Staff Report to the Zoning Administrator

Application Number: 201373

Applicant: Melissa Gonzalez for J5 on behalf of AT&T Mobility
Owner: Pastor Dale Solom-Brotheron for Christ Lutheran Church of Aptos
APN: 041-661-05
Site Address: 10707 Soquel Drive, Aptos

Agenda Date: April 1, 2022

Agenda Item #: 1

Time: After 9:00 a.m.

Project Description: Proposal to construct a 75-foot tall (80 feet to top of highest branches) mono-broadleaf Wireless Communication Facility with related ground equipment on an existing developed parcel (Christ Lutheran Church of Aptos) zoned PF (Public Facilities). Requires approval of a Commercial Development Permit and a Master Site Plan.

Associated report reviews include Biological Report Review (REV211338) and Arborist Report Review (REV211339).

Location: The property is located on the northeast side of Soquel Drive approximately 1,000 feet south of its intersection with Freedom Blvd at 10707 Soquel Drive in Aptos.

Permits Required: Commercial Development Permit, Master Site Plan

Supervisorial District: Second District (District Supervisor: Zach Friend)

Staff Recommendation:

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 201373, based on the attached findings and conditions.

Project Description & Setting

The subject parcel is located in Aptos on the northeast side of Soquel Drive, an east-west arterial roadway connecting downtown Santa Cruz with Aptos and mid-County communities, approximately 1,000 feet south of its intersection with Freedom Blvd at 10707 Soquel Drive. The property is owned by Christ Lutheran Church of Aptos containing a church building with an associated parking lot and the Aptos Community Garden, a community garden provided by the church.

The subject parcel slopes up from Soquel Drive. The elevation along Soquel Drive varies but is approximately 194 feet above sea level at the driveway entrance to the parcel. The project site would be located approximately 160 feet east of the front property line at the southeast corner of the property. The ground elevation at the project site is approximately 226 feet above sea level. The proposed facility would be sited within a lease area measuring 15 feet by 20 feet in an undeveloped portion of the lot on a flat grassy area surrounded by trees. Wood fencing measuring six feet in height would be constructed around the perimeter of the lease area.

The facility would be accessed via the existing driveway to the property from Soquel Drive. A new 12-foot-wide asphalt accessway would be constructed from the back of the existing site driveway, for a total length of about 75 feet, terminating at the proposed lease area. A gate would be constructed at the entry to the new accessway to control vehicular access to the facility. The proposed accessway has been reviewed by the Central Fire Protection District and the Department of Public Works and would meet applicable requirements as conditioned.

Highlighted features of the proposed wireless communication facility include the following:

- 15' by 20' lease area secured by a 6' wood fence and gate
  - 8' by 8' walk-in equipment cabinet on a concrete slab
  - Emergency backup diesel generator installed on a concrete slab
  - Ice bridge for tower access
- 75-foot-tall mono-broadleaf wireless communication facility to top of monopole – located within lease area enclosure
  - 12 panel antennas to 73'4" height and faux tree foliage to 80' height
  - 24 remote radio head units (RRHs) and 4 surge suppressors
- About 165-feet of utility trenching for underground power line and associated ground vaults connecting to an existing power pole located on-site

As indicated above, the proposed facility would measure 80 feet in height and is designed to resemble a broadleaf tree. The top of the antennas would be located at 73 feet 4 inches in height. Twelve total antennas are proposed, each measuring about six feet in length by 1.5 feet in width. Faux branching and tree foliage would extend to 80 feet in height in order to achieve the natural appearance of a tree and allow space for the top crown of the tree.

The project site is located within a mapped Sensitive Habitat area. A biotic report and arborist report were submitted and accepted by Environmental Planning staff per Biological Report Review (REV211338) and Arborist Report Review (REV211339). No trees would be removed as part of this proposal.

Approval of a Master Site Plan by the Zoning Administrator accompanied by a finding of General Plan consistency pursuant to Section 65402 of the California Government Code is required for a new conditionally permitted use in the PF (Public Facilities) zone district.

Pursuant to Santa Cruz County Code (SCCC) Section 13.10.661(A) (Wireless Communications Ordinance), all new wireless communication facilities are required to obtain a Commercial Development Permit with approval by the Zoning Administrator.

Zoning & General Plan Consistency

The subject property measures approximately 2.92 acres in size, located in the PF (Public Facilities) zone district, a designation which allows wireless communication facility uses. The proposed mono-broadleaf wireless communication facility is a conditionally permitted use within the zone district and the zoning is consistent with the site's P (Public Facilities) General Plan designation.

Setbacks

County Code Section 13.10.663(A)(9) requires new freestanding wireless communication towers be located a minimum of five times the tower height or 300 feet, whichever is greater, to the nearest residentially zoned parcel, unless waived by the decision maker. The intent of this setback requirement is to minimize visual impacts to residentially zoned properties.

Based on the proposed height of 75 feet, the facility would need to provide a 375-foot setback to the nearest residentially zoned property. The proposed tower would be located approximately 31.5 feet from a residentially-zoned parcel boundary, thus the applicant must prove that the wireless communication facility will be camouflaged or otherwise made inconspicuous such that visual impacts are not created, or the applicant can prove that a significant area proposed to be served would otherwise not be provided wireless services by the subject carrier, including proving that there are no viable, technically feasible, environmentally equivalent or superior alternative sites outside the prohibited and restricted areas designated in SCCC 13.10.661(B) and (C).

The closest residence is located on the neighboring parcel (APN 041-741-03) approximately 112 feet southeast from the location of the proposed facility.

Alternative Sites Analysis

The alternative sites analysis (Exhibit I) evaluated sites within the search ring available to meet the coverage objective to establish the most suitable site that meets both cellular service objectives and minimizes visual and environmental impacts. As enumerated in the analysis, the study substantiates that there are no sites available outside the prohibited and restricted areas designated in SCCC 13.10.661(B) and (C) that would serve to eliminate or substantially reduce the gap in the carrier's network, while also being viable, technically feasible, and environmentally equivalent or superior.

The sites located within a zone district that allow wireless facilities either do not meet the carrier's service objectives or are not viable or technically feasible due to a variety of factors. These factors include landlord disinterest, topography, and locational prohibitions such as school sites and restricted or prohibited zone districts per the County Wireless Communications Ordinance, and more. Please see the attached analysis for a full evaluation of all sites in the search ring.

Site Standards

Height

Per County Code Section 13.10.510(D)(2), the height of utility and commercial poles may not be subject to height limits prescribed in the zone district regulations. Though the County Code does not set a height limit, Administrative Guideline WCF-01-Rev establishes parameters for the maximum allowable height of freestanding wireless communication facilities. Per Administrative Guideline WCF-01-Rev, the permitted maximum height for a freestanding wireless communication facility in the PF zone district is 85 feet. The proposed facility measures 75 feet to the top of the main monopole structure, and 80 feet to the top of the faux broadleaf tree concealment branches; therefore, the proposed facility would be located 10 feet below the maximum height limit for the PF zone district as interpreted by Administrative Guideline WCF-01-Rev applied to freestanding wireless communication facilities.

Visual Analysis

SCCC Section 13.10.611(F) requires that wireless facilities be located in the least visually obtrusive location that is technically feasible. This is achieved by completion of an alternative analysis.

An alternatives analysis evaluates potential sites meeting wireless service objectives, zoning restrictions, access requirements, leasing requirements, topography, visual impacts, ect., and includes evaluation of potential collocation opportunities. It is a tool for establishing the most viable site for wireless facilities that meets all the requirements of the Wireless Ordinance, including the least visually obtrusive location.

The alternative site analysis (Exhibit I) provided by the applicant shows that there are no viable alternative sites that would result in a lesser visual impact. The proposed faux broadleaf foliage tree design will blend in well with the existing forested context in the greater area, and thus the project will not significantly impact views.

Visual simulations (Exhibit J) are provided of the proposed facility. As proposed, the wireless facility complies with the requirement to minimize visual impacts enumerated in the visual protection ordinance of the Wireless Ordinance and County Design Review Ordinance.

Wireless communication facilities, because they are characteristically sizable structures, they typically cannot feasibly be sited and designed to be invisible from public vantage points. The site is not located on a ridge, where visual impacts would be more prominent; however, at a height of 80 feet to top of faux foliage, the facility will be taller than adjacent trees and would be visible from neighboring properties as well as Highway 1. To address visual impacts as much as technically feasible, the wireless facility is proposed to be camouflaged as a faux broadleaf tree.

The project site is located within a mapped scenic area as designated in Section 5.10 of the County General Plan/LCP. The closest scenic road (Highway 1), as designated by General Plan Section 5.10.10, is located approximately 300 feet west from the project site. The proposed wireless communication facility, however, would be minimally visible from this stretch of Highway 1 due to the presence of a steep forested hillside sloping up from the northeastern

frontage of the highway. Given the natural topography and tree cover between Highway 1 and the project site, and use of camouflaging and stealth techniques, the design of the proposed facility would mitigate any significant visual impacts, consistent with the technological requirements of the proposed cellular service.

The proposed wireless communication facility complies with the requirements of the County Design Review Ordinance, in that the proposed project, as conditioned, will incorporate site and architectural design features such as such as faux broadleaf branches with foliage, faux bark, and color camouflaging to reduce the visual impact of the proposed development on surrounding land uses and the natural landscape.

Master Site Plan

Pursuant to SCCC 13.10.365, prior to, or concurrently with, the approval of any new use for which a Level V (or higher) approval is required in the PF zone district, a development permit for a Master Site Plan shall be approved by the Zoning Administrator and such approval shall be accompanied by a finding of General Plan consistency pursuant to Section 65402 of the California Government Code.

Wireless communication facilities are conditionally permitted uses within the PF zone district. No other uses are proposed in conjunction with the wireless communication facility use at this time. Any new uses proposed in the future would need to comply with the requirements of the applicable zone district and General Plan designation. Phased construction is not proposed. Construction would be permitted to commence upon issuance of the building permit and any other required construction-related permits. A General Plan consistency finding pursuant to California Government Code Section 65402, which outlines the due process of review for real property acquisitions and dedications, is not applicable to the proposed project.

In accordance with SCCC Section 13.10.365(A)(4), future site and facility development permits, when applied for pursuant to an approved Master Site Plan, may be processed as a Level IV approval or according to an over-the-counter staff review specified by the conditions of the Master Site Plan development permit approval. The intent of this Code section is to ensure all phased development is compatible with an approved Master Site Plan. Being that that the proposed project entails construction of a wireless communication facility, and phased construction is not proposed, it is appropriate to allow future site and facility development permits to be processed in accordance with the permit procedures outlined in the County's Wireless Communications Facilities Ordinance, Administrative Practice Guidelines, and applicable State and Federal Law.

Noise

Per County Code Sections 13.15.050(C) and 13.10.663(B)(11), backup generators shall only be operated during power outages and for testing and maintenance purposes. The facility would not be located within 100 feet of a residential dwelling unit, thus additional noise attenuation measures are not required; however, a noise study was submitted to evaluate the noise levels associated with the facility, and as proposed, the facility would comply with the County's applicable noise limits.

Radio Frequency Emissions

Section 47 USC 332(c)(7)(B)(iv) of the Telecommunications Act of 1996 prohibits local jurisdictions from regulating the placement, construction, or modification of Wireless Communications Facilities based on the environmental effects of radio frequency (RF) emissions if these emissions comply with the Federal Communications Commission (FCC) standards.

County Code Section 13.10.661(D) requires compliance with the FCC rules, regulations, and standards by requiring that facilities comply with the radio frequency (RF) standards set forth by the FCC. A radio frequency report, prepared by Waterford Consultants, LLC dated May 12, 2020, is attached as Exhibit H. Maximum RF emissions at the nearest ground walking surface to the facility is approximately 5.5612 percent of the FCC's general public limit. The proposed project is consistent with the FCC regulations as proposed and conditioned.

Final Action Required

The final action on this project is subject to a Federal Shot Clock Extension deadline of April 15, 2022, per the FCC Shot Clock Extension Agreement between the County of Santa Cruz and AT&T. The Federal Telecommunications Act requires local jurisdictions to act on this deadline unless otherwise authorized by an additional extension.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **201373,** based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.sccoplanning.com

Report Prepared By: Jonathan DiSalvo
Santa Cruz County Planning Department
701 Ocean Street, 4th Floor
Santa Cruz CA 95060
Phone Number: (831) 454-3157
E-mail: jonathan.disalvo@santacruzcounty.us

Exhibits

A. Categorical Exemption (CEQA determination)
B. Findings
C. Conditions
D. Project plans
E. Assessor's, Location, Zoning and General Plan Maps
F. Parcel information
G. Biotic and arborist reports review letter
H. Radio Frequency Report, prepared by Waterford Consultants, LLC dated May 12, 2020
I. Alternative Sites Analysis
J. Visual Simulations
K. Foliage Tree Sample

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 201373
Assessor Parcel Number: 041-661-05
Project Location: 10707 Soquel Drive, Aptos

Project Description: Proposal to construct a 75-foot tall (80 feet to top of highest branches) mono-broadleaf Wireless Communication Facility with related ground equipment.

Person or Agency Proposing Project: Melissa Gonzalez for J5 on behalf of AT&T Mobility

Contact Phone Number: (415) 305-8633

A. _____ The proposed activity is not a project under CEQA Guidelines Section 15378.

B. _____ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).

C. _____ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.

D. _____ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

E. __X__ **Categorical Exemption**

Specify type: Class 3 - New Construction or Conversion of Small Structures (Section 15303)

F. Reasons why the project is exempt:

Construction and location of limited numbers of new, small facilities or structures and utilities; installation of small new equipment and facilities in small structures. Though the project site is located within a mapped Sensitive Habitat area, as conditioned per accepted biotic and arborist reports, no significant impacts are anticipated for any protected biotic or vegetative species or habitats. Additionally, as conditioned, though the project would be visible from Highway 1, which is a designated scenic corridor per General Plan Section 5.10.10, natural topography and tree cover between Highway 1 and the project site and use of camouflaging and stealth techniques would mitigate any significant visual impacts consistent with the technological requirements of the proposed cellular service.

In addition, none of the conditions described in Section 15300.2 apply to this project.

_____ Date: _____

Jonathan DiSalvo, Project Planner

EXHIBIT A

Wireless Communication Facility Use Permit Findings

1. That either: (1) the development of the proposed wireless communications facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive habitat resources (as defined in the Santa Cruz County General Plan/LCP Sections 5.1, 5.10, and 8.6.6.), and/or other significant County resources, including agricultural, open space, and community character resources; or (2) there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts and the proposed facility has been modified by condition and/or project design to minimize and mitigate its visual and other resource impacts.

This finding can be made, in that the location and design of the proposed wireless communication facility would not result in a significant visual impact to any designated visual resources, environmentally sensitive habitat resources, archeological resources, or other significant County resources.

The project site is located within a mapped Sensitive Habitat area. A biotic report and arborist report were submitted and accepted by Environmental Planning staff per Biological Report Review (REV211338) and Arborist Report Review (REV211339). As conditioned per accepted biotic and arborist reports, no significant impacts are anticipated for any protected biotic or vegetative species or habitats. Additionally, no trees would be removed as part of this proposal.

The project site is located within a mapped scenic area as designated in Section 5.10 of the County General Plan/LCP. The closest scenic road (Highway 1), as designated by General Plan Section 5.10.10, is located approximately 300 feet west from the project site. The proposed wireless communication facility, however, would be minimally visible from this stretch of Highway 1 due to the presence of a steep forested hillside sloping up from the eastern frontage of the highway. Given the natural topography and tree cover between Highway 1 and the project site, and use of camouflaging and stealth techniques, the design of the proposed facility would mitigate any significant visual impacts, consistent with the technological requirements of the proposed cellular service.

County Code Section 13.10.663(A)(9) requires new freestanding wireless communication towers be located a minimum of five times the tower height or 300 feet, whichever is greater, to the nearest residentially zoned parcel, unless waived by the decision maker. The intent of this setback requirement is to minimize visual impacts to residentially zoned properties.

Based on the proposed height of 75 feet, the facility would need to provide a 375-foot setback to the nearest residentially zoned property. The proposed tower would be located approximately 31.5 feet from a residentially-zoned parcel boundary (approximately 112 feet from the closest residence), thus the applicant must prove that the wireless communication facility will be camouflaged or otherwise made inconspicuous such that visual impacts are not created, or the applicant can prove that a significant area proposed to be served would otherwise not be provided personal wireless services by the subject carrier, including proving that there are no viable, technically feasible, environmentally equivalent or superior alternative sites outside the prohibited and restricted areas designated in SCCC 13.10.661(B) and (C).

As enumerated in the submitted alternatives analysis (Exhibit I) the proposed facility would substantially reduce a gap in the carrier's network and there are no sites identified outside the prohibited and restricted areas designated in SCCC 13.10.661(B) and (C) that would serve to eliminate or substantially reduce the gap in the carrier's network, while also being viable, technically feasible, and environmentally equivalent or superior.

2. That the site is adequate for the development of the proposed wireless communications facility and, for sites located in one of the prohibited and/or restricted areas set forth in SCCC 13.10.661(B) and (C), that the applicant has demonstrated that there are not environmentally equivalent or superior and technically feasible: (1) alternative sites outside the prohibited and restricted areas; and/or (2) alternative designs for the proposed facility as conditioned.

This finding can be made, in that the Public Facilities (PF) zone district is not a prohibited or restricted zone district for wireless communication facilities. Further, the applicant has provided an alternatives analysis (Exhibit I) to substantiate the proposed location as the most viable site with the least visual impacts that meets the wireless objectives of the carrier.

3. That the subject property upon which the wireless communications facility is to be built is in compliance with all rules and regulations pertaining to zoning uses, subdivisions and any other applicable provisions of this title and that all zoning violation abatement costs, if any, have been paid.

This finding can be made, in that the proposed wireless facility would meet applicable requirements of the County Code and General Plan designation in which it is located. The zoning of the subject parcel is Public Facilities (PF). PF is not a restricted or prohibited zone district for wireless communication facilities.

No zoning violation abatement fees are applicable to the subject site.

4. The proposed wireless communication facility as conditioned will not create a hazard for aircraft in flight.

This finding can be made, in that the proposed wireless communications facility will not be located within the Watsonville Municipal Airport Approach Zone; therefore, the project is not subject to the adopted airport safety regulations for the Watsonville Municipal Airport. Additionally, the maximum height of the project (approximately 75 feet, 80 feet to top of faux foliage) will be located well below the aircraft travel path.

5. The proposed wireless communication facility as conditioned is in compliance with all FCC and California PUC standards and requirements.

This finding can be made, in that the radio frequency (RF) report prepared by Waterford Consulting, LLC dated May 12, 2020, indicates the maximum public radio frequency exposure from all antennas at this location would result in an exposure limit of approximately 5.5612 percent of the applicable public exposure limit at accessible areas at ground level. Consequently, sufficient evidence has been submitted to indicate that the proposed project is consistent with the FCC regulations as proposed and conditioned.

6. For wireless communication facilities in the Coastal Zone, the proposed wireless communication facility as conditioned is consistent with the all applicable requirements of the Local Coastal Program.

This finding can be made, in that the proposed project site is not located within the Coastal Zone.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for wireless communication facility uses. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the optimum in safety and the conservation of energy and resources.

Furthermore, radio frequency exposure levels were evaluated the radio frequency (RF) report prepared by Waterford Consulting, LLC dated May 12, 2020, based on the calculated operation of the proposed wireless communication facility, and is attached as Exhibit H. The proposed levels are within FCC prescribed limits.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the wireless communication facility and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the PF (Public Facilities) zone district as the proposed wireless communication facility is a conditionally permitted use in the district that meets all current site standards for the zone district. In addition, wireless findings are attached.

County Code Section 13.10.663(A)(9) requires new freestanding wireless communication towers be located a minimum of five times the tower height or 300 feet, whichever is greater, to the nearest residentially zoned parcel, unless waived by the decision maker. The intent of this setback requirement is to minimize visual impacts to residentially zoned properties.

Based on the proposed height of 75 feet, the facility would need to provide a 375-foot setback to the nearest residentially zoned property. The proposed tower would be located approximately 31.5 feet from a residentially-zoned parcel boundary (approximately 112 feet from the closest residence), thus the applicant must prove that the wireless communication facility will be camouflaged or otherwise made inconspicuous such that visual impacts are not created, or the applicant can prove that a significant area proposed to be served would otherwise not be provided personal wireless services by the subject carrier, including proving that there are no viable, technically feasible, environmentally equivalent or superior alternative sites outside the prohibited and restricted areas designated in SCCC 13.10.661(B) and (C).

As enumerated in the submitted alternatives analysis (Exhibit I) the proposed facility would substantially reduce a gap in the carrier's network and there are no sites identified outside the prohibited and restricted areas designated in SCCC 13.10.661(B) and (C) that would serve to eliminate or substantially reduce the gap in the carrier's network, while also being viable, technically feasible, and environmentally equivalent or superior.

The project site is located within a mapped Sensitive Habitat area. A biotic report and arborist report were submitted and accepted by Environmental Planning staff per Biological Report Review (REV211338) and Arborist Report Review (REV211339). As conditioned per accepted biotic and arborist reports, no significant impacts are anticipated for any protected biotic or vegetative species or habitats. Additionally, no trees would be removed as part of this proposal.

The project site is located within a mapped scenic area as designated in Section 5.10 of the County General Plan/LCP. The closest scenic road (Highway 1), as designated by General Plan Section 5.10.10, is located approximately 300 feet west from the project site. The proposed wireless communication facility, however, would be minimally visible from this stretch of Highway 1 due to the presence of a steep forested hillside sloping up from the eastern frontage of the highway. Given the natural topography and tree cover between Highway 1 and the project site, and use of camouflaging and stealth techniques, the design of the proposed facility would mitigate any significant visual impacts, consistent with the technological requirements of the proposed cellular service.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed wireless communication facility use is consistent with the use requirements specified for the P (Public Facilities) land use designation in the County General Plan by implementation of the implementing PF (Public Facilities) zone district use and site standards, including associated wireless communication facilities regulations.

The proposed wireless communication facility is compatible with adjacent uses in that the wireless communications facility was subject to Design Review and its design is consistent with the design review standards, as specified in Policy 8.5.2 (Commercial Compatibility With Other Uses). The proposed project includes camouflaging, which would include painting equipment to match the color of the natural tree and rural context, installation of faux broadleaf branches and foliage, and faux bark. Additionally, as conditioned, the antennas would be covered with foliage socks. Together, these efforts will reduce the visual impact of the wireless facility on surrounding land uses. The project has been conditioned to ensure the facility is maintained in good condition and will continue to blend with the natural backdrop.

The project site is located within a mapped Sensitive Habitat area. A biotic report and arborist report were submitted and accepted by Environmental Planning staff per Biological Report Review (REV211338) and Arborist Report Review (REV211339). As conditioned per accepted biotic and arborist reports, no significant impacts are anticipated for any protected biotic or vegetative species or habitats. Additionally, no trees would be removed as part of this proposal.

The project site is located within a mapped scenic area as designated in Section 5.10 of the County General Plan/LCP. The closest scenic road (Highway 1), as designated by General Plan Section 5.10.10, is located approximately 300 feet west from the project site. The proposed wireless communication facility, however, would be minimally visible from this stretch of Highway 1 due to the presence of a steep forested hillside sloping up from the eastern frontage of the highway. Given the natural topography and tree cover between Highway 1 and the project site, and use of camouflaging and stealth techniques, the design of the proposed facility would

mitigate any significant visual impacts, consistent with the technological requirements of the proposed cellular service.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities, and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed wireless communication facility is to be constructed on an existing developed lot. The expected level of traffic generated by the proposed project is not anticipated to significantly affect traffic volumes. The only traffic expected to be generated by the project will be periodic trips for routine maintenance and thus will not adversely affect the existing roads or intersections in the surrounding area. The project will not require the use of public services such as water and sewer. Power lines to the facility would mostly be located underground.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

The proposed monopine wireless communication facility is consistent with the land use intensity and density of the surrounding context. With the proposed camouflaging measures such as the artificial tree treatment, the project is designed to appear part of the greater forested natural context. The project does not propose to construct any dwelling units.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed mono-broadleaf wireless communication facility will be of an appropriate scale and type of design that will not reduce or visually impact the aesthetic qualities of the surrounding properties and available open space in the surrounding area.

SCCC Section 13.10.611(F) requires that wireless facilities be located in the least visually obtrusive location that is technically feasible. This is achieved by completion of an alternative analysis.

An alternatives analysis evaluates potential sites meeting wireless service objectives, zoning restrictions, access requirements, leasing requirements, topography, visual impacts, ect., and includes evaluation of potential collocation opportunities. It is a tool for establishing the most viable site for wireless facilities that meets all the requirements of the Wireless Ordinance, including the least visually obtrusive location.

The alternative site analysis (Exhibit I) provided by the applicant shows that there are no alternative sites that would result in a lesser visual impact. The proposed faux broadleaf foliage tree design will blend in well with the existing forested backdrop in the greater area, and thus the project will not significantly impact views.

Visual simulations (Exhibit J) are provided of the proposed facility. As proposed, the wireless facility complies with the requirement to minimize visual impacts enumerated in the visual protection ordinance of the Wireless Ordinance and County Design Review Ordinance.

Wireless communication facilities, because they are characteristically sizable structures, they typically cannot feasibly be sited and designed to be invisible from public vantage points. The site is not located on a ridge, where visual impacts would be more prominent; however, at a height of 80 feet, the facility will taller than adjacent trees and would be visible from neighboring properties as well as Highway 1. To address visual impacts as much as technically feasible, the wireless facility is proposed as a faux broadleaf tree.

The project site is located within a mapped scenic area as designated in Section 5.10 of the County General Plan/LCP. The closest scenic road (Highway 1), as designated by General Plan Section 5.10.10, is located approximately 300 feet west from the project site. The proposed wireless communication facility, however, would be minimally visible from this stretch of Highway 1 due to the presence of a steep forested hillside sloping up from the northeastern frontage of the highway. Given the natural topography and tree cover between Highway 1 and the project site and use of camouflaging and stealth techniques, the design of the proposed facility would mitigate any significant visual impacts, consistent with the technological requirements of the proposed cellular service.

The proposed wireless communication facility complies with the requirements of the County Design Review Ordinance, in that the proposed project will incorporate site and architectural design features such as such as faux broadleaf branches with foliage, faux bark, and color camouflaging to reduce the visual impact of the proposed development on surrounding land uses and the natural landscape.

Conditions of Approval

Exhibit D: Project plans, prepared by AllStates Engineering & Surveying, dated 4/27/21.

I. This permit authorizes the construction of a wireless communication facility and associated equipment as indicated on the approved Exhibit "D" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Building Permit from the Santa Cruz County Building Official.

1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.

C. Obtain a Grading Permit from the Santa Cruz County Building Official.

D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

E. The applicant shall obtain approval from the California Public Utilities Commission and the Federal Communications Commission to install and operate this facility, as required.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "D" on file with the Planning Department. Any changes from the approved Exhibit "D" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. A copy of the text of these conditions of approval incorporated into the full size sheets of the architectural plan set.

2. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing

the materials and colors on the elevation, the applicant shall supply a color and material sheet in 8 1/2" x 11" format for Planning Department review and approval.

3. One elevation shall indicate that the artificial tree treatment will be applied to the upper 60 feet of the facility at minimum.

4. Fencing shall be shown on the site plan and on elevations. Show elevation views (face view) of fencing and any gates, indicate maximum height, and state color and materials. Show and label any proposed gates.

5. "Foliage socks" shall be installed on all panel antennas.

6. Detailed plans and specifications pertaining to faux foliage, faux bark, and color camouflaging.

7. Plans shall indicate the maximum height of the structure, including all portions of any antenna or other equipment mounted to the tower and including all "branches" or other camouflage features.

8. Details showing compliance with the FCC occupational exposure guidelines and safety measures.

9. A bilingual (English and Spanish) sign plan shall be submitted. The sign plan shall incorporate the recommended signage measures as required by the FCC.

10. Tree protection measures must be clearly delineated on the plans.

11. Construction details of the ice bridge and the method of installation for the equipment platform shall be included on the plans.

12. All new electric and telecommunications lines shall be indicated on the plans and placed underground where feasible.

13. Grading, drainage, and erosion control plans.

14. If any lighting is proposed, a lighting plan shall be submitted. Any site or security lighting shall be directed onto the lease site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Lighting shall be integrated into the design and shall be operated with a manual on/off switch.

15. Details showing compliance with fire department requirements. If the proposed structure(s) are located within the State Responsibility Area (SRA) the requirements of the Wildland-Urban Interface code (WUI), California Building Code Chapter 7A, shall apply.

B. To guarantee that the camouflaged mono-broadleaf facility remains in good visual condition and to ensure the continued provision of mitigation of the visual impact of the wireless communications facility, the applicant shall submit a maintenance program prior to building permit issuance which includes the following:

1. A signed contract for maintenance with the company that provides the exterior finish and camouflage materials, for annual visual inspection and follow up repair, replacement, painting, and resurfacing as necessary.

C. Meet all requirements of the County Department of Public Works, Stormwater Management. Drainage fees will be assessed on the net increase in impervious area.

D. Meet all requirements of the County Department of Environmental Health Services, including the following:

1. As part of the Building Permit Application, Applicant shall provide updated plot plans showing the location of the septic tank, leachfield, and future expansion area. Please contact Heather Reynolds, at Environmental Health, with any questions (831) 454-2748.

2. A hazardous material permit may be required is using, storing, or generating hazardous materials onsite. For any questions, contact the Hazardous Material Program at (831) 454-2022.

E. Meet all requirements of the Environmental Planning section of the Planning Department.

F. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.

G. Submit 3 copies of a soils report prepared and stamped by a licensed Geotechnical Engineer.

H. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.

III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. All site improvements shown on the final approved Building Permit plans shall be installed.

B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

EXHIBIT C

C. The project must comply with all recommendations of the approved soils reports.

D. The Hazardous Materials Management Plan, if required, shall be approved by the County Department of Environmental Health Services.

E. The project must comply with all recommendations of the accepted Arborist Report dated May 24, 2021 prepared by Davey Resource Group, including the following:

1. Tree protection zones for tree #6, #7, and #14 (Quercus agrifolia) shall be protected to ensure no soil compaction occurs in the Critical Root Zone (CRZ) of these trees. If construction is planned within their CRZ, and caution shall be exercised to limit soil compaction in their CRZ.

2. All trees shall be protected with chain link tree protection fencing. The ideal location for the fence is outside or along the CRZ listed in Table 2 of the arborist report. At a minimum, tree protection fencing can alternatively be placed at the furthest extent of the tree dripline. If no other alternative exists, fencing shall be placed at the furthest extent of construction and moved outward as construction is completed.

3. Due to the sensitive nature of working within the CRZ of trees, any excavation or grading within the CRZ must be performed with hand tools and supervised by a Certified Arborist to monitor and document any tree impacts. Any significant roots (roots 2 inches in diameter or larger) encountered shall be cut cleanly and photo documented. If severed roots increase failure risk, the Arborist may recommend tree removal.

4. Applying a 4-inch layer of mulch to the CRZ of trees in the work area, particularly if the entire CRZ cannot be fenced due to construction is required.

5. No material shall be stored, nor concrete basins washed, or any chemical materials or paint stored within the CRZ of trees, and no construction chemicals or paint shall be released into landscaped areas.

6. Mycorrhizal treatment can increase nutrient accessibility and compensate for root loss and is a good practice the property owner may consider if significant roots are encountered and must be cut.

7. A tree health assessment report, from the project arborist, one year after project is completion, shall be provided to the Environmental Planning Section, for review and acceptance. Should there be negative impacts (dead or dying) trees identified within the project area, then a 2:1 tree replacement ratio will be enacted. The replacement trees shall consist of either medium to tall California native tree species with a minimum container size of 15-gallon. Tree replacement locations shall be determined by the project arborist and County Resource Planner.

EXHIBIT C

F. The project must comply with all recommendations of the accepted biotic report and County Biologist, including the following:

1. Prior to any site disturbance, a pre-construction meeting shall be conducted. The purpose of the meeting will be to ensure that the conditions set forth in the proposed project description and Conditions of Approval are communicated to the various parties responsible for constructing the project. The meeting shall involve all relevant parties including the project proponent, construction supervisor, Environmental Planning Staff, and the project biologist.

2. All project construction related activities including trenching and excavation for installation of the fiber optic cables, equipment, and fencing shall occur during the dry season. The dry season shall be defined as the time period between April 15 and the first overnight rain of the fall season (2 mm or greater) or October 15 whichever occurs first.

   a. No project related activities shall be allowed between October 16th and April 14th.

   b. Construction activities shall not take place at night or during rain events. Consult weather forecasts from the National Weather Service at least 72 hours prior to performing work.

   c. If an unexpected rain event occurs at any time during construction, the project disturbance area shall be inspected for SCLTS by a qualified biologist prior to recommencement of construction (see Condition E.10 below).

   d. All construction-related debris shall be removed before the onset of winter rains.

3. The project design shall avoid installation of curbs. Any features required for project approval related to stormwater runoff shall be designed, with the help of a qualified biologist, so that SCLTS cannot become trapped or impeded during dispersal.

4. Prior to commencement of construction every individual working on the Project must attend biological awareness training by a qualified biologist prior to working on the job site. The training shall include at minimum information regarding the following:

   a. Location and identification of sensitive habitats and all special-status species with potential to occur in the project area including information specific to identifying SCLTS.

   b. The importance of avoiding impacts to special-status species and

their habitat, and the steps necessary if any special-status species is encountered at any time.

c. Best management practices to be implemented, identification of the limits of work, and project-specific avoidance measures and permit conditions that must be followed.

5. Prior to commencement of construction, high visibility construction fencing or flagging shall be installed, with the assistance of a qualified biologist, to indicate the limits of work and prevent inadvertent grading or other disturbance within the adjacent sensitive habitat. All areas outside of the limits of work shall be clearly marked as environmentally sensitive areas.

   a. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.

   b. The fencing shall be inspected and maintained daily until project completion.

6. Impacts to oak trees, including limbing and pruning, shall be avoided to the maximum extent possible. Trees shall be protected at or outside of the dripline if possible by a system of fencing/flagging and straw bale barricades. The exact locations of the protection measures shall be determined in the field with the assistance of a qualified arborist or biologist.

7. All protective measures outlined on Page 7 of the attached Arborist Report dated May 24, 2021 prepared by Davey Resource Group shall be adhered to.

8. An arborist shall be on site during tree trimming and grading within the dripline of the oak trees and her/his recommendations shall be followed. As per an arborist's directions, hand tools shall be used to trim oak tree roots encountered during excavation cleanly (vs. ripping roots with excavator/backhoe).

9. During project construction, no exposed trenches or open pits shall be left overnight.

10. A single person on the jobsite shall be designated for daily monitoring activities which shall include:

    a. Checking under all equipment for wildlife before use.

    b. Ensuring that at the end of each work day, all excavations shall be secured with a cover, or a ramp installed to prevent wildlife

entrapment.

c. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

11. If a SCLTS is identified at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. A qualified SCLTS biologist, USFWS, CDFW, and the County Environmental Coordinator shall be notified immediately. The animal shall be allowed to move out of harm's way on its own unless otherwise approved. Capturing and handling SCLTS is not permitted unless a project-specific Take Permit has been obtained from USFWS. Only biologists specially approved by USFWS are allowed to participate in activities associated with surveying, capturing, handling, and monitoring of SCLTS.

12. Prior to commencement of construction, a focused rare plant survey for robust spineflower (Chorizanthe robusta var. robusta) and Monterey spineflower (Chorizanthe pungens var. pungens) shall be completed during the identifiable period (May-June) and submitted to the County Environmental Coordinator for approval.

a. If no rare plants are found, no additional protective measures are required.

b. If either species is found present in the project impact area, the County Environmental Coordinator shall be notified immediately.

i. All areas where rare plants occur shall be avoided as environmentally sensitive areas and surrounded with protective fencing.
ii. If avoidance is not possible, project construction may not commence until additional biotic approval from County Planning is received. Additional impact analysis (demonstrating adequate avoidance, minimization, and mitigation) shall be completed and reviewed by County Planning. Additional environmental analysis may be required based on the results of this review and analysis.

13. Any seed mix used for erosion control purposes on temporarily impacted areas and exposed soils shall be limited to seeds of native species common to the surrounding habitat and/or sterile seeds.

G. Pursuant to Sections 16.40.040 and 16.42.080 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning

Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.080, shall be observed.

IV. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

B. The wireless communication facility may not be connected to a power source until a final inspection and clearance from the Santa Cruz County Planning Department has been received.

C. The exterior finish and materials of the wireless communication facility must be maintained on an annual basis to continue to blend with the existing context. Additional paint and/or replacement materials shall be installed as necessary to blend the wireless communication facility with the existing visual backdrop.

D. The foliage on the facility shall be maintained in good condition and if damaged shall be repaired or replaced in-kind to retain the appearance of a natural tree to the greatest extent possible.

E. All noise generated from the approved use shall comply with the County Noise Ordinance.

F. The operator of the wireless communication facility must submit within 90 days of commencement of normal operations (or within 90 days of any major modification of power output of the facility) a written report to the Santa Cruz County Planning Department documenting the measurements and findings with respect to compliance with the established Federal Communications Commission (FCC) Non-Ionizing Electromagnetic Radiation (NEIR) exposure standard. The wireless communication facility must remain in continued compliance with the NEIR standard established by the FCC at all times. Failure to submit required reports or to remain in continued compliance with the NEIR standard established by the FCC will be a violation of the terms of this permit.

G. If, as a result of future scientific studies and alterations of industry-wide standards resulting from those studies, substantial evidence is presented to Santa Cruz County that radio frequency transmissions may pose a hazard to human health and/or safety, the Santa Cruz County Planning Department shall set a public hearing and in its sole discretion, may revoke or modify the conditions of this permit.

H. If future technological advances would allow for reduced visual impacts resulting from the proposed telecommunication facility, the operator of the wireless communication facility must make those modifications which would allow for

reduced visual impact of the proposed facility as part of the normal replacement schedule. If, in the future, the facility is no longer needed, the operator of the wireless communication facility must abandon the facility and be responsible for the removal of all permanent structures and the restoration of the site as needed to re-establish the area consistent with the character of the surrounding natural landscape.

I. The auxiliary equipment area must be locked at all times except when authorized personnel are present. The antennas must not be accessible to the public.

J. Any site or security lighting shall be directed onto the lease site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Lighting shall be integrated into the design and shall be operated with a manual on/off switch. The site shall be unlit except when authorized personnel are present at night.

V. Indemnification

A. The applicant/owner shall indemnify, defend with counsel approved by the COUNTY, and hold harmless the COUNTY, its officers, employees, and agents from and against any claim (including reasonable attorney's fees, expert fees, and all other costs and fees of litigation), against the COUNTY, its officers, employees, and agents arising out of or in connection to this development approval or any subsequent amendment of this development approval which is requested by the applicant/owner, regardless of the COUNTY's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the COUNTY. Should the COUNTY in its sole discretion find the applicant's/owner's legal counsel unacceptable, then the applicant/owner shall reimburse the COUNTY its costs of defense, including without limitation reasonable attorney's fees, expert fees, and all other costs and fees of litigation. The applicant/owner shall promptly pay any final judgment rendered against the COUNTY (and its officers, employees, and agents) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this development approval.

B. The COUNTY shall promptly notify the applicant/owner of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. The COUNTY shall cooperate fully in such defense.

C. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

EXHIBIT C

D. Settlement. The applicant/owner shall not be required to pay or perform any settlement unless such applicant/owner has approved the settlement. When representing the COUNTY, the applicant/owner shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.

E. Successors Bound. The "applicant/owner" shall include the applicant and/or the owner and the successor'(s) in interest, transferee(s), and assign(s) of the applicant and/or the owner.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

_____
Jocelyn Drake
Deputy Zoning Administrator

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

EXHIBIT C

EXHIBIT D

26

at&t mobility corp.

SITE NUMBER: CCL02296
SITE NAME: RSFR NSB CCL02296
SITE TYPE: MONO-BROADLEAF / CWIC
ADDRESS: 10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

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

PROJECT TEAM

APPLICANT / LESSEE:

ALYSSA FERRIS,
AT&T MOBILITY
5001 EXECUTIVE PARKWAY, 4W5501
SAN RAMON, CA 94583
EMAIL: ab724b@att.com
PHONE: (530) 966-2612

CONSTRUCTION MANAGER:

BECHTEL
CONTACT: GRACIANO DONGALA
EMAIL: gdongala@bechtel.com
PHONE: (925) 856-0065

RF ENGINEER:

HARPREET SINGH
EMAIL: hs3076@att.com
PHONE: (248) 885-5496

PROJECT MANAGER:

J5 INFRASTRUCTURE PARTNERS
CONTACT: MISAKO HILL
EMAIL: mhill@j5ip.com
CELL: (415) 533-2540

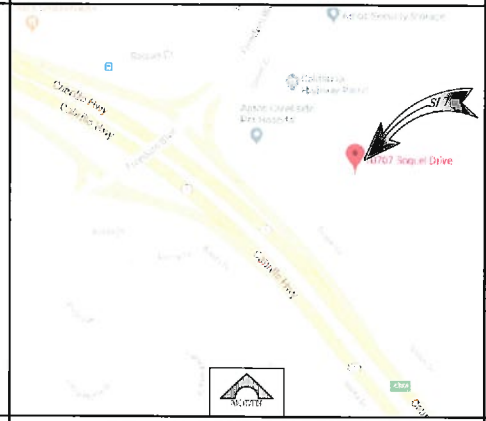
ARCHITECT / ENGINEER:

ALL STATES ENGINEERING & SURVEYING
CONTACT: ROGER FLORES
EMAIL: roger@allcal.com
OFFICE: (949) 273-0996x109
PHONE: (562) 841-1264

SITE ACQUISITION:

J5 INFRASTRUCTURE PARTNERS
CONTACT: DEREK TURNER
EMAIL: dturner@j5ip.com
PHONE: (415) 420-4922

VICINITY MAP



CODE COMPLIANCE

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

1) 2019 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS
2) 2019 CALIFORNIA BUILDING CODE (CBC)
3) 2019 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2012 IRC. (PART 2.5)
4) 2019 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)
5) 2019 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2012 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
6) 2019 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2012 UMC (PART 4)
7) 2019 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2012 UPC (PART 5)
8) 2019 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2011 NEC (PART 3)
9) 2019 CALIFORNIA ENERGY CODE (CEC)- PART 6
10) ANSI / EIA-TIA-222-H

SHEET INDEX

SITE INFORMATION

PROPERTY OWNER:	CHRIST LUTHERAN CHURCH OF APTOS ATTN: PASTOR DALE SOLLOM-BROTHERTON
ADDRESS:	10707 SOQUEL DRIVE APTOS, CA 95003
PHONE:	(831) 662-0511
EMAIL:	pastor@aptoschurch.org
JURISDICTION:	SANTA CRUZ COUNTY
A.P.N.:	041-661-05
CURRENT ZONING:	PUBLIC & COMMUNITY FACILITIES
LATITUDE (NAD 83):	36°58'12.957" N 36.970266
LONGITUDE (NAD 83):	-121°52'12.6696" W -121.870166

ACCESSIBILITY REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY IS NOT REQUIRED PER CBC2016, SECTION 11B-203.4 (LIMITED ACCESS SPACE)

POWER AGENCY: PG&E

TELEPHONE AGENCY: AT&T

RFDS VERSION: 2.00
DATE UPDATED: 03/1/20

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

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

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS NEW.

STATEMENTS

STRUCTURAL ANALYSIS IS NOT WITHIN THE SCOPE OF WORK CONTAINED IN THIS DRAWINGS SET. FOR ANALYSIS OF EXISTING AND/OR NEW COMPONENTS, REFER TO STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.

ANTENNA MOUNT ANALYSIS IS NOT WITHIN THE SCOPE OF WORK CONTAINED IN THIS DRAWING SET. FOR ANALYSIS OF MOUNT TO SUPPORT EXISTING AND/OR NEW COMPONENTS. REFER TO ANTENNA MOUNT STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.

DRIVING DIRECTIONS

5001 EXECUTIVE PKWY, SAN RAMON, CA 94583

1. GET ON I-680 S FROM CAMINO RAMON AND BOLLINGER CANYON RD
2. HEAD SOUTHWEST, TURN RIGHT, TURN LEFT TOWARD EXECUTIVE PKWY
3. TURN RIGHT ONTO EXECUTIVE PKWY
4. TURN RIGHT ONTO CAMINO RAMON
5. USE THE RIGHT 2 LANES TO TURN RIGHT ONTO BOLLINGER CANYON RD
6. USE THE RIGHT LANE TO MERGE ONTO I-680 S VIA THE RAMP TO SAN JOSE
7. TAKE EXIT 12 FOR MISSION BLVD/STATE ROUTE 262 TOWARD I-880\
8. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR MISSION BLVD W AND MERGE ONTO CA-262 S/MISSION BLVD (PASS BY JACK IN THE BOX, ON THE RIGHT)
9. USE THE LEFT 2 LANES TO TAKE THE EXIT TOWARD INTERSTATE 880 S/SAN JOSE, MERGE ONTO I-880 S
10. CONTINUE ONTO CA-17 S. TAKE EXIT 1B TO MERGE ONTO CA-1 S TOWARD WATSONVILLE/MONTEREY
11. TAKE EXIT 433A FOR FREEDOM BLVD, TURN LEFT ONTO FREEDOM BLVD
12. TURN RIGHT ONTO SOQUEL DR

DESTINATION WILL BE ON THE LEFT

10707 SOQUEL DRIVE
APTOS, CA 95003

PROJECT DESCRIPTION

INSTALLATION OF A NEW SITE BUILD, UNMANNED TELECOMMUNICATIONS FACILITY, CONSISTING OF THE FOLLOWING:

ANTENNA SOW:
- •• INSTALLATION OF 75'-0" HIGH MONO-BROADLEAF
- •• INSTALLATION OF (4) ANTENNA SECTORS
- •• INSTALLATION OF (12) PANEL ANTENNAS
- •• INSTALLATION OF (24) REMOTE RADIO HEADS (RRHS)
- •• INSTALLATION OF (4) DC-9 SURGE SUPPRESSORS
- •• INSTALLATION OF (3) DC-12s MOUNTED ON CWIC
- •• INSTALLATION OF (1) GPS ANTENNA
- •• INSTALLATION OF (1) ICE BRIDGE

EQUIPMENT SOW:
- •• INSTALLATION OF (1) PREFABRICATED WALK-IN CLOSET TWIC
- •• INSTALLATION OF (1) POWER PLANT RACK W/ (8) BATTERIES
- •• INSTALLATION OF (1) EMERSON BATTERY RACK W/ (4) BATTERIES
- •• INSTALLATION OF (1) HYBRID EQUIPMENT RACK
- •• INSTALLATION OF (4) FIBER TRUNKS
- •• INSTALLATION OF FIBER CABLES FROM EQUIPMENT AREA TO PROPOSED ANTENNAS
- •• INSTALLATION OF (1) 200A, AC POWER PANEL
- •• INSTALLATION OF (1) CIENA AND HOFFMAN BOX
- •• INSTALLATION OF (1) 15'x20' FOUNDATION AND WOOD FENCE ENCLOSURE
- •• INSTALLATION OF (1) DIESEL GENERATOR

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
J5 INFRASTRUCTURE PARTNERS
AZ • CA • CO • ID • NM • NV • TX • UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

DESIGN RECORD:

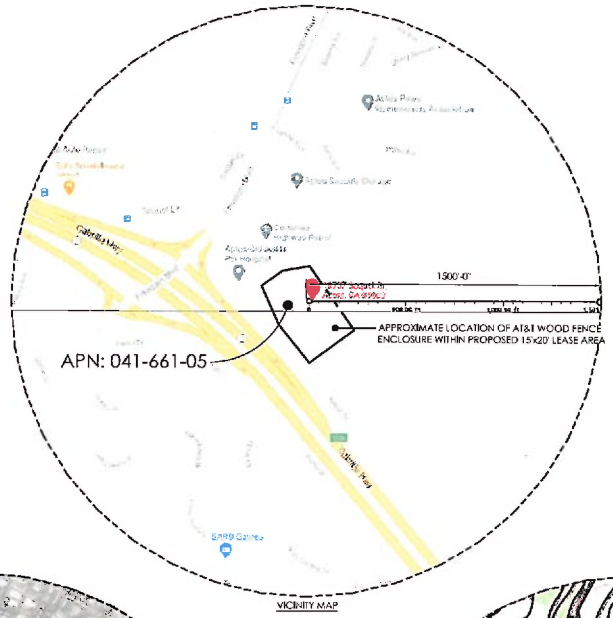
REV	DATE	DESCRIPTION
A	04/27/21	REV PER PLANNING
1	03/03/21	REV ELEC
0	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

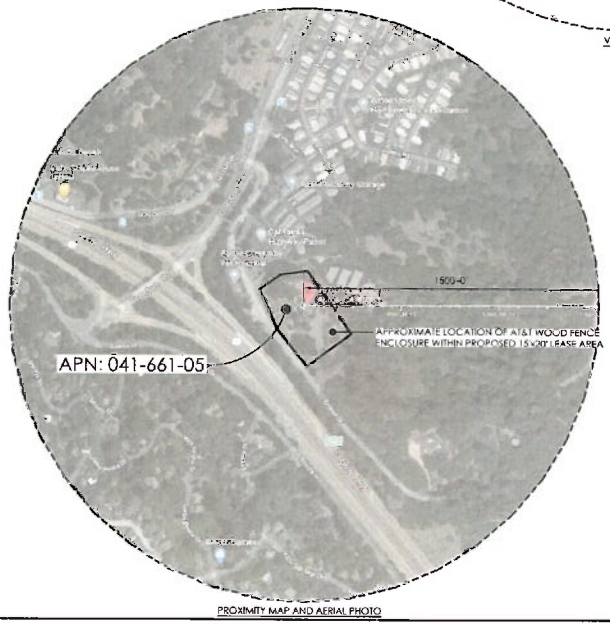
SHEET NAME: TITLE SHEET

SHEET TITLE: T-1

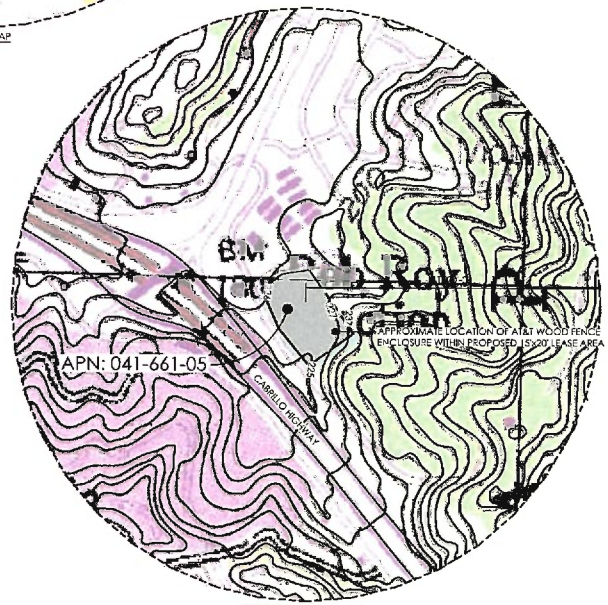
EXHIBIT D



VICINITY MAP



PROXIMITY MAP AND AERIAL PHOTO



TOPOGRAPHIC AREA MAP

1 TOPOGRAPHIC AREA MAP

24"x36" SCALE: NTS
11"x17" SCALE: NTS

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
INFRASTRUCTURE
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

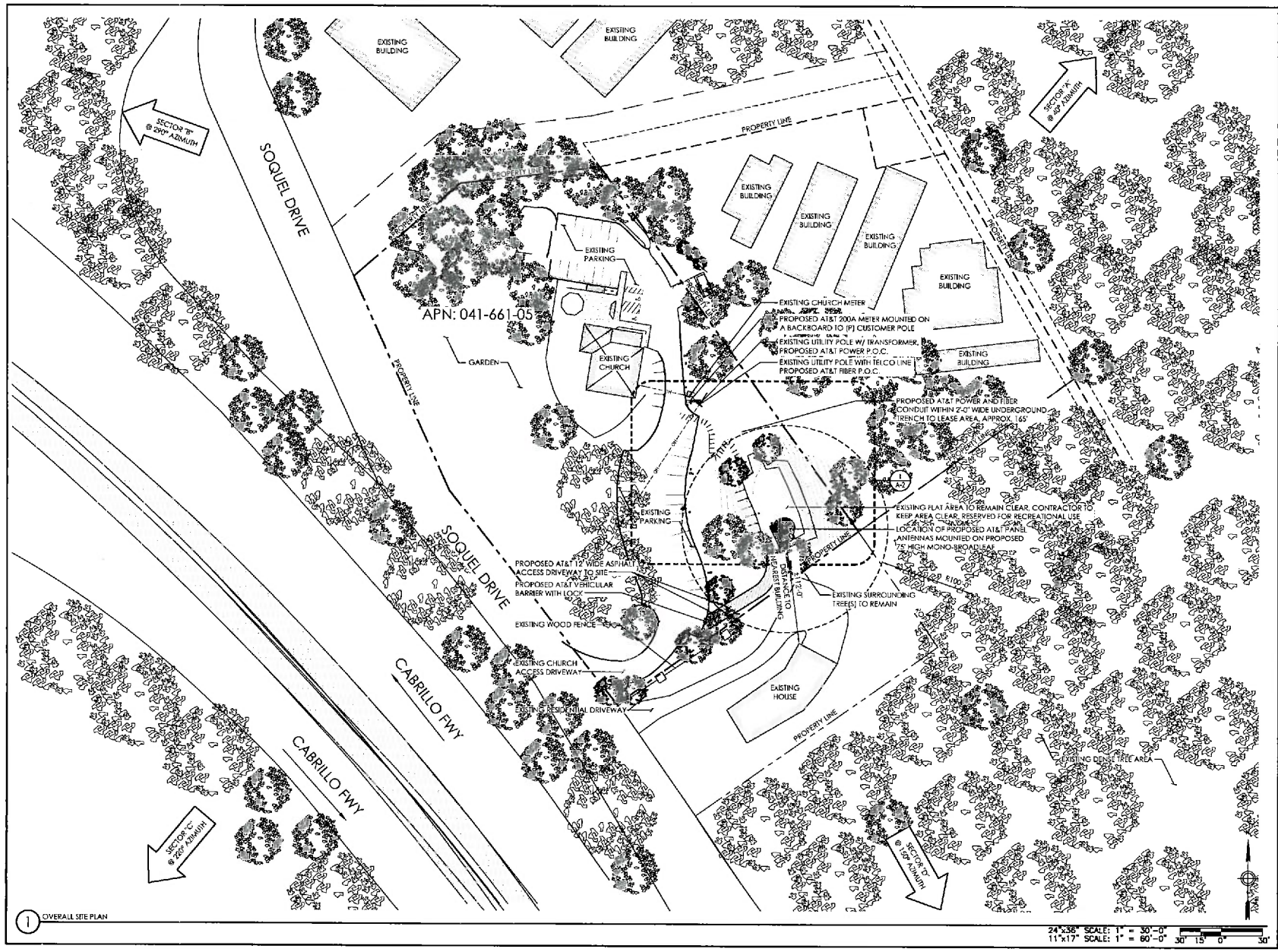
DESIGN RECORD:

REV	DATE	DESCRIPTION
⚠	04/27/21	REV PER PLANNING
1	03/03/21	REV ELEC
0	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
TOPOGRAPHIC AREA MAP

SHEET TITLE:
T-2



1 OVERALL SITE PLAN

24"x36" SCALE: 1" = 30'-0"
11"x17" SCALE: 1" = 60'-0"

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
15 INFRASTRUCTURE
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PIN: 3701A0QIDKH
USID: 281320

DESIGN RECORD:

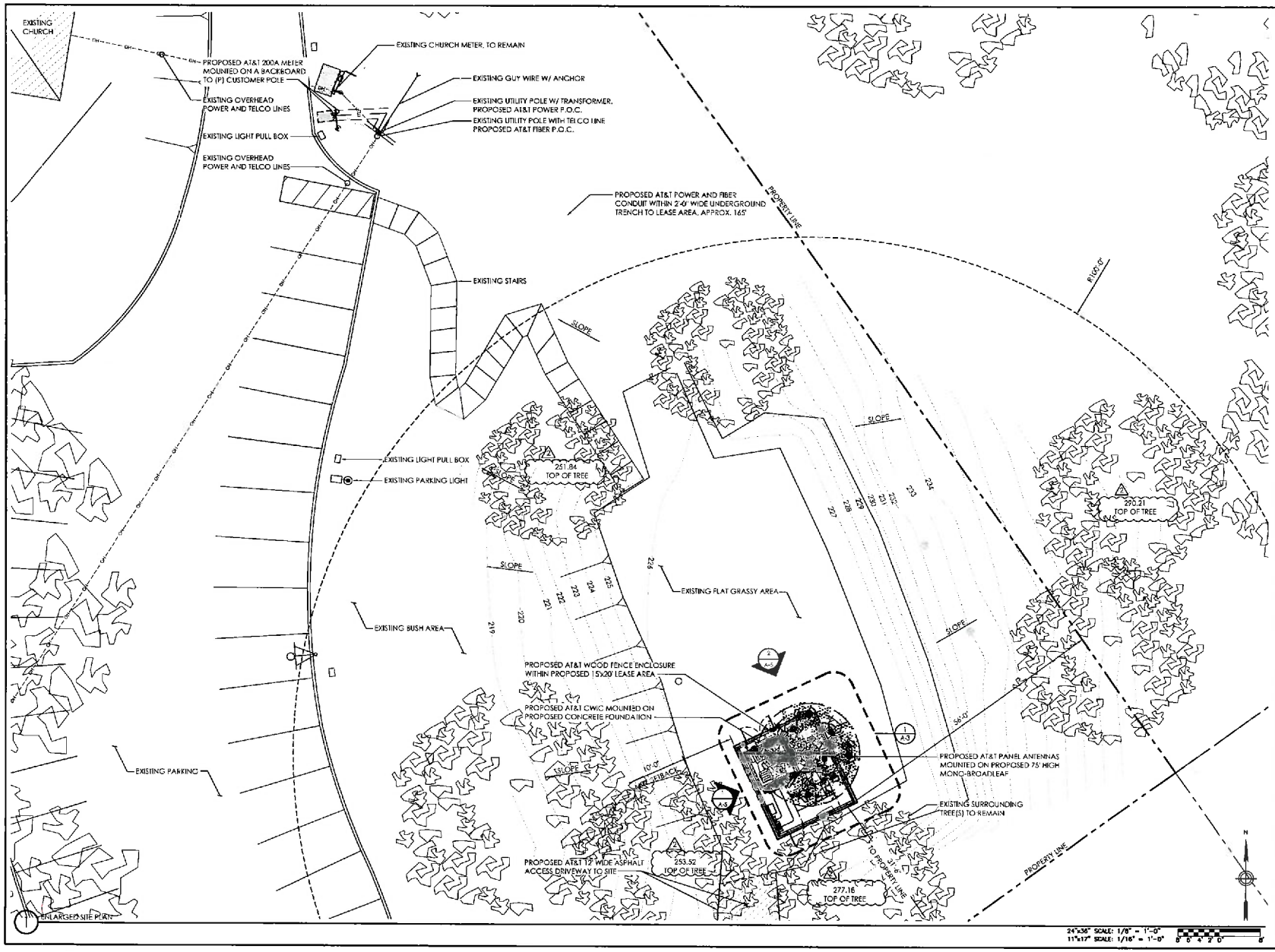
REV	DATE	DESCRIPTION
C	04/27/21	REV PER PLANNING
B	03/03/21	REV ELEC
A	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
OVERALL SITE PLAN

SHEET TITLE:
A-1

EXHIBIT D



APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
INFRASTRUCTURE
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

DESIGN RECORD

REV	DATE	DESCRIPTION
A	02/19/20	90%ZDs
B	04/03/20	100%ZDs
C	10/07/20	REV PER PG&E
D	01/25/21	ZDs FOR ZAP
1	03/03/21	REV ELEC.
A	04/27/21	REV PER PLANNING

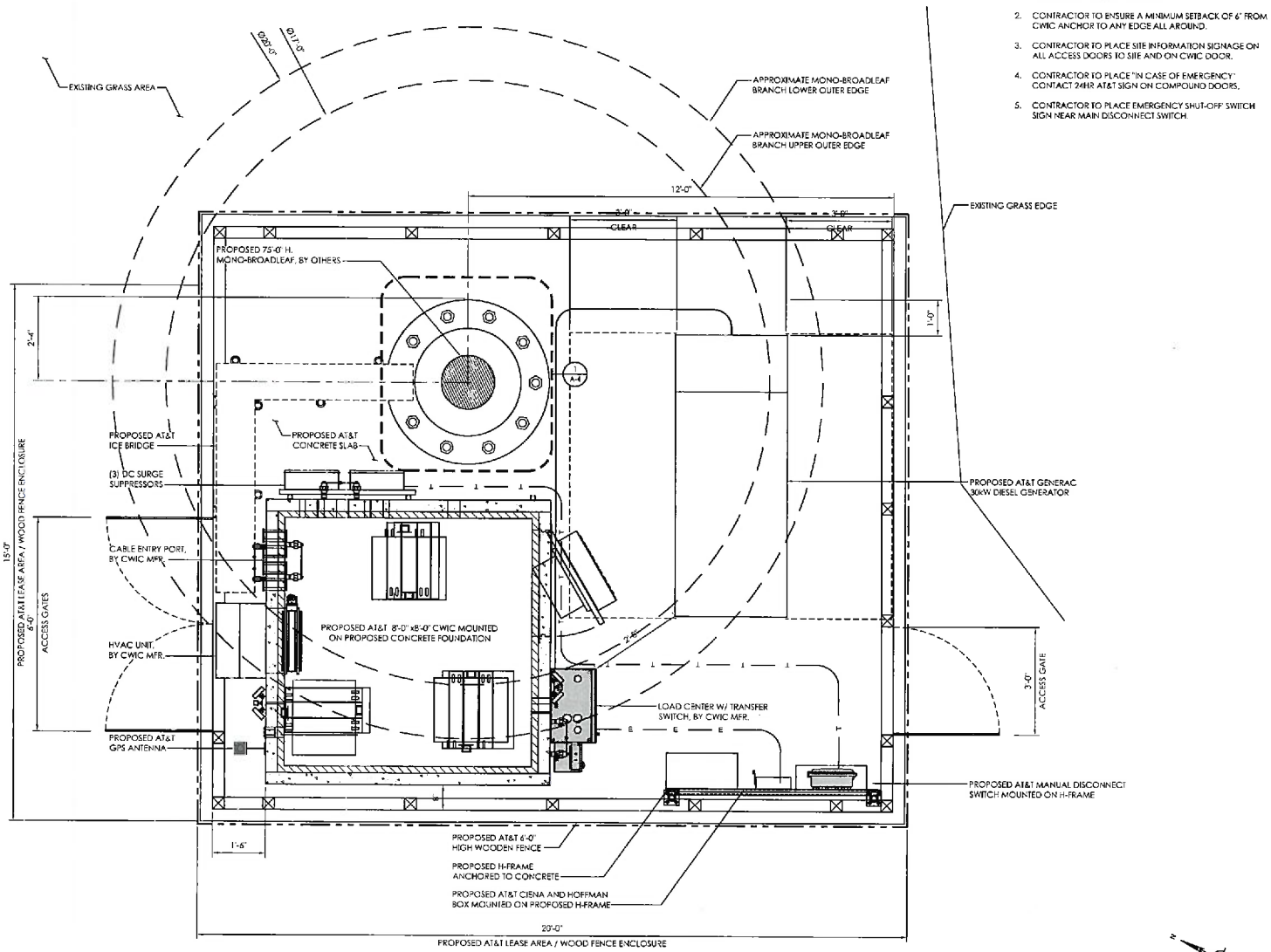
PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
ENLARGED SITE PLAN

SHEET TITLE:
A-2

EXHIBIT D

EXHIBIT D



1 EQUIPMENT LAYOUT PLAN

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
IS INFRASTRUCTURE
AZ • CA • CO • ID • NM • NV • TX • UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

DESIGN RECORD:

REV	DATE	DESCRIPTION
A	04/27/21	REV PER PLANNING
1	03/03/21	REV ELEC
0	01/25/21	EDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/05/20	100%EDs
A	02/19/20	90%EDs

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
EQUIPMENT LAYOUT PLAN

SHEET TITLE:
A-3

SECTOR		RRH TYPE NEW	RRH LOCATION (DISTANCE FROM ANTENNA)		MINIMUM CLEARANCES ABOVE	BELOW	SIDES
ALPHA	A1	4449 B5 B12 / B843 B2 B66	UP	5'-0"	16"	12"	8"
	A2	4478 B14	UP	5'-0"	16"	12"	8"
	A3	4415 B30	UP	5'-0"	16"	12"	8"
BETA	B1	4449 B5 B12 / B843 B2 B66	UP	5'-0"	16"	12"	8"
	B2	4478 B14	UP	5'-0"	16"	12"	8"
	B3	4415 B30	UP	5'-0"	16"	12"	8"
GAMMA	C1	4449 B5 B12 / B843 B2 B66	UP	5'-0"	16"	12"	8"
	C2	4478 B14	UP	5'-0"	16"	12"	8"
	C3	4415 B30	UP	5'-0"	16"	12"	8"
DELTA	D1	4449 B5 B12 / B843 B2 B66	UP	5'-0"	16"	12"	8"
	D2	4478 B14	UP	5'-0"	16"	12"	8"
	D3	4415 B30	UP	5'-0"	16"	12"	8"

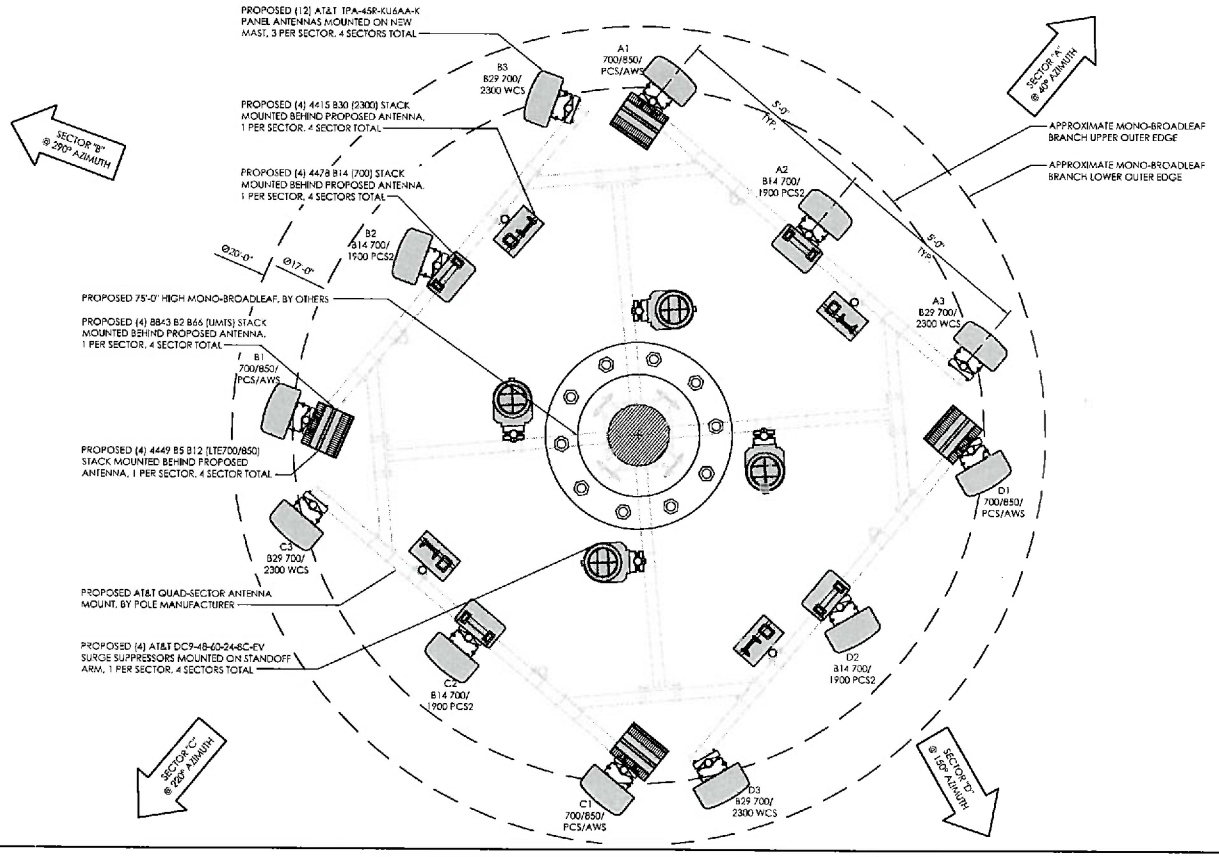
2 RF SCHEDULE

NOTES TO CONTRACTOR:

- CONTRACTOR IS TO REFER TO AT&T'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
- CABLE LENGTHS WERE DETERMINED BASED ON VISUAL INSPECTION DURING SITE-WALK. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK.

FINAL ANTENNA AND TRANSMISSION CABLE REQUIREMENTS

SECTOR		TECHNOLOGY	ANTENNA MFR./MODEL #	SIZE	AZIMUTH	TRANSMISSION LINES (LENGTH FT. +/-) COAX LENGTH	COAX SIZE	COAX NO.
SECTOR A	A1	850/ LTE 700 / 1900 PCS / AWS	CCI TPA-65R-KU6AA-K	6'-6"	40°	±95'	TBD	FIBER
	A2	LTE 700 / 1900	CCI TPA-65R-KU6AA-K	6'-6"	40°	±95'	TBD	FIBER
	A3	LTE 700 / LTE WCS	CCI TPA-65R-KU6AA-K	6'-6"	40°	±95'	TBD	FIBER
SECTOR B	B1	850/ LTE 700 / 1900 PCS / AWS	CCI TPA-65R-KU6AA-K	6'-6"	290°	±95'	TBD	FIBER
	B2	LTE 700 / 1900	CCI TPA-65R-KU6AA-K	6'-6"	290°	±95'	TBD	FIBER
	B3	LTE 700 / LTE WCS	CCI TPA-65R-KU6AA-K	6'-6"	290°	±95'	TBD	FIBER
SECTOR C	C1	850/ LTE 700 / 1900 PCS / AWS	CCI TPA-65R-KU6AA-K	6'-6"	220°	±95'	TBD	FIBER
	C2	LTE 700 / 1900	CCI TPA-65R-KU6AA-K	6'-6"	220°	±95'	TBD	FIBER
	C3	LTE 700 / LTE WCS	CCI TPA-65R-KU6AA-K	6'-6"	220°	±95'	TBD	FIBER
SECTOR C	C1	850/ LTE 700 / 1900 PCS / AWS	CCI TPA-65R-KU6AA-K	6'-6"	150°	±95'	TBD	FIBER
	C2	LTE 700 / 1900	CCI TPA-65R-KU6AA-K	6'-6"	150°	±95'	TBD	FIBER
	C3	LTE 700 / LTE WCS	CCI TPA-65R-KU6AA-K	6'-6"	150°	±95'	TBD	FIBER



1 ANTENNA LAYOUT PLAN

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

APPLICANT:
AT&T
1452 EDINGER AVE.
IRVINE, CALIFORNIA 92780

VENDOR:
INFRASTRUCTURE
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003
FA: 14881325
PACE: MRSFR063963
PIN: 3701A0QDKH
USID: 281320

DESIGN RECORD

REV	DATE	DESCRIPTION
4	04/27/21	REV PER PLANNING
3	03/03/21	REV ELEC
2	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

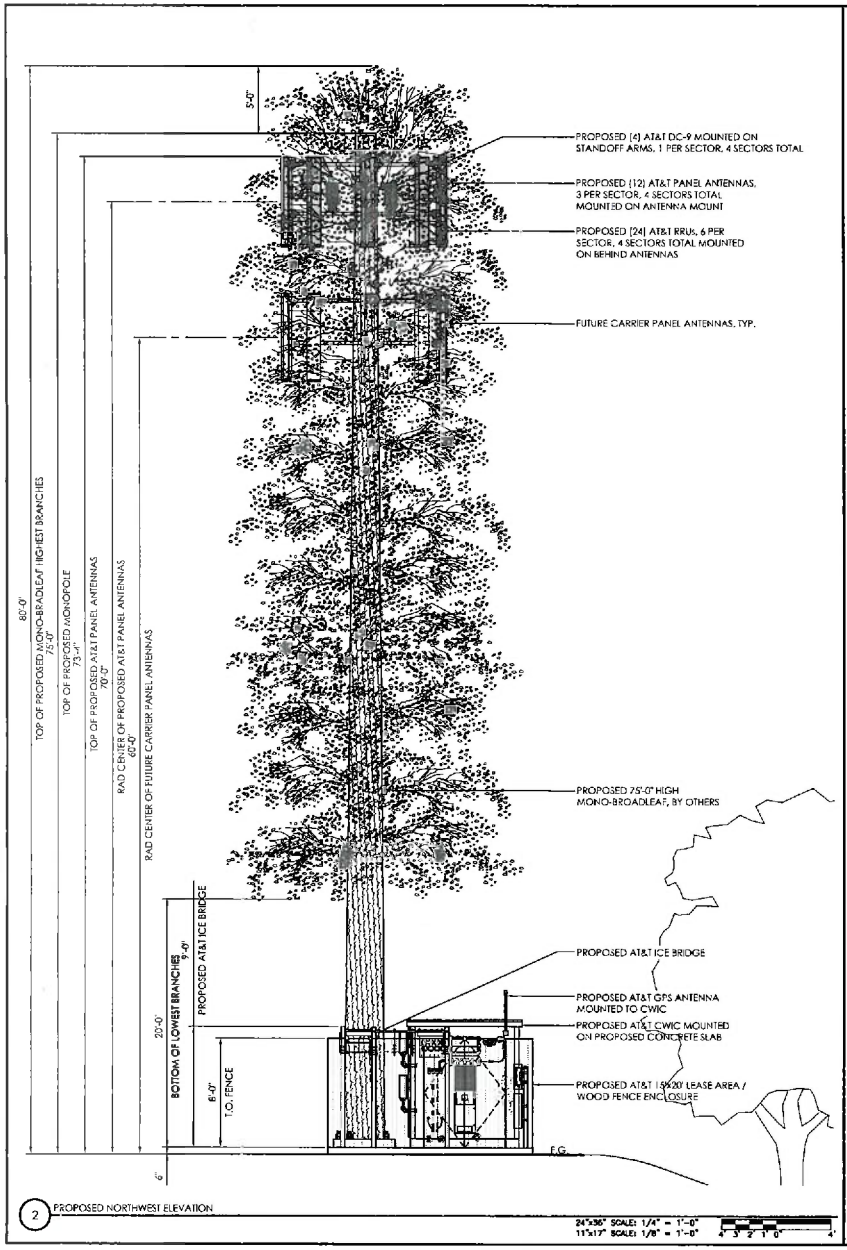
PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
ANTENNA LAYOUT, RRH LAYOUT & RF SCHEDULE

SHEET NUMBER:
A-4

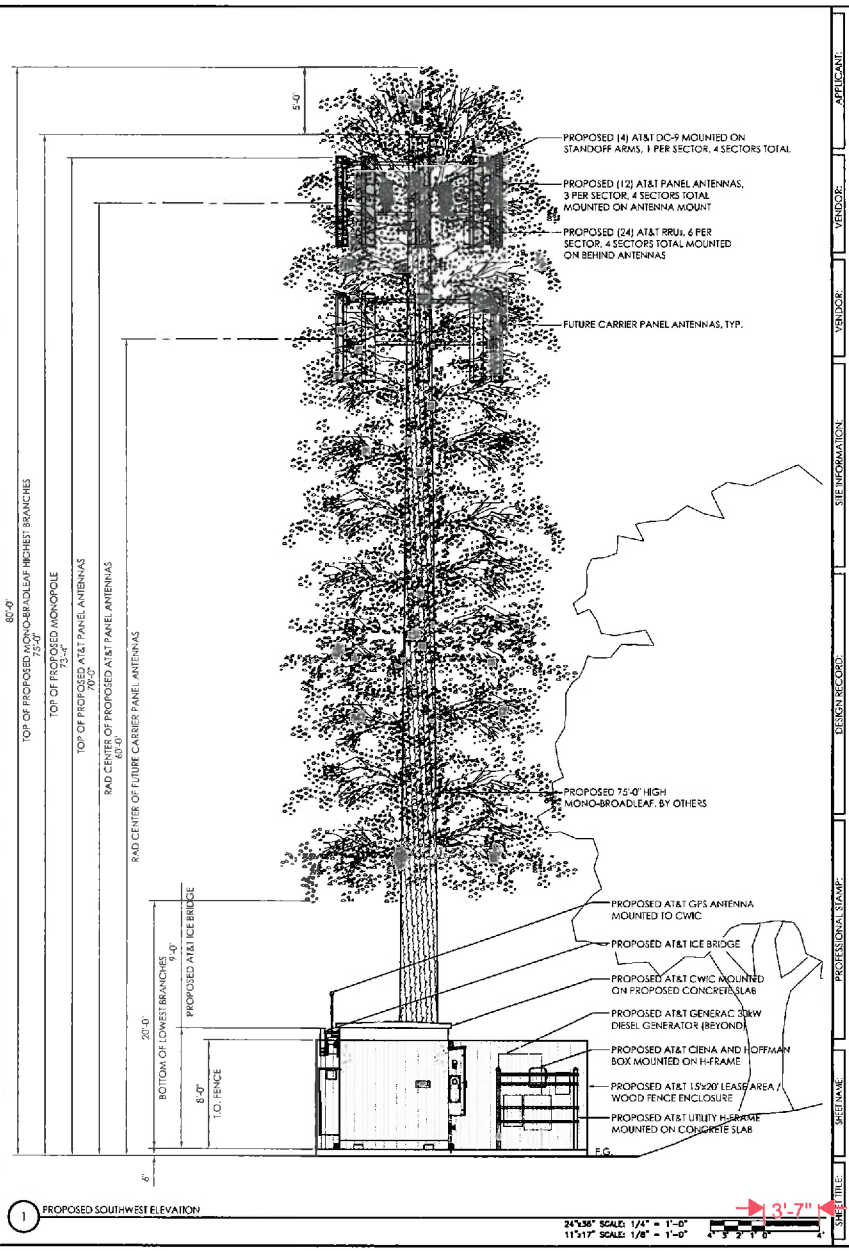
EXHIBIT D

EXHIBIT D



2 PROPOSED NORTHWEST ELEVATION

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"



1 PROPOSED SOUTHWEST ELEVATION

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"

APPLICANT:

AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:

INFRASTRUCTURE
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:

ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:

CCL02296

RSFR NSB CCL02296

10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

DESIGN RECORD:

REV	DATE	DESCRIPTION
A	04/27/21	REV PER PLANNING
1	03/03/21	REV ELEC
0	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:

NOT TO BE USED FOR CONSTRUCTION

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

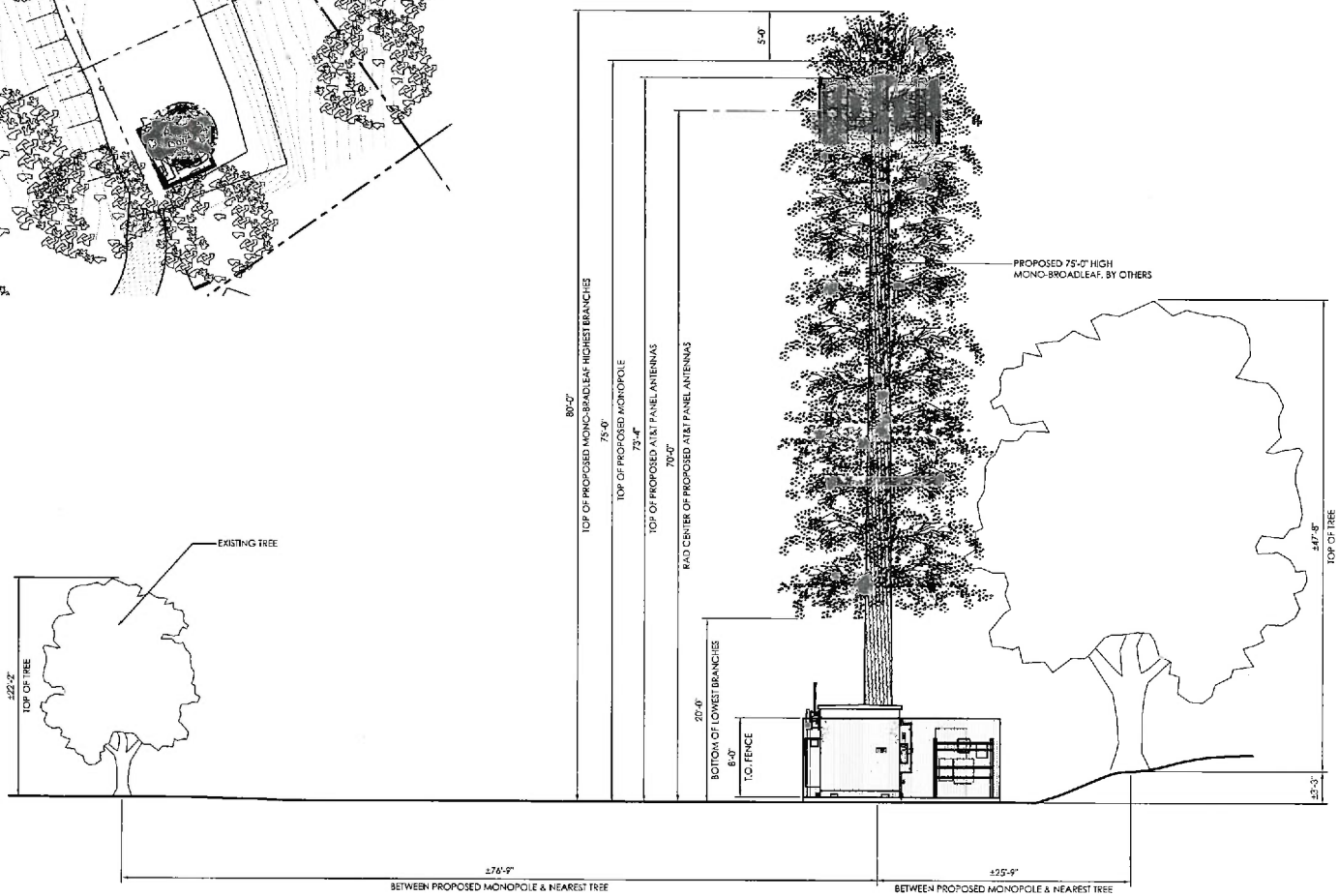
SHEET NAME:

ELEVATIONS

SHEET TITLE:

A-5

EXHIBIT D



1 SECTION A

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

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
JS INFRASTRUCTURE
AZ - CA - CO - ID - NM - NV - TX - UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BRITCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

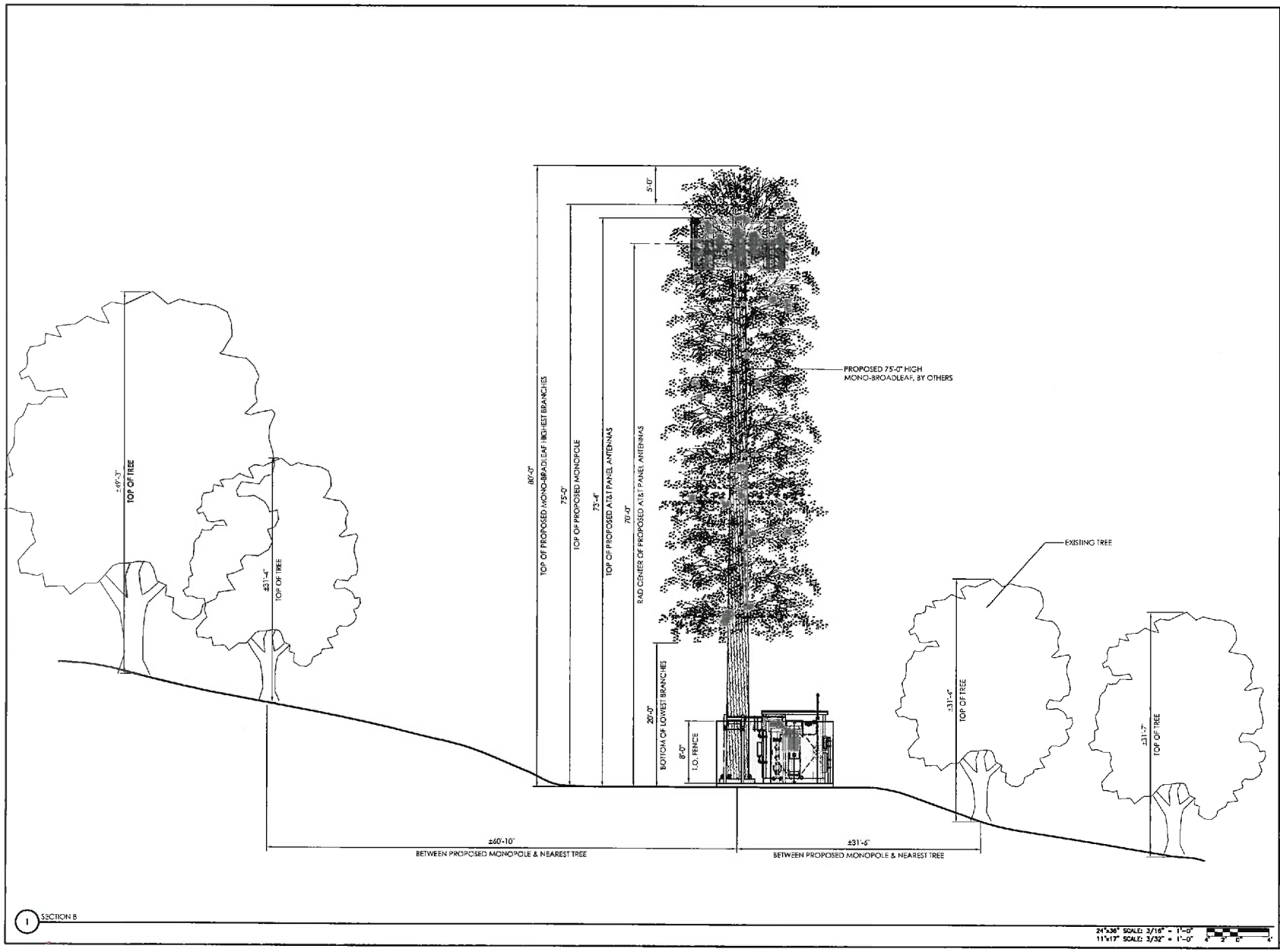
DESIGN RECORD:

REV	DATE	DESCRIPTION
A	04/27/21	REV PER PLANNING
I	03/03/21	REV ELEC
G	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
SECTION

SHEET TITLE:
A-6



APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
INFRASTRUCTURE
AZ • CA • CO • ID • NM • NV • TX • UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

DESIGN RECORD:

REV	DATE	DESCRIPTION
A	02/19/20	90%ZDs
B	04/03/20	100%ZDs
C	10/27/20	REV PER PG&E
0	01/25/21	ZDs FOR ZAP
1	03/05/21	REV ELEC
2	04/27/21	REV PER PLANNING

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
SECTION 2

SHEET TITLE:
A-7

EXHIBIT D

EXHIBIT D

35

ELECTRICAL INSTALLATION METHODS:

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

ELECTRICAL NOTES

GENERAL REQUIREMENTS:

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL CODES. NOTHING IN THESE PLANS OR SPECIFICATIONS SHALL BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THE MOST STRINGENT OF THESE CODES. SHOULD CHANGES BE NECESSARY IN THE DRAWINGS OR SPECIFICATIONS TO MAKE THE WORK COMPLY WITH THESE REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING AND CEASE WORK ON PARTS OF THE CONTRACT WHICH ARE AFFECTED.
2. THE CONTRACTOR SHALL MAKE A SITE VISIT PRIOR TO BIDDING AND CONSTRUCTION TO VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY ARCHITECT IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES. THE CONTRACTOR ASSUMES ALL LIABILITY FOR FAILURE TO COMPLY WITH THIS PROVISION.
3. THE EXTENT OF THE WORK IS INDICATED BY THE DRAWINGS, SCHEDULES, AND SPECIFICATIONS AND IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT. THE WORK SHALL CONSIST OF FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND SUPPLIES NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. THE WORK SHALL ALSO INCLUDE THE COMPLETION OF ALL ELECTRICAL WORK NOT MENTIONED OR SHOWN WHICH IS NECESSARY FOR SUCCESSFUL OPERATION OF ALL SYSTEMS.
4. THE CONTRACTOR SHALL PREPARE A BID FOR A COMPLETE AND OPERATIONAL SYSTEM, WHICH INCLUDES THE COST FOR MATERIAL AND LABOR.
5. WORKMANSHIP AND NEAT APPEARANCE SHALL BE AS IMPORTANT AS THE OPERATION. DEFECTIVE OR DAMAGED MATERIALS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE IN A MANNER ACCEPTABLE TO OWNER AND ENGINEER.
6. COMPLETE THE ENTIRE INSTALLATION AS SOON AS THE PROGRESS OF THE WORK WILL PERMIT. ARRANGE ANY OUTAGE OF SERVICE WITH THE OWNER AND BUILDING MANAGER IN ADVANCE. MINIMIZE DOWNTIME ON THE BUILDING ELECTRICAL SYSTEM.
7. THE ENTIRE ELECTRICAL SYSTEM INSTALLED UNDER THIS CONTRACT SHALL BE DELIVERED IN PROPER WORKING ORDER, REPLACE WITHOUT ADDITIONAL COST TO THE OWNER, ANY DEFECTIVE MATERIAL AND EQUIPMENT WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.
8. ANY ERROR, OMISSION OR DESIGN DISCREPANCY ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION OR CORRECTION BEFORE CONSTRUCTION.
9. "PROVIDE" INDICATES THAT ALL ITEMS ARE TO BE FURNISHED, INSTALLED AND CONNECTED IN PLACE.
10. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND PAY ALL REQUIRED FEES

EQUIPMENT LOCATION:

1. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE DESIRED LOCATIONS OR ARRANGEMENTS OF CONDUIT RUNS, OUTLETS, EQUIPMENT, ETC., AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. PROPER JUDGEMENT MUST BE EXERCISED IN EXECUTING THE WORK SO AS TO SECURE THE BEST POSSIBLE INSTALLATION IN THE AVAILABLE SPACE LIMITATIONS OR INTERFERENCE OF STRUCTURE CONDITIONS ENCOUNTERED.
2. IN THE EVENT CHANGES IN THE INDICATED LOCATIONS OR ARRANGEMENTS ARE NECESSARY, DUE TO FIELD CONDITIONS IN THE BUILDING CONSTRUCTION OR REARRANGEMENT OF FURNISHINGS OR EQUIPMENT, SUCH CHANGES SHALL BE MADE WITHOUT COST, PROVIDING THE CHANGE IS ORDERED BEFORE THE CONDUIT RUNS, ETC., AND WORK DIRECTLY CONNECTED TO THE SAME IS INSTALLED AND NO EXTRA MATERIALS ARE REQUIRED.
3. LIGHTING FIXTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. COORDINATE THE FIXTURE LOCATION WITH MECHANICAL EQUIPMENT TO AVOID INTERFERENCE.
4. COORDINATE THE WORK OF THIS SECTION WITH THAT OF ALL OTHER TRADES. WHERE CONFLICTS OCCUR, CONSULT WITH THE RESPECTIVE CONTRACTOR AND COME TO AGREEMENT AS TO CHANGES NECESSARY, OBTAIN WRITTEN ACCEPTANCE FROM ENGINEER FOR THE PROPOSED CHANGES BEFORE PROCEEDING.

SHOP DRAWINGS:

1. N/A UNLESS NOTED OTHERWISE.

SUBSTITUTIONS:

1. NO SUBSTITUTIONS ARE ALLOWED

TESTS:

1. BEFORE FINAL ACCEPTANCE OF WORK, THE CONTRACTOR SHALL INSURE THAT ALL EQUIPMENT, SYSTEMS, FIXTURES, ETC., ARE WORKING SATISFACTORILY AND TO THE INTENT OF THE DRAWINGS.

PERMITS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING OUT AND PAYING FOR ALL REQUIRED PERMITS, INSPECTION AND EXAMINATION WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

GROUNDING:

1. THE CONTRACTOR SHALL PROVIDE A COMPLETE, AND APPROVED GROUNDING SYSTEM INCLUDING ELECTRODES, ELECTRODE CONDUCTOR, BONDING CONDUCTORS, AND EQUIPMENT CONDUCTORS AS REQUIRED BY ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
2. CONDUITS CONNECTED TO EQUIPMENT AND DEVICES SHALL BE METALLICALLY JOINED TOGETHER TO PROVIDE EFFECTIVE ELECTRICAL CONTINUITY.
3. FEEDERS AND BRANCH CIRCUIT WIRING INSTALLED IN A NONMETALLIC CONDUIT SHALL INCLUDE A CODE SIZED GROUNDING CONDUCTOR HAVING GREEN INSULATION. THE GROUND CONDUCTOR SHALL BE PROPERLY CONNECTED AT BOTH ENDS TO MAINTAIN ELECTRICAL CONTINUITY.
4. REFER TO GROUND BUS DETAILS. PROVIDE NEW GROUND SYSTEM COMPLETE WITH CONDUCTORS, GROUND ROD AND DESCRIBED TERMINATIONS.
5. ALL GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER AND ANNEALED #2 UNLESS NOTED OTHERWISE.
6. ALL NON-DIRECT BURIED TELEPHONE EQUIPMENT GROUND CONDUCTORS SHALL BE #2 STRANDED THHN (GREEN) INSULATION.
7. ALL GROUND CONNECTIONS SHALL BE MADE WITH "THYGROUND" COMPRESSION SYSTEM BURNDY CONNECTORS EXCEPT WHERE NOTED OTHERWISE.
8. PAINT AT ALL GROUND CONNECTIONS SHALL BE REMOVED.
9. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FUTURE INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS AND FURNISH TO SMART SMR ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".

UTILITY SERVICE:

1. TELEPHONE AND ELECTRICAL METERING FACILITIES SHALL CONFORM TO THE REQUIREMENTS OF THE SERVING UTILITY COMPANIES. CONTRACTOR SHALL VERIFY SERVICE LOCATIONS AND REQUIREMENTS. SERVICE INFORMATION WILL BE FURNISHED BY THE SERVING UTILITIES.
2. CONFORM TO ALL REQUIREMENTS OF THE SERVING UTILITY COMPANIES.

PRODUCTS:

1. ALL MATERIALS SHALL BE NEW, CONFORMING WITH NEC, ANSI, NEMA, AND THEY SHALL BE U.L. LISTED AND LABELED.
2. CONDUIT:
   - A) RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
   - B) ELECTRICAL METALLIC TUBING SHALL U.L. LABEL, FITTINGS SHALL BE COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
   - C) FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. SEAL TIGHT FLEXIBLE CONDUIT, ALL CONDUIT EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE
   - D) CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILING OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
   - E) ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE
   - F) ALL CONDUIT ONLY (C.O.) SHALL HAVE PULL ROPE.
   - G) CONDUITS RUN ON ROOFS SHALL BE INSTALLED ON 4x4 REDWOOD SLEEPERS, 6'-0" ON CENTER, SET IN NON-HARDENING MASTIC.
3. ALL WIRE AND CABLE SHALL BE COPPER, 600 VOLT, #12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. CONDUCTORS # 10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. TYPE THHN INSULATION USED UNLESS CONDUCTORS INSTALLED IN CONDUIT EXPOSED TO WEATHER, IN WHICH CASE TYPE THWN INSULATION SHALL BE USED.
4. PROVIDE GALVANIZED COATED STEEL BOXES AND ACCESSORIES SIZED PER CODE TO ACCOMMODATE ALL DEVICES AND WIRING.
5. DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE WITH WHITE FINISH (UNLESS NOTED BY ENGINEER), 20 AMP, 125 VOLT, THREE WIRE GROUNDING TYPE, NEMA 5-20R, MOUNT RECEPTACLE AT +12" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED ON DRAWINGS OR IN DETAILS. WEATHERPROOF RECEPTACLES SHALL BE GROUND FAULT INTERRUPTER TYPE WITH SIERRA #WPD-8 LIFT COVERPLATES.
6. TOGGLE SWITCHES SHALL BE 20 AMP, 120 VOLT AC, SPECIFICATION GRADE WHITE (UNLESS NOTED OTHERWISE) FINISH. MOUNT SWITCHES AT +48" ABOVE FINISHED FLOOR.
7. PANELBOARDS SHALL BE DEAD FRONT SAFETY TYPE WITH ANTI-BURN SOLDERLESS COMPRESSION APPROVED FOR COPPER CONDUCTORS, COPPER BUS BARS, FULL SIZED NEUTRAL BUS, GROUND BUS AND EQUIPPED WITH QUICK-MAKE QUICK-BREAK BOLT-IN TYPE THERMAL MAGNETIC CIRCUIT BREAKERS. MOUNT TOP OF THE PANELBOARDS AT 6'-3" ABOVE FINISHED FLOOR. PROVIDE TYPE WRITTEN CIRCUIT DIRECTORY.
8. ALL CIRCUIT BREAKERS, MAGNETIC STARTERS AND OTHER ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED.
9. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG. COPPERWELD OR APPROVED EQUAL.

INSTALLATION:

1. PROVIDE SUPPORTING DEVICES FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, BOXES, PANEL, ETC., SUPPORT LUMINARIES FROM UNDERSIDE OF STRUCTURAL CEILING. EQUIPMENT SHALL BE BRACED TO WITHSTAND HORIZONTAL FORCES IN ACCORDANCE WITH STATE AND LOCAL CODE REQUIREMENTS. PROVIDE PRIOR ALIGNMENT AND LEVELING OF ALL DEVICES AND FIXTURES.
2. CUTTING, PATCHING, CHASES, OPENINGS: PROVIDE LAYOUT IN ADVANCE TO ELIMINATE UNNECESSARY CUTTING OR DRILLING OF WALLS, FLOORS CEILINGS, AND ROOFS. ANY DAMAGE TO BUILDING STRUCTURE OR EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR. OBTAIN PERMISSION FROM THE ENGINEER BEFORE CORING.
3. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER THE CIRCUMSTANCES.
4. LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
5. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH THE REQUIREMENTS OF THE C.B.C.

PROJECT CLOSEOUT:

1. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALLS DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
2. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.
3. ALL BROCHURES, OPERATING MANUALS, CATALOG, SHOP DRAWINGS, ETC., SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
INFRASTRUCTURE
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PIN: 3701A0QDKH
USID: 281320

DESIGN RECORD:

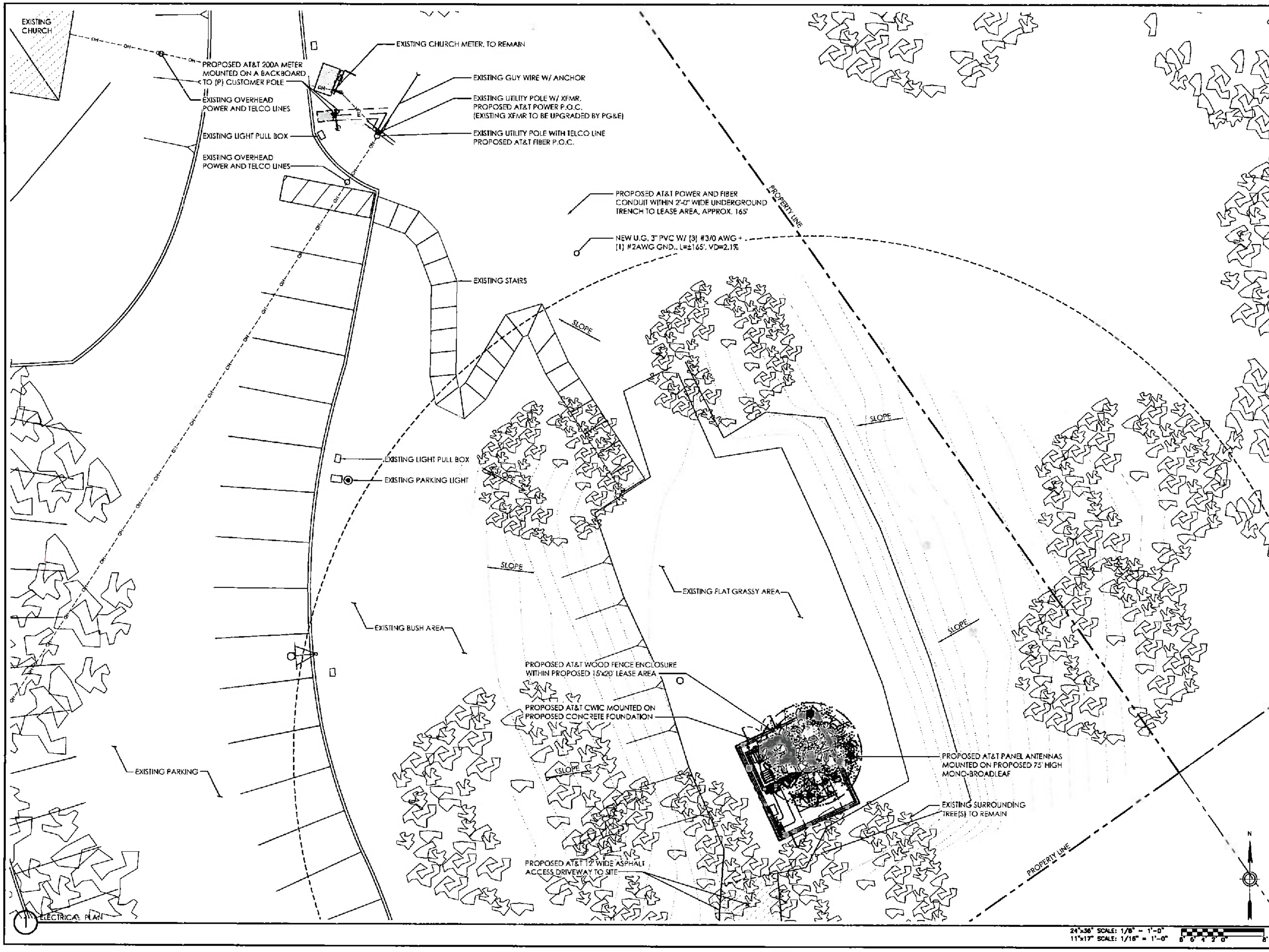
REV	DATE	DESCRIPTION
A	02/19/20	90%ZDs
B	04/03/20	100%ZDs
C	10/27/20	REV PER PG&E
0	01/25/21	ZDs FOR ZAP
1	03/03/21	REV ELEC
2	04/27/21	REV PER PLANNING

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
ELECTRICAL NOTES

SHEET TITLE:
E-1



APPLICANT:

AT&T

1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:

J5 INFRASTRUCTURE PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:

ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:

CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0GDKH
USID: 281320

DESIGN RECORD:

REV	DATE	DESCRIPTION
2	04/27/21	REV PER PLANNING
1	03/03/21	REV ELEC
0	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:

NOT TO BE USED FOR CONSTRUCTION

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME: **ELECTRICAL PLAN**

SHEET TITLE: **E-2**

EXHIBIT D

EXHIBIT D

NOTES:

1. ALL WORK TO CONFORM TO N.E.C. LATEST STATE ADOPTED EDITION.
2. LABEL SERVICE DISCONNECT WITH A RED TAG.
3. SWITCH LEG CONDUCTORS SHALL BE THE SAME COLOR AS CIRCUIT CONDUCTORS.
4. PULL ONE GROUND CONDUCTOR PER FLEXIBLE NONMETALLIC CONDUIT. FOR ALL OTHER CIRCUITS PULL A SEPARATE CONDUCTOR.
5. ALL GFCI RECEPTACLES TO HAVE A DEDICATED GROUND WIRE.
6. EQUIPMENT TERMINATION LUGS AND CONDUCTORS ARE RATED AT A MINIMUM OF 75°C.
7. CONDUIT REQUIREMENTS
   - UNDERGROUND PVC (SCH 40 OR 80)
   - INDOOR: EMT (RGS IN TRAFFIC AREAS)
   - Outdoor (ABOVE GRADE): RGS
8. LIGHTING IS DESIGNED AND INSTALLED BY SHELTER MANUFACTURER.

NOTE:
ALL BREAKERS AND PANELS SHOWN ARE EXISTING UNLESS NOTED AS (N) NEW.

SEE SPECIFICATION FOR CONDUIT TYPE.

LEGEND:
MI = MECHANICAL INTERLOCK
RU = RELAY TO MONITOR UTILITY POWER
RG = RELAY TO MONITOR GENERATOR POWER

ABBREVIATIONS:

BCW	BARE COPPER WIRE
BTS	BASE TRANSCEIVER STATION
C	CONDUIT
(E)	EXISTING
EG	EQUIPMENT GROUND
(F)	FUTURE
FACP	FIRE ALARM CONTROL PANEL
GEN	GENERATOR
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
MCM	MILLION CIRCULAR MILS
MI	MECHANICAL INTERLOCK
MP&S	SEE MECHANICAL PLANS & SPECIFICATIONS
(N)	NEW
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NL	NIGHT LIGHT - FIXTURE TO BE UNSWITCHED
PFB	PROVISION FOR FUTURE BREAKER
PVC	POLYVINYL CHLORIDE CONDUIT
(R)	RELOCATE
RG	RELAY TO MONITOR GENERATOR POWER
RU	RELAY TO MONITOR UTILITY POWER
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF
GFCI	GROUND FAULT CIRCUIT INTERRUPTER

NOTE: SYMBOLS INDICATED ABOVE MAY NOT NECESSARILY APPEAR AS PART OF THESE DRAWINGS IF NOT REQUIRED.

3 ELECTRICAL NOTES

24"x36" SCALE: NTS
11"x17" SCALE: NTS

PANEL 'A'

SITE NAME: CCL02296

PANEL DESIGNATION: AC PANEL 'A'

VOLTAGE: 120/240 V
PHASE: 1
WIRE: 3
MAIN BREAKER: 200 AMP
BUSS RATING: 225 AMP
LOCATION: SURFACE - EXTERIOR

CKT	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	USAGE FACTOR	PHASE A VA	PHASE B VA	PHASE A W	PHASE B W	USAGE FACTOR	SERVICE LOAD VA	STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	NETSURE RECTIFIERS 1 & 2	50	2	ON	2112	1.00	2112		2112		1.00	2112		2	50	NETSURE RECTIFIERS 11 & 12	2
3					2112	1.00		2112		2112	1.00	2112					4
5	NETSURE RECTIFIERS 3 & 4	50	2	ON	2112	1.00	2112		1200		1.00	1200		2	50	HVAC #1 (LEAD-LAG*)	6
7					2112	1.00		2112		1200	1.00	1200					8
9	NETSURE RECTIFIERS 5 & 6	50	2	ON	2112	1.00	2112		0					2	50	HVAC #2 (LEAD-LAG*)	10
11					2112	1.00		2112		0			ON				12
13	NETSURE RECTIFIERS 7 & 8	50	2	ON	2112	1.00	2112		900		1.00	900	ON	3	20	RECEPTACLE	14
15					2112	1.00		2112		200	1.00	200	ON	1	20	UNTHROW LIGHT	16
17	NETSURE RECTIFIERS 9 & 10	50	2	ON	2112	1.00	2112		100		1.00	100	ON	1	20	EXTERIOR LIGHT	18
19					2112	1.00		2112		180	1.00	180	ON	1	20	GFI	20
21	GFI INTERNAL	20	1	ON	180	1.00	180		360		1.00	360	ON	1	20	BATTERY CHARGER	22
23	OUTLETS	20	1	ON	720	1.00		720		480	1.00	480	ON	1	20	HEATER	24

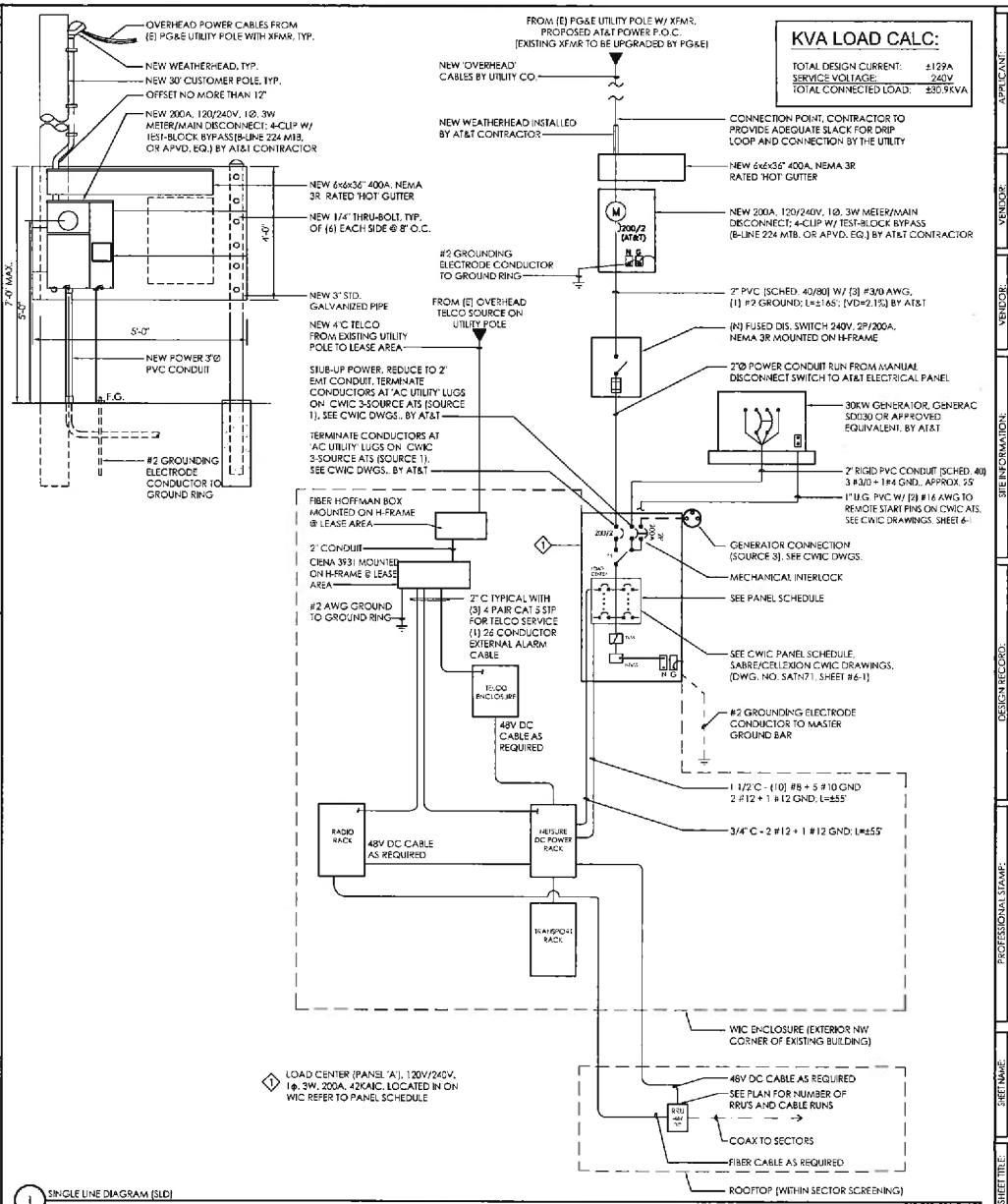
CONTRACTOR SHALL LABEL PANEL WITH CARRIER I.D. AND SERVICE RATING

PHASE A TOTAL VA: 15923
PHASE B TOTAL VA: 15452
TOTAL KVA: 30.86
TOTAL AMPS: 128.59

NOTES:
1. ALL LOADS CALCED AS CCL/WCL LOADS (OK TO DESIGN TO 100% CAPACITY)
2. UNUSED BREAKERS SHALL BE IN 'OFF' POSITION AND LABELED 'SPARE'
3. * LEAD LAG CONTROLLER ENSURES ONLY ONE HVAC IS ON AT A TIME

2 AC PANEL SCHEDULE

24"x36" SCALE: NTS
11"x17" SCALE: NTS



1 SINGLE LINE DIAGRAM (SLD)

24"x36" SCALE: NTS
11"x17" SCALE: NTS

KVA LOAD CALC:

TOTAL DESIGN CURRENT:	±129A
SERVICE VOLTAGE:	240V
TOTAL CONNECTED LOAD:	±30.9KVA

APPLICANT:
AT&T
1452 EDINGER AVE.
TUSTIN, CALIFORNIA 92780

VENDOR:
INFRASTRUCTURE ENGINEERS
AZ - CA - CO - ID - UT - NV - TX - UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

VENDOR:
ALLSTATES ENGINEERING & SURVEYING
23675 BIRTCHER DRIVE
LAKE FOREST, CA 92630

SITE INFORMATION:
CCL02296
RSFR NSB CCL02296
10707 SOQUEL DRIVE
APTOS, CA 95003

FA: 14881325
PACE: MRSFR063963
PTN: 3701A0QDKH
USID: 281320

DESIGN RECORD:

REV	DATE	DESCRIPTION
A	04/27/21	REV PER PLANNING
1	03/03/21	REV ELEC
0	01/25/21	ZDs FOR ZAP
C	10/27/20	REV PER PG&E
B	04/03/20	100%ZDs
A	02/19/20	90%ZDs

PROFESSIONAL STAMP:
NOT TO BE USED FOR CONSTRUCTION
It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

SHEET NAME:
SINGLE-LINE DIAGRAM & PANEL SCHEDULE

SHEET TITLE:
E-3

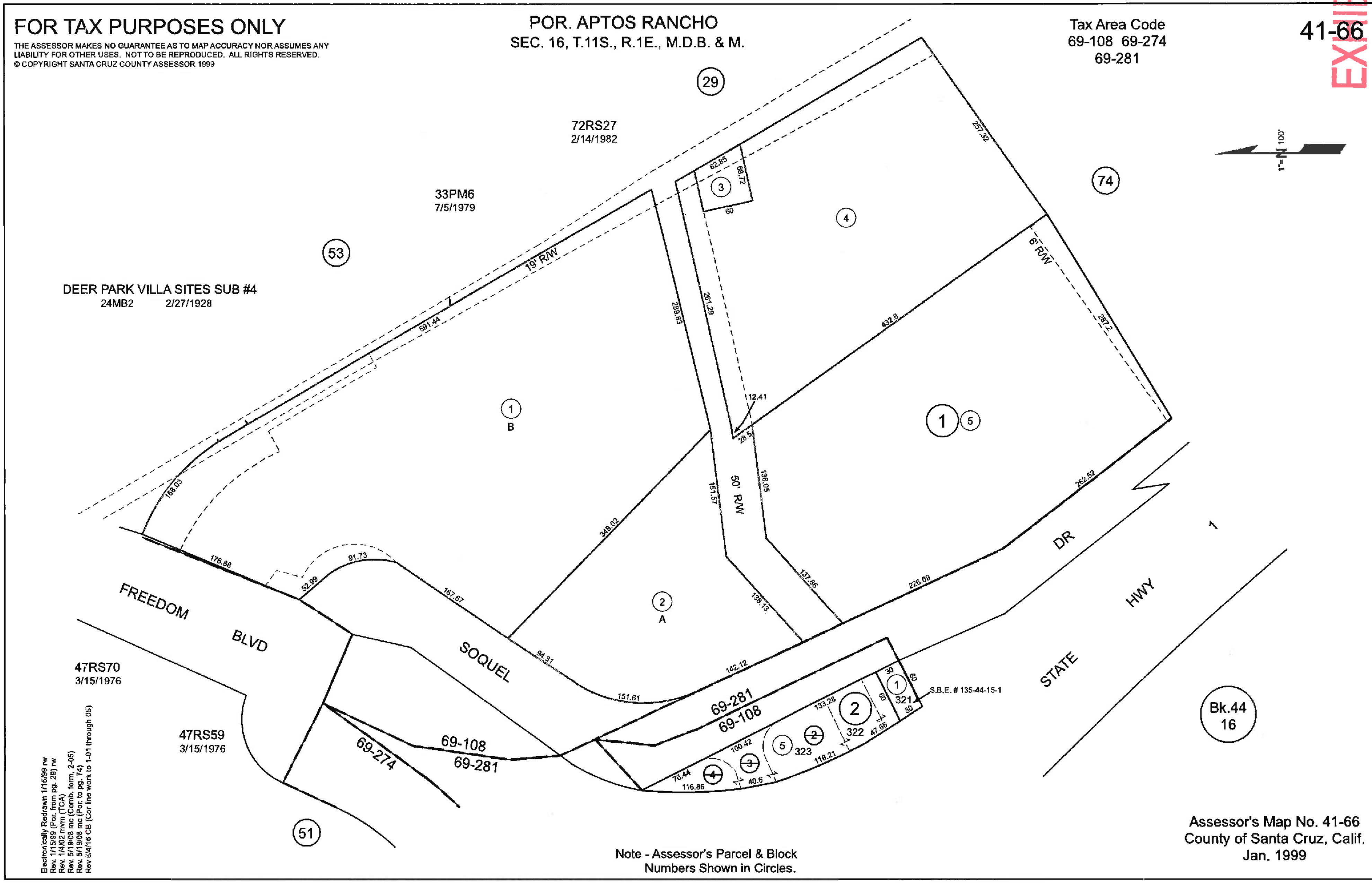
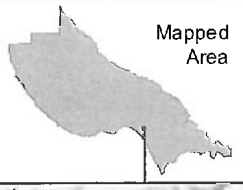
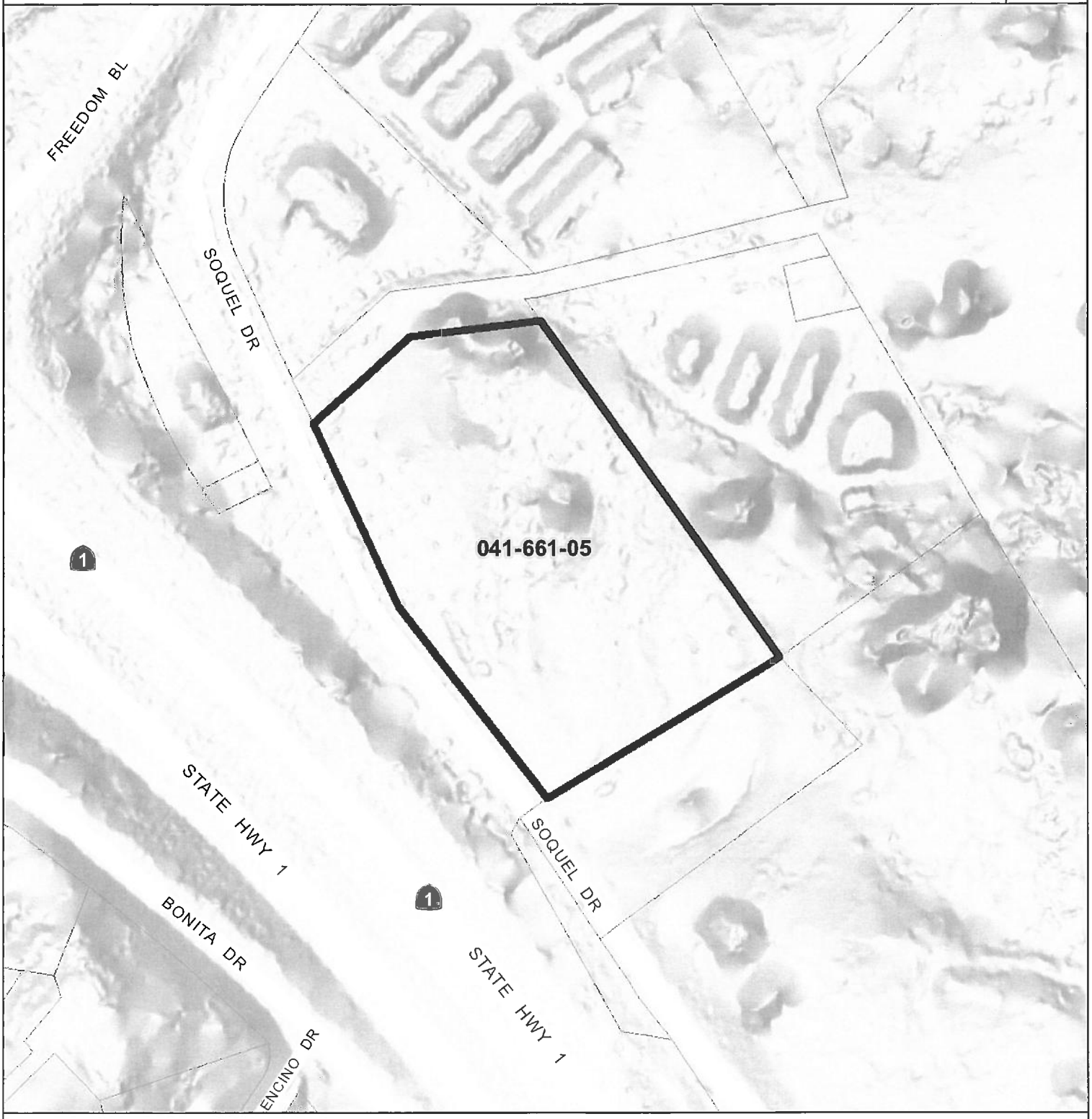

FOR TAX PURPOSES ONLY
THE ASSESSOR MAKES NO GUARANTEE AS TO MAP ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED.
© COPYRIGHT SANTA CRUZ COUNTY ASSESSOR 1999
POR. APTOS RANCHO
SEC. 16, T.11S., R.1E., M.D.B. & M.
Tax Area Code
69-108 69-274
69-281
41-66
72RS27
2/14/1982
33PM6
7/5/1979
DEER PARK VILLA SITES SUB #4
24MB2 2/27/1928
19' R/W
50' R/W
6' R/W
FREEDOM BLVD
SOQUEL DR
STATE HWY 1
47RS70
3/15/1976
47RS59
3/15/1976
S.B.E. # 135-44-15-1
Bk.44
16
1"= 100'
Electronically Redrawn 1/15/99 rw
Rev. 1/15/99 (Por. from pg. 29) rw
Rev. 1/4/02 mvm (TCA)
Rev. 5/19/08 mc (Comb. form, 2-05)
Rev. 5/19/08 mc (Por. to pg. 74)
Rev 6/4/16 CB (Cor line work to 1-01 through 05)
Note - Assessor's Parcel & Block
Numbers Shown in Circles.
Assessor's Map No. 41-66
County of Santa Cruz, Calif.
Jan. 1999

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Location Map





Parcel: 04166105

Study Parcel

Assessor Parcel Boundary

Map printed: 23 Mar. 2022

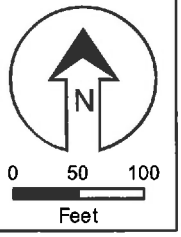
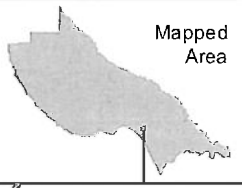


EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel General Plan Map



R-UL

P

R-UM

C-S

P

041-661-05
(P)

P

R-R

R-UL

C-S *Commercial Services*
P *Public Facilities*
R-R *Residential Rural*
R-UM *Res. Urban Medium Density*
R-UL *Res. Urban Low Density*

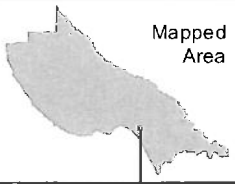
N

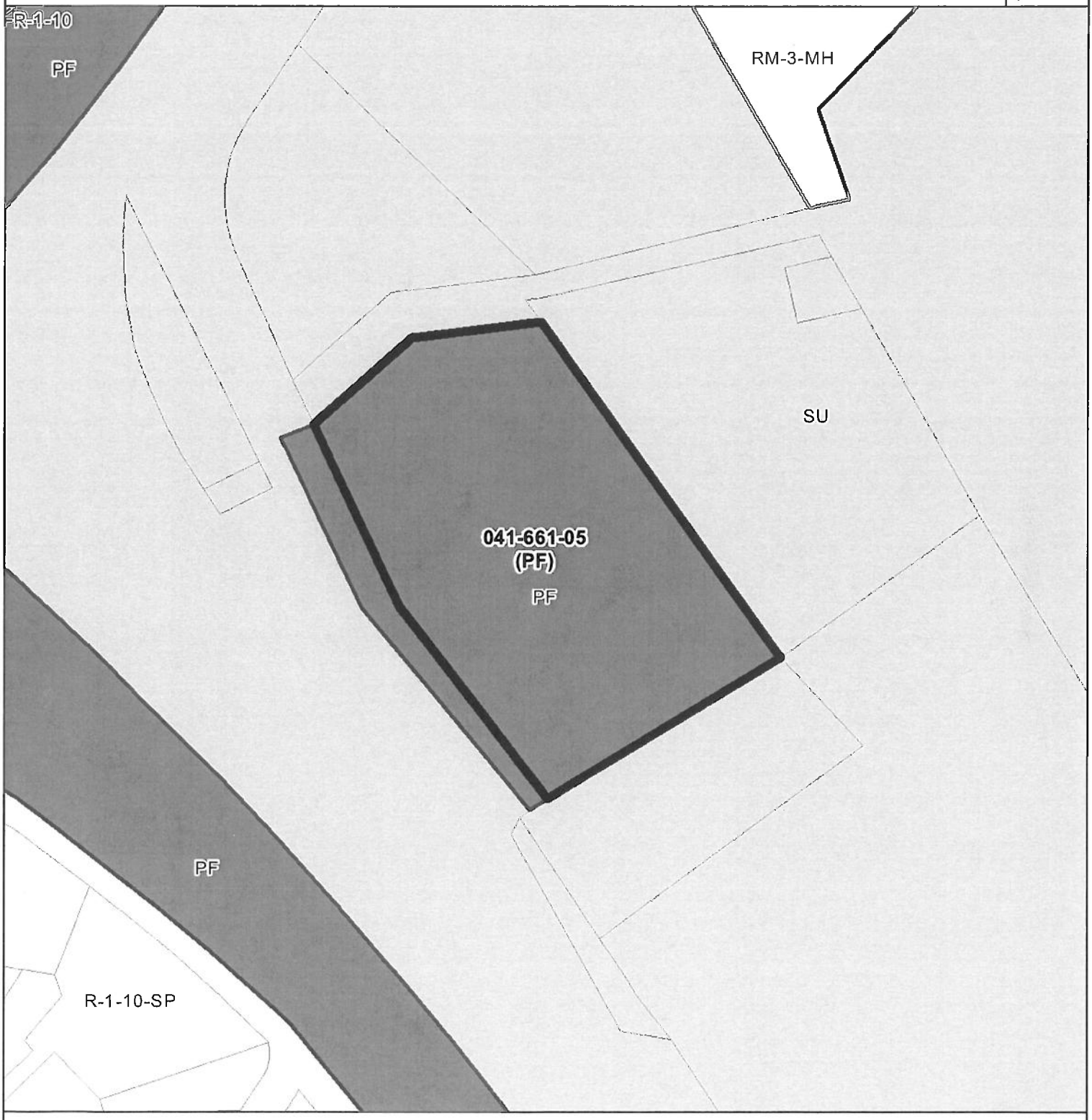
0 50 100
Feet

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Zoning Map





PF *Public/Community Facilities*
R-1 *Single-Family Residential*
RM *Residential Multi-Family*
SU *Special Use*

N

0 50 100
Feet

EXHIBIT E

Parcel Information

Services Information

Urban/Rural Services Line:	__ Inside X Outside
Water Supply:	Central Water District
Sewage Disposal:	Septic
Fire District:	Central Fire District
Drainage District:	n/a

Parcel Information

Parcel Size:	2.92 acres / 127,369 square feet
Existing Land Use - Parcel:	Church/Institutional
Existing Land Use - Surrounding:	Commercial, Public Facilities, Residential
Project Access:	Soquel Drive
Planning Area:	Aptos Hills
Land Use Designation:	P (Public Facilities)
Zone District:	PF (Public Facilities)
Coastal Zone:	__ Inside X Outside
Appealable to Calif. Coastal Comm.	__ Yes X No

Technical Reviews: Biological Report Review (REV211338), Arborist Report Review (REV211339)

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site
Fire Hazard:	Not a mapped constraint
Slopes:	0% to 30%
Env. Sen. Habitat:	Mapped Sensitive Habitat – SC Long-Toed Salamander
Grading:	About 111 cubic yards of grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Mapped Scenic
Archeology:	Not mapped/no physical evidence on site

County of Santa Cruz

PLANNING DEPARTMENT
701 Ocean Street, 4th floor, Santa Cruz, Ca 95060
(831) 454-2580 Fax: (831) 454-2131 Tdd: (831) 454-2123

Melissa Gonzalez
J5 Infrastructure Partners
23 Mauchly, Suite 110
Irvine, CA 92618
mgonzalez@j5ip.com

January12, 2021

Subject: 10707 Soquel Drive AT&T Mobility LLC (AT&T) Facility Biotic Report Review
APN: 041-661-05
Application #: REV211338; 201373

Attachment 1. Biotic Report
Attachment 1. Arborist Report

Dear Ms. Gonzalez,

The Planning Department received and reviewed a Biotic Report dated November 2021, prepared by Biotic Resources Group for APN 041-661-05 (Attachment 1). A Biotic Report Review was required because of the potential for sensitive habitats and protected species on this parcel where construction of a new telecommunications facility is proposed.

The proposed project consists of the construction of an unmanned telecommunications facility consisting of a 75-foot-high mono-broadleaf pole, supporting 4 antenna sectors, 12 panel antennas, 24 remote radio heads, surge suppressors, GPS antennae and ice bridge. A 15x20 foot fenced area will surround the monopole; this area will house equipment cabinets, batteries, diesel generator, and associated fiber cables from the equipment to the antennas. The project includes approximately 165 linear feet of power and fiber conduit that will extend from an existing Pacific Gas & Electric Company utility pole to the lease area. The power and fiber conduit will be placed in a 2-foot wide underground trench. The project also proposes a new 100-foot long, 12-foot wide asphalt access driveway that will extend from the existing church driveway to the lease area.

The summary and evaluation below are based on information obtained through review of the attached Biotic Report and Project Specific Arborist Report prepared by Davey Resources Group (Attachment 2). Other sources consulted during report review included the California Natural Diversity Data Base (CNDDB), the California Wildlife Habitat Relationships (CWHR) information system, Santa Cruz County GIS Maps, aerial imagery of the project site, and personal communications between the County staff biologist, United States Fish and Wildlife Service (USFWS) Staff, and local amphibian experts.

Baseline Environmental Conditions

The Study Area covered in the Biotic Report includes the entire approximately 2.92-acre parcel which is partially developed with a church, parking areas, recreational areas, and a large community garden. The Biotic Report identifies three distinct habitat types on the parcel: oak woodland, grassland, and non-native landscaping. There is a paved driveway, existing church, and large parking areas in the central portion of the property. The lower western portion of the parcel along Soquel Drive contains a large community garden. Figure 2 in the attached Biotic Report shows the location of each habitat type identified on the property in relation to the location of existing and proposed development..

EXHIBIT G

An open grassy area occurs on a flat bench above (east) of the church parking lot and extends down a slope to the existing utility pole. This grassy area is maintained through regular mowing or weed eating and appears to be used for church recreation activities. The oak woodland habitat is dominated by a mature canopy of coast live oak (*Quercus agrifolia*) and a few non-native Monterey pine (*Pinus radiata*) with a non-native grassland understory also maintained through regular mowing. The understory vegetation on the entire property has been mowed for many years to maintain a park-like setting under the oak canopy and in the open grassy areas. The property was mowed almost to ground level at the time of the field survey as depicted in Figures 4-7 of the attached Biotic Report.

Analysis

Oak Woodlands and habitat for special-status plant and wildlife species are considered sensitive under Santa Cruz County's Sensitive Habitat Protection ordinance (Chapter 16.32). Biological Resources including special-status species and their habitats and other sensitive natural communities as identified by local policies, California Department of Fish and Wildlife (CDFW), or United States Fish and Wildlife Service (USFWS) are also protected under the California Environmental Quality Act (CEQA), the California Endangered Species Act, and the Federal Endangered Species Act.

The proposed access driveway to the lease area is located within oak woodland. Although no oak trees are proposed for removal, construction activities and permanent development are proposed within the dripline of existing oak trees. Grading, trenching, and heavy pruning for construction of the driveway could cause direct mortality or decline of these trees after construction is complete. Protective measures for oak trees included in the attached Arborist Report must be adhered to. Conditions are included below to ensure protection of oak trees.

The project site provides potential habitat for two federally protected plants: robust spineflower (*Chorizanthe robusta* var. *robusta;* FE) and Monterey spineflower (*Chorizanthe pungens* var. *pungens;* FT). Both species bloom and are identifiable in the months of May and June; therefore, presence/absence of these species could not be determined during the October 2021 site survey. Measures requiring additional surveys to confirm presence or absence of these species are included below. If either species is found present in the project impact area, further biotic review and approval will be required.

This parcel is within the known range of Federally and State Endangered/State Fully Protected Santa Cruz Long-toed Salamander (SCLTS; *Ambystoma maculatum croceum*). This species spends a substantial portion of its life underground in small mammal burrows or around the root systems of plants in upland chaparral and woodland areas. This species breeds in seasonal ponds during the rainy season and estivates beneath ground during the summer months in suitable upland habitat to which it migrates. Suitable upland habitat for this species includes in-tact understory vegetation where they are protected from heat and desiccation. SCLTS are not expected to over-summer in locations dominated by grassland or in oak woodlands that have a modified grassland understory.

Individuals of this species will travel long distances from breeding ponds to reach suitable upland habitat and will move across grasslands and other unsuitable habitats (e.g. roads, sidewalks, lawns, patios, landscaped areas etc.) during migration. Most surface movements such as migration to and from breeding ponds, and the dispersal of juveniles away from ponds, are associated with sustained rainfall, especially at night. The species usually begins migrations from upland habitat to breeding ponds with the first heavy rains of fall and have returned to upland habitat by April.

The project parcel does not contain breeding habitat or upland habitat for this species. The nearest known breeding pond (Racehorse Lane Pond) is located approximately 0.4 mile to the East/Southeast, within SCLTS dispersal distance to the project site. Suitable upland habitat occurs in the hills east and southeast between the project site and the Racehorse Lane Pond. There is no suitable upland habitat on the project site or beyond the project site (across Soquel Drive). Highway 1 is assumed to be a complete barrier to dispersal to and from ponds southwest of the site. The annual grassland and degraded oak woodland that currently occur on the property are not suitable for SCLTS estivation.

EXHIBIT G

However, given the proximity of this property to known breeding and potential upland habitat, it is possible that SCLTS individuals pass through this parcel during migration and dispersal in the rainy season. Protective measures for SCLTS have been included below.

Trees in and adjacent to the study area provide potential nesting and foraging habitat for birds of prey and migratory birds. Birds of prey and migratory birds are offered protection under the California Fish and Game Code, and the Federal Migratory Bird Treaty Act (MBTA). Under the MBTA, it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird unless and except as permitted by regulations. Conditions have been included in the Biotic Report to protect nesting birds during project construction.

Conclusion

There are sensitive habitat constraints on the project site associated with oak woodlands, special-status species, and habitat for nesting birds that must be considered prior to and during project implementation. This parcel is within the known range of Santa Cruz long-toed salamander. The project impact area does not contain breeding habitat or upland habitat for this species. SCLTS individuals may pass through this area during the rainy season for migration and dispersal. Once the rainy season begins, SCLTS that pass through the property could temporarily seek cover onsite between storm events, under woody or manmade debris or in small mammal burrows.

The proposed project will not result in the loss of potential SCLTS upland or aquatic habitats or other sensitive habitats. Construction of the cell tower (lease area) will be located entirely in an area of previously disturbed and regularly mowed grassland. Although the building footprint will be larger than the existing development on the property, it is a minor increase in size compared to the surrounding open area and existing development and is not expected to add any new significant barriers to salamander dispersal. Temporary impacts associated with installation of the fiber optic line will occur in annual grassland. Underground utilities will not present a barrier or obstruction to overland movements, and SCLTS are not expected to be affected by trenching or digging on site during the dry season.

Conditions have been included below to ensure that potential impacts to special-status species and their habitats have been avoided and/or minimized to the maximum extent possible during project implementation and post project completion. These conditions are intended to ensure that there is no potential for *take* of SCLTS.

It is important to note that if a SCLTS is identified at any time during project related activities prior to or during construction, capturing and handling of SCLTS is not permitted unless a project-specific Take Permit has been obtained from USFWS. Only biologists specially approved by USFWS are allowed to participate in activities associated with surveying, capturing, handling, and monitoring of SCLTS. Under current State law, there is no pathway or permit for legal "take" of Fully Protected species or their habitat.

A copy of this biotic approval, including attachments, must be submitted with any future permit applications.

If you have any questions regarding this letter, please feel free to contact me by email or telephone at Juliette.Robinson@santacruzcounty.us or 831-454-3156.

Sincerely,

Juliette Robinson
Resource Planner IV, Biologist

CC: Bob Loveland, Area Resource Planner
Matt Johnston, Environmental Coordinator
Jonathan DiSalvo; Project Planner

10707 Soquel Drive Biotic Report Review

EXHIBIT G

Conditions of Approval

In order to conduct development activities on parcel 041-661-05, and avoid impacts to sensitive habitats and special-status species, the following conditions shall be adhered to:

A. Prior to any site disturbance, a pre-construction meeting shall be conducted. The purpose of the meeting will be to ensure that the conditions set forth in the proposed project description and Conditions of Approval are communicated to the various parties responsible for constructing the project. The meeting shall involve all relevant parties including the project proponent, construction supervisor, Environmental Planning Staff, and the project biologist.

B. All project construction related activities including trenching and excavation for installation of the fiber optic cables, equipment, and fencing shall occur during the dry season. The dry season shall be defined as the time period between April 15 and the first overnight rain of the fall season (2 mm or greater) *or* October 15 whichever occurs first.

    1. No project related activities shall be allowed between October 16th and April 14th.
    2. Construction activities shall not take place at night or during rain events. Consult weather forecasts from the National Weather Service at least 72 hours prior to performing work.
    3. If an unexpected rain event occurs at any time during construction, the project disturbance area shall be inspected for SCLTS by a qualified biologist prior to re-commencement of construction (see Condition J below).
    4. All construction-related debris shall be removed before the onset of winter rains.

C. The project design shall avoid installation of curbs. Any features required for project approval related to stormwater runoff shall be designed, with the help of a qualified biologist, so that SCLTS cannot become trapped or impeded during dispersal.

D. Prior to commencement of construction every individual working on the Project must attend biological awareness training by a qualified biologist prior to working on the job site. The training shall include at minimum information regarding the following:

    1. Location and identification of sensitive habitats and all special-status species with potential to occur in the project area including information specific to identifying SCLTS.
    2. The importance of avoiding impacts to special-status species and their habitat, and the steps necessary if any special-status species is encountered at any time.
    3. Best management practices to be implemented, identification of the limits of work, and project-specific avoidance measures and permit conditions that must be followed.

E. Prior to commencement of construction, high visibility construction fencing or flagging shall be installed, with the assistance of a qualified biologist, to indicate the limits of work and prevent inadvertent grading or other disturbance within the adjacent sensitive habitat. All areas outside of the limits of work shall be clearly marked as environmentally sensitive areas.

    1. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.
    2. The fencing shall be inspected and maintained daily until project completion.

F. Impacts to oak trees, including limbing and pruning, shall be avoided to the maximum extent possible. Trees shall be protected at or outside of the dripline if possible by a system of fencing/flagging and straw bale barricades. The exact locations of the protection measures shall be determined in the field with the assistance of a qualified arborist or biologist.

EXHIBIT G

G. All protective measures outlined on Page 7 of the attached Arborist Report dated May 24, 2021 prepared by Davey Resource Group shall be adhered to.

H. An arborist shall be on site during tree trimming and grading within the dripline of the oak trees and her/his recommendations shall be followed. As per an arborist's directions, hand tools shall be used to trim oak tree roots encountered during excavation cleanly (vs. ripping roots with excavator/backhoe).

I. During project construction, no exposed trenches or open pits shall be left overnight.

J. A single person on the jobsite shall be designated for daily monitoring activities which shall include:

1. Checking under all equipment for wildlife before use.
2. Ensuring that at the end of each work day, all excavations shall be secured with a cover, or a ramp installed to prevent wildlife entrapment.
3. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

K. If a SCLTS is identified at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. A qualified SCLTS biologist, USFWS, CDFW, and the County Environmental Coordinator shall be notified immediately. The animal shall be allowed to move out of harm's way on its own unless otherwise approved. Capturing and handling SCLTS is not permitted unless a project-specific Take Permit has been obtained from USFWS. Only biologists specially approved by USFWS are allowed to participate in activities associated with surveying, capturing, handling, and monitoring of SCLTS.

L. Prior to commencement of construction, a focused rare plant survey for robust spineflower (*Chorizanthe robusta* var. *robusta*) and Monterey spineflower (*Chorizanthe pungens* var. *pungens*) shall be completed during the identifiable period (May-June) and submitted to the County Environmental Coordinator for approval.

a. If no rare plants are found, no additional protective measures are required.

b. If either species is found present in the project impact area, the County Environmental Coordinator shall be notified immediately.

i. All areas where rare plants occur shall be avoided as environmentally sensitive areas and surrounded with protective fencing.

ii. If avoidance is not possible, project construction *may not commence* until additional biotic approval from County Planning is received. Additional impact analysis (demonstrating adequate avoidance, minimization, and mitigation) shall be completed and reviewed by County Planning. Additional environmental analysis may be required based on the results of this review and analysis.

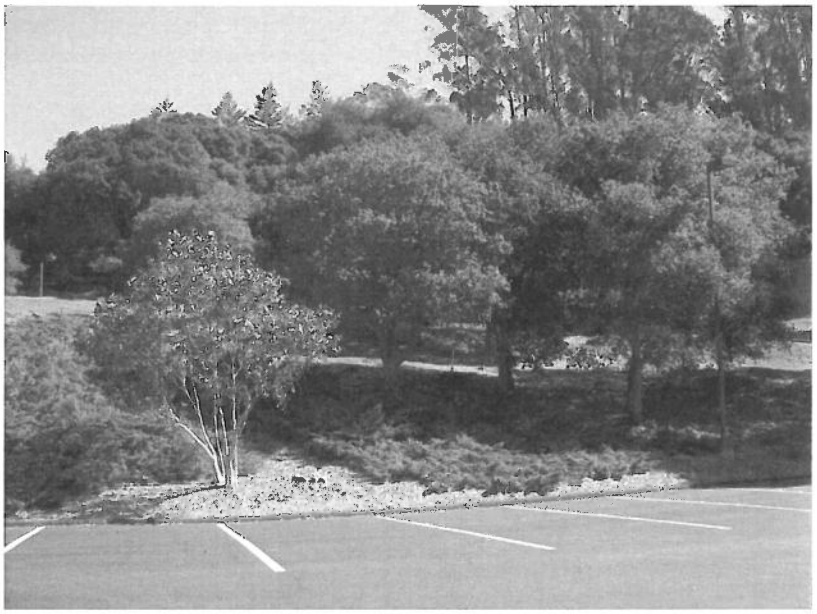
M. Any seed mix used for erosion control purposes on temporarily impacted areas and exposed soils shall be limited to seeds of native species common to the surrounding habitat and/or sterile seeds.

AT&T TELECOMMUNICATIONS FACILITY

10707 SOQUEL DRIVE, APTOS, CA 95003
SITE NUMBER CCL02296
APN 041-661-05

BIOTIC REPORT

November 2021



Biotic Resources Group
Biotic Assessments • Resource Management • Permitting

EXHIBIT G

Biotic Resources Group

Biotic Assessments • Resource Management • Permitting

AT&T TELECOMMUNICATIONS FACILITY

10707 SOQUEL DRIVE, APTOS, CA 95003
SITE NUMBER CCL02296
APN 041-661-05

BIOTIC REPORT

Prepared for:

Sentinel Science
Attn: Mark Bellini

Prepared by:

Biotic Resources Group
Kathleen Lyons
With
Dana Bland, Wildlife Biologist
Dana Bland & Associates

November 19, 2021

2551 S. Rodeo Gulch Road #12 • Soquel California 95073 • (831) 476-4803 • brg@cruzio.com

EXHIBIT G

AT&T TELECOMMUNICATIONS FACILITY
10707 SOQUEL DRIVE, APTOS, CA 95003
SITE NUMBER CCL02296
APN 041-661-05

BIOTIC REPORT

November 2021

EXECUTIVE SUMMARY

AT&T Mobility Corporation is proposing the construction of a telecommunications facility on a property on Soquel Drive in the Aptos area of Santa Cruz County. The approximately 0.03-acre project site is located east of Freedom Boulevard and north of Soquel Drive on a 2.92-acre parcel that is currently partially developed with a church (Christ Lutheran Church of Aptos) at 10707 Soquel Drive (APN 041-661-05 (Figure 1).

The proposed project consists of the construction of an unmanned telecommunications facility consisting of a 75-foot high mono-broadleaf pole, supporting 4 antenna sectors, 12 panel antennas, 24 remote radio heads, surge suppressors, GPS antennae and ice bridge. A 15x20 foot fenced area will surround the monopole; this area will house equipment cabinets, batteries, diesel generator, and associated fiber cables from the equipment to the antennas. The project includes approximately 165 linear feet of power and fiber conduit that will extend from an existing Pacific Gas & Electric Company utility pole to the lease area. The power and fiber conduit will be placed in a 2-foot wide underground trench. The project also proposes a new 100-foot long, 12-foot wide asphalt access driveway that will extend from the existing church driveway to the lease area. The access driveway will have a locked vehicular barrier, for use by AT&T service personnel. An existing flat grassy area located northwest of the lease area will be retained. No trees will be removed for the project; however, some oak tree limbs may need to be removed to accommodate construction and equipment access.

The placement of the buried power and fiber conduit will be a temporary disturbance of approximately 330 square feet of sparse, sandy grassland and non-native landscaping. The ground area permanently affected by the access driveway and lease area is 1,500 square feet of sparse, sandy grassland and degraded oak woodland understory. The biotic report outlines measures to avoid impacts to sensitive resources prior to construction, including a spring survey for special status plant species and measures during project construction, including protecting/retaining occurrences of special status plant species (if found), protecting/retaining existing oak trees, and implementing a pre-construction breeding bird nest survey. No special status wildlife species are expected to occur on the project site. Successful implementation of the recommended measures will reduce impacts to sensitive biotic resources to a less than significant level.

Intended Use of this Report

The findings presented in this biological report are intended for the sole use of Sentinel Science, AT&T, and Santa Cruz County in evaluating the proposed development project. The findings presented by the Biotic Resources Group in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or County law or ordinance pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.

EXHIBIT G

1.0 INTRODUCTION

AT&T Mobility Corporation is proposing the construction of a telecommunications facility on a property on Soquel Drive in the Aptos area of Santa Cruz County. The approximately 0.03-acre project site is located east of Freedom Boulevard and north of Soquel Drive on a 2.92-acre parcel that is currently partially developed with a church (Christ Lutheran Church of Aptos) at 10707 Soquel Drive (APN 041-661-05 (Figure 1).

The proposed project consists of the construction of an unmanned telecommunications facility consisting of a 75-foot high mono-broadleaf pole, supporting 4 antenna sectors, 12 panel antennas, 24 remote radio heads, surge suppressors, GPS antennae and ice bridge. A 15x20 foot fenced area will surround the monopole; this area will house equipment cabinets, batteries, diesel generator, and associated fiber cables from the equipment to the antennas. The project includes approximately 165 linear feet of power and fiber conduit that will extend from an existing Pacific Gas & Electric Company utility pole to the lease area. The power and fiber conduit will be placed in a 2-foot wide underground trench. The project also proposes a new 100-foot long, 12-foot wide asphalt access driveway that will extend from the existing church driveway to the lease area. The access driveway will have a locked vehicular barrier, for use by AT&T service personnel. An existing flat grassy area located northwest of the lease area will be retained. No trees will be removed for the project; however, some oak tree limbs may need to be removed to accommodate construction and equipment access.

The placement of the buried power and fiber conduit will be a temporary disturbance of approximately 330 square feet. The ground area permanently affected by the access driveway and lease area is 1,500 square feet.

The Biotic Resources Group assessed the biotic resources of the project site. The focus of the assessment was to identify sensitive biotic resources within the project area and evaluate the proposed activities relative to such resources.

Specific tasks conducted for this study include:

- Characterize and map the major plant communities within the project site;
- Identify sensitive biotic resources, including plant and wildlife species of concern, within areas proposed for construction activities,
- Evaluate the potential effects of the proposed project on sensitive biotic resources and recommend measures to avoid or reduce such impacts.

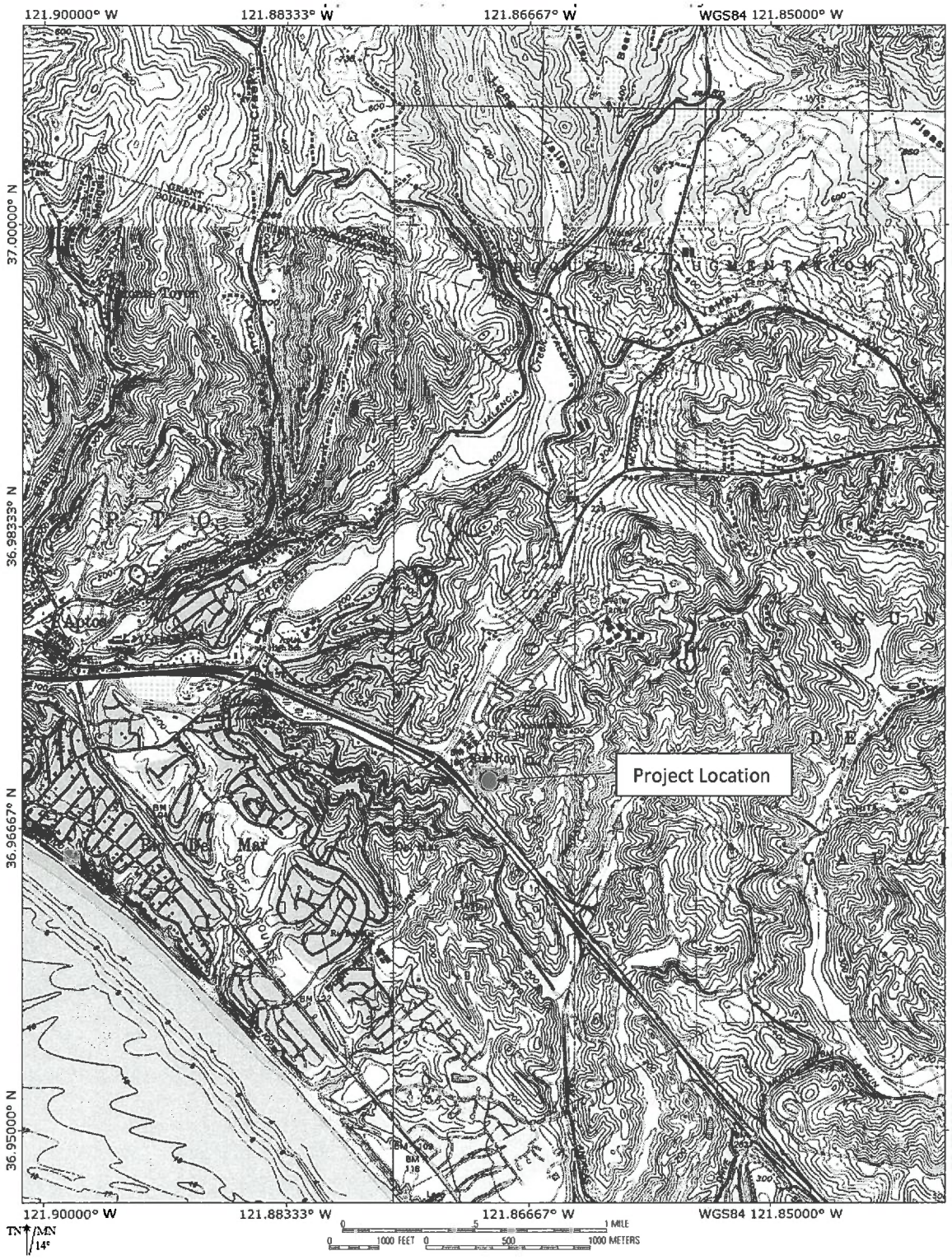


Figure 1. Project Location on USGS Watsonville West Topographic Map

EXHIBIT G

2.0 METHODOLOGY

A survey to document site conditions and biotic resources at the project site was conducted in October 2021 by Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist, Dana Bland & Associates). Study methodology included a field reconnaissance survey, aerial photograph interpretation, and accessing electronic databases. Database searches were conducted; the California Natural Diversity Data Base (CNDDB) "RareFind" (2021) and the California Native Plant Society (CNPS) Rare Plant Electronic Inventory (2021) for the Watsonville West and surrounding quadrangles were accessed.

Prior to conducting the field surveys, a potential list of special status or sensitive species was reviewed, utilizing species recognized by California Department of Fish and Wildlife (CDFW), US Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS). The proposed telecommunications facility area was walked. The major plant community types on the property, based on the classification system developed by CNDDB's *California Terrestrial Natural Communities (*CDFW 2020) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995) and as amended to reflect site conditions, were mapped during the field survey. Plant community types as recognized by CDFW were used to the greatest extent feasible, however, modifications to the classification system's nomenclature were made, as necessary, to accurately describe the sites resources, particularly for areas that the CDFW system provides no suitable classification. The plant communities were mapped onto a project site plan (Figure 2) and an aerial image (Figure 3). The *Jepson Manual* (2012) was the principal taxonomic reference used for the botanical work.

3.0 ENVIRONMENTAL SETTING

The AT&T Telecommunications Facility project site lies at the mid-portion of the geographic area known as the Central Coast Range and extends eastward to the San Francisco Bay Area Range. The project site supports three plant community types: oak woodland, grassland, and non-native landscaping. Each vegetation type, its California vegetation code, and state ranking (rarity) are listed in Table 1.

The location of these communities is depicted on Figures 2 and 3. The soil at the project site is mapped as Baywood loamy sand, 15 to 30 percent slopes (106) (SoilWeb, 2021).

Table 1. Vegetation Types, AT&T Telecommunications Facility

CaCode[1]	Vegetation Type	Plant Association/Alliance	State Ranking[2]
42.026.22	Grassland	Wild Oat/ Ripgut Brome– Filaree/ Cat's Ear/Sheep Sorrel /Coast Tarweed /English Plantain	None
71.060.02	Oak Woodland	Coast Live Oak– California Blackberry/Ripgut Brome/Poison Oak	S4
None	Landscaping	Juniper/ Rock Rose	None

[1] – California vegetation code as per CDFW (September, 2020); 2- Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled.

EXHIBIT G

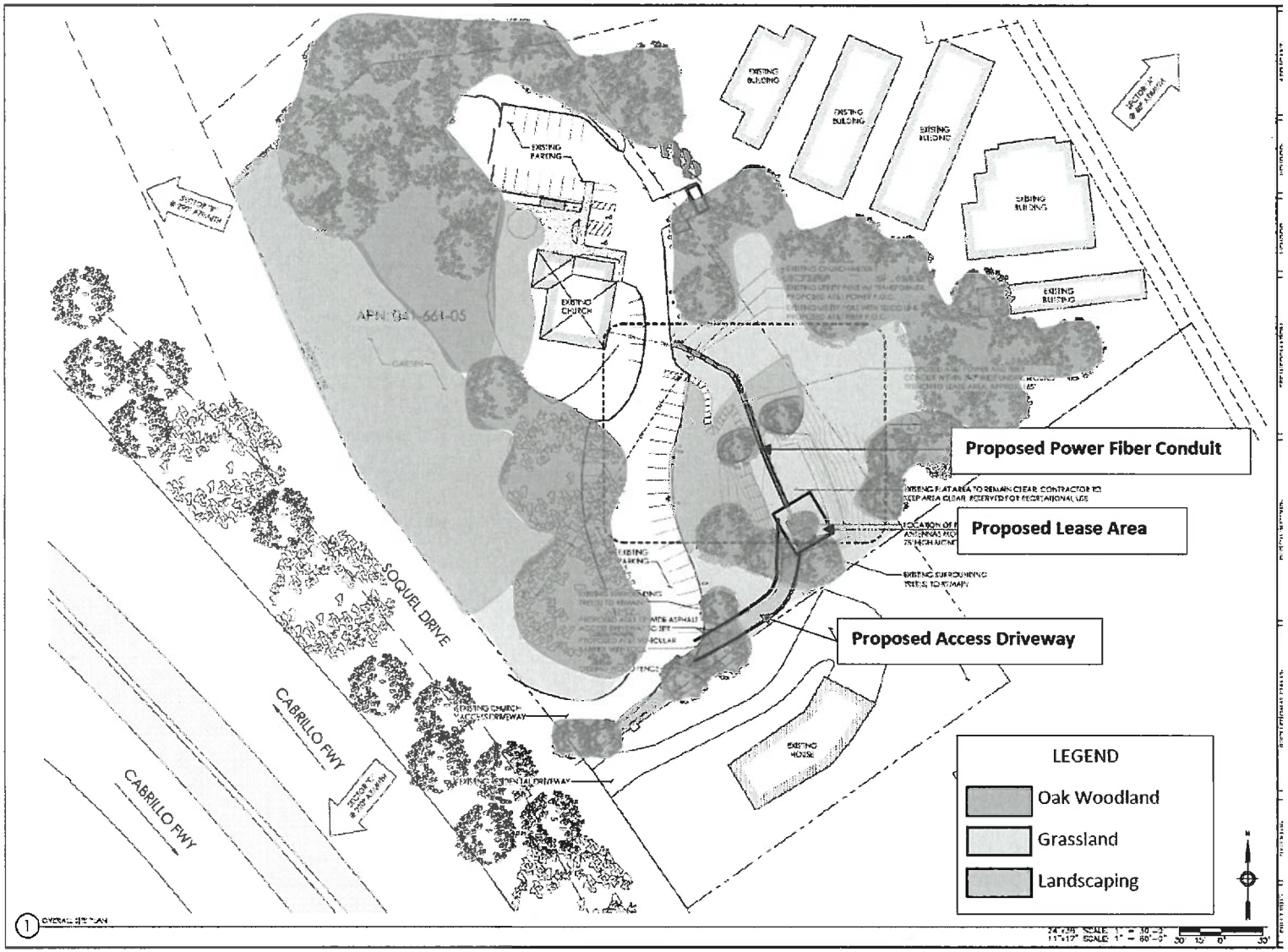


Figure 2. Existing Vegetation Types on Site Plan

Figure 3. Aerial Photos of Subject Property

3.1 Grassland

A grassy area occurs on a flat bench above (east) of the church parking lot, where the monopole and lease area are proposed. Another grassy area occurs near the existing utility pole where a portion of the telco/fiber conduit line is proposed. The grassland has low plant cover with open, sandy areas. It appears some of the area is used for church recreation. This vegetation type was observed to support a mosaic of non-native plant species, such as wild oat (*Avena fatua)*, ripgut brome (*Bromus diandrus),* cat's ear (*Hypochaeris radicata)*, filaree (*Erodium botrys)*, English plantain (*Plantago lanceolata)*, and sheep sorrel (*Rumex acetosella)*. Native species observed include telegraph weed (*Heterotheca grandiflora)*, coast tarweed (*Madia sativa)* and California poppy (*Eschscholzia californica)*. A sloping area supports patches of ice plant (*Carpobrotus edulis)*, and bracken fern (*Pteridium aquilinum)*. The character of the grassland at the proposed lease area is depicted in Figure 4. The grassland near the utility pole is depicted in Figure 5.

Figure 4. View easterly of grassland at proposed lease area

Figure 5. View westerly of grassland at proposed telco/fiber conduit trench

Wildlife Resources. The non-native grassland habitat provides little value to native wildlife, due to its

fragmented nature at this site, periodic mowing, and the predominance of non-native vegetation. The weedy, grassy areas do provide some forage for wildlife that can tolerate the high human presence in and around the site such as California towhee (*Pipilo crissalis*), American goldfinch (*Carduelis tristis*), California meadow vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*).

3.2 Oak Woodland

The property supports oak woodland which is characterized by the presence of coast live oak (*Quercus agrifolia)* trees and a few non-native Monterey pine (*Pinus radiata)*. The woodland shows evidence of intensive vegetation management, as there is little understory vegetation. Small sprouts of California blackberry (*Rubus ursinus)*, poison oak (*Toxicodendron diversilobum)*, deerweed (*Acmispon glaber)*, and mugwort (*Artemisia douglasiana)* were observed, yet these all showed evidence of periodic weed-whipping/mowing. The ground surface supports a dense cover of oak leaves, and in some areas pine needle duff. Some herbaceous plant species were observed, such as wild oat, filaree, and patches of ice plant. Open, sandy areas were also observed. The woodland near the proposed access driveway is depicted in Figure 6. Woodland and non-native landscaping east of the existing parking lot is depicted in Figure 7.

Figure 6. View southeasterly of grassland and oak woodland at proposed access driveway

Figure 7. View northerly of oak woodland and non-native landscaping east of existing parking lot

EXHIBIT G

Wildlife Resources. The oak woodland on the property provides only moderate value for wildlife, because the understory has been completely cleared. However, acorns from the oaks provide an important food resource for many wildlife species and natural cavities in the oaks provide nesting opportunities for some birds and mammals. Common wildlife species expected to occur in the oak woodlands on the property include scrub jay (*Aphelocoma californica*) and western gray squirrel (*Sciurus griseus*). No special status wildlife are expected to occur in the oaks on site (see Section 5.2).

3.3 Landscaping

The property supports non-native landscaping. Landscaped areas are located north, east and west of the existing parking lot as well as areas around the church buildings. Plant species include juniper (*Juniperus sp.)*, rock rose (*Cistus sp.)*, fortnight lily (*Dietes vegeta)*, belladonna lily (*Amaryllis belladonna)*, deodar cedar (*Cedrus deodora)*, brittle-leaf manzanita (*Arctostaphylos crustacea)* (native species), and eucalyptus (*Eucalyptus sp.)*. A portion of the property abutting Soquel Drive is used as a community garden and supports a myriad of cultivated vegetables and flowers.

Wildlife Resources. The non-native landscaping provides little habitat for native wildlife. Some common species that may occasionally forage on landscaping plants and eucalyptus include Anna's hummingbird (*Calypte anna)* and alligator lizard (*Elgaria multicarinata*).

4.0 REGULATED AND SENSITIVE HABITATS

4.1 Regulated Habitats

California Department of Fish and Wildlife (CDFW) is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1600-1603 of the Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. Along watercourses, CDFW's jurisdictional limit typically extends to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. There are no creeks or watercourses under CDFW jurisdiction within the project site.

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge will comply with water quality standards which are in the regional board's basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that consider the beneficial uses to be protected. Waters of the State subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features and saline waters. Should there be no Section 404 nexus (i.e., isolated feature not subject to USACE jurisdiction); a report of waste discharge (ROWD) should be filed with the RWQCB. The RWQCB interprets waste to include fill placed into water bodies. There are no creeks or watercourses under RWQCB jurisdiction within the project site.

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to

the ebb and flow of the tide to the Mean High Water mark (tidal areas) or below the Ordinary High Water mark (freshwater areas). There are no features under USACE jurisdiction within the project site.

4.2 Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity.

CDFW classifies and ranks the State's natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFG, 2020). The coast live oak woodland is ranked S4 by CDFW.

Oak woodlands are also considered sensitive under County Code. According to County Code, development activities shall conform to permitted uses and impacts to sensitive habitat be avoided. If development occurs within any sensitive habitat area the County requires projects mitigate significant environmental impacts and restoration of any area which is degraded sensitive habitat or has caused or is causing the degradation, with restoration commensurate with the scale of the development. A portion of the proposed project (access driveway) is located within oak woodland.

5.0 SPECIAL STATUS SPECIES

5.1 Special Status Plants

The biotic review focused on special status plant species that are officially listed by the State and/or Federal government and CNPS List 1B. No special status plant species have been recorded for the project site as per the CNDDB; however, occurrences are documented in close proximity to the site. The species evaluated for potential occurrence on the property, as per CNDDB records and the CNPS Rare Plant Inventory, are listed on Table 2.

Of the special status plant species evaluated for their potential to occur on the property (see Table 2), one species is known from the immediate project vicinity. The robust spineflower (*Chorizanthe robusta* var. *robusta)* is known to occur on several properties along Freedom Boulevard; the closest occurrence is on a property northeast of the site, near Aptos High School. A similar species, the Monterey spineflower (*Chorizanthe pungens* var. *pungens)*, is also known from the greater Aptos area. Robust spineflower is listed as endangered under the Federal Endangered Species Act. Monterey spineflower is listed as threatened under the Federal Endangered Species Act. They both occupy open areas with loose, sandy soil in oak woodlands, maritime chaparral, and grassland. The sandy soil within the project site provides potential habitat for both of these species. Both species bloom and are identifiable in the months of May and June; therefore, presence/absence of these species could not be determined during the October 2021 site survey.

Other special status species recorded from the greater project vicinity include Santa Cruz tarplant (*Holocarpha macradenia)* (Larkin Valley area), woodland woolythreads (*Monolopia gracilens)* (Corralitos area), Pajaro manzanita (*Arctostaphylos pajaroensis)* (Pleasant Valley area), Hooker's manzanita (*Arctostaphylos hookeri)* (Mar Monte area), Dudley's lousewort (*Pedicularis dudleyi)* (historic occurrence from Aptos area), and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii)* (Harkins Slough). Although the biotic review was conducted outside the blooming period of these species, the

potential presence of these species is considered low due to the lack of suitable microhabitats.

Table 2. List of Special Status Plant Species with Potential to Occur at AT&T Telecommunications Facility Site

Scientific Name	Common Name	Lifeform	Rare Plant Rank	CESA	FESA	Potential to Occur on Subject Property
Amsinckia lunaris	bent-flowered fiddleneck	annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Arctostaphylos andersonii	Anderson's manzanita	perennial evergreen shrub	1B.2	None	None	Low, not observed
Arctostaphylos hookeri ssp. Hookeri	Hooker's manzanita	perennial evergreen shrub	1B.2	None	None	Low, not observed
Arctostaphylos pajaroensis	Pajaro manzanita	perennial evergreen shrub	1B.1	None	None	Low, not observed
Arctostaphylos regismontana	Kings Mtn. manzanita	perennial evergreen shrub	1B.2	None	None	Low, not observed
Arctostaphylos silvicola	Bonny Doon manzanita	perennial evergreen shrub	1B.2	None	None	Low, not observed
Calyptridium parryi var. hesseae	Santa Cruz Mountains pussypaws	annual herb	1B.1	None	None	Low, not expected due to lack of Zayante sands
Carex saliniformis	deceiving sedge	perennial rhizomatous herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Ceanothus ferrisiae	coyote ceanothus	Perennial evergreen shrub	1B.1	None	FE	Low, not expected due to lack of serpentinite
Centromadia parryi ssp. Congdonii	Congdon's tarplant	Annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Chorizanthe pungens var. hartwegiana	Ben Lomond spineflower	annual herb	1B.1	None	FE	Low, not expected due to lack of Zayante sands
Chorizanthe pungens var. pungens	Monterey spineflower	annual herb	1B.1	None	FE	High, known from nearby area; suitable habitat present
Chorizanthe robusta var. hartwegii	Scotts Valley spineflower	annual herb	1B.1	None	FE	Low, not expected due to lack of suitable microhabitat
Chorizanthe robusta var. robusta	robust spineflower	annual herb	1B.1	None	FT	High, known from nearby area; suitable habitat present
Cirsium fontinale var. campylon	Mt. Hamilton thistle	perennial herb	1B.2	None	None	Low, not expected due to lack of serpentinite
Cordylanthus rigidus ssp. littoralis	seaside bird's beak	Herb, semiparasitic	1B.1	CE	None	Low, marginally suitable habitat present, but not observed
Dudleya abramsii ssp. Setchellii	Santa Clara Valley dudleya	Perennial herb	1B.1	None	FE	Low, not expected due to lack of serpentinite
Ericameria fasciculata	Eastwood's goldenbush	perennial shrub	1B.1	None	None	Low, marginal habitat, but not observed

Table 2. List of Special Status Plant Species with Potential to Occur at AT&T Telecommunications Facility Site

Scientific Name	Common Name	Lifeform	Rare Plant Rank	CESA	FESA	Potential to Occur on Subject Property
Eriogonum nudum var. decurrens	Ben Lomond buckwheat	perennial herb	1B.1	None	None	Low, not expected due to lack of Zayante sands
Eryngium aristulatum var. hooveri	Hoover's button celery	perennial herb	1B.1	None	None	Low, not expected due to lack of suitable microhabitat
Erysimum ammophilum	Sand-loving wallflower	perennial herb	1B.2	None	None	Low, marginal sandy habitat
Erysimum teretifolium	Santa Cruz wallflower	perennial herb	1B.1	CE	FE	Low, no suitable habitat, lack of Zayante sands
Fissidens pauperculus	minute pocket moss	moss	1B.2	None	None	Low, no suitable habitat
Fritillaria liliacea	fragrant fritillary	perennial herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat and lack of serpentinite
Gilia tenuiflora ssp. Arenaria	Monterey gilia	annual herb	1B.2	CT	FE	Low, not expected due to lack of suitable microhabitat; lack of coastal dunes
Hoita strobilina	Loma Prieta hoita	perennial herb	1B.1	None	None	Low, not expected due to lack of suitable microhabitat
Holocarpha macradenia	Santa Cruz tarplant	annual herb	1B.1	CE	FT	Low, not expected due to lack of suitable microhabitat
Horkelia cuneata ssp. Sericea	Kellogg's horkelia	perennial herb	1B.1	None	None	Low, not expected due to lack of suitable microhabitat
Lasthenia californica ssp. Macrantha	perennial goldfields	perennial herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Lessingia micradenia var. glabrata	smooth lessingia	annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Malacothamnus arcuatus	arcuate bush-mallow	perennial evergreen shrub	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; not observed
Malacothamnus hallii	Hall's bush-mallow	perennial evergreen shrub	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; not observed
Monolopia gracilens	woodland woolythreads	annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; no serpentine
Pedicularis dudleyi	Dudley's lousewort	perennial herb	1B.2	CR	None	Low, not expected due to lack of suitable

EXHIBIT G

Table 2. List of Special Status Plant Species with Potential to Occur at AT&T Telecommunications Facility Site

Scientific Name	Common Name	Lifeform	Rare Plant Rank	CESA	FESA	Potential to Occur on Subject Property
						microhabitat; not observed
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	perennial herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; not observed
Pentachaeta bellidiflora	white-rayed pentachaeta	annual herb	1B.1	CE	FE	Low, not expected due to lack of suitable microhabitat
Piperia yadonii	Yadon's rein orchid	perennial herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Plagiobothrys chorisianus var. chorisianus	Choris' popcorn-flower	annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat
Plagiobothrys diffusus	San Francisco popcorn-flower	annual herb	1B.1	CE	None	Low, not expected due to lack of suitable microhabitat
Polygonum hickmanii	Scotts Valley polygonum	annual herb	1B.1	CE	FE	Low, not expected due to lack of suitable microhabitat
Rosa pinetorum	pine rose	perennial shrub	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; not observed
Streptanthus albidus ssp. Peramoenus	most beautiful jewelflower	annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; no serpentine
Trifolium buckwestiorum	Santa Cruz clover	annual herb	1B.1	None	None	Low, no suitable habitat
Trifolium hydrophilum	saline clover	annual herb	1B.2	None	None	Low, not expected due to lack of suitable microhabitat; no alkali wetlands

CNPS Status: **List 1B:** These plants (predominately endemic) are rare through their range and are currently vulnerable or have a high potential for vulnerability due to limited or threatened habitat, few individuals per population, or a limited number of populations. List 1B plants meet the definitions of Section 1901, Chapter 10 of the CDFG Code.

5.2 Special Status Wildlife

Special status wildlife species include those listed, proposed or candidate species by either the Federal or the State resource agencies, as well as those identified as State species of special concern. In addition, all raptor nests are protected by Fish and Game Code, and all migratory bird nests are protected by the Federal Migratory Bird Treaty Act. Special status wildlife species were evaluated for their potential presence in the project area as described in Table 3.

Santa Cruz long-toed salamander (SCLTS). SCLTS make annual mass migrations on rainy nights during winter months from upland habitats such as dense oak woodland with deep leaf litter to breeding ponds. The closest known breeding pond (Racehorse Lane Pond) to the project site is approximately 0.4 mile to the ESE.

There is no breeding pond on the project property. In 2007-2008, Dana Bland & Assoc. (2008) conducted a winter trapping study on a large property (known as the Katz property) of mostly dense oak woodland less than 0.2 mi to the northeast of this project site and found 47 SCLTS in an area mapped as successional scrub. However, the proposed project site does not have the dense forest habitats that exist on the Katz property. The scattered oaks in the proposed project area have no understory, and there is no suitable habitat beyond this site (across Soquel Drive) such that salamanders might travel across this property during their winter migrations. Due to a lack of suitable habitat, no SCLTS are expected to occur on this project site. The site is not identified as critical habitat for the species (USFWS Critical Habitat Mapper, 2021), nor is the area identified as supporting the species as presented in the County's GIS data base; although lands south of State Highway 1 are considered in the SCLTS zone.

No other special status species are expected to occur on this project site because the site lacks suitable habitat for the other special status species known from the greater vicinity, as identified in Table 3; however, native birds may nest in the trees.

Table 3. List of Special Status Wildlife Species with Potential to Occur at AT&T Telecommunications Facility Site, Watsonville West Quadrangle

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
Invertebrates			
Monarch butterfly *Danaus plexippus*	*	Eucalyptus, acacia and pine trees groves provide winter habitat when they have adequate protection from wind and nearby source of water	No suitable habitat on site.
Fish			
Steelhead *Oncorhynchus mykiss*	FT	Perennial creeks and rivers with gravels for spawning.	No suitable habitat on site.
Tidewater goby *Eucyclogobius newberryi*	FE, CSC	Coastal lagoons and associated creeks up to 1 mile inland	No suitable habitat on site.
Amphibians			
California tiger salamander *Ambystoma californiense*	FT, CT	Ponds, vernal pools for breeding, grasslands with burrows for upland habitat	No suitable habitat on site.
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	FE, SE	Ponds for breeding with water at least into June. Riparian, oak woodland, coastal scrub for upland habitat.	No suitable habitat on site
Santa Cruz black salamander *Aenides flavipunctatus niger*	CSC	Mesic forests of fog belt; terrestrial, lives under logs, rocks, etc.	No suitable habitat on site.
California giant salamander *Dicamptodon ensatus*	CSC	Wet coastal forests near streams and seeps; breed in streams	No suitable habitat on site.
Foothill yellow-legged frog *Rana boylii*	CT	Perennial creeks with cobble substrate for egg attachment.	No suitable habitat on site.
California red-legged frog *Rana draytonii*	FT, CSC	Riparian, marshes, estuaries and ponds with still water at least into June.	No suitable habitat on site.

Table 3. List of Special Status Wildlife Species with Potential to Occur at AT&T Telecommunications Facility Site, Watsonville West Quadrangle

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
Reptiles			
Western pond turtle *Emys marmorata*	CSC	Creeks and ponds with water of sufficient depth for escape cover, and structure for basking; grasslands or bare areas for nesting.	No suitable habitat on site.
Black legless lizard *Anniella pulchra nigra*	CSC	Sand dunes with native vegetation	No suitable habitat on site.
Birds			
White tailed kite *Elanus leucurus*	FP	Nests in riparian and other mixed deciduous forests with adjacent open areas for foraging	No suitable habitat on site.
Western snowy plover *Charadrius alexandrinum nivosus*	FT, CSC	Nests on sandy beach, shores of salt ponds	No suitable habitat on site.
Burrowing owl *Athene cunicularia*	CSC	Nests and winters in grasslands with burrows and short vegetation	No suitable habitat on site.
Bank swallow *Riparia riparia*	ST	Vertical banks of rivers, lakes, ocean shorelines with sandy soils for digging nests	No suitable habitat on site.
Olive-sided flycatcher *Contopus cooperi*	CSC	Coniferous and oak forests with tall trees or snags for nesting	No suitable habitat on site.
Yellow warbler *Dendroica petechia brewsteri*	CSC	Riparian woodlands with dense understory plants	No suitable habitat on site.
Tricolored blackbird *Agelaius tricolor*	CSC	Dense bulrush and/or cattail vegetation adjacent to freshwater marshes	No suitable habitat on site.
Mammals			
Santa Cruz kangaroo rat *Dipodomys venustus venustus*	*	Silverleaf manzanita and mixed scrub in Zayante soils	No suitable habitat on site.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	CSC	All types of forests and dense scrub habitats	No suitable habitat on site
American badger *Taxidea taxus*	CSC	Grasslands with friable soils for digging dens	No suitable habitat on site.

[1] Key to status:

FE = Federally listed as endangered species
FT = Federally listed as threatened species
SE = State listed as endangered species
ST = State listed as threatened species
CSC = California species of special concern
* = Species of local concern as per County Code

6.0 PROJECT REVIEW AND RECOMMENDATIONS

6.1 Thresholds of Significance

The thresholds of significance presented in the CEQA Guidelines were used to evaluate project impacts and

EXHIBIT G

to determine if implementation of the proposed project would pose significant impacts to biological resources. For this analysis, significant impacts are those that substantially affect, either directly or through habitat modifications:

a) A species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS or NMFS;
b) Riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
c) State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation plan, or other approved local, regional, or state habitat conservation plan.

6.2 Environmental Impacts, Mitigation Measures and Significance Determination for The Proposed Project

The proposed project was evaluated for potential direct and indirect impacts to biotic resources, as per the CEQA criteria presented above. Impacts to sensitive habitats/resources and/or special status species were considered potentially significant. A discussion of project features and determination of potential impacts, as per CEQA criteria (a) through (f) are presented below.

a) **Special Status Plant Species.** The robust spineflower and Monterey spineflower are known to occur in close proximity to the proposed project and the project site supports suitable habitat. Presence or absence could not be determined during the October 2021 field visit, as this was outside the blooming period for these annual plant species.

Recommended Measure: Because surveys were not conducted during the blooming season for Monterey and robust spineflower, prior to ground disturbing activities, applicant should conduct surveys during the blooming season (April-June) to confirm absence of robust or Monterey spineflower. If the species are not found to be present, no additional measures are required. If either species is found within the project area, the applicant will identify an alternative project area that avoids impacting the species.

Oak Woodland. The oak woodland is a sensitive habitat as per County Code. Although the proposed project will not remove any oak trees, the access driveway will be within the dripline of trees to be retained and tree limbs will need to be trimmed/removed to accommodate construction vehicles and other access requirements. The following measures are identified to avoid or reduce potential indirect impacts to the oak woodland from the project.

Recommended Measure: The project shall implement standard erosion control BMP's and oak woodland habitat protection measures prior to, during, and after the construction period to minimize impacts to oak trees and the oak woodland, including:

1) Install plastic mesh fencing at the limit of work area adjacent to woodland vegetation. Place protective fencing prior to ground disturbances and remove once all construction is

complete. During construction, no grading, construction or other work shall occur outside the designated limits of work.

2) Minimize limbing of oak tree limbs through the careful design of all project features.
3) No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored outside the designated limits of work.
4) An arborist shall be on site during tree trimming and grading within the dripline of the oak trees and her/his recommendations shall be followed. As per an arborist's directions, hand tools shall be used to trim oak tree roots encountered during excavation (vs. ripping roots with excavator/backhoe). Where feasible, roots 2 inches and larger diameter shall be tunneled under and shall be heavily wrapped with peat and burlap to prevent scarring and drying. Minimize spread of *Phytopthora* during tree and root trimming.
5) All staging of equipment and materials, and refueling of equipment, shall be located in existing roadways and parking areas. The contractor shall prepare and implement a fuel spill prevention and clean-up plan.
6) Implement erosion control on disturbed areas. Utilize an erosion control seed mix that contains locally native plant species on all temporarily disturbed area. Suitable grass species include California brome (*Bromus carinatus)*, purple needlegrass (*Stipa pulchra)*, and blue wild rye (*Elymus glaucus)*. Sterile (cereal) barley (*Hordeum vulgare)* or sterile wheat (*Triticum x Elymus)* can be added to the native species to provide short-term erosion control.

c) **Federally Protected Wetlands.** No federally protected wetlands occur in the project site. No impacts are expected.

d) **Migratory Birds.** Nesting birds may occur in the oak trees on the site and in the woodland adjacent to the project site. Removal or trimming of trees and other vegetation to accommodate the project has the potential to kill or injure nesting birds, if any are present in the construction area. Noise from construction has the potential to cause abandonment by adult birds of chicks or eggs in areas of close proximity to construction. Because most nesting birds are protected by the Migratory Bird Treaty Act, measures are identified to avoid potentially significant impacts if any are present during construction.

Recommended Measure: The project shall implement standard pre-construction surveys if construction cannot occur between September 1 and February 1, which is outside the bird nesting season. A qualified biologist will conduct preconstruction bird nesting survey no more than 14 days prior to construction. If the biologist determines that active bird nests will be impacted by the construction, the biologist will recommend a buffer in that area to protect the nesting birds. Once the biologist determines that all birds have fledged the nest, vegetation removal or project construction may proceed.

e) **Policies or Ordinances.** The project is subject to the County's Sensitive Habitat Ordinance as oak woodland is considered a sensitive habitat; however, no oak trees will be removed for the project. A recommended measure identifies protection measures prior to, during, and after construction to minimize impacts to oak trees and the oak woodland.

f) **Habitat Conservation Plan.** The project site is not located in an area subject to a Habitat Conservation plan, Natural Community Conservation plan or other approved conservation plan. The project site is not located within designated critical habitat for any federally-listed species.

7.0 REFERENCES AND LITERATURE CITED

California Department of Fish and Game. 2021. California Natural Diversity Data Base. Rarefind 5 Program, Natural Heritage Division, Sacramento, CA.

California Native Plant Society, 2021. Electronic Rare Plant Inventory, West Watsonville and surrounding eight quadrangles.

Hickman, J. 1993. The Jepson Manual Higher Plants of California. Berkeley: University of California Press.

Jepson Manual 2012. The Jepson Manual – Vascular Plants of California

EXHIBIT G

DAVEY Resource Group

Corporate Headquarters
295 South Water Street, Suite 300
Kent, OH 44240
800-828-8312

Local Office
PO Box 5321
Larkspur, CA 94977
805-461-7500

May 24, 2021

Derek Turner
J5 Infrastructure Partners

RE: Arborist Report for 10707 Soquel Dr., Aptos, California

Dear Derek,

Thank you for contracting with Davey Resource Group regarding the above project. In support of your objectives, Davey Resource Group (DRG) is pleased to provide you with the attached report for the planned project.

A DRG International Society of Arboriculture (ISA) Certified Arborist (Certification #WE-13422A) conducted the site assessment of the trees that may be impacted by construction at 10707 Soquel Dr. on May 13, 2021. The trees were assessed for location, size, current condition, and overall health as well as identifying critical and structural root zones to assist with design considerations for tree protection and/or tree removal. The attached report can be used to make informed decisions about construction planning, and long-term care of the trees.

The survey determined the following:

- Fifteen (15) trees were evaluated.
- Two distinct species were identified: Coast Live Oak (*Quercus agrifolia)* and European Olive *(Olea europaea)*.
- The trees are in Poor to Good condition.
- Four (4) trees were identified as heritage trees by the County of Santa Cruz.
- All trees are recommended for retention (with monitoring).
- Tree Protection should be utilized as noted in the Recommendations and as per the direction of the on-site supervising arborist.

Please feel free to contact me if you would like more information or have any questions.

Sincerely,

Katelyn Obana
ISA Certified Arborist #WE-13422A
831.291.1344 mobile
Davey Resource Group, Inc.
www.daveyresourcegroup.com

EXHIBIT G

ARBORIST REPORT AND TREE PROTECTION PLAN

10707 Soquel Dr.
Aptos, CA 95003

May 2021

EXHIBIT G

Arborist Report for
10707 Soquel Dr., Aptos, CA

Prepared for

Christ Lutheran Church Aptos
J5 Infrastructure Partners
Aptos, Ca 95003

May 2021

Prepared by:

Davey Resource Group, Inc.
Northern California Office
PO Box 5321
Larkspur, CA 94977

805-461-7500

Notice of Disclaimer

Inventory data provided by Davey Resource Group is based on visual recording at the time of inspection. Visual records do not include testing or analysis and do not include aerial or subterranean inspection. Davey Resource group is not responsible for discovery or identification of hidden or otherwise non-observable risks. Records may not remain accurate after inspection due to variable deterioration of inventoried material and site disturbance. Davey Resource Group provides no warranty with respect to the fitness of the urban forest for any use or purpose whatsoever or for future outcomes of the inventoried trees.

EXHIBIT G

Contents

Summary

In May 2021, Davey Resource Group (DRG) was contracted by Derek Turner of J5 Infrastructure Partners to conduct an arborist report for the trees within the limits of disturbance of planned construction at 10707 Soquel Dr., Aptos, CA. The request was made to assess the current condition of the trees to be impacted during construction.

On May 13, 2021, an International Society of Arboriculture (ISA) Certified Arborist (#WE-13422A) from Davey Resource Group conducted the evaluation of fifteen (15) trees on site. The trees were assessed by their location, size, current condition, and overall health. The request was made to assess the current condition of the trees and establish a protection plan based on the findings. These data were also used to determine if the trees fall under the definition of protected heritage trees as defined by the County of Santa Cruz.

Tree information is summarized as follows:

- Four (4) are considered Significant trees as defined by Santa Cruz County Code Chapter 16.34. In the County of Santa Cruz, heritage trees are defined as any tree with a diameter at breast height (DBH) of twenty (20) inches or larger.
- Nine (9) trees were in good condition, five (5) trees in fair/good condition, and one (1) tree was in poor condition
- Heights ranged from 12 to 33 ft tall with an average height of 19 ft.
- Diameters at Breast Height (DBH) ranged from 7 to 30 with an average DBH of 15 in.

Introduction

Background

J5 Infrastructure is planning to install an unmanned telecommunications facility at 10707 Soquel Dr., Aptos, CA. In order to comply with County of Santa Cruz codes, and create a plan that considers the least impact to these trees, the client contracted Davey Resource Group, Inc. (DRG) to provide an arborist evaluation and report on the health, size, and location of the trees as well as identify tree protection and retention measures. These plans can be provided for submittal and approval by the County of Santa Cruz prior to any construction, and for any required permitting.

Using an iPad, the arborist visually assessed each tree within the scope of proposed work, and the required tree data were collected. Following data collection, specific tree preservation plan elements were calculated that identified each tree's critical and structural root zones (CRZ and SRZ) to better ensure survivability during the planned development. Trenching and construction may impact 15 trees on the site, and no removal of trees will be required for the proposed construction.

Assignment

The Arborist Report and Tree Protection Plan is the first step in determining if the trees are within the project area, but far enough from surface disruption that it is not likely to be impacted. This report establishes the condition of the trees and canopy within the project area. The condition of the trees were visually assessed, and the trees were photographed so that change in condition can be assessed if needed.

Limits of Assignment

Many factors can limit specific and accurate data when performing evaluations of trees, their conditions, and potential for failure or response to site disturbances. No soil or tissue testing was performed. All observations were made from the ground on May 13, 2021, and no soil excavation to expose roots was performed. The determinations and recommendations presented here are based on current data and conditions that existed at the time of the evaluation and cannot be a predictor of the ultimate outcome for the evaluated trees in the future.

Purpose and Use of Report

The purpose of this report is to provide an observation of the conditions of the trees within the project area of impact, including an assessment of the current condition and health. The findings in this report can be used to make informed decisions on construction design planning and be used to guide long-term care of the tree.

Observations

Methods

Data collection also included height estimation, canopy diameter estimation, a visual assessment of tree condition, structure, and health. To assign condition, numerical values were assigned to grade the attributes of the roots, trunk, branches, and foliage, including structure and health, and averaged to obtain an overall condition rating. No physical inspection of the upper canopy, root crown excavation, resistance drilling, or other technologies were used in the evaluation of the trees.

Site Observations

The inventory took place at 10707 Soquel Dr., Aptos, CA. The trees are located in an open area that is southeast of the church building. Small vegetation was growing around the trees. Trees #1-3 are located behind a power pole . Trees #4-5 are located at the top of the stairs above the parking lot. Four trees (trees #6, #7, #8, & #15) are located above from the parking lot. The remaining trees six trees (trees #9, #10, #11, #12, #13, & #14) are located by the parking lot. No maintenance or irrigation was observed. Clusters of trees were noted between the parking lot and proposed construction area but have root zones outside of the limits of disturbance.

Tree Observations

Fifteen (15) trees were assessed within the project area, four of which meet the County of Santa Cruz's heritage size requirements. The tree species identified were Coast Live Oaks (*Quercus agrifolia,* 14 trees) and European Olive *(Olea europaea,* 1 tree*)*. The condition assessment rated nine (9) trees in good condition, five (5) trees in fair/good condition, and one (1) tree in poor condition. Heights ranged from 12 to 33 ft. tall with an average of 19 ft. Diameters at Breast Height (DBH) ranged from 7 to 30 in. with an average of 15 in.

Analysis and Discussion

The trunk diameters of the surveyed trees were used to illustrate the potential critical root zone (CRZ) of each tree. The CRZ is considered the maximum possible radius of the root zone of a tree. The CRZ was calculated by multiplying the DBH by 1.5 feet. For instance, tree #1 has a DBH of 20 inches and a calculated CRZ of 30 feet (20 x 1.5). This distance may extend beyond the tree canopy drip line and is normally considered the tree protection zone (TPZ). Tree protection fencing is normally installed to protect the CRZ, but may be prohibitive for this project due to sidewalk and street access needs.

Like the CRZ, the structural root zone was also calculated using a commonly accepted method established by Dr. Kim Coder in *Construction Damage Assessments: Trees and Sites.*[1] In this method, the root plate size (i.e. pedestal roots, zone of rapid taper area, and roots under compression) and limit of disruption based upon tree DBH is considered as a minimum distance that any disruption should occur during construction. Significant risk of catastrophic tree failure exists if structural roots within this given radius are destroyed or severely damaged. The SRZ is the area where minimal or no disturbance should occur without arborist supervision. Both the CRZ and SRZ for the surveyed trees are listed in Appendix B, Table 1.

[1] Dr. Kim D. Coder, University of Georgia June 1996

1. Tree #6 is in poor health, but with proper protection and monitoring may be retained with minimal impact during construction.
2. Tree protection zones for tree #6, #7, and #14 (heritage *Quercus agrifolia*) will be needed to ensure no soil compaction occurs in the CRZ of these trees. Construction is planned within their CRZ, and caution should be exercised to limit soil compaction in their CRZ.
3. All trees to be retained should be protected with chain link tree protection fencing. The ideal location for the fence is outside or along the CRZ listed in Table 2. At a minimum, tree protection fencing can alternatively be placed at the furthest extent of the tree dripline. If no other alternative exists, fencing should be placed at the furthest extent of construction and moved outward as construction is completed.
4. Due to the sensitive nature of working within the CRZ of trees to be retained, any excavation or grading within the CRZ must be performed with hand tools and supervised by a Certified Arborist to monitor and document any tree impacts. Any significant roots (roots 2 inches in diameter or larger) encountered should be cut cleanly and photo documented. If severed roots increase failure risk beyond the property owner's tolerance, the Arborist may recommend tree removal.
5. Applying a 4 inch layer of mulch to the CRZ of trees in the work area, particularly if the entire CRZ cannot be fenced due to construction, is a best practice that should be considered.
6. No material shall be stored, nor concrete basins washed, or any chemical materials or paint stored within the CRZ of trees, and no construction chemicals or paint should be released into landscaped areas, as these can be toxic to trees and contaminate soil.
7. Mycorrhizal treatment can increase nutrient accessibility and compensate for root loss and is a good practice the property owner may consider if significant roots are encountered and must be cut.
8. After construction is complete, the property owner(s) should monitor the retained trees for one year and contact a Certified Arborist to inspect if any lean, limb die-back, leaf drop, or foliage discoloration develops.

Conclusion

This report is the first step in preserving the forest aesthetic, health, function, and value on the site during and after development. Trees and green spaces provide benefits and add value to residents and visitors. Tree preservation starts with a basic understanding of the health and structure of the trees on the site. The importance of protecting trees that have been selected for preservation should be clearly communicated to contractors, equipment operators, and workers before any land disturbance.

The suitability of a tree for preservation is a qualitative process based on the interaction of a variety of influencing factors. A tree inventory and arborist report provides a snapshot in time of each individual tree assessed across many of the most important observable factors relative to preservation. Healthy, vigorous trees better tolerate impacts from construction and more readily adapt to the new site conditions that exist after completion of development. Additionally, tolerance to impact from construction activities varies across species and sites. The percentage impact to the critical root zone also greatly influences the suitability of a particular tree for preservation.

Successful tree preservation requires a team effort to find the right balance and select the appropriate trees. Using the findings of this report as a guiding foundation, planners are equipped to design, prepare, and implement a tree preservation plan tailored to achieving the optimal outcome.

Appendix A: Site Map

EXHIBIT G

Appendix B. Photos (*Additional photos available upon request.)

Photo 1. Trees 1-3 (left to right) are in good condition.

EXHIBIT G

Photo 2. Trees #4 & 5 (left to right) are in good condition.

EXHIBIT G

Photo 3. Trees #7 (left foreground) & 15 (left background) are in good condition. Tree #6 (right)in poor condition.

EXHIBIT G

Photo 4. Tree #8 is in good condition.

EXHIBIT G

Photo 7. Trees #9-12 are in fair/good condition.

EXHIBIT G

Photo 8. Tree #13 in fair/good condition and tree 14 in good condition.

EXHIBIT G

Appendix B. Tables

Table 1. Tree Data

Tree #	Dbh (in.)	Common Name	Botanical Name	Condition	Canopy (avg. diameter in feet)	Height (feet)
1	7	European Olive	*Olea europaea*	Good	10	15
2	7,6	Coast LIve Oak	*Quercus agrifolia*	Good	10	15
3	7,5	Coast Live Oak	*Quercus agrifolia*	Good	12	12
4	8,5	Coast Live Oak	*Quercus agrifolia*	Good	12	25
5	10,9,9, 8,7	Coast Live Oak	*Quercus agrifolia*	Good	15	25
6	33	Coast Live Oak	*Quercus agrifolia*	Poor	35	30
7	11,10, 9	Coast Live Oak	*Quercus agrifolia*	Good	20	25
8	10	Coast Live Oak	*Quercus agrifolia*	Good	12	15
9	11	Coast Live Oak	*Quercus agrifolia*	Fair/Good	15	20
10	13	Coast Live Oak	*Quercus agrifolia*	Good	20	25
11	15	Coast Live Oak	*Quercus agrifolia*	Fair/Good	20	25
12	13	Coast Live Oak	*Quercus agrifolia*	Fair/Good	20	30
13	9,7	Coast Live Oak	*Quercus agrifolia*	Fair/Good	22	20
14	20	Coast Live Oak	*Quercus agrifolia*	Good	20	20
15	13	Coast Live Oak	*Quercus agrifolia*	Good	15	25

EXHIBIT G

Table 2. Critical and Structural Root Zones

Tree #	Dbh (in.)	Common Name	Structural Critical Root Zone in Feet (3x diameter)	Critical Root Zone in Ft (1.5x diameter)	Retain
1	7	European Olive	5	10.5	Yes
2	7,6	Coast Live Oak	5	15	Yes
3	7,5	Coast Live Oak	5	11.5	Yes
4	8,6	Coast Live Oak	5.5	16.5	Yes
5	10,9,9, 8,7	Coast Live Oak	7	40	Yes
6	33	Coast Live Oak	7	49.5	Yes, with monitoring
7	11,10,9	Coast Live Oak	7	31	Yes
8	10	Coast Live Oak	5	15	Yes
9	11	Coast Live Oak	5.5	16.5	Yes
10	13	Coast Live Oak	6	19.5	Yes
11	15	Coast Live Oak	6	22.5	Yes
12	13	Coast Live Oak	6	19.5	Yes
13	9,7	Coast Live Oak	5.5	19	Yes
14	20	Coast Live Oak	6.5	30	Yes
15	13	Coast Live Oak	6	19.5	Yes

EXHIBIT G

WATERFORD

Radio Frequency Emissions Compliance Report For AT&T Mobility

Site Name:	**CCL02296_SR**	**Site Structure Type:**	**Mono-Broadleaf**
Address:	**10707 Soquel Drive**	**Latitude:**	**36.970266**
	Aptos, CA 95003	**Longitude:**	**-121.870186**
Report Date:	**May 12, 2020**	**Project:**	**New Build**

Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the Ccl02296_Sr installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the Monopole to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings.

Certification

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

General Summary

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

EXHIBIT H

Table 1: FCC Limits

Frequency (MHz)	*Limits for General Population/ Uncontrolled Exposure*		*Limits for Occupational/ Controlled Exposure*	
	Power Density (mW/cm_2)	Averaging Time (minutes)	Power Density (mW/cm_2)	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

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

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

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

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

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

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

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

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

EXHIBIT H

Analysis

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

- INSTALLATION OF (12) PANEL ANTENNAS
- INSTALLATION OF (24) REMOTE RADIO HEADS (RRH'S)

The antennas will be mounted on a 75-foot Mono-Broadleaf with centerlines 70 feet above ground level. Proposed antenna operating parameters are listed in Appendix A. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. No other antennas are known to be operating in the vicinity of this site.

Figure 1: Antenna Locations

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 5.5612% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 5.0213% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings.

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

EXHIBIT H

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

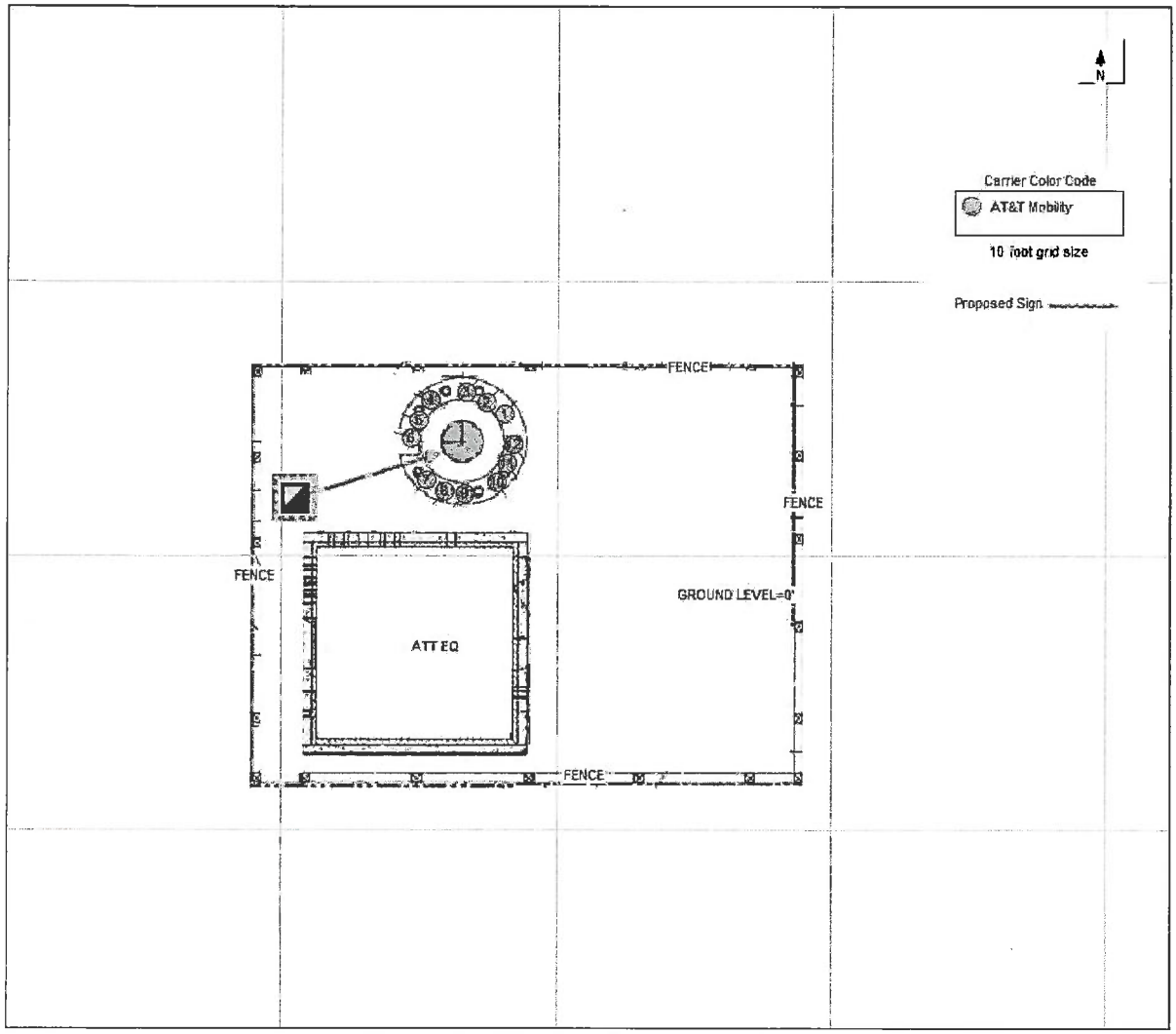


Figure 2: Mitigation Recommendations
Caution 2B posted at base of structure

Caution 2B

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

EXHIBIT H

EXHIBIT 1

Appendix A: Operating Parameters Considered in this Analysis

Antenna #:	Carrier:	Manufacturer	Pattern:	Band:	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	EIRP (W):	Rad Center (ft):
1	AT&T	CCI	TPA45R-KU6A 02DT	700	40	-3	50	6.5	40	4	0	11.15	2085	3421	70
1	AT&T	CCI	TPA45R-KU6A 02DT	850	40	-3	48	6.5	40	4	0	12.15	2625	4306	70
1	AT&T	CCI	TPA45R-KU6A 04DT	1900	40	-3	45	6.5	40	4	0	13.75	3794	6225	70
1	AT&T	CCI	TPA45R-KU6A 04DT	2100	40	-3	40	6.5	40	4	0	14.95	5002	8206	70
2	AT&T	CCI	TPA45R-KU6A 02DT	700	40	-3	50	6.5	40	4	0	11.15	2085	3421	70
2	AT&T	CCI	TPA45R-KU6A 04DT	1900	40	-3	45	6.5	40	4	0	13.75	3794	6225	70
3	AT&T	CCI	TPA45R-KU6A 02DT	700	40	-3	50	6.5	40	2	0	11.15	1043	1710	70
3	AT&T	CCI	TPA45R-KU6A 04DT	2300	40	-3	41	6.5	25	4	0	14.45	2786	4571	70
4	AT&T	CCI	TPA45R-KU6A 02DT	700	290	-3	50	6.5	40	4	0	11.15	2085	3421	70
4	AT&T	CCI	TPA45R-KU6A 02DT	850	290	-3	48	6.5	40	4	0	12.15	2625	4306	70
4	AT&T	CCI	TPA45R-KU6A 04DT	1900	290	-3	45	6.5	40	4	0	13.75	3794	6225	70
4	AT&T	CCI	TPA45R-KU6A 04DT	2100	290	-3	40	6.5	40	4	0	14.95	5002	8206	70
5	AT&T	CCI	TPA45R-KU6A 02DT	700	290	-3	50	6.5	40	4	0	11.15	2085	3421	70
5	AT&T	CCI	TPA45R-KU6A 04DT	1900	290	-3	45	6.5	40	4	0	13.75	3794	6225	70
6	AT&T	CCI	TPA45R-KU6A 02DT	700	290	-3	50	6.5	40	2	0	11.15	1043	1710	70
6	AT&T	CCI	TPA45R-KU6A 04DT	2300	290	-3	41	6.5	25	4	0	14.45	2786	4571	70
7	AT&T	CCI	TPA45R-KU6A 02DT	700	220	-3	50	6.5	40	4	0	11.15	2085	3421	70
7	AT&T	CCI	TPA45R-KU6A 02DT	850	220	-3	48	6.5	40	4	0	12.15	2625	4306	70
7	AT&T	CCI	TPA45R-KU6A 04DT	1900	220	-3	45	6.5	40	4	0	13.75	3794	6225	70
7	AT&T	CCI	TPA45R-KU6A 04DT	2100	220	-3	40	6.5	40	4	0	14.95	5002	8206	70
8	AT&T	CCI	TPA45R-KU6A 02DT	700	220	-3	50	6.5	40	4	0	11.15	2085	3421	70
8	AT&T	CCI	TPA45R-KU6A 04DT	1900	220	-3	45	6.5	40	4	0	13.75	3794	6225	70
9	AT&T	CCI	TPA45R-KU6A 02DT	700	220	-3	50	6.5	40	2	0	11.15	1043	1710	70
9	AT&T	CCI	TPA45R-KU6A 04DT	2300	220	-3	41	6.5	25	4	0	14.45	2786	4571	70
10	AT&T	CCI	TPA45R-KU6A 02DT	700	150	-3	50	6.5	40	4	0	11.15	2085	3421	70
10	AT&T	CCI	TPA45R-KU6A 02DT	850	150	-3	48	6.5	40	4	0	12.15	2625	4306	70

88

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

EXHIBIT H

Antenna #:	Carrier:	Manufacturer	Pattern:	Band:	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	EIRP (W):	Rad Center (ft):
10	AT&T	CCI	TPA45R-KU6A 04DT	1900	150	-3	45	6.5	40	4	0	13.75	3794	6225	70
10	AT&T	CCI	TPA45R-KU6A 04DT	2100	150	-3	40	6.5	40	4	0	14.95	5002	8206	70
11	AT&T	CCI	TPA45R-KU6A 02DT	700	150	-3	50	6.5	40	4	0	11.15	2085	3421	70
11	AT&T	CCI	TPA45R-KU6A 04DT	1900	150	-3	45	6.5	40	4	0	13.75	3794	6225	70
12	AT&T	CCI	TPA45R-KU6A 02DT	700	150	-3	50	6.5	40	2	0	11.15	1043	1710	70
12	AT&T	CCI	TPA45R-KU6A 04DT	2300	150	-3	41	6.5	25	4	0	14.45	2786	4571	70

89

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

Alternatives Analysis

AT&T Wireless Site: CCL02296

Santa Cruz County
APN 041-661-05-000
10707 Soquel Drive
Aptos, CA 95003

Application # 201373

AT&T Mobility/ J5 Infrastructure Partners | 23 Mauchly, Suite 110, Irvine CA. 92618 | Melissa Gonzalez | mgonzalez@j5ip.com | 415.305.8633

EXHIBIT I

PROJECT NARRATIVE

SEARCH AREA

The Search Area is a technological relocation from an existing wooden pole near 10871 Soquel Drive in Aptos, CA. The Search Area centers on Highway 1 with a 0.5-mile radius. The Search Area is characterized by a sloping topography within the unincorporated City of Aptos. Land use within this ring consists of mixed-use commercial and residential areas.

The Search Area was designed to close a significant service coverage gap along Highway 1 (Cabrillo HWY) and the residences along it which include Soquel Drive, Freedom Boulevard and the homes nearby. The proposed wireless facility will also serve the California Highway Patrol Office, Christ Lutheran Church of Aptos, and Aptos High School. The primary goal is to stay as close to the decommissioned exit site as possible which is approximately 266 feet away from the proposed site.

EXHIBIT I

AT&T Proposed site location parcel at Christ Lutheran Church of Aptos
10707 Soquel Drive, Aptos CA 95003
APN: 041-661-05

Santa Cruz County Zoning Map

The proposed site belongs to Christ Lutheran Church of Aptos and is elevated above the north side of Highway 1's Cabrillo Hwy. The proposed site is located on the eastern edge of RAN's search ring and is approximately 266 feet south from the decommissioned exit site located near 10871 Soquel Drive in Aptos. The Pastor and church governing board are in agreement about a suitable area for the proposed stealth structure and its associated equipment shelter among the trees for added screening.

The proposed site lies within a significant service coverage gap which can be viewed in the Coverage Analysis section below. The service coverage gap is caused by inadequate infrastructure in the vicinity of the proposed site. As depicted in the existing LTE coverage map below, the two nearby existing sites do not provide sufficient in-building service in the gap area. The proposed facility is necessary to improve signal strength and signal quality in the area, which will improve overall coverage and increase data rates which are necessary for customers to receive consistently reliable wireless service. Any areas that do not meet these minimal standards represent a service coverage gap that must be closed.

In addition to improving overall coverage, increasing data speed is critical to providing the mobile experience customers demand and to manage the unprecedented increase in mobile

EXHIBIT I

data usage on AT&T's network. AT&T estimates that since the introduction of the iPhone in 2007, mobile data usage has increased 470,000% on its network. AT&T forecasts its customers growing demand for mobile data to continue. The increased volume of data travels to and from customers' wireless devices and AT&T's wireless infrastructure over limited airwaves – radio frequency spectrum that AT&T licenses from the Federal Communications Commission (FCC).

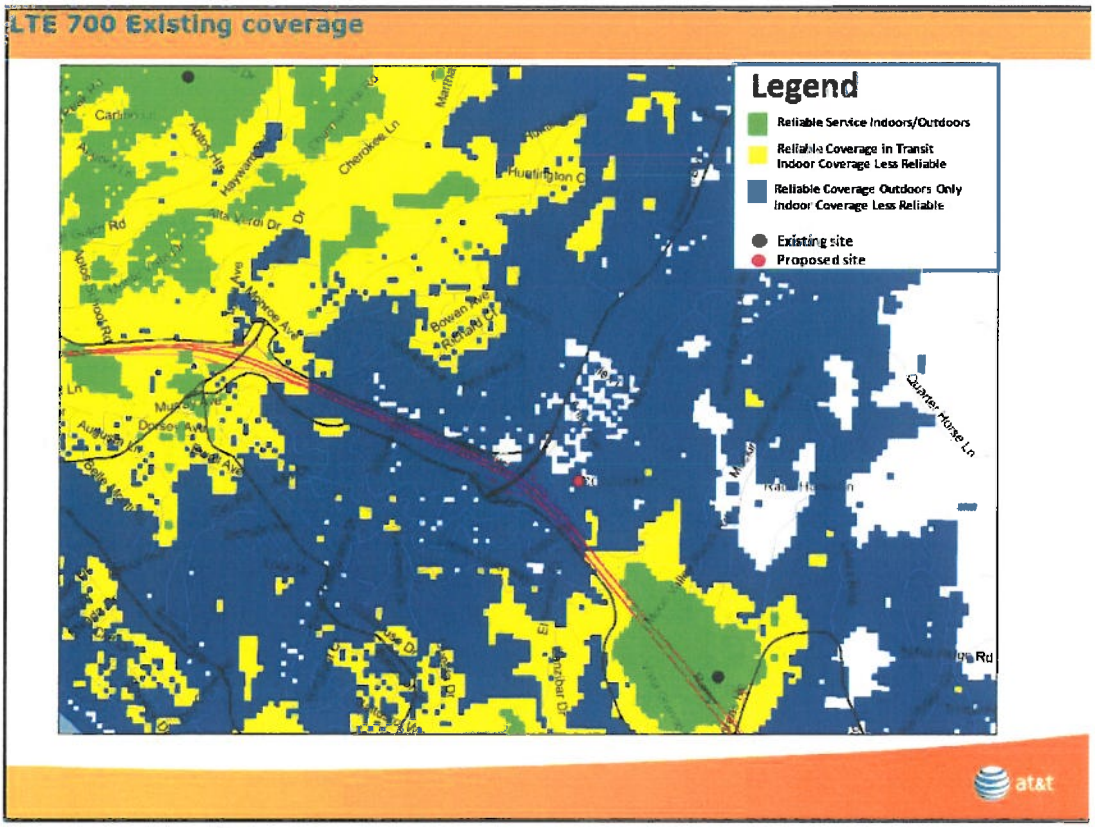
AT&T uses industry standard propagation tools to identify the areas in its network where signal strength is too weak to provide reliable in-building service quality. The information is developed from many sources including terrain and clutter databases, which simulate the environment, and propagation models that simulate signal propagation in the presence of terrain and clutter variation. AT&T designs and builds its wireless network to ensure customers will receive reliable in-building service quality. This level of service is critical as customers increasingly use their mobile phones as their primary communications devices. More than 75% of California households exclusively or primarily rely on wireless services for their communications needs, and rely on their mobile phones to do more (E911, video steaming, GPS, web access, text, etc.). In fact, the FCC conservatively estimates that 72% of 911 calls are placed by people using wireless phones.

The proposed facility at the proposed site is also part of AT&T's commitment to supporting Public safety through its partnership with FirstNet, the federal First Responder Network Authority. The proposed facility will provide new service on Band 14, which is the dedicated Public Safety Network for first responders nationwide. The proposed facility is designed to be part of FirstNet and will provide coverage and capacity for the deployment of the FirstNet platform on AT&T's LTE network. Deployment of FirstNet in the subject area will improve public safety by providing advanced communications capabilities to assist public safety agencies and first responders.

EXHIBIT I

COVERAGE ANALYSIS

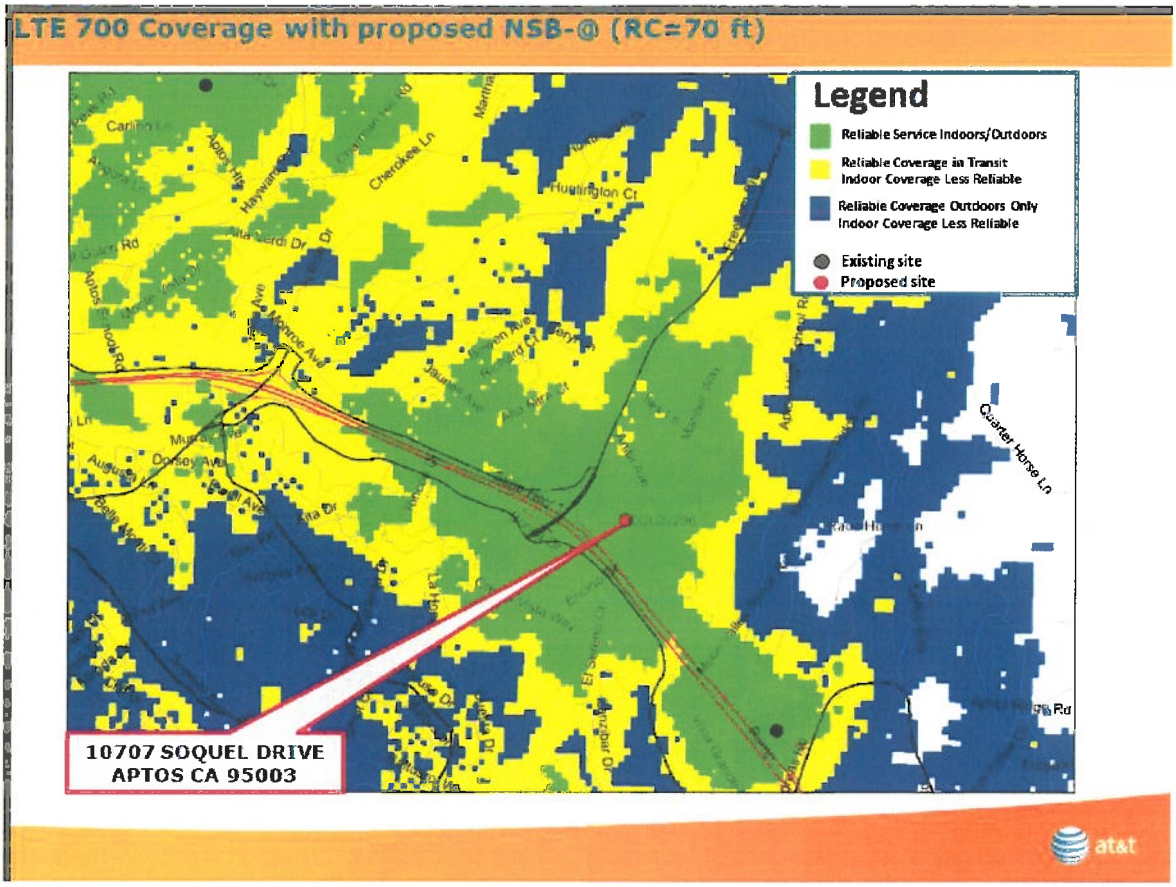
Existing LTE Coverage Map:



The existing LTE coverage map above depicts the existing LTE service coverage (without the proposed installation at the proposed site) in the area at issue. It includes LTE service coverage provided by existing AT&T sites. The green shaded areas of the map depict acceptable in-building coverage. In-building coverage means customers can place or receive a call on the ground floor of a building. The yellow shaded areas depict areas within a signal strength range that provide acceptable in-vehicle service coverage. In these areas, AT&T customers should be able to successfully place or receive a call within a vehicle. The blue shading depicts areas within a signal strength range in which a customer might have difficulty receiving consistently acceptable level of service. Any unshaded areas of the map are areas where the signal strength does not meet the outdoor signal level threshold. The quality of service experienced by any individual customer can differ greatly depending on whether that customer is indoors, outdoors, stationary, or in transit. Any area in the yellow, blue, or unshaded category are considered inadequate service coverage and constitutes a service coverage gap.

EXHIBIT I

Proposed LTE Coverage Map:



The map above predicts LTE service coverage based on signal strength in the vicinity of the proposed site if the 75-foot tall (80 feet to top of highest branch) mono-broadleaf wireless communications facility is installed as proposed in the application. As shown by this map, placement of the equipment at the proposed site closes the significant service coverage gap that currently exists.

EXHIBIT I

ZONING REGULATIONS

Santa Cruz County Code (SCCC), Zoning Regulations, Section 13.10.661 requires that all new Wireless Communications facilities be subject to a Commercial Development Permit. This project is subject to a level V review at a public hearing before the Zoning Administrator. A public hearing notice will be provided to property owners within 1,000 feet of the subject parcel. There is a 14-day appeal period, in which appeals are made to the Planning Commission. A hearing will be scheduled within 60 days of the appeal and at the end of the hearing, a decision to continue, deny, or approve the project will be made (per SCC 18.10.330).

Section 13.10.661(B)(1) Prohibited Areas, Prohibited Zoning Districts. Wireless communications facilities are prohibited in the following zoning districts, unless a Telecommunications Act exception is approved pursuant to SCCC 13.10.668. (a) Single-Family Residential (R-1); Multi-family Residential (RM); (c) Single-Family Ocean Beach Residential (RB); (d) Commercial Agriculture; and € The combining zone overlays for: i. Mobile Home Parks (MH).

Section 13.10.661(B)(3) Prohibited Areas, Prohibited School Grounds, prohibits wireless communications facilities on all public and private K-12 school sites unless a Telecommunications Act Exception is approved pursuant to SCCC 13.10.668.

Section 13.10.661(C)(1)(c), Restricted Areas, Restricted Zoning Districts, Special Use (SU) with a residential General Plan designation, states that non-co-located wireless communication facilities are discouraged in the following zoning districts, subject to the exceptions described in subsection (C)(3) of this section and/or unless a Telecommunications Act exception is approved pursuant to SCCC 13.10.668.

Section 13.10.662(C)(1), states [...] an alternative analysis must be submitted by the applicant, subject to RF engineering review, which shall at minimum identify and indicate on a map, at a minimum, two viable, technically feasible, and potentially environmentally equivalent or superior alternative locations outside the prohibited and restricted areas which could eliminate or substantially reduce the significant gap(s) in the applicant carrier's network intended to be eliminated or substantially reduced by the proposed facility. If there are fewer than two such alternative locations, the applicant must provide evidence establishing that fact.

EXHIBIT I

Alternate Sites Analysis

AT&T considered five (5) alternative candidates that were ultimately ruled out for reasons that include 1.) disinterested landlords, 2.) low elevation levels, resulting inability to meet coverage objectives, 3.) the parcel exists in a Prohibited Zoning District, or 4.) the parcel exists in a Restricted, Special Use (SU), Zone District, which restricts or discourages non-co-located wireless communication facilities.

The results of AT&T's good faith and diligent attempts to otherwise obtain at least two viable, Technically feasible alternative sites include the following efforts:

1.) **California Highway Patrol Office (CHP), 10395 Soquel Dr., Aptos – Disinterested Landlord**

- 10/9/19 – AT&T left a message for CHP OFC Mueller, (831) 662-0511, jemueller@chp.ca.gov
- 10/14/19 – AT&T spoke with OFC Mueller and rank and file. They expressed mutual interest in a cell site at their property due to poor AT&T coverage in the area.
- 10/16/19 – OFC Mueller confirmed via email he received AT&T's design proposal and would present it to the Captain for consideration.
- 11/20/19 – OFC Mueller replied that Captain denied AT&T's proposal due to future redevelopment plans of their offices.
- 9/21/20 – OFC Mueller reached out to indicate a new Captain in place at the Aptos office that now wants improved AT&T cell service at their office. AT&T informed the OFC Mueller that AT&T is proposing a new 75' tree pole, including FirstNet service, next door at Christ Lutheran Church to improve coverage in the immediate area. CHP is in support of the project.

The CHP office represents a technically feasible alternate which was rejected by the landlord.

2.) **Office Building, 9565 Soquel Drive, Aptos – Co-location candidate ruled out due to low elevation, inability to meet coverage objectives, and site located outside Search Area.**

- 9/19/19 – AT&T spoke with Jim Wiseman, Commercial Broker, 831-459-6440. He agreed to present the proposal to ownership. T-Mobile is currently on rooftop.
- 10/14/19 - RAN rejected the candidate as the site is outside the search ring and situated in a lower elevation. AT&T requires a site with higher elevation.

EXHIBIT I

The Office Building represented a potential co-location site which was rejected by AT&T's RAN engineers as an inadequate coverage site; and because it was located outside of RAN's search ring.

3.) **Store More America, 9687 Soquel Drive, Aptos – Low elevation and resulting inability to meet coverage objectives**

- Landlord, Mr. DeMar was interested, however, due to the site's lower elevation, the site was rejected by RAN engineers.

4.) **Aptos High School, 100 Mariner Way, Aptos – No response from landlord; and site exists in Zone District that prohibits wireless telecommunications facilities.**

- 9/14/19 – Site is at 500' AMSL. Left message with Dan Weiser, IT Director, 831-786-2170 x2904, at the School District. AT&T did not receive a response.
- AT&T later concluded Section 13.10.661(B)(3) prohibits wireless communications facilities on all public and private K-12 school sites unless a Telecommunications Act Exception is approved pursuant to SCCC 13.10.668.

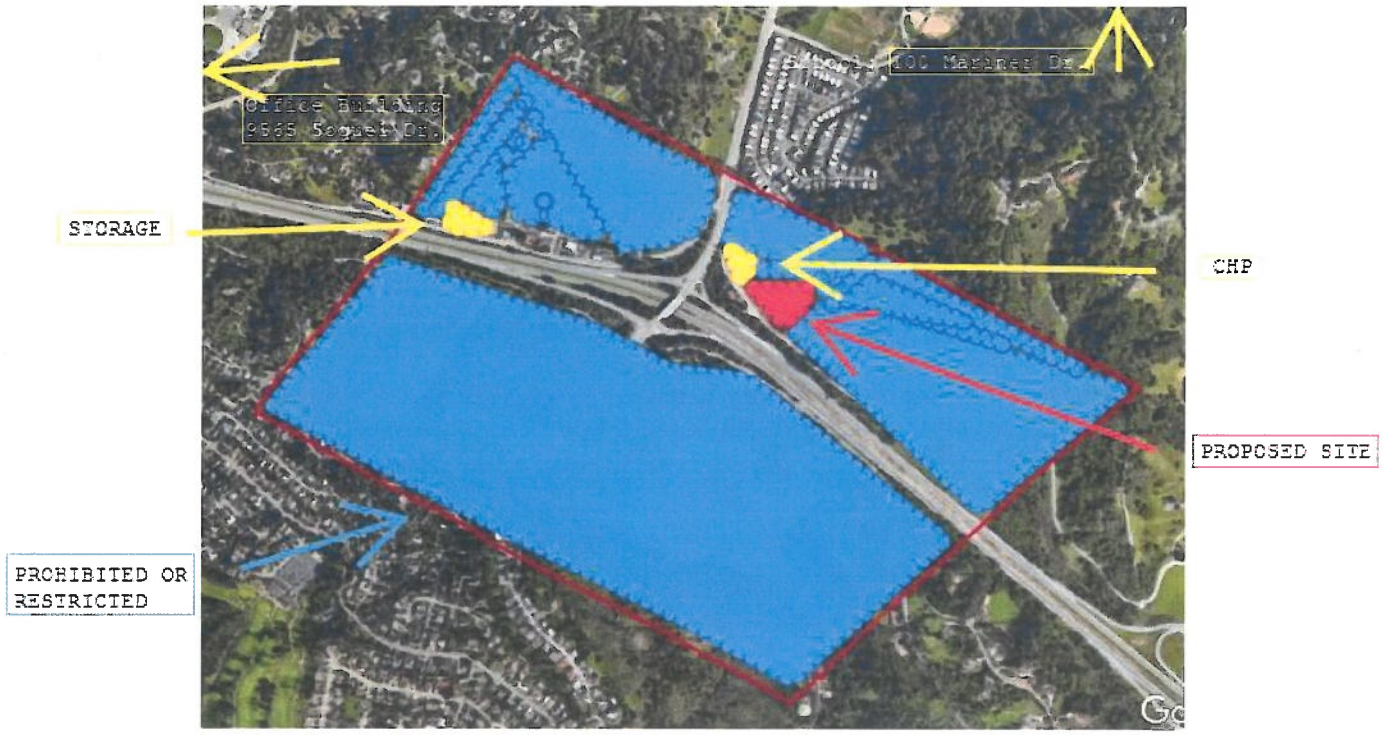
5.) **Rob Roy Storage, 10405 Soquel Drive, Aptos – parcel zoned in Restricted, Special Use (SU), Zone District**.

- AT&T considered this parcel which is located behind the proposed site. It was subsequently ruled out due to its Special Use (SU), Restricted, Zone District designation which discourages the establishment of non-co-located telecommunication wireless facilities pursuant to Section 13.20.661(C)(1)(c) above.

EXHIBIT I

ALTERNATIVE CANDIDATES LIMITED DUE TO PROHIBITED AND RESTRICTED ZONE DISTRICTS:

The majority of parcels within AT&T's search area are designated Prohibited or Restricted as described in Section 13.10.661(B)(1) and Section 13.10.661(C)(1)(c) referenced above. This significantly limited AT&T's ability to find adequate alternative sites to the proposed. As depicted below in the blue shading, the land north of and northwest of the proposed site is designated Special Use (SU) which is a district that discourages the establishment of telecommunications sites. The land south of, and southeast of the proposed site is predominantly designated Single-Family Residential (R-1) which prohibits the construction of telecommunication facilities.



Consistent with the earlier depicted Proposed LTE Coverage Map and its related description on page six above, AT&T citizens residing in or traveling through the above prohibited and restricted zoning districts illustrated above, will greatly benefit from approval of the proposed site. If the proposed site is not approved, AT&T coverage will remain as described in the Existing LTE Coverage Map above on page five.

EXHIBIT I

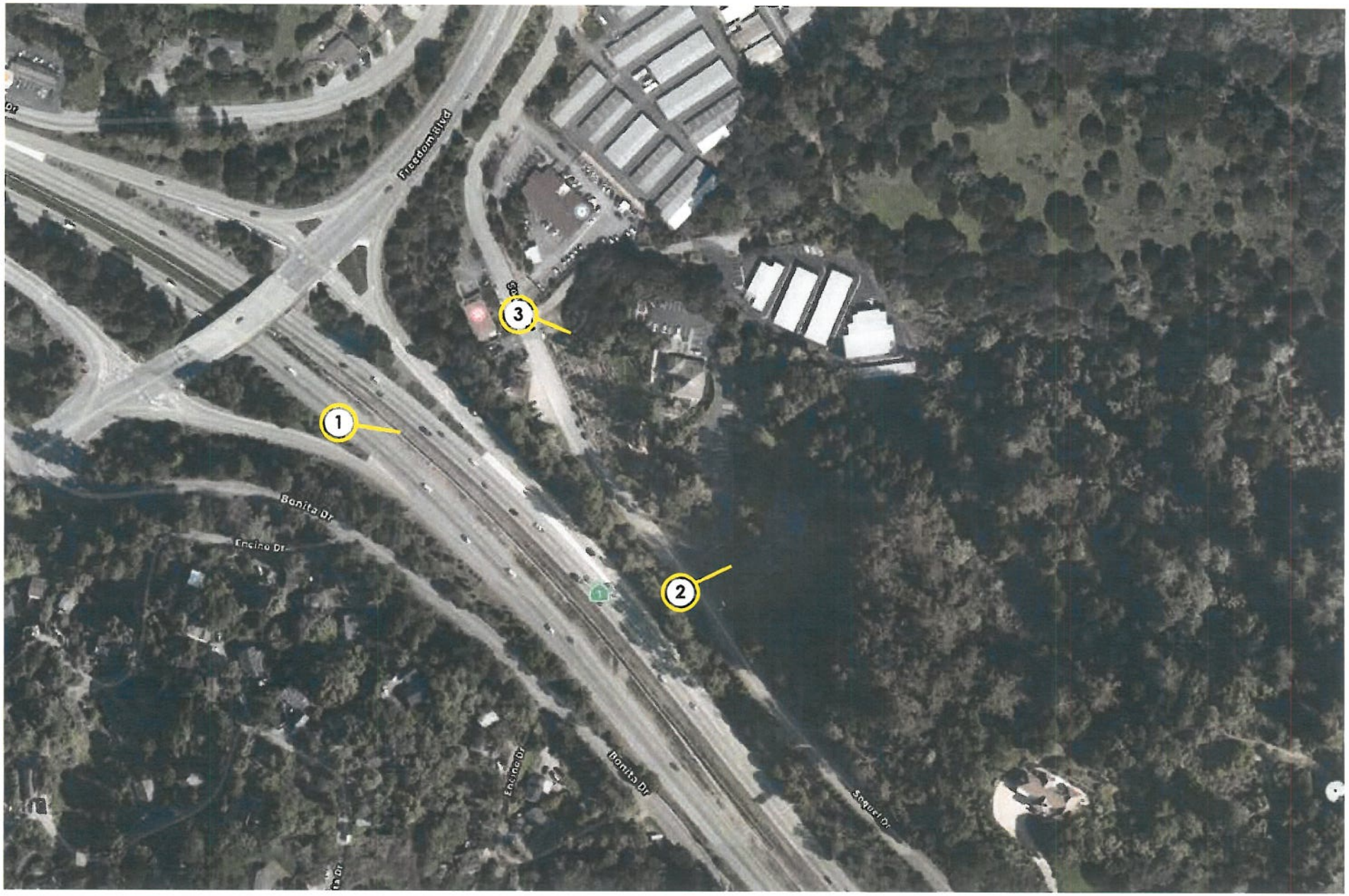
CONCLUSION

The proposed work associated with Application 201373, 10707 Soquel Drive, Aptos CA falls within the Search Area provided by AT&T; and meets the coverage objective by filling the significant gap in AT&T's service network. Once installed the site will provide the wireless services the community desires as well as enhancing public safety through its partnership with FirstNet, the federal First Responder Network Authority.

The proposed 75-foot tall (80 feet to top of highest branches) mono-broadleaf wireless telecommunications facility is at suitable base elevation; the proposed facility is well separated from the public right of way and residential parcels; and best maintains the integrity and nature of the surrounding areas. Negative impacts have been minimized through careful siting of the installation on the parcel and the choosing of a stealth design to make the site as visually inconspicuous as possible.

AT&T has made a good faith effort to pursue alternate candidates which would also meet the coverage objective. It is the experiences opinion of AT&T that when all factors are considered, the proposed site location is the least intrusive and best choice to provide the improved network service for this area of Soquel. We therefore request approval of the project as applied. Thank you for your consideration.

EXHIBIT I



101

EXHIBIT J5

PHOTOSIMULATION

CCL02296 | 10707 SOQUEL DR APTOS CA 95003 | VIEWS

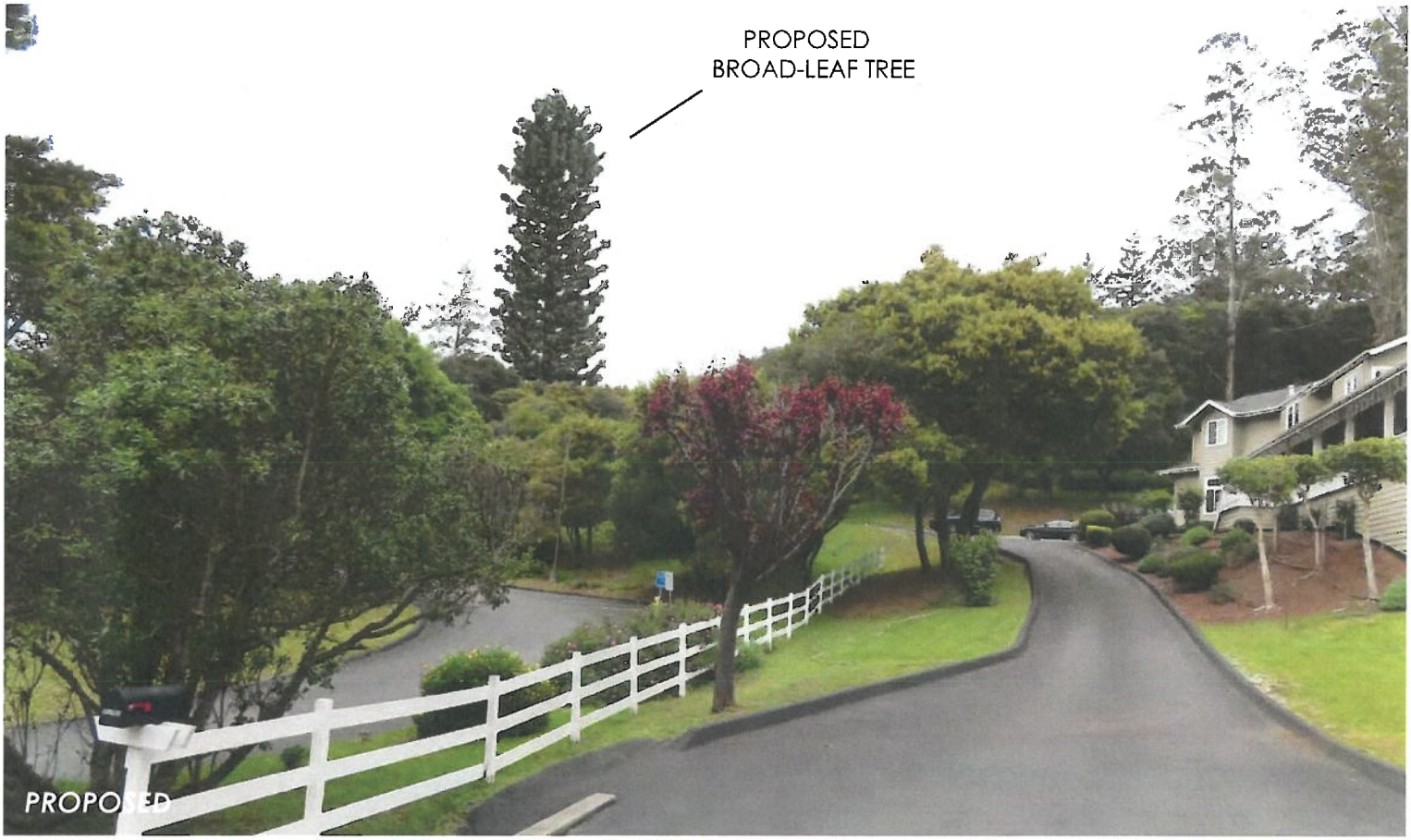
at&t

PHOTOSIMULATION *INSTALL (12) PANEL ANTENNAS ON PROPOSED 75' BROAD-LEAF TREE*

SET 1 - 4/18/20 | **CCL02296** | 10707 SOQUEL DR APTOS CA 95003 | VIEW 1

EXHIBIT J

at&t

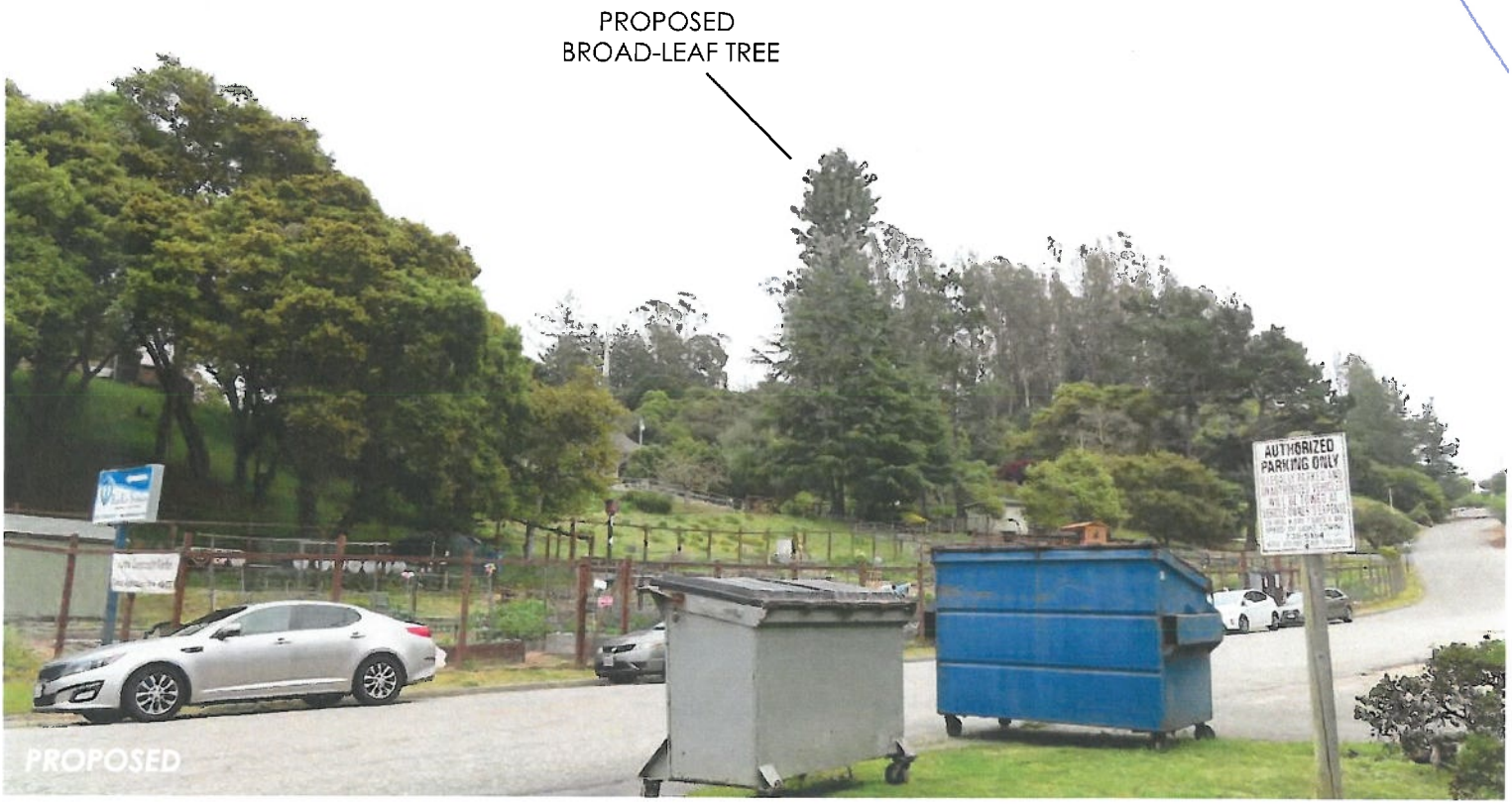


PHOTOSIMULATION *INSTALL (12) PANEL ANTENNAS ON PROPOSED 75' BROAD-LEAF TREE*

SET 1 - 4/18/20 **CCL02296** | 10707 SOQUEL DR APTOS CA 95003 | VIEW 2

EXHIBIT J

at&t



PHOTOSIMULATION

INSTALL (12) PANEL ANTENNAS ON PROPOSED 75' BROAD-LEAF TREE

SET 1 - 4/18/20 | **CCL02296** | 10707 SOQUEL DR APTOS CA 95003 | EXHIBIT J | VIEW 3

at&t

PHOTOSIMULATION

INSTALL (12) PANEL ANTENNAS ON PROPOSED 75' BROAD-LEAF TREE

EXHIBIT J

CCL02296 | 10707 SOQUEL DR APTOS CA 95003

at&t

EXHIBIT K