepared biological and archeological technical reports for the studied locations for submission to the CPUC. Prepared CEQA analysis for project that complied with CPUC requirements and guidelines. Consulted with local, state, and federal resource agencies. Participated in the CPUC CEQA environmental review process for the project.

New Path Networks City of Temecula/Murrieta Fiber-Fed Distributed Antenna Communications System Project: Cities of Temecula/Murrieta, Western Riverside County, California. Prepared a Proponent's Environmental Assessment for the installation of fiber-fed distributed antenna communications systems within the Cities of Temecula and Murrieta in western Riverside County, California. Managed the environmental planning of the proposed project. Consulted with local, state, and federal resource agencies. Conducted biological surveys of the proposed project areas. Participated in the CPUC CEQA environmental review process for the project.

Bradford Island Levee Raising and Widening Project, Contra Costa County, California, Nesting Avian Species Surveys (2013-Present), Contra Costa County, California. In support of Reclamation District # 2059's levee improvement project, provided yearly and pre-construction nesting avian species surveys for proposed work areas on Bradford Island in Contra Costa County, California. Recently finished pre-construction avian nesting surveys on April 17, 2014. Nesting avian species identified during the efforts included Swainson's hawk, red-tailed hawk, great horned owl, Barn swallow, common sparrow, red-winged blackbird, mourning dove, common grebe, American crow, cliff swallow, and western meadowlark. Provided avian nest monitoring during construction activities for the above species to ensure that no impacts occurred to actively nesting avian species.

Terminous Tract Levee Raising and Widening Project, San Joaquin County, California, Nesting Avian Species Surveys (2012-Present), San Joaquin County, California. In support of Reclamation District # 548's project, provided yearly and pre-construction nesting avian species surveys for proposed work areas on Terminous Tract in San Joaquin County, California. Nesting avian species identified during the efforts included Swainson's hawk, red-tailed hawk, Barn swallow, red-winged blackbird, mourning dove, American crow, and cliff swallow. Provided avian nest monitoring during construction activities for the above species to ensure that no impacts occurred to actively nesting avian species.

Union Island Levee Raising and Widening Project, Nesting Avian Species Surveys (2020), San Joaquin County, California. In support of Reclamation District # 1007's project, provided pre-construction nesting avian species surveys for proposed work areas. Nesting avian species identified during the efforts included Swainson's

hawk, red-tailed hawk, Barn swallow, red-winged blackbird, mourning dove, American crow, and cliff swallow. Provided avian nest monitoring during construction activities for the above species to ensure that no impacts occurred to actively nesting avian species.

Sensitive Species Surveys, Biological Assessments, Wetland and Water Course Delineations, Environmental Permitting, CEQA/NEPA Analysis, and Environmental Monitoring for Various Exploratory Natural Gas Wells, Seismic Surveys, Natural Gas Pipelines, and Development of Natural Gas and Oil Fields: State of California. As a consultant to Robert A. Booher Consulting, (between 2004 and Present worked on 500 individual projects), conducted sensitive species protocol-level biological surveys for a number of threatened and endangered species, including blunt-nosed leopard lizard, giant kangaroo rat, San Joaquin antelope squirrel, San Joaquin kit fox, Southwestern willow flycatcher, California condor, and numerous plant species. Conducted nesting avian species surveys. Prepared and conducted biological assessments. Prepared numerous environmental permitting packages for submission to BLM, USACE, RWQCB, USFWS, CDFG, CPUC, CSLC, planning departments of Contra Costa, Solano, Glenn, San Joaquin, Colusa, Sutter, Sacramento, Kern, Kings, Monterey, San Luis Obispo, Santa Barbara, and Ventura Counties, and numerous cities within these counties. Secured permits and approvals from these permitting agencies. Consulted with local, state, and federal agencies regarding the proposed projects. Managed the preparation of, conducted CEQA/NEPA analysis for, and prepared sections for inclusion in environmental assessments, initial studies, mitigated negative declarations, environmental assessments, and environmental impact reports and studies. Conducted environmental training and compliance monitoring of projects.

Foothills Resources, Inc. Grizzly Bluff Natural Gas Field Development Project Environmental Impact Report: Humboldt County, California. Completed sensitive species biological surveys, prepared biological assessment, conducted visual simulations, conducted air quality analysis, and prepared a programmatic and final environmental impact reports (EIR) for the project. Conducted public meetings required under CEQA. Consulted with regulatory agencies (including USACE, RWQCB, USFWS, CDFG, CPUC, CSLC, as well as others) during the preparation of the EIR and the public review process.

Naftex, Inc. Oil and Natural Gas Exploration Project, Kern County, California. In support of oil and natural gas exploration activities within the Edison Area east of Bakersfield within BLM lands, conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, San Joaquin antelope squirrel, burrowing owls, giant, short-nosed, and Tipton, and Hermann's kangaroo rats, kern mallow, San Joaquin woolly-threads, California jewelflower, Hoover's woolly-star, Bakersfield cactus, and oil netstraw, as well as other species). Prepared biological assessment reports and BLM Sensitive Species Review Form in support of biological surveys conducted. Conducted pre-construction biological surveys for special-status species prior to implementation of project activities, and prepared reports documenting findings of surveys.

Daybreak Oil and Gas, Inc. Poso Creek New Bear and Sunday Oil and Natural Gas Exploration Project, Kern County, California. In support of oil and natural gas exploration activities within the Poso Creek Area northeast of Bakersfield, conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, San Joaquin antelope squirrel, burrowing owls, giant, short-nosed, and Tipton, and Hermann's kangaroo rats, kern mallow, San Joaquin woolly-threads, California jewelflower, Hoover's woolly-star, Bakersfield cactus, and oil netstraw, as well as other species). Prepared biological assessment report in support of biological surveys conducted. Conducted pre-construction biological surveys for special-status species prior to implementation of project activities, and prepared reports documenting findings of surveys.

E & B Natural Resources Management Company Wheeler Ridge Oil and Natural Gas Exploration Project, Kern County, California. Conducted protocol-level biological surveys for blunt-nosed leopard lizards, San Joaquin antelope squirrels, San Joaquin kit foxes, and western burrowing owls within the proposed well pad, buffer areas, and access roadways.

Gasco Cymric and Willow Oil and Natural Gas Exploration Project, Kern County, California. Conducted protocol-level biological surveys for blunt-nosed leopard lizards, San Joaquin antelope squirrels, San Joaquin kit foxes, and western burrowing owls within the proposed well pad, buffer areas, and access roadways.

Legacy Energy Oil and Natural Gas Exploration Project, Kern County, California. Conducted protocol-level biological surveys for blunt-nosed leopard lizards, San Joaquin antelope squirrels, San Joaquin kit foxes, and western burrowing owls within the proposed well pad, buffer areas, and access roadways.

Venoco, Inc. Sevier # 1-29 Oil and Natural Gas Exploration Project, Kern County, California. Conducted pre-construction biological surveys for special-status wildlife species, including San Joaquin kit foxes. Prepared pre-construction survey reports detailing the findings of the survey effort. Conducted environmental training of construction and drilling personnel.

Venoco, Inc. Monterey County Oil and Natural Gas Exploration Program, Monterey County, California. Conducted biological surveys for special-status plant and animal species for eight (8) individual well sites south of the Salinas Valley and the San Ardo Oil Filed in southern Monterey County. Prepared biological assessment reports for each well site in support of biological surveys conducted. Prepared Conditional Use Permit applications for each well. Participated in the CEQA environmental review process for each of the projects. Conducted environmental awareness training of construction and drilling personnel.

Salinas Energy Corporation Paris Valley Oil and Natural Gas Exploration Program, Monterey County, California. Conducted biological surveys for special-status plant and animal species for four (4) individual well sites within Paris Valley Area in south central Monterey County. Prepared biological assessment reports for each well site in support of biological surveys conducted. Prepared Conditional Use Permit applications for each well. Participated in the CEQA environmental review process for each of the projects. Conducted environmental awareness training of construction and drilling personnel.

Cirque Resources LP Kern Water Bank Oil and Natural Gas Exploration Project, Kern County, California. Conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, San Joaquin antelope squirrel, burrowing owls, giant kangaroo rats, kern mallow, San Joaquin woolly-threads, California jewelflower, Hoover's woolly-star, Bakersfield cactus, and oil netstraw, as well as other species). Prepared biological assessment report in support of biological surveys conducted. Prepared greenhouse gases analysis of proposed project activities.

E and B Natural Resources Management Company South Cuyama Oil and Natural Gas Exploration Project, Santa Barbara County, California. Conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, burrowing owls, Kern sphinx moth, etc.). Prepared biological assessment reports for submittal to BLM and Santa Barbara County in support of biological surveys conducted. Prepared Santa Barbara County Air Pollution Control District Authority to Construct/Permit to Operate permit application for the proposed project.

E and B Natural Resources Management Company Titan/Apollo Oil and Natural Gas Exploration Project, Santa Barbara County, California. Conducted biological surveys for special-status plant and animal species (including San Joaquin kit fox, blunt-nosed leopard lizards, burrowing owls, Kern sphinx moth, etc.). Prepared biological assessment report in support of biological surveys conducted. Prepared Santa Barbara County Air Pollution Control District Authority to Construct/Permit to Operate permit application for the proposed project.

E and B Natural Resources Management Company Belgian Anticline 3D Seismic Survey Project, Kern County, California. Conducted biological surveys for special-status plant and animal species. Prepared biological assessment report in support of biological surveys conducted. Comanaging environmental monitoring effort for field implementation of the project. As part of field implementation of project, conducting environmental awareness training of project personnel, biological surveys and mapping of sensitive habitats and species, environmental monitoring of seismic survey activities, documentation of species and habitat impacts, and preparing final reports for submission to the Bureau of Land Management, California Department of Fish and Game, U.S. Fish and Wildlife Service, BLM, as well as other regulatory agencies with jurisdiction over project.

Venoco, Inc. West Montalvo 3-D Seismic Survey Project, Cities of Oxnard and Ventura, and Ventura County, California. In support of Venoco, Inc.'s proposed 3-D seismic survey, conducted biological surveys of the seismic study area and prepared a biological assessment report. Prepared a draft Initial Study/Mitigated Negative Declaration for submittal to Ventura County incorporating information from the Ventura County General Plan, zoning ordinances, and utilizing the requirements of the Ventura County Initial Study Assessment Requirements. Prepared regulatory permitting packages for submission to Ventura County, City of Oxnard, City of Ventura, California State Parks, and other regulatory agencies. Consulted with local, state, and federal agencies regarding the proposed project.

United States National Park Service Fort Baker Saterlee Road Improvement Project (2015), Marin County, California. Conducted pre-construction biological surveys for *Lupinus albifrons*, the host plant for Mission Blue butterfly, a federally endangered species. In areas where this host plant species is identified, identified exclusion buffer zones and installed construction exclusion fencing at a minimum of 50 feet from identified lupine plants. Placed signs on the fencing identifying the areas as "Environmentally Sensitive Areas (ESA)". Conducted pre-construction nesting avian surveys of the project site and buffer area. Installed exclusionary buffer fencing that complied with the requirements of the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Prepared a pre-construction biological survey report detailing the findings of the biological surveys and mitigation measures implemented to protect these sensitive species. Participated in onsite meetings with the National Park Service and construction contractor to discuss project construction and the implementation of best management practices and mitigation measures to protect sensitive environmental resources. Prepared an environmental awareness training program binder for use during the project. The training program binder contained information on the regulatory requirements the project must comply with, the sensitive wildlife species (including mission blue butterfly and nesting migratory avian species) and habitats that may be present within the project site and buffer areas, photographs of sensitive wildlife species that may be encountered within the project site and buffer, mitigation and best management measures that shall be implemented during project implementation to protect sensitive biological resources, and a section on archeological and cultural resources that describes these resources and measures to protect them. Conducted environmental awareness training sessions with project team. Provided full time environmental monitoring during project implementation.

Extenet Systems Highway 35 Distributed Antenna System Project, San Mateo County, California, Pre-Construction Nesting Avian Species Surveys (March 2011 through August 2013), San Mateo County, California. Prior to project implementation, prepared a Proponent's Environmental Assessment (CPUC-specific Initial Study and Mitigated Negative Declaration document) for the installation of fiber-fed distributed antenna communications systems within the Cities of Temecula and Murrieta in western Riverside County, California. Managed the environmental planning of the proposed project. Consulted with local, state, and federal resource agencies. Conducted biological surveys of the proposed project areas. Participated in the CPUC CEQA environmental review process for the project. Provided pre-construction nesting avian species surveys and active nest site monitoring for a 15-mile telecommunication project located in San Mateo County, California south of San Francisco. Nesting avian species identified during the efforts included long-eared owl, marbled murrelet, red-tailed hawk, western scrub jay, California quail, and acorn woodpecker. Managed the CPUC regulatory compliance program for the proposed project.