### County of Santa Clara

Department of Planning and Development Planning Office

County Government Center, East Wing, 7th Floor 70 West Hedding Street San Jose, California 95110-1705 (408) 299-5770 FAX (408) 288-9198 www.sccplanning.org



STAFF REPORT Zoning Administration February 4, 2021

**Item #2** 

Staff Contact: Lara Tran, Associate Planner (408) 299-5759, lara.tran@pln.sccgov.org

# File: PLN19-0206 (Monterey Road AT&T Wireless Facility) Architecture and Site Approval

**Summary**: Architecture and Site Approval (ASA) for a wireless telecommunications facility at an existing winery facility. The project includes a new 80-foot tall mono-pine and a fenced equipment area, located within the footprint of the two (2) existing wireless towers. Grading is not proposed as part of the project.

Owner: 2 Youths LLC Gen. Plan Designation: Agriculture Large Scale

**Applicant**: AT&T Mobility **Zoning**: A-40Ac-sr

Lot Size: 0.5-acre
Address: 4350 Monterey Road, Gilroy
APN: 728-24-008
Present Land Use: Winery Facility
HCP: Area 3 (Not a Covered Project)

#### **RECOMMENDED ACTIONS**

- **A.** Accept a Categorical Exemption under Section 15303(d) of the CEQA Guidelines, Attachment A.
- **B.** Grant Architecture and Site Approval (ASA), subject to Conditions of Approval outlined in Attachment B.

#### ATTACHMENTS INCLUDED

Attachment A – Proposed CEQA Determination

Attachment B – Proposed Conditions of Approval

Attachment C – Location & Vicinity Map

Attachment D – Proposed Plans

Attachment E – Colors and Materials Board

Attachment F – Photo Simulations

Attachment G – Radio Frequency Emissions Compliance Report

Attachment H – Geotechnical Report (dated August 2, 2020)

Board of Supervisors: Mike Wasserman, Cindy Chavez, Otto Lee, Susan Ellenberg, S. Joseph Simitian County Executive: Jeffrey V. Smith

#### PROJECT DESCRIPTION

The proposed project includes a request for an Architecture and Site Approval to allow the installation of a new 80-foot tall, unmanned wireless telecommunications facility, located at an existing winery on Monterey Rd. In addition to the mono-pine, the site has two (2) existing 35-foot tall wireless towers which will all be removed, along with three (3) antennas that will be relocated to the new mono-pine tower (from on top of the existing winery facility). A 23-foot by 11-foot (253 square feet) fenced equipment area is proposed to be located adjacent to the monopine and within the current footprint of one of the existing wireless towers. Grading is not proposed for the wireless mono-pine, however, the removal of a 12-inch non-native tree is required for installation of the equipment area.

The current property (Rapazzini Winery) obtained a 35-foot tall wireless tower installation in 1996 and an additional 50-foot tall wireless tower from Cingular in 2015. The proposed monopine will replace the existing towers with a new 80-foot tall mono-pine and equipment area from AT&T, with the antennas co-located to the proposed tower.

#### **Setting/Location Information**

The subject property is a 0.5 gross-acre parcel located off from Monterey Road, Gilroy, near Highway 101, in unincorporated Santa Clara County. The property abuts a single-family residence in the rear (owned by the same family) and is adjacent to an existing vineyard to the south. The existing building on the property is a tasting and retail store that sells the wine made from the adjacent vineyard, as well as local wine from the South County region.

The site is located within the Santa Clara Valley Habitat Plan (HCP) Area 3 and is not a covered project under HCP.

#### REASONS FOR RECOMMENDATIONS

#### A. Environmental Review and Determination (CEOA)

The proposed project qualifies for a Categorical Exemption under Section 15303 for new construction of utility extensions. As such, an Initial Study and further analysis under the CEQA was not required.

#### **B.** Architecture and Site Approval Findings:

Pursuant to Zoning Ordinance Section 4.10.400, a project defined under the New Facilities use classification shall be subject to Architecture and Site Approval. The ASA may only be approved by the Zoning Administration Hearing Officer if all the following findings listed in §5.40.040 of the County Zoning Ordinance can be made. Listed below are the individual findings in **bold** followed with a discussion relating to how the proposed project conforms to each respective finding in regular text:

1. Adequate traffic safety, on-site circulation, parking and loading areas, and insignificant effect of the development on traffic movement in the area;

As noted in the Project Description section of this report, the project includes a request to remove two existing wireless telecommunication mono-pole towers and install a new 80-foot tall mono-pine in the same general location. The new mono-pine

will be an unmanned wireless telecommunication facility and will not produce additional traffic. There is an existing 10-foot wide utility and access easement that will be used by AT&T to access the leasehold area for maintenance, if necessary, in the future. Existing parking and loading areas are located at the front of the property, adjacent to Highway 101, and shall remain unchanged. As such, the project conforms with this finding.

# 2. Appearance of proposed site development and structures, including signs, will not be detrimental to the character of the surrounding neighborhood or zoning district;

The surrounding area includes large, rural residential properties and agricultural uses to the north, south, and east of the property with U.S. Highway 101, a scenic highway located to the west. The site has existing antennas that are mounted on the existing building used as a winery facility. There are also two (2) existing wireless towers that are 35 feet tall that will be removed and replace with the proposed 80-foot tall monopine. The proposed wireless will not be detrimental to the character of the surrounding neighborhood as the structure is a mono-pine to mimic the colors of a pine tree and the foliage will screen the proposed antennas. The surrounding area and neighborhood are mostly agriculture with occasional trees in the background and having the mono-pine instead of a monopole would be more consistent to the overall landscape of the agriculture environment.

In order to ensure that the new mono-pine and antennas will not be detrimental to the character of the surrounding neighborhood, and as required by the *Wireless Telecommunication Facilities Design Guidelines*, the antennas would be "stealthed" by grouping the antennas together and providing foliage to screen the antennas on the mono-pine. Additionally, all ground equipment that is visible from the fence line will be painted brown to match the color of the tree trunk of the mono-pine. A Condition of Approval to this effect has been included in Attachment B.

Pursuant to the *Wireless Telecommunication Facilities Design Guidelines*, a 12-foot tall, chained link fence is proposed to screen, and buffer equipment area located at the base of the tower. Areas of equipment that are visible from the fence will be painted brown to match the proposed trunk of the mono-pine. The ground-mounted equipment is not taller than 12 feet in height. Through the foliage color "stealthing" of the antennas and the fence concealment of the equipment area, the project's effects on neighborhood aesthetics will be mitigated. Additionally, the existing building screens the first 30 feet of the leasehold area. For the reasons stated above, this finding can be made.

### 3. Appearance and continued maintenance of proposed landscaping will not be detrimental to the character of the surrounding neighborhood or zoning district;

There is landscaping proposed as part of this project scope. However, the mono-pine and its foliage will screen the proposed antennas and match with the overall

agricultural aesthetics of the neighborhood and zoning district. Although this finding is not applicable, as no "landscaping" is proposed, the synthetic foliage of the monopine will not be detrimental to the character of the neighborhood and this finding can be made.

### 4. No significant, unmitigated adverse public health, safety and environmental effects of proposed development;

There will not be any significant, unmitigated adverse public health, safety or environmental effects resulting from the proposed new mono-pine, as no known biological or environmental issues were identified on site. AT&T provided a Radio Frequency Emissions Compliance Report analyzing compliance to the Federal Communications Commission (FCC) guidelines as part of application submittal. The report concluded that the cumulative power density level at the location from all antennas is 2.1%, which is below the 5% limit of the FCC General Population limits. Furthermore, the report concluded that the proposed operation will not expose members of the General Public to hazardous levels of radio frequency (RF) energy and will not contribute to existing cumulative Maximum Permissible Exposure (MPE) levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits. As such, this finding can be made.

## 5. No adverse effect of the development on flood control, storm drainage, and surface water drainage;

The proposed project will not have any significant impact to flood control, storm drainage, and surface water drainage as the proposal was reviewed by Land Development Engineering to ensure that the design of the project does not create impacts. Runoff from the additional impervious surface area will be adequately managed and treated, as required through the Conditions of Approval placed on the project to address on-site drainage. As such, this finding can be made.

### 6. Adequate existing and proposed fire protection improvements to serve the development;

The proposed project was reviewed by the County Fire Marshal and the site access is in conformance with the Fire Marshal's Office standards, subject to the Conditions of Approval in Attachment B.

#### 7. No significant increase in noise levels;

The proposed project will not result in any significant increase of noise levels in the area, as there are existing wireless towers with antennas on the property.

# 8. Conformance with zoning standards, unless such standards are expressly eligible for modification by the Zoning Administrator as specified in the Zoning Ordinance;

The proposed project satisfies all the required zoning standards, as stipulated in the County Zoning Ordinance. The zoning district for subject parcel is A-40ac-sr. No proposed modification to these standards are proposed or required. According to Note 5 of Table 2.20-2 of the Zoning Ordinance, "Wireless telecommunications facilities are exempt from the development standards listed in Table 2.20-3." The Geology Report (Attachment H) submitted by the applicant and reviewed by the County Geologist, was accepted with the conditions (as outlined in Attachment B) that the applicant provide a geotechnical engineer's Plan Review Letter during the Building Permit process that confirms the plans conform with the recommendations. The applicant will also be required to submit a Construction Observations Letter that verifies the work was completed in accordance with the approved plans. As such (and as conditioned) this finding can be made.

9. Conformance with the general plan and any applicable area or specific plan, or, where applicable, city general plan conformance for property located within a city's urban service area;

The General Plan designation for subject parcel is Agriculture: Large Scale. The project does not conflict with the General Plan because there is no loss of agricultural lands and the proposed wireless telecommunications facility is an allowable, ancillary use. (See R-LU 11 for other allowable land uses on lands designated "Agriculture" in the General Plan). As such, this finding can be made.

10. Substantial conformance with the adopted "Guidelines for Architecture and Site Approval" and any other applicable guidelines adopted by the County.

The proposal will be required to adhere to all conditions set forth in the staff report (Attachment B). The intent of the "Guidelines for Architecture and Site Approval" is to maintain the character and integrity of zoning districts by promoting quality development in harmony with the surrounding area, through consideration of all aspects of site configuration and design, and to generally promote the public health, safety and welfare. As the character of the proposal is in harmony with the existing utility infrastructure, and there is no significant effect on traffic or congestion, the proposal is consistent to the above finding. The proposed mono-pine also conforms to the Wireless Telecommunication Facilities Design Guidelines (as described in Section C of the staff report), as the structure the antennas are "stealthed" where it is appropriately screened behind the pine foliage. The equipment area is within the footprint of the tower and is screened behind a 12-foot tall, chained link fence. The structure is consistently to the overall agricultural environment of the neighborhood with similar trees located in the background. As such, this finding can be made.

### C. Wireless Telecommunication Facilities Design Guidelines – Review Criteria:

The Wireless Telecommunication Facilities Design Guidelines (WTFDG), adopted by the Board of Supervisors, includes guidelines to minimize the visual impact of wireless telecommunication facilities and encourage colocation of those facilities. The guidelines "should be interpreted with flexibility by staff and are not rigorous requirements like adopted ordinance, but rather a means of adapting documentation and review needs to the scope of a particular facility request" (WTFDG, page 1). Additionally, "the primary goals of these guidelines are to ensure visually acceptable facility design, colocation of facilities, stealth design where appropriate and to provide a guide to preferred and acceptable design of wireless telecommunications facilities" (WTFDG, page 2). Listed below are the individual review guidelines in **bold**, followed by a discussion relating to how the proposed project conforms to each respective guideline in regular text:

### 1. The proposal minimizes visual impact to the extent possible through design, screening and siting.

The proposed wireless tower is a mono-pine whereby the antennas are hidden behind the proposed synthetic pine foliage. Additionally, the antennas are "stealthed" where it is appropriately screened behind the pine foliage and is painted to match the tower. The equipment area is within the footprint of the tower and is screened behind a 12 - foot tall, chained link fence. Any portions of the equipment area that can be seen above the fence are required to be painted brown to match the trunk of the monopine. Additionally, the existing building will screen and shield a significant portion of the leasehold area and a portion of the proposed mono-pine. As such, the project design meets this Guideline.

### 2. The proposal minimizes removal or modification of any site landscaping and provides appropriate replacement landscaping, if necessary.

No landscaping is proposed to be removed or modified as a result of the proposed project, as the only ground disturbances are within the footprint of the tower. As such, this guideline is not applicable.

#### 3. The request does not increase the height of the existing, approved facility.

The existing towers will be removed and replaced with a new 80 -foot tall mono-pine. As noted in the ASA findings, the new mono-pine has been determined to not create new impacts as it is consistent to the overall agriculture atmosphere of the neighborhood where the mono-pine can blend with similar trees in the area. Although the height of the tower will increase, the foliage of pines will screen the antennas and the pole is painted and structured to mimic a tree, similar to the surrounding trees in the area.

4. For façade-mounted facilities, the antenna and associated equipment is of a scale and design compatible with the building, is mounted to a building façade and does not project beyond 12 inches from the face of the building.

No façade-mounted facilities are proposed. The proposed mono-pine is located to the side rear of the existing building. As such, this guideline is not applicable.

5. The proposal will blend with and/or complement the color, design, and/or character of the surrounding context, whether natural backdrop, building or existing facility.

The proposed mono-pine will have synthetic pine foliage to screen the antennas and would be "stealthed" by painting the antennas to match the color of the tower pole (tree trunk) and the foliage of the mono-pine. Additionally, the mono-pine would be consistent to the overall agricultural aesthetics of the existing winery and neighborhood. As such, as the new wireless telecommunication improvements will include a new tower that appears as a tree that blend with the surroundings, this guideline is met.

6. No exterior, artificial lighting is proposed unless required for safety purposes by State or Federal Law.

No lighting is proposed. As such, this guideline is not applicable.

7. Ground equipment and vertical elements have been screened/buffered using landscaping and fencing to the extent possible.

Ground equipment is fully screened with a 12-foot tall, chained link fence. Areas of equipment that are visible from the fence will be painted brown to match the proposed trunk of the monopine. Additionally, the mono-pine will have pine foliage to screen the antennas and would be "stealthed" by painting them to match the color of the tower and the foliage of the mono-pine. Additionally, the mono-pine would be consistent to the overall agricultural aesthetics of the existing winery and neighborhood. As such, this guideline is met.

8. Facility incorporates stealth/aesthetic designs such as public art, clock towers, flagpoles or other appropriate visual forms, if possible.

The proposed mono-pine will have pine foliage to screen the antennas and would be "stealthed" to match the color of the tower and the foliage of the mono-pine. Additionally, the mono-pine would be consistent to the overall agricultural aesthetics of the existing winery and neighborhood. As such, this guideline is met.

### 9. No guy wires are used on the structure.

Guy wires are not proposed as part of the project. As such, this guideline is not applicable.

### 10. Facility, tower and/or antenna-mounted signage is limited to warning and informational signs.

Conditions of Approval limit signage to warning and informational signs only. As such, this guideline is being met.

### 11. The facility has been designed to discourage unauthorized access.

A perimeter chain link fence protects the site from unauthorized access. As such, this guideline is being met.

#### 12. Facilities have been collocated where feasible.

The site has two (2) existing 35-foot tall wireless towers which will all be removed along with two (2) antennas mounted on existing winery facility that will be relocated to the new mono-pine tower. The applicant is reducing the number of towers on the property, and replacing the multiple towers with one, taller tower. As noted in the ASA Findings above, the new towner is sufficient and meets the intent of this guideline.

## 13. Ridgeline/hilltop siting has been avoided or the related visual impacts have been eliminated through design and landscaping.

The project site is in the valley floor and there are no visual impacts to ridgelines or hilltops. As such, this guideline is being met.

In conclusion, based on the findings of facts described in the body of this report and the *Wireless Telecommunication Facilities Design Guidelines*, staff can make the required findings pursuant to Zoning Ordinance Section 5.40.040. The proposed 80-foot tall mono-pine at an existing winery facility will not create a detrimental impact to the property and/or surrounding neighborhood, as there are multiple wireless towers on site which will be removed and replaced with one (1) mono-pine that is designed to be consistent with the agricultural environment and surrounding trees in the vicinity. Therefore, Staff recommends that the Zoning Administration Hearing Officer accept the CEQA exemption and grant the Architecture and Site Approval (ASA) for the wireless facility mono-pine with antennas.

#### **BACKGROUND**

On October 4, 2019, an application for the project was submitted by Crown Castle, which is a representative of AT&T. The application was reviewed and subsequently deemed incomplete on November 4, 2019. Crown Castle representatives met with Planning Staff to discuss process and

address incomplete items from the application. After submitting all required information, the application was deemed complete on December 23, 2020.

On January 20, 2021, a public notice was mailed to all property owners within a 300-foot radius of the project and was also published in the Post Records on January 25, 2021 for the Zoning Administration Hearing date.

DocuSigned by:

STAFF REPORT REVIEW

Prepared by: Lara Tran, Associate Planner

Reviewed by: Leza Mikhail, Zoning Administrator/Principal Planner.

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# ATTACHMENT A Proposed CEQA Determination

### **ATTACHMENT A**

### STATEMENT OF EXEMPTION

### from the California Environmental Quality Act (CEQA)

FILE NUMBER		APN(S)		
PLN19-0206		841-32-010	1/28/2021	
PROJECT NAME		APPLICATION TYPE		
Architecture and Site Approval - 4350 Monterey Road, Gilroy  Architecture and Site Approval				
OWNER		APPLICANT		
2 Youths LLC		Crown Castle/AT&T Mobility		
PROJECT LOCATION				
4350 Monterey Road, Gilroy				
PROJECT DESCRIPTION				
Architecture and Site Approval (ASA) for a wireless telecommunications facility at an existing winery facility. Included in the project is a new 80 -foot tall mono-pine and a fenced equipment area located within the footprint of the two (2) existing wireless towers. Grading is not proposed as part of the project.				
All discretionary development permits processed by the County Planning Office must be evaluated for compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended). Projects which meet criteria listed under CEQA may be deemed exempt from environmental review. The project described above has been evaluated by Planning Staff under the provisions of CEQA and has been deemed to be exempt from further environmental review per the provision(s) listed below.				
CEQA (GUIDELINES) EXEMPTION SECTION				
Categorically Exempt – Section 15303 of a new 80 -foot tall wireless mono-pine for utility purposes.				
COMMENTS				
The project proposes to remove one (1) non-native tree for the leasehold area Areas of equipment that are visible from the fence will be painted brown to match the proposed trunk of the mono-pine. The ground-mounted equipment will not be taller than 12 feet in height.				
APPROVED BY:	lara tran			
Lara Tran, Associate Planner	747B96A85CB94DC Signature		8/2021	
n	ocuSigned by:			
	za Mikhail			

# ATTACHMENT B Proposed Conditions of Approval

### ATTACHMENT B

### PRELIMINARY CONDITIONS OF APPROVAL ARCHITECTURE AND SITE APPROVAL

**Date:** February 4, 2021

Owner/Applicant: 2 Youths LLC. / Crown Castle/AT&T Mobility

**Location:** 4350 Monterey Road, Gilroy, CA (APN: 841-32-010)

File Number: PLN19-0206

**CEQA**: Categorically Exempt – Section 15303, Class 3

Project Description: Architectural and Site Approval (ASA) for a new wireless

telecommunications facility at an existing winery facility. Included in the project is a new 80 -foot tall mono-pine and a fenced equipment area located within the footprint of two (2) existing wireless towers. Proposed work will include removal of the two (2) 35-foot. existing towers and removal of three (3) existing antennas mounted on the existing winery

facility. Grading is not proposed as part of the project.

Development is not a covered project under the Santa Clara Valley Habitat

Conservation Plan (HCP).

For any question regarding the following preliminary conditions of approval, contact the person listed for that agency. S/he represents a specialty and can provide details about the conditions of approval.

Agency	Name	Phone	E-mail
Planning	Lara Tran	(408) 299-5759	lara.tran@pln.sccgov.org
Land Development Engineering	Darrel Wong	(408) 299-5735	darrell.wong@pln.sccgov.org
Fire Marshal	Alex Goff	(408) 299-5763	alex.goff@sccfd.org
Environmental Health	Darrin Lee	(408) 299-5748	darrin.lee@cep.sccgov.org
Geology	Jim Baker	(408) 299-5774	jim.baker@pln.sccgov.org
Building Inspection		(408) 299-5700	

### STANDARD CONDITIONS OF APPROVAL

#### **Building Inspection**

1. For detailed information about the requirements for a Building Permit, obtain a Building Permit Application Instruction handout from the Building Inspection Office or visit the website at <a href="https://www.sccbuilding.org">www.sccbuilding.org</a>.

#### Planning

2. Development must take place in substantial conformance with the submitted plans on November 23, 2020 and the approved Conditions of Approval. Any changes to the

proposed project may result in additional environmental review, pursuant to the California Environmental Quality Act, or additional Planning review and a public hearing.

- 3. All painted, or otherwise treated, surfaces of the antenna and fence shall be maintained at all times. If the antenna or fence is improperly maintained, the approval may be revoked and subject to violation and fines.
- 4. The permittee shall keep the project site free of graffiti. "Graffiti" means any unauthorized inscription, writing, lettering, word, figure, mark, design or other inscribed material that is written, marked, etched, scratched, drawn, painted or otherwise placed on any structures, fences, or other permanent or temporary surfaces.
- 5. All telecommunications equipment installed on-site shall comply with the standards of the Federal Communications Commission (FCC) for health, safety, and other pertinent requirements.
- 6. No signs are approved at this time except for (1) an informational sign that provides phone numbers to be used in case of an emergency, and (2) a bilingual NIER hazard warning sign posted at the outer perimeter of the project site. These signs must be in compliance with FCC rules regarding required telecommunication facility signage. Such signs shall be limited to an area of one square foot.
- 7. Flags, banners, streamers, or other devices are not approved and may not be attached to the tower, antennas, fence enclosure, or any supporting structures.
- 8. All developed areas shall be continuously maintained in compliance with the conditions of approval and County Ordinances.
- 9. The driveway and any access easement will be adequate for monthly service and any non-scheduled emergency maintenance personnel accessing the proposed facility. Maintenance of these improvements is the responsibility of the property owner.
- 10. All telecommunications related equipment shall be removed from the site within six (6) months of cessation of use. This shall require obtaining a demolition permit from the Santa Clara County Building Division.

#### **Environmental Health**

11. All construction activities shall be in conformance with the Santa Clara County Noise Ordinance Section B11-154 and prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays for the duration of construction.

### <u>CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO BUILDING AND/OR</u> GRADING PERMIT ISSUANCE

#### Planning

- 12. **Prior to issuance of any permits**, the applicant shall pay all reasonable costs associated with the work by the Department of Planning and Development.
- 13. Ensure the GPS coordinates of the center of the tower are listed on the title page of the plans submitted for Building Permits.
- 14. **Prior to issuance of a building permit**, submit paint color samples for the tower, fence enclosure, and any mechanical or electrical equipment visible above the fence. The color for the fence enclosure must blend with the adjacent landscape and improvements. The color of any visible tower-based or ground-based mechanical or electrical equipment must match the color of the existing tower. The color samples shall include the name, number, and manufacturer of the proposed color(s). Show the color sample information on the Building Permit plans.

#### Geology

15. **Prior to issuance of grading or building permits**, submit a Geotechnical Engineer's Plan Review Letter that confirms the plans conform with the recommendations presented in the Tower Engineering Professionals' Subsurface Exploration Report (dated 8-7-2020).

#### Land Development Engineering (LDE)

- 16. Survey monuments shall be shown on the building plans to provide sufficient information to locate the proposed improvements and the property lines. Existing monuments must be exposed, verified and noted on the grading plans. Where existing monuments are below grade, they shall be field verified by the surveyor and the grade shall be restored and a temporary stake shall be placed identifying the location of the found monument. If existing survey monuments are not found, temporary staking delineating the property line may be placed prior to construction and new monuments shall be set prior to final acceptance of the improvements. The permanent survey monuments shall be set pursuant to the State Land Surveyor's Act. The Land Surveyor / Engineer in charge of the boundary survey shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.
- 17. Existing and set permanent survey monuments shall be verified by inspectors prior to final acceptance of the improvements by the County. Any permanent survey monuments damaged or missing shall be reset by a licensed land surveyor or registered civil engineer authorized to practice land surveying and they shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.
- 18. The building plans shall include an Erosion and Sediment Control Plan that outlines seasonally appropriate erosion and sediment controls during the construction period).
- 19. All applicable easements affecting the parcel(s) with benefactors and recording

- information shall be shown on the improvement plans.
- 20. The project is in a Special Flood Hazard Area; therefore, all improvements shall be in accordance with the County's Floodplain Management Ordinance (SCC code C12-800 C12-826).
- 21. Submit a No Rise Certificate, No Adverse Impact Certificate and corresponding documentation and calculations demonstrating a no impact to the floodplain prepared by a licensed Civil Engineer.
- 22. Property owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to adjoining property.
- 23. All new on-site utilities, mains and services shall be placed underground and extended to serve the proposed development. All extensions shall be included in the building plans. Off-site work should be coordinated with any other undergrounding to serve other properties in the immediate area.
- 24. The improvement plans shall include at a minimum, one of the Low Impact Development site design measures. These measure include directing roof runoff into; cisterns or rain barrels for reuse, onto vegetated areas and; directing runoff from sidewalks, walkways, patios, driveways and uncovered parking onto vegetated areas; and constructing sidewalks, walkways, patios, driveways with permeable surfaces.

#### Environmental Health

- 25. **Prior to issuance of building permit**, submit a completed Hazardous Materials Clearance Form (available at www.EHinfo.org/hazmat) to the Hazardous Materials Compliance Division of the Department of Environmental Health. This is a separate submittal to DEH and additional fees may apply.
- 26. **Prior to issuance of building permit**, submit plans and associated documentation and required fees to the Hazardous Materials Compliance Division (HMCD) of the Department of Environmental Health at 1555 Berger Drive, Suite 300, San Jose, CA 95112-2716. Contact HMCD at (408) 918-3400 to ensure all necessary materials are included in the plan submittal. This is a separate submittal to DEH and additional fees may apply.

#### Fire Marshal's Office

27. **Prior to building permit issuance**, submit a detail of how many batteries will be installed and the quantities of flooded lead-acid, nickel cadmium, valve-regulated lead-acid and lithium ion/metal polymer for each battery. Installation of any stationary lead-acid battery system shall comply with 2020 Edition, California Fire Code Section 608. A permit will be required if electrolyte capacity exceeds 50 gallons.

28. A separate permit is required from the Fire Marshal's Office for any fuel storage in excess of exempt amounts, including integral tanks for equipment, such as generators. NOTE: Storage of fuel on site may also require permits from the Building Division and the County Hazardous Material Compliance Division of the County Department of Environmental Health. Additional requirements will be made when a complete set of construction drawings is submitted for Building Permit application.

#### Roads and Airport

- 29. **Prior to Building Permit issuance**, obtain a Santa Clara County Roads and Airports Department (RAD) Encroachment Permit for the following required improvement:

  A. Installation of the driveway approach on Barnard Road to County Standard B/4.
- 30. The process for obtaining an Encroachment Permit and the forms that are required can be found at: <a href="www.countyroads.org">www.countyroads.org</a> > Services > Apply for Permits > Encroachment Permit.
- 31. Demonstrate that the post-development maximum flow rate into the County Road right-of-way is equal-to or less-than the pre-development corresponding storm event flow rate per the County Drainage Manual. Provide engineered plans and drainage calculations for any detention or retention system necessary to satisfy this requirement.

# CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO OCCUPANCY OR ONE YEAR FROM THE DATE OF THE LAND DEVELOPMENT AGREEMENT, WHICHEVER COMES FIRST.

#### **Planning**

- 32. **Prior to final inspection**, apply for a demolition permit to remove the two (2) 35 -foot wireless towers.
- 33. **Prior to final inspection**, contact Lara Tran in the Planning Division, **at least two (2)** weeks in advance to schedule a site visit to verify the approved exterior colors have been installed as approved.

#### Geology

34. Submit a Construction Observations Letter that verifies the work was completed in accordance with the approved plan (note to that effect should be stamped on the plans).

#### Land Development Engineering

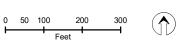
35. Construct all the improvements. Construction staking is required and shall be the responsibility of the developer.

# **ATTACHMENT C Location & Vicinity Map**



### **Project Vicinity Map**

File PLN19-0206 APN 841-32-010 4350 Monterey Rd. Gilroy



This map created by the Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability. 1/20/2021 9:04:53 AM Y:StaffReports/PLN19-0208/PLN19-0206.mxd



### ATTACHMENT D Proposed Plans



5. STEEL REINFORCEMENT / REBAR PLACEMENT

6. STEEL MATERIAL VERIFICATION

OCCUPANCY: U (UNMANNED)

DISABLED ACCESS REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, ACCESSIBILITY ACCESS IS

NOT REQUIRED, IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CODE OF

REGULATIONS, TITLE 24, PART 2, VOLUME 1, CHAPTER 11B, DIVISION 2, SECTION

CONSTRUCTION TYPE: V-B

# SITE NUMBER: CCL01924

SITE NAME: SF829 HWY'S 25 & 101

CROWN CASTLE BUN#: 827822 FA#: 10569471

4350 MONTEREY RD **GILROY, CALIFORNIA 95020 JURISDICTION: COUNTY OF SANTA CLARA** 

# CITE TVDE: MANADINE/ALITHAAD CARINETS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24" x 36".

CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE

ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE

PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND

DO NOT SCALE DRAWINGS

RESPONSIBLE FOR THE SAME.

PROJECT DESCRIPTION	PROJECT INFOR	RMATION	PROJECT 1	EAM	SHEET INDEX	REV
FIRST TIME INSTALL.  1. BRING POWER / TELCO / FIBER TO SITE LOCATION 2. NEW 80'-0' TOWER BY OTHERS 3. NEW 22'-7"X11'-0" LEASE AREA 4. INSTALL 7:-3"X14'-0" COVERED ELEVATED PLATFORM FOR OUTDOOR EQUIPMENT (BY OTHERS) MIN 2.5FT ABOVE GROUND LEVEL 5. INSTALL GENERAC DIESEL GENERATOR 6. INSTALL (2) NEW GPS UNITS 7. INSTALL (3) NEW GPS UNITS 7. INSTALL (6) 10.5' FACE T-ARM MOUNTS (2 PER SECTOR) 8. INSTALL (6) ANTENNAS (3) PER SECTOR 9. INSTALL (15) RRUS (5) PER SECTOR 10. INSTALL (3) RAYCAP DC9 SURGE SUPPRESSION (SQUID) (1) PER SECTOR 11. INSTALL (3) FIBER TRUNKS 12. INSTALL (3) DC TRUNKS 13. INSTALL (4) DC TRUNKS 14. INSTALL METER AND MAIN BREAKER WITH GFCI OUTLET 15. INSTALL TELCO CAN 16. INSTALL TELCO CAN 17. INSTALL CABLE TRAY 17. INSTALL (1) PURCELL FOR FUTURE 19. INSTALL (1) PURCELL FOR FUTURE 19. INSTALL (1) POWER PLANT WITH (8) BATTERIES 20. INSTALL (2) DC-12 21. REMOVE EXISTING 12"0 TREE 22. INSTALL (3)BOLLARDS NEAR TOWER 24. ALL GROUND EQUIPMENT VISIBLE AROUND COMPOUND FENCE LINE IS TO BE PAINTED BROWN TO MATCH THE COLOR OF THE MONOPINE TRUNK 25. INSTALL NEW 12FT TALL FENCE AROUND COMPOUND WITH PRIVACY SLATS NOTE: NO GRADING PROPOSED  CODE COMPLIANCE  WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL	Property Information:  Site Name: SF829 HWY'S 25 & 101  Site Number: CCL01924  BU: 827822  CCI App: 461476 REV 0  Search Ring: SEARCH RING  FA#: 10569471  Site Address: 4350 MONTEREY RD GILROY, CALIFORNIA 95020  A.P.N. Number: 841-32-010  Current Use: TELECOMMUNICATIONS FACILITY  Proposed Use: TELECOMMUNICATIONS FACILITY  Jurisdiction: COUNTY OF SANTA CLARA  Latitude: 36° 57' 52.60"  Longitude: -121° 33' 4.40"  Ground Elevation: 107.7 ft FT. AMSL	Property Owner: contact: ph:  Power Agency: PACIFIC GAS & ELECTRIC ph:  Telephone Agency: ATT ph: ph:	CROWN PM: CROWN CASTLE 1 PARK PLACE, SUITE 300 DUBLIN, CA 94568 CONTACT: ARIANNE GUZMAN EMAIL:ARIANNE.GUZMAN@CROWNCASTLE.COM  CONSTRUCTION MANAGER: CROWN CASTLE 1 PARK PLACE, SUITE 300 DUBLIN, CA 94568 CONTACT:JASON KIDD EMAIL: JASON.KIDD@CROWNCASTLE.COM  A&E PM: CROWN CASTLE 1 PARK PLACE, SUITE 300 DUBLIN, CA 94568 CONTACT:ALI ANJARWALA EMAIL:ALI.ALJARWALA@CROWNCASTLE.COM	RF ENGINEER: AT&T 5001 EXECUTIVE PKWY SAN RAMON, CA 94583  ENGINEER: POD GROUP 11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 PH: (502) 437-5252  SAQ: CROWN CASTLE 1 PARK PLACE, SUITE 300 DUBLIN, CA 94568  ZONING: CROWN CASTLE 1 PARK PLACE, SUITE 300 DUBLIN, CA 94568	T-1 TITLE SHEET C-1 OVERALL SITE PLAN C-2.1 EXISTING SITE PLAN C-2.2 PROPOSED SITE PLAN C-3 ANTENNA PLAN & DETAILS C-4.1 EXISTING AND PROPOSED TOWER ELEVATIONS (FACING WEST) C-4.2 EXISTING AND PROPOSED TOWER ELEVATIONS (FACING NORTH) C-5 CONSTRUCTION DETAILS - EQUIPMENT C-5.1 CONSTRUCTION DETAILS - EQUIPMENT C-5.2 GENERATOR DETAILS C-6 PLATFORM DETAILS C-7 MOUNT SPECIFICATIONS E-1 GENERAL ELECTRICAL/ GROUNDING NOTES E-2 UTILITY SITE PLAN E-3 POWER SINGLE LINE DIAGRAM E-4 POWER PANEL SCHEDULE & DETAILS G-1 SINGLE LINE DIAGRAM - NOTES AND LEGENDS G-2 GROUNDING DETAILS GN-1 GENERAL NOTES, ABBREVIATIONS, & NOTES GN-2 SITE SIGNAGE GN-3 BATTERY SPECIFICATIONS	M M M M M M M M M M M M M M M
2019 CALIFORNIA BUILDING CODE (CBC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2018 IBC (PART 2, VOL 1-2)  2019 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2018 IRC (PART 2.5)  4) 2019 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11)		SITE	DIRECTIONS FR  DIRECTIONS FROM AT&T's OFFICE AT 5001 EX  1. DEPART EXECUTIVE PKWY TOWARD CAMINO RAM  2. TURN RIGHT ONTO CAMINO RAMON	ECUTIVE PARKWAY, SAN RAMON, CA		
(AFFECTED ENERGY PROVISIONS ONLY)  5) 2019 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2018 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)  6) 2019 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2018 UMC (PART 4)  7) 2019 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2018 UPC (PART 5)  8) 2019 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2017 NEC (PART 3)  9) 2019 CALIFORNIA ENERGY CODE (CEC)			3. TURN RIGHT ONTO BOLLINGER CANYON RD 4. TAKE RAMP RIGHT FOR I-680 SOUTH TOWARD SAN 5. TAKE RAMP RIGHT FOR US-101 SOUTH TOWARD LO 6. AT EXIT 353, TAKE RAMP FOR CA-25 TOWARD HOLD 7. TURN LEFT ONTO CA-25 SOUTH 8. TURN RIGHT TO MERGE ONTO US-101 NORTH 9. ARRIVE AT SITE ON THE RIGHT	OS ANGELES		
10) ANSI / EIA-TIA-222-G  11) 2019 NFPA 101, LIFE SAFETY CODE  12) 2019 NFPA 72, NATIONAL FIRE ALARM CODE  13) 2019 NFPA 13, FIRE SPRINKLER CODE	SPECIAL INSPE	CTIONS	APPROVED BY:	/ALS		
OCCUPANCY AND CONSTRUCTION TYPE	ANCHOR BOLTS WET-SET INTO CONCRETE     EXPANSION BOLTS INTO EXISTING CONCRETE		AT&T: VENDOR:	INITIALS. DATE.	GENERAL CONTRACTOR NOTES	ALFR'
	3. HIGH STRENGTH BOLTING		R.F.:			A COMMON

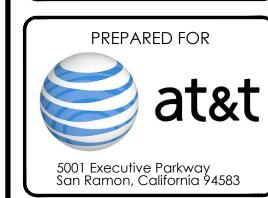
ZONING:

LEASING / LANDLORD:

CONSTRUCTION:

POWER / TELCO:





CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025 CHECKED BY: MEP

<u> </u>		
М	11/16/2020	90% CDS
L	6/4/2020	90% CDS
K	6/3/2020	90% CDS
J	5/29/2020	90% CDS
Н	3/20/2020	90% CDS
G	2/19/2020	90% CDS
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С	08/30/19	90% CDS
В	04/01/19	90% CDS
Α	03/08/19	90% CDS
REV	DATE	DESCRIPTION

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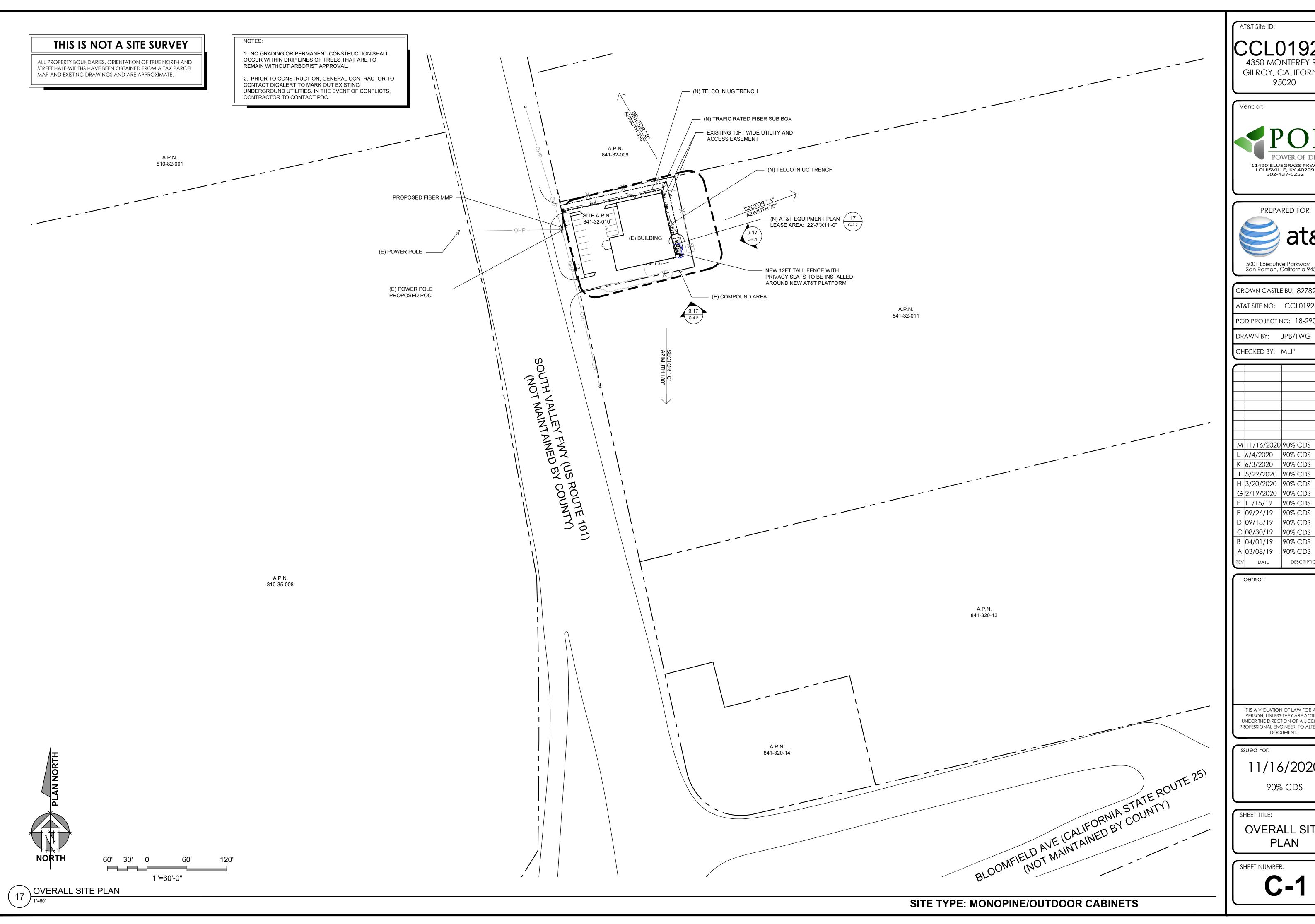
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11/16/2020

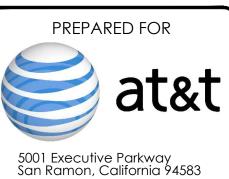
90% CDS

TITLE SHEET



GILROY, CALIFORNIA 95020

11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252



CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

CHECKED BY: MEP

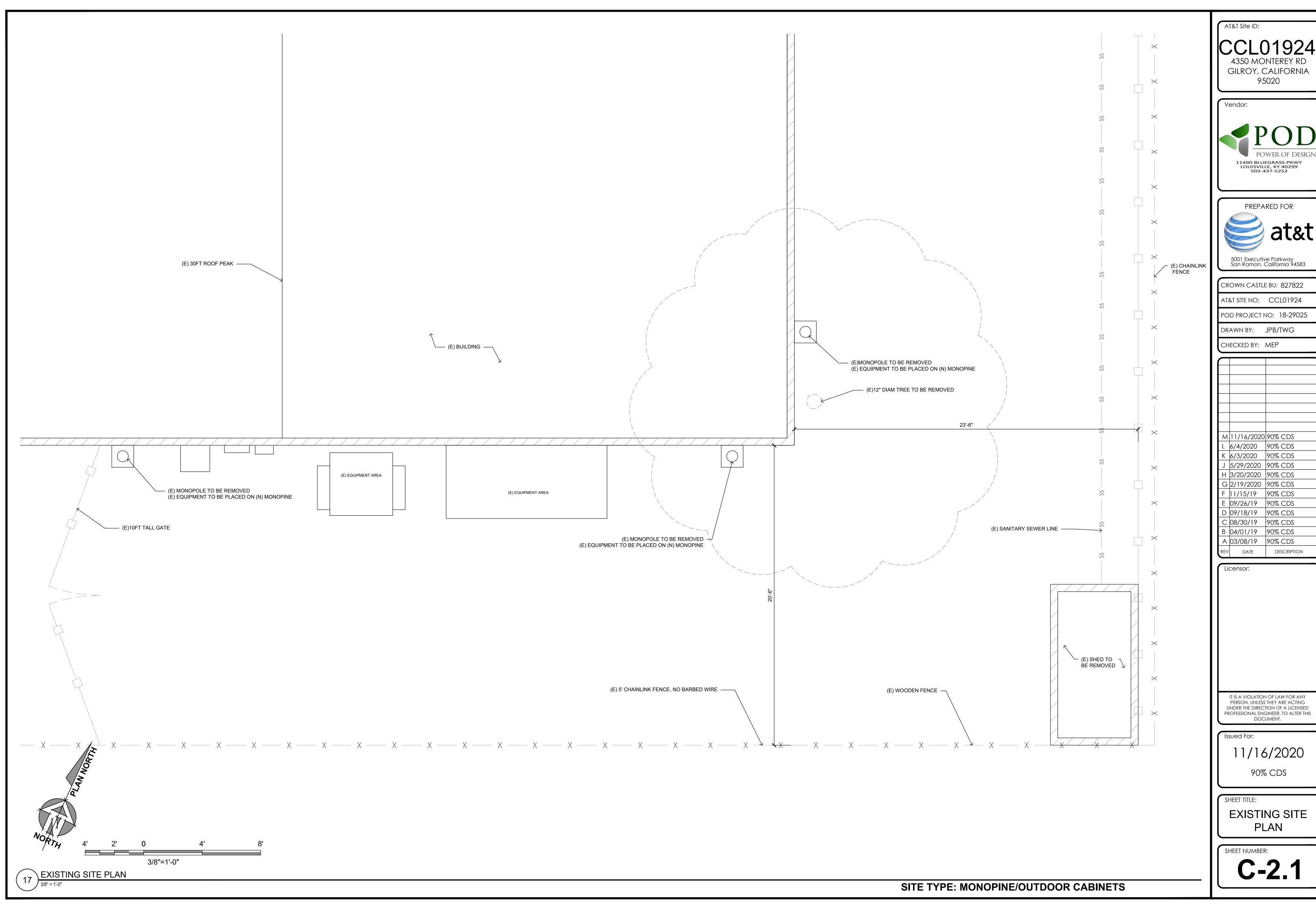
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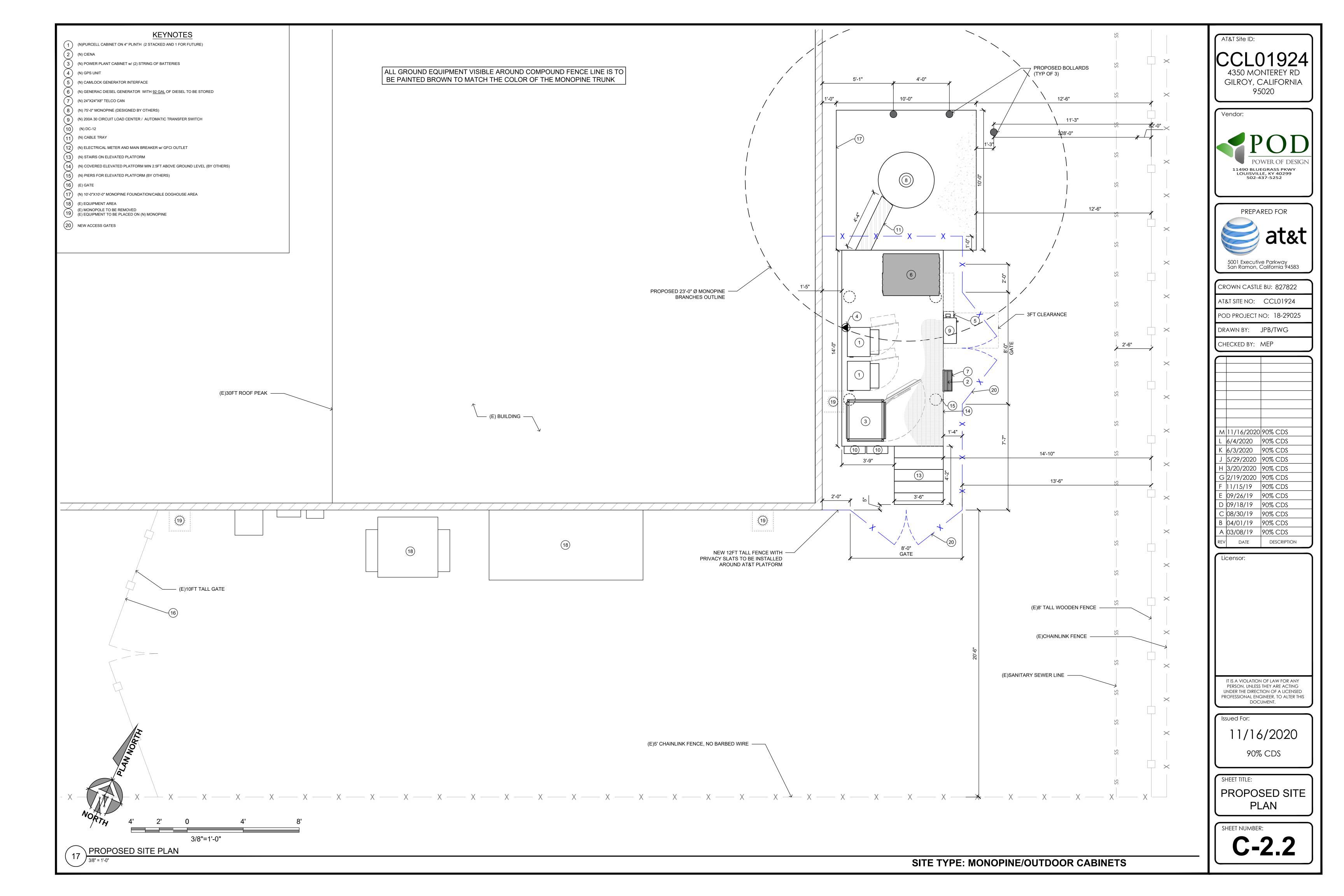
**OVERALL SITE** PLAN

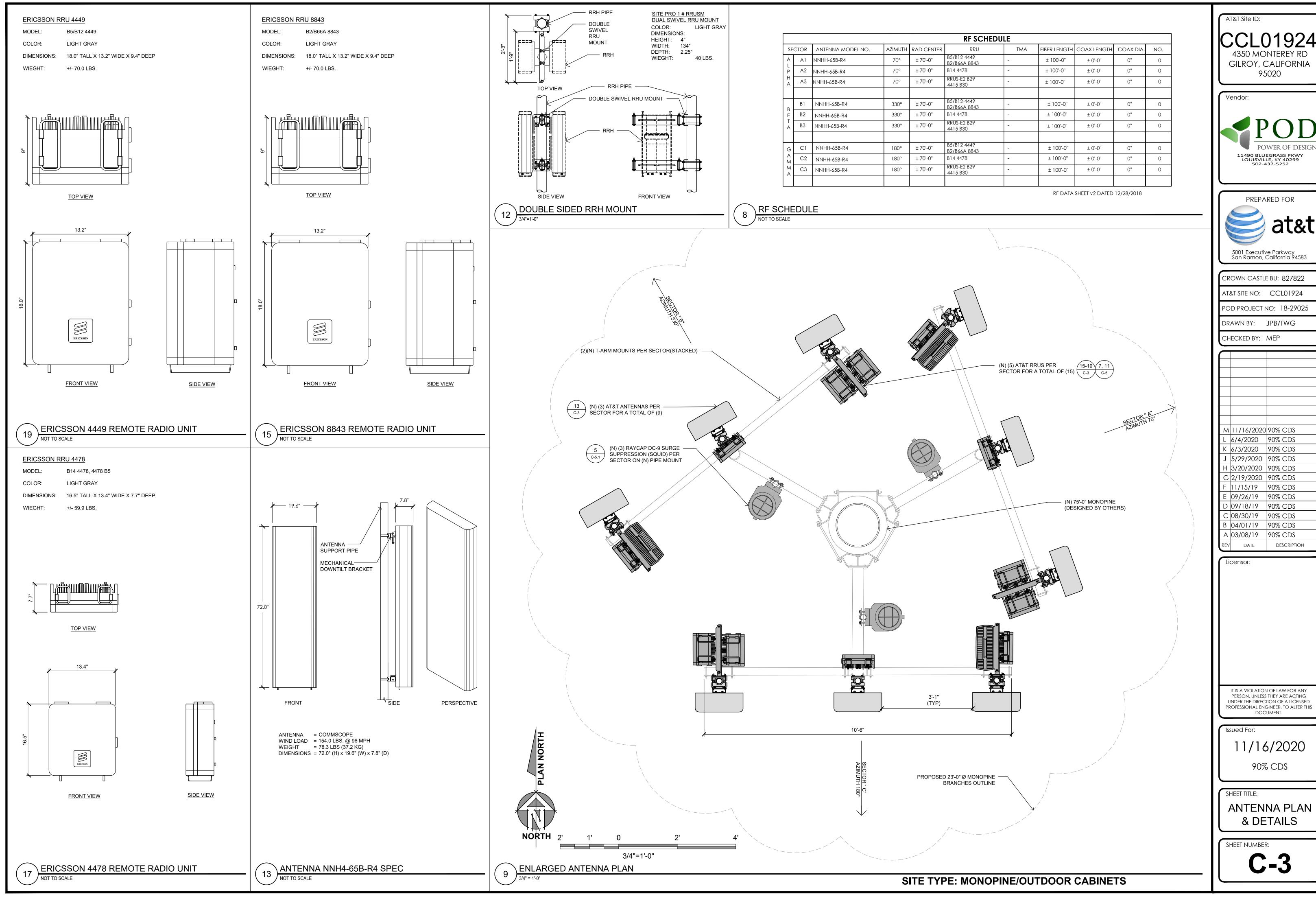


GILROY, CALIFORNIA



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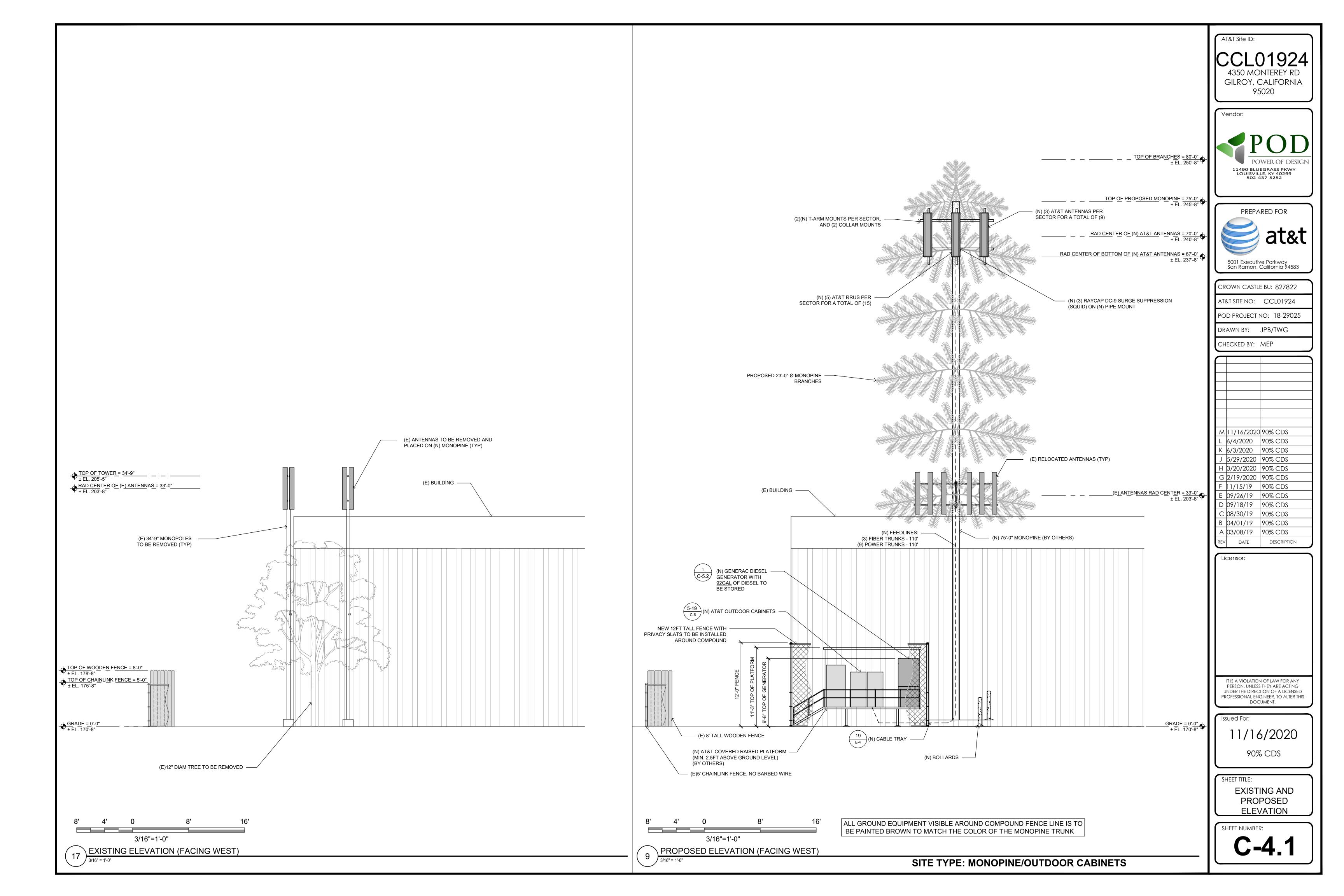


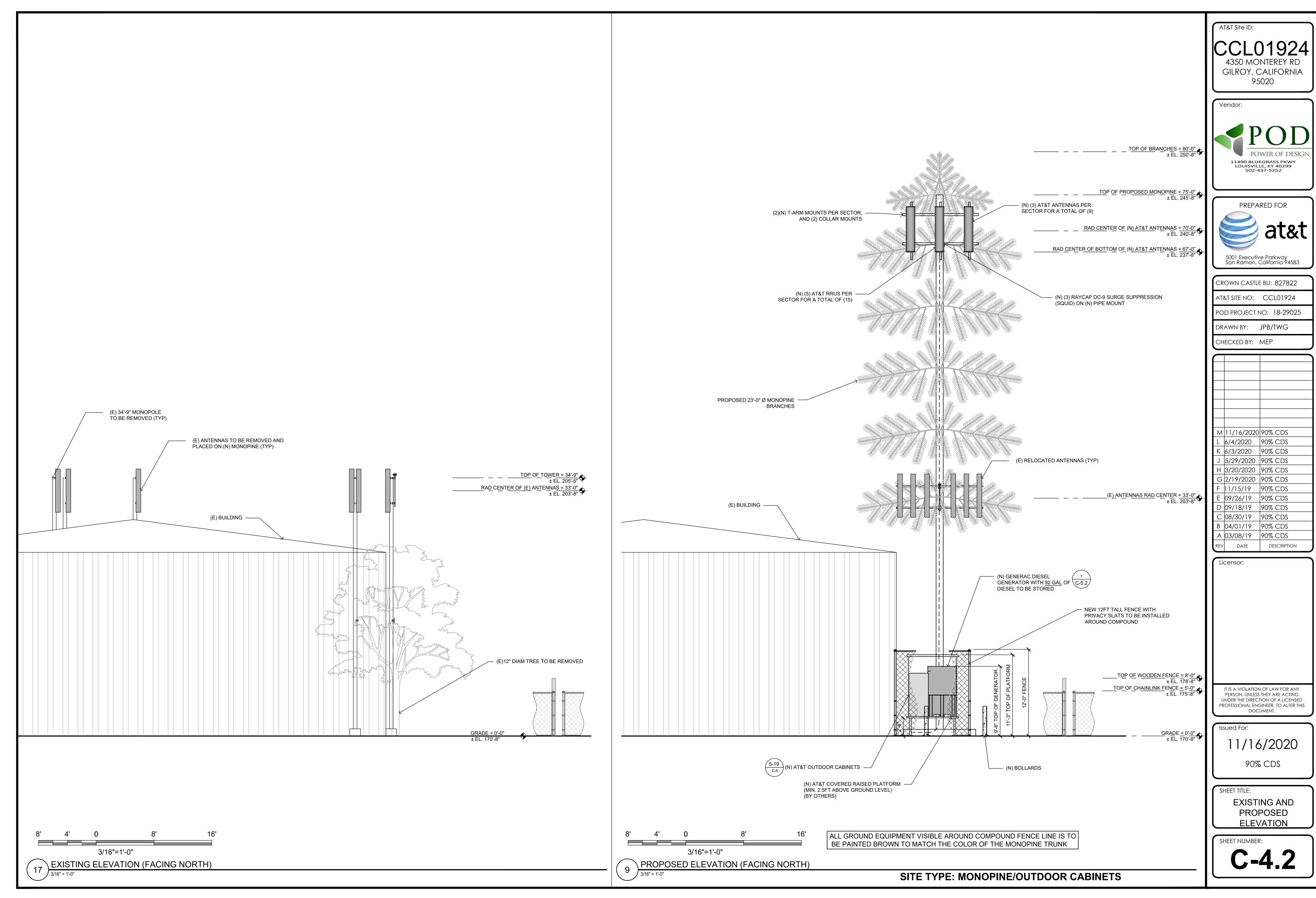
5001 Executive Parkway San Ramon, California 94583

CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

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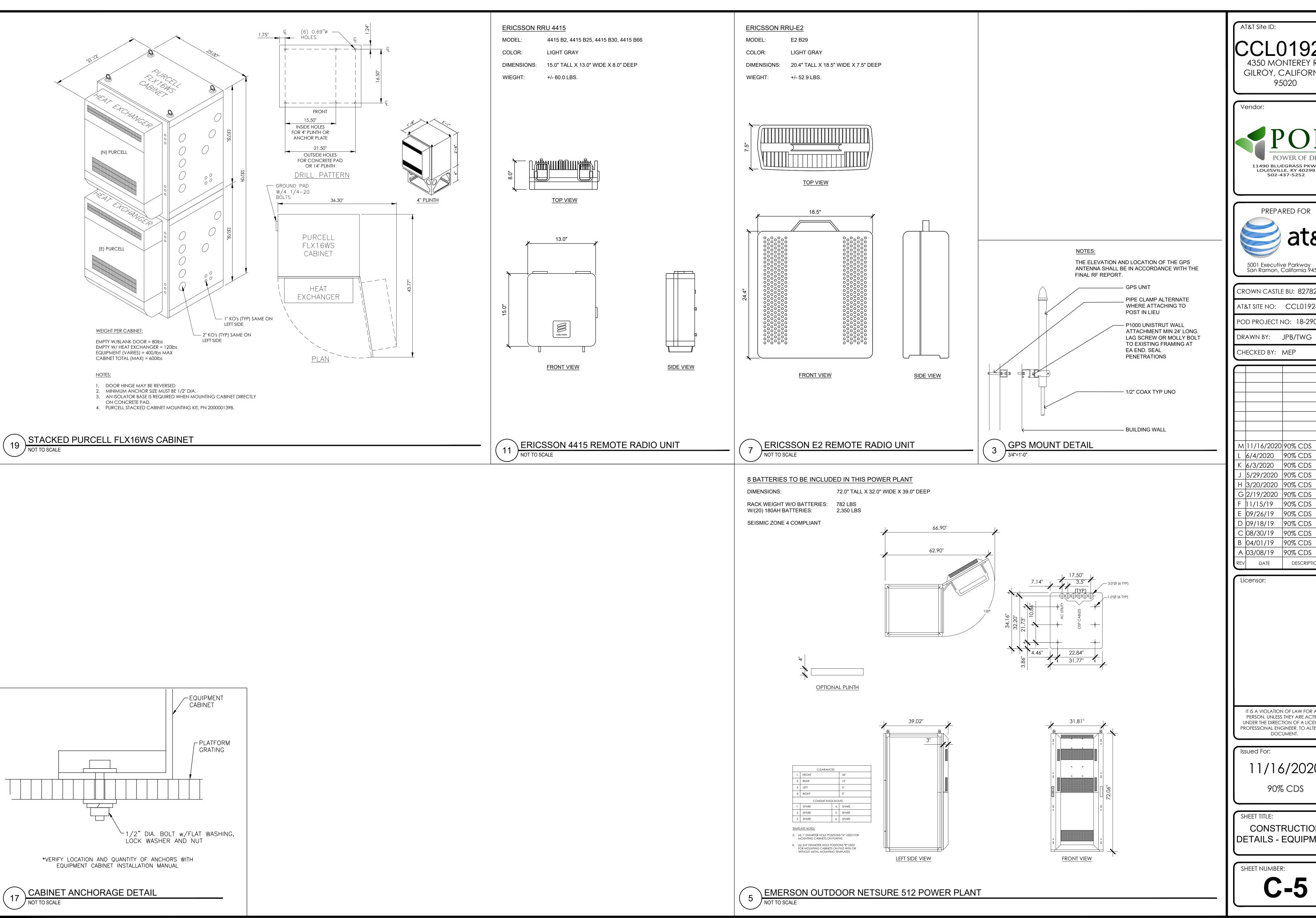
ANTENNA PLAN







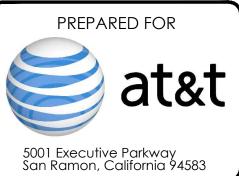
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REV	DATE	DESCRIPTION



GILROY, CALIFORNIA 95020

Vendor:





CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG

CHECKED BY: MEP

M 11/16/2020 90% CDS 6/4/2020 90% CDS K 6/3/2020 90% CDS J 5/29/2020 90% CDS H |3/20/2020 | 90% CDS G 2/19/2020 90% CDS

DESCRIPTION

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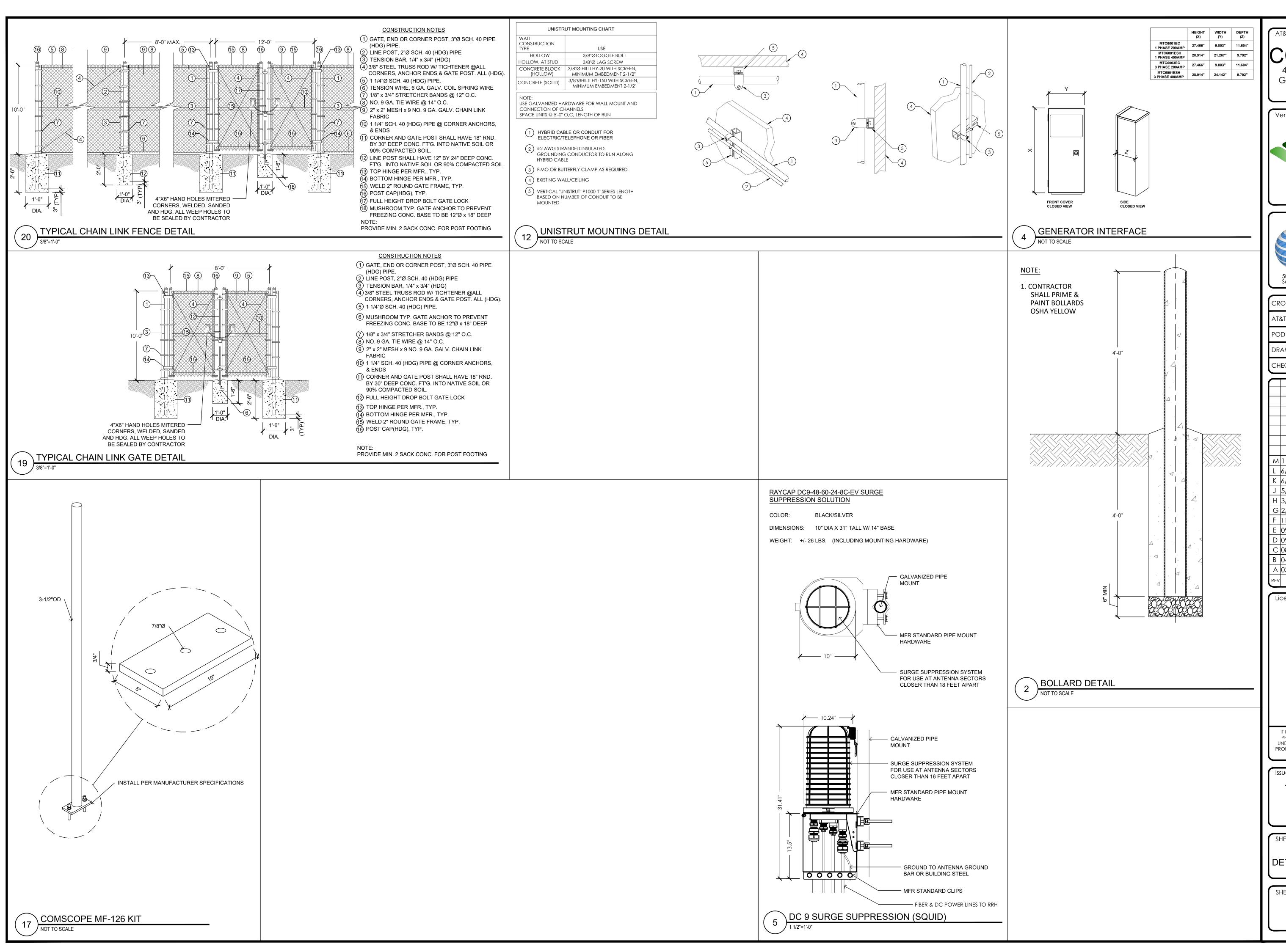
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Issued For:

11/16/2020 90% CDS

SHEET TITLE: CONSTRUCTION **DETAILS - EQUIPMENT** 

SHEET NUMBER:



GILROY, CALIFORNIA 95020

Vendor:

11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252

> PREPARED FOR 5001 Executive Parkway San Ramon, California 94583

CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG CHECKED BY: MEP

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11/16/2020 90% CDS

SHEET TITLE:

CONSTRUCTION **DETAILS - EQUIPMENT** 



GENERAC INDUSTRIAL

Model G007098-0 (Steel)

Model G007098-0 (Steel)

**ENCLOSURE** 

Gasketed Door

Stamped Air-Intake Louvers

150 MPH Wind Rating

36" Snow Rating

**FUEL TANK** 

GENERAC INDUSTRIAL

Serviceable Items Accessible Though Lift-Off Door

High Performance Sound-Absorbing Material

Single Door Latch Lockable with Key & Padlock

Rhino Coat<sup>™</sup> - Textured Polyester Powder Coat

# GENERAC | INDUSTRIAL

### Model G007098-0 (Steel)

### Standby Power Rating 20 kW AC, 60 Hz

**EPA Certified Stationary Emergency** 

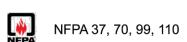


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### **Codes and Standards**

### Generac products are designed to the following standards:

UL2200, UL508, UL142, UL489





NEC700, 701, 702, 708



NEMA ICS10, MG1, 250, ICS6, AB1



### **Powering Ahead**

SDC20 | 2.5L | 20 kW - AC

INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

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

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

and arrangements, allowing us to meet the standby power needs

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

communications software.

Generac gensets utilize a wide variety of options, configurations of practically every application.

conditions.

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

#### Vented Rotor 2/3 Pitch Skewed Stator

**ALTERNATOR SYSTEM** 

 Oil Drain Extension Class H Insulation Material Air Cleaner with Service Indicator Fan Guard

**SDC20** | 2.5L | 20 kW - AC

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

STANDARD FEATURES

50/50 Ethylene Glycol Antifreeze

Solenoid Activated Starter Motor

· Sealed/Rubber-Booted Engine Electrical Connec-

Radiator Drain Extension

Battery Charging Alternator

AGM Spill Proof Battery

Output Circuit Breaker

CONTROL SYSTEM

**Electrical System** 

Battery Cables

**ENGINE SYSTEM** 

- Stainless Steel Flexible Exhaust Connection Exhaust Silencer with Drain Amortisseur Winding Factory Filled Oil & Coolant Brushless Excitation
- Sealed Bearings Fuel System Rotor Dynamically Spin Balanced Primary Fuel Filter

### Full Load Capacity Alternator Protective Thermal Shutdown

- Cooling System **GENERATOR SET**  120V AC Coolant Heater Single Side Service Closed Coolant Recovery System UV/Ozone Resistant Hoses Factory-Installed Radiator
  - Separation of Circuits- High/Low Voltage Silencer Heat Shield High Heat Wrapped Exhaust Piping Silencer Enclosed Within Generator
  - 5 Year Extended Warranty Extended Factory Testing 12 Gallon System Spill Containment

### UL 142 Compliant

- Internal Genset Vibration Isolators Rupture Basin Alarm Fuel Level Gauge and Sender
  - Stainless Steel Hardware Integrated Fork Pockets

### 2.5 Gallon Fuel Fill Spill Containment

## Frequency

- Date/Time Fault History (Event Log) Digital H Control Panel - Dual 4x20 Display Isochronous Governor Control Programmable Crank Limiter Waterproof/Sealed Connectors 7-Day Programmable Exerciser Audible Alarms and Shutdowns
- Special Applications Programmable PLC Not in Auto (Flashing Light) RS-232/485 Communications Auto/Off/Manual Switch All-Phase Sensing Voltage Regulator E-Stop (Red Mushroom-Type) Full System Status NFPA110 Level I and II (Programmable)
- 2-Wire Start Compatible Customizable Alarms, Warnings, and Events Power Output (kW) Modbus protocol Power Factor Predictive Maintenance Algorithm kW Hours, Total & Last Run
- Sealed Boards Real/Reactive/Apparent Power Password Parameter Adjustment Protection All Phase AC Voltage Single Point Ground Connections All Phase Currents
- Oil Pressure Coolant Temperature Alarm Information Automatically Comes Up On the Coolant Level Engine Speed

### **MODEL OPTIONS**

Battery Voltage

GENERAC INDUSTRIAL

Model G007098-0 (Steel)

### **ENCLOSURE**

- External E-Stop-Shipped Loose Kit and Field

O Extreme Cold Weather Kit - Shipped Loose Kit and

- Double Wall Construction Factory Pressure Tested (5 psi)
- Check Valve in Supply Line Rhino Coat<sup>™</sup> - Textured Polyester Powder Coat

- Generator Run- Dry Contact Major Alarm- Dry Contact
- Minor Alarm- Dry Contact Low Fuel Alarm- Dry Contact
- Rupture Basin Alarm- Dry Contact Alarms & Warnings Time and Date Stamped
- Alarms & Warnings for Transient and Steady State Snap Shots of Key Operation Parameters During
- Alarms & Warnings Alarms and Warnings Spelled Out (No Alarm Codes)

- 15 Channel Data Logging 0.2 msec High Speed Data Logging

# Alarms

### **CONTROL SYSTEM**

- 21 Light Annunciator- Shipped Loose Kit and Field
- Aluminum Enclosure Field Installed

# **TANKS**

# External Fuel Vent- Shipped Loose Kit and Field

### Cooling System

General		Cooling Cystom		
Make	Mitsubishi	Cooling System Type	Forced Circulation	
EPA Emissions Compliance	Interim Tier 4	Water Pump Type	Centrifugal Pump	
Cylinder #	4	Fan Type	Pusher	
Туре	In-Line	Fan Speed (rpm)	2100	
Displacement - L (Cu In)	2.5 (158)	Fan Diameter - mm (in)	431.8 (17)	
Bore - mm (in)	88 (3.5)	Coolant Heater Wattage	1000	
Stroke - mm (in)	103 (4.1)	Coolant Heater Voltage	120	_

### Naturally Aspirated

Engine Governing		Fuel Type	Ultra Low Sulfur Diesel #2
		Fuel Specifications	ASTM
Governor	Electronic Isochronous	Fuel Filtering (microns)	6
Frequency Regulation (Steady State)	± 0.25%	Fuel Inject Pump Make	Bosch
		Injector Type	Engine Driven Gear
Lubrication System		Engine Type	Diesel
-			

#### Fuel Supply Line - mm (in.) Oil Pump Type Trochoid Gear Pump Engine Electrical System Oil Filter Type Filtering Paper, Full Flow

6.5 (6.9)

,	
System Voltage	12 VDC
Battery Charger Alternator	12V-50A
Battery Size	650 CCA
Battery Group	35
Battery Voltage	12 VDC
Ground Polarity	Negative

6.6 (0.26)

### **ALTERNATOR SPECIFICATIONS**

Crankcase Capacity - L (qts)

SDC20 | 2.5L | 20 kW - AC

EPA Certified Stationary Emergency

**ENGINE SPECIFICATIONS** 

General

Compression Ratio

Intake Air Method

**APPLICATION AND ENGINEERING DATA** 

INDUSTRIAL DIESEL GENERATOR SET

Standard Model	Mecc Alte ECP 28-2L/4	Bearings	Dual Sealed
Poles	4	Coupling	Belt, Pulley
Field Type	Revolving	Load Capacity - Standby	100%
Insulation Class - Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class - Stator	Н	Voltage Regulator Type	Digital
Total Harmonic Distortion	<5%	Number of Sensed Phases	All
Telephone Interference Factor (TIF)	<45	Regulation Accuracy (Steady State)	±0.5%
Standard Excitation	Brushless		

### **RATING DEFINITIONS**

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

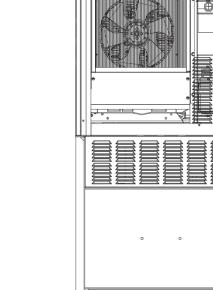
GENERAC | INDUSTRIAL

Model G007098-0 (Steel)

SDC20 | 2.5L | 20 kW - AC

INDUSTRIAL DIESEL GENERATOR SET EPA Certified Stationary Emergency





## **Level 2 Sound Attenuation Enclosure**

null fillle nours	40
Usable Capacity Gal (L)	92 (348.2)
LxWxHin (mm)	48 x 36 x 90 (1219.2 x 914.4 x 2286)
Weight lbs (kg)	2400 (1089)
Sound Level	71 dBA

\* All measurements are approximate and for estimation purposes only. YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

P: (262) 544-4811 @2016 Generac Power Systems, Inc. All rights reserved. All specifications are subject to change without notice.

11/16/2020

SHEET TITLE:

AT&T Site ID:

Vendor:

GILROY, CALIFORNIA

95020

11490 BLUEGRASS PKWY

LOUISVILLE, KY 40299 502-437-5252

PREPARED FOR

5001 Executive Parkway

CROWN CASTLE BU: 827822

AT&T SITE NO: CCL01924

POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG

M | 11/16/2020 | 90% CDS

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C 08/30/19 90% CDS

B 04/01/19 90% CDS

A 03/08/19 90% CDS

DATE

Licensor:

K 6/3/2020

90% CDS

DESCRIPTION

CHECKED BY: MEP

San Ramon, California 94583

90% CDS

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PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**GENERATOR DETAILS** 

**OPERATING DATA POWER RATINGS** Single-Phase 120/240 VAC @1.0pf 20 kW Circuit Breaker Size **FUEL CONSUMPTION RATES\*** 1.41 (5.30) 1.90 (7.19) \* Fuel supply installation must accommodate fuel consumption rates at 100% load. COOLING 11.9 (45) Coolant Flow per Minute 3.5 (13.2) Coolant System Capacity BTU/hr 238.200 Heat Rejection to Coolant cfm (m<sup>3</sup>/min) 2365 (67) Max. Operating Ambient Temperature (Before Derate) 77° (25°) Maximum Radiator Backpressure **COMBUSTION AIR REQUIREMENTS** Flow at Rated Power cfm (m<sup>3</sup>/min) 88 (2.49) ENGINE **EXHAUST** Exhaust Flow (Rated Output) inHg (kPa) 1.38 (4.67) Max. Backpressure (Post Silencer) Exhaust Temp (Rated Output - Post Silencer) °F (°C)

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

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards. DIMENSIONS AND WEIGHTS\*

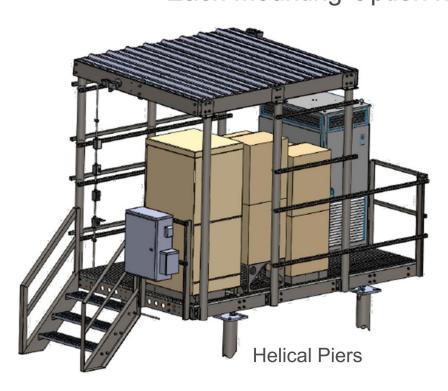
Generac Power Systems, Inc. | P.O.Box 8 | Waukesha, WI 53189

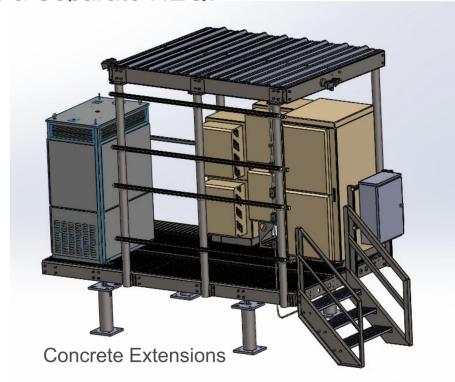
Document No. 10000009019 Rev. WIP 11/04/16

### **STANDARD PLATFORM**

## Same Platform with Two Different Mounting Options

Each Mounting Option has a Separate NEQ.



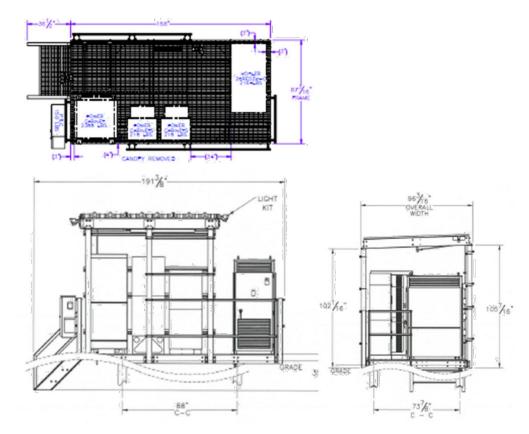


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**STANDARD PLATFORM** 

## **Helical Foundation Option**



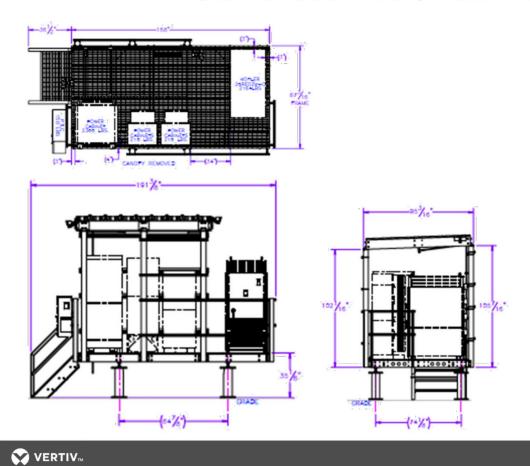
The helical foundation consists of four 10" diameter x 10" long helicals. Helicals are installed leaving 15 inches above grade for the stairs to work. This platform will accommodate a DC power cabinet, two stacks of radio cabinets, and a generator. The PTLC is mounted on the outside rail next to the stairs. Each platform ships fully configured with cabinets, generator, Raycaps, light kit, conduits and cables, etc. from WWT directly to the site. See page 9 for helical installation accessories.

Order NEQ.20312 and NEQ.20314

\*Additional Notes 6

### **STANDARD PLATFORM**

## **Concrete Pier/Pad Foundation Option**



The concrete foundation consists of four extensions; 10" diameter x 15 inches long. Extensions are anchored to the concrete pier or pad. Anchors can be anything between 5/8" and 1". This platform will accommodate a DC power cabinet, two stacks of radio cabinets, and a generator. The PTLC is mounted on the outside rail next to the stairs. Each platform ships fully configured with cabinets, generator, Raycaps, light kit, conduits and cables, etc. from WWT directly to the site.

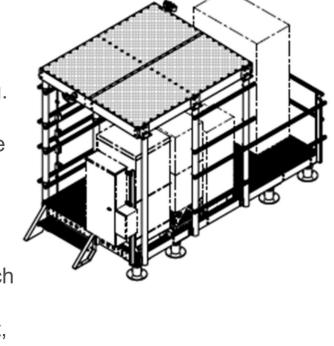
Order NEQ.20312 and NEQ.20315

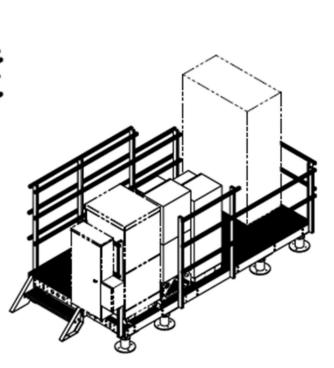
ON THE GROUND (GRAVITY MOUNT) PLATFORMS

## Same Platform With and Without Expanded Metal Canopy

The gravity mount platforms are designed to set on the ground or gravel. Each of the 8 feet are adjustable utilizing single bolt leveling. There is an option without a canopy but having a canopy is preferred. The gravity mount platforms will accommodate a DC power cabinet, two stacks of radio cabinets, and a generator. The PTLC is mounted on the outside rail next to the stairs. Each platform ships fully configured with cabinets, generator, Raycaps, light kit, conduits and cables, etc. from WWT directly to the site.

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**Platform With Expanded Metal Canopy** 

ON THE GROUND (GRAVITY MOUNT) PLATFORMS

The expanded metal canopy is required with gravity mount platforms to reduce the "sail" affect of the standard canopy and survive the 155mph ATT wind spec. In addition the expanded metal canopy protects the equipment and personnel from falling ice off the tower.

**Expanded Metal** 

Order NEQ.20577

\*Additional Notes 11

CCL01924 4350 MONTEREY RD GILROY, CALIFORNIA 95020



PREPARED FOR



5001 Executive Parkway San Ramon, California 94583

CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924

POD PROJECT NO: 18-29025 DRAWN BY: JPB/TWG

CHECKED BY: MEP

M 11/16/2020 90% CDS L 6/4/2020 90% CDS K 6/3/2020 90% CDS J 5/29/2020 90% CDS H 3/20/2020 90% CDS G 2/19/2020 90% CDS F 11/15/19 90% CDS E 09/26/19 90% CDS D 09/18/19 90% CDS C 08/30/19 90% CDS B 04/01/19 90% CDS A 03/08/19 90% CDS

Licensor:

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Issued For:

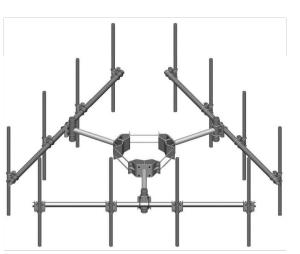
11/16/2020 90% CDS

PLATFORM DETAILS

SHEET NUMBER:

**C-6** 

## MC-K10L-B



Monopole Co-location T-Frame Kit, 30 in to 60 in OD, 10 ft face, pipe ordered separately

### Product Classification

Product Type Monopole T-frame kit

Dimensions

 Face Width
 3.2 m | 10.5 ft

 Mounting Diameter, maximum
 1524.0 mm | 60 in

 Mounting Diameter, minimum
 762.0 mm | 30 in

 Pipe Outer Diameter
 60.3 mm | 2 3/8 in

 Height
 254.0 mm | 10.0 in

 Length
 914.4 mm | 36.0 in

 Weight
 376.9 kg | 830.9 lb

 Width
 3200.4 mm | 126.0 in

### Environmental Specifications

**EPA with 1/2 in (12 mm) radial ice** 1.2 m<sup>2</sup> | 12.7 ft<sup>2</sup> **EPA without ice** 0.9 m<sup>2</sup> | 10.0 ft<sup>2</sup>

Man Rating 250 lb vertical man load at 15 mph (BWS)

Wind Rating 120 mph (BWS) at 150 ft AGL | 140 mph (3-second gust) at 150 ft AGL using Exposure D per FBC

Wind Rating Criteria Four 72 in x 8 in panel antennas per sector

Wind Rating Test Method TIA/EIA-222

### General Specifications

Pipe, quantity

Includes Cellular pipe frames | Ring mount | Stand-off arms

Material Type Hot dip galvanized steel

**Mounting** Monopole, 762–1524 mm (30–60 in) OD

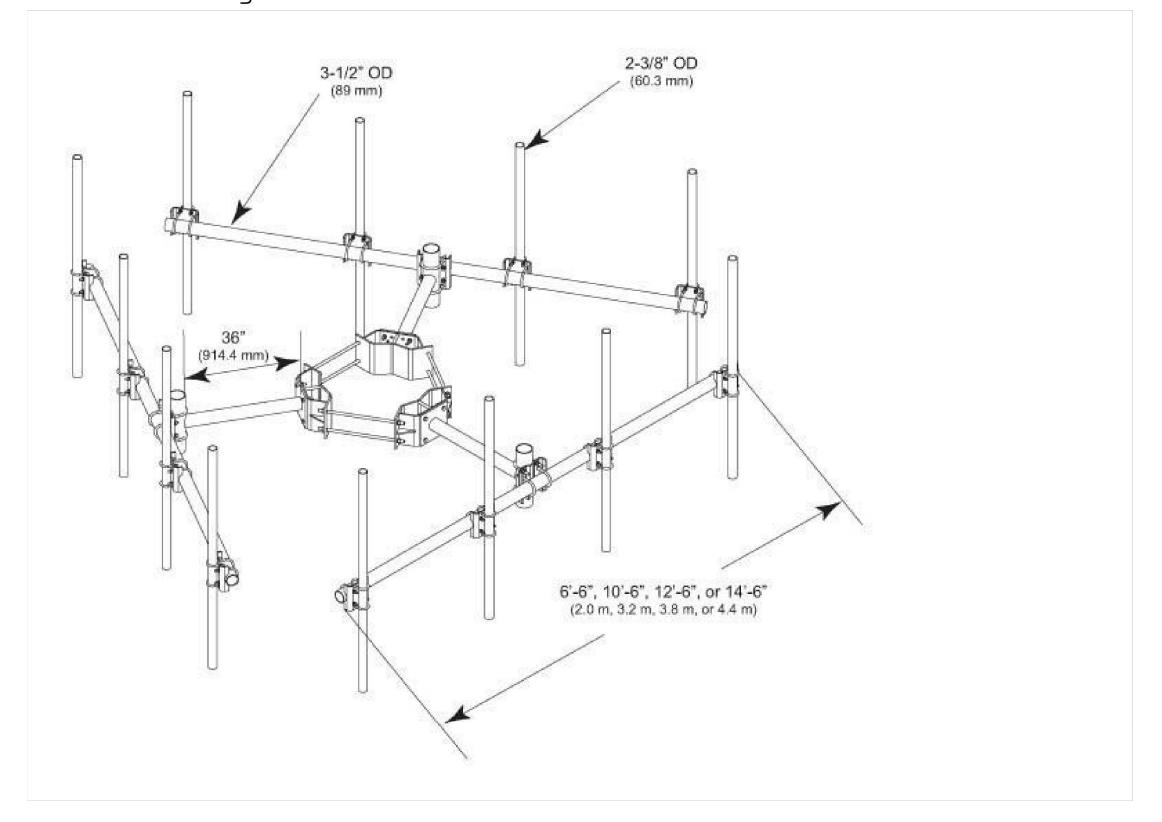
Package Quantity

Sectors, quantity

**Stand-off Distance** 914.4 mm | 36.0 in

## MC-K10L-B

### Outline Drawing



## Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system

### Included Products

MT-216-10NS — Cellular Pipe Frame, 10 ft face

MT-197 — Single Support Arm, 36 in, includes pipe

MC-RM3060-3 — Universal Ring Mount, 30 in to 60 in OD

page 7 of 8 October 24, 2018

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page 6 of 8

October 24, 2018

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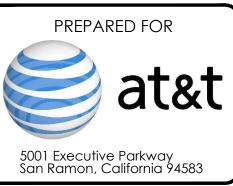
CCL01924
4350 MONTEREY RD
GILROY, CALIFORNIA
95020

Vendor:

POD

POWER OF DESIGN

11490 BLUEGRASS PKWY
LOUISVILLE, KY 40299
502-437-5252



CROWN CASTLE BU: 827822

AT&T SITE NO: CCL01924

POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG

CHECKED BY: MEP

M 11/16/2020 90% CDS
L 6/4/2020 90% CDS
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E 09/26/19 90% CDS
D 09/18/19 90% CDS
C 08/30/19 90% CDS
A 03/08/19 90% CDS
REV DATE DESCRIPTION

Licensor:

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Issued For:

11/16/2020

90% CDS

SHEET TITLE:

MOUNT SPECS

SHEET NUMBER:

<sup>\*</sup> Footnotes

### **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 IMC or PVC conduit to the interior of the BTS
- 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. 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. Supplemental equipment ground wiring located outdoors or below grade shall be single conductor #2 AWG solid, tinned, copper cable.
- Power and control wiring, not in tubing or conduit, shall be multi-conductor, Type TC. Cable (#14 AWG and larger), 600V, oil resistant THHN or THWN-2, Class B, Stranded copper cable rated for 90°C (Wet or Dry) operation, with outer jacket listed or labeled for the location used.
- Cables shall not be routed through ladder-style cable tray rungs. Raceway and cable tray shall be listed or labeled for electrical
- use in accordance with NEMA, UL, ANSI/IEEE and NEC. New raceway or cable tray shall match the existing installation where possible.
- 11. All power and grounding connections shall be crimp style, compression, wire lugs and wirenuts by Thomas and Betts (or equal). Lugs and wirenuts shall be rated for operation at no less than 75°C.
- 12. Each end of every power, grounding and T1 conductor and cable shall be labeled with color coded insulation or electrical tape. The identification method shall conform with NEC & OSHA
- and match existing installation requirements. All electrical components shall be clearly labeled with engraved laminated plastic labels. All equipment shall be labeled with their voltage rating, phase configuration, wire configuration, power or ampacity rating and branch circuit ID numbers
- (panelboard and circuit identification). 14. All tie wraps shall be cut flush with approved cutting tool to
- remove sharp edges. Rigid nonmetallic conduit (PVC Schedule 40 or PVC Schedule 80) shall be used underground, direct buried in areas of occasional light vehicle traffic or encased in reinforced concrete in areas of heavy vehicle traffic.
- 16. All conduit run above ground or exposed shall be LFMC, IMC or
- 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.
- 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
- 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

report any violations or adverse findings to the contractor for

- conductors in accordance with the NEC. 25. Perform IEEE fall-of-potential resistance to earth testing (per IEEE 1100 and 81) for new ground electrode systems. The subcontractor shall furnish and install supplemental ground
- electrodes as needed to achieve a test result of 5 ohms or less. 26. Metal raceway shall not be used as the NEC required equipment ground conductor. Stranded copper conductors with green insulation sized in accordance with the NEC shall be furnished
- and installed with the power circuits to BTS equipment. 27. Each indoor BTS cabinet frame shall be directly connected to the master ground bar with supplemental equipment ground wires #6 or larger.
- 28. Exothermic welds shall be used for all grounding connections below grade.
- 29. Approved antioxidant coatings (i.e. conductive gel or paste) shall be used on all compression and bolted ground connections.
- 30. ICE bridge bonding conductors shall be exothermically bonded or bolted to the bridge and the tower ground bar.
- 31. Surfaces to be connected to ground conductors shall be cleaned to a bright surface at all connections.
- 32. Exposed ground connections shall be made with compression connectors which are then bolted to equipment using stainless steel hardware. Installation torque shall be per manufacturer's requirements.
- 33. DC power cables shall be Cobra COP-FLEX 2000, Flexible Class B or approved equal.

### **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
- 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

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
- 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 "HYGROUND" 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
- 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.

EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.

- 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.

### **GROUNDING NOTES:**

- FOR ADDITIONAL GROUNDING INFORMATION SEE AT&T GROUND STANDARDS ATT-TP-76416
- 1. ALL DETAILS ARE SHOWN IN GENERAL TERMS, ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS.
- 2. ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
- 3. GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
- 4. ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE
- 5. GROUND RING SHALL BE LOCATED A MINIMUM OF 24" BELOW GRADE OR 6" MINIMUM
- 6. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.

CONNECTIONS: EXOTHERMIC WELD TYPE.

7. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.

### 8. GROUND BARS:

GROUNDING.

BUSS BAR.

BELOW THE FROST LINE.

- A) EQUIPMENT GROUND BUS BAR (EGB) LOCATED AT THE BOTTOM OF ANTENNA POLE/MAST FOR MAKING GROUNDING JUMPER CONNECTIONS TO COAX FEEDER CABLES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. JUMPERS (FURNISHED BY OWNERS) SHALL BE INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
- 9. ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
- 10. OBSERVE N.E.C. AND LOCAL UTILITY REQUIREMENTS FOR ELECTRICAL SERVICE
- 11. GROUNDING ATTACHMENT TO TOWER SHALL BE AS PER MANUFACTURER'S
- RECOMMENDATIONS OR AT GROUNDING POINTS PROVIDED (2 MINIMUM). 12. IF EQUIPMENT IS IN A C.L. FENCE ENCLOSURE, GROUND ONLY CORNER POSTS AND

SUPPORT POSTS OF GATE. IF CHAIN LINK LID IS USED, THEN GROUND LID ALSO.

- 13. GROUNDING AT PPC CABINET SHALL BE VERTICALLY INSTALLED.
- 14. ALL GROUNDING FOR ANTENNAS SHALL BE CONNECTED SO THAT IT WILL BY-PASS MAIN
- 15. ALL EMT RUNS SHALL BE GROUNDED AND HAVE A BUSHING, NO PVC ABOVE GROUND.
- 16. USE SEPARATE HOLES FOR GROUNDING AT BUSS BAR. NO "DOUBLE-UP" OF LUGS.
- 17. POWER AND TELCO CABINETS SHALL BE GROUNDED (BONDED) TOGETHER.

18. NO LB'S ALLOWED ON GROUNDING.

- 19. PROVIDE STAINLESS STEEL CLAMP AND BRASS TAGS ON COAX AT ANTENNAS AND DOGHOUSE.
- 20. ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER SPECIFICATION.
- 21. IF THE AC PANEL IN THE POWER CABINET IS WIRED AS SERVICE ENTRANCE, THE AC SERVICE GROUND CONDUCTOR SHALL BE CONNECTED TO GROUND ELECTRODE SYSTEM. WHEN THE AC PANEL IN THE POWER CABINET IS CONSIDERED A SUB-PANEL, THE GROUND WIRE SHALL BE INSTALLED IN THE AC POWER CONDUIT. THE INSTALLATION SHALL BE PER LOCAL AND NATIONAL ELECTRIC CODE (NFPA-70).
- 22. EXOTHERMIC WELDING IS RECOMMENDED FOR GROUNDING CONNECTION WHERE PRACTICAL. OTHERWISE, THE CONNECTION SHALL BE MADE USING COMPRESSION TYPE-2 HOLES. LONG BARREL LUGS OR DOUBLE CRIMP CLAMP "C" CLAMP. THE COPPER CABLES SHALL BE COATED WITH ANTIOXIDANT (COPPER SHIELD) BEFORE MAKING THE CONNECTIONS. THE MANUFACTURER'S TORQUING RECOMMENDATIONS ON THE BOLT ASSEMBLY TO SECURE CONNECTIONS SHALL BE FOLLOWED.
- 23. THE ANTENNA CABLES SHALL BE GROUNDED AT THE TOP AND BOTTOM OF THE VERTICAL RUN FOR LIGHTING PROTECTION. THE ANTENNA CABLE SHIELD SHALL BE BONDED TO A COPPER GROUND BUSS AT THE LOWER MOST POINT OF A VERTICAL RUN JUST BEFORE IT BEGINS TO BEND TOWARD THE HORIZONTAL PLANE. WIRE RUNS TO GROUND SHALL BE KEPT AS STRAIGHT AND SHORT AS POSSIBLE. ANTENNA CABLE SHIELD SHALL BE GROUNDED JUST BEFORE ENTERING THE CELL CABINET. ANY ANTENNA CABLES OVER 200 FEET IN LENGTH SHALL ALSO BE EQUIPPED WITH ADDITIONAL GROUNDING AT MID-POINT.
- 24. ALL GROUNDING CONDUCTORS INSIDE THE BUILDING SHALL BE RUN IN CONDUIT RACEWAY SYSTEM, AND SHALL BE INSTALLED AS STRAIGHT AS PRACTICAL WITH MINOR BENDS TO AVOID OBSTRUCTIONS. THE BENDING RADIUS OF ANY #2 GROUNDING CONDUCTOR IS 8". PVC RACEWAY MAY BE FLEXIBLE OR RIGID PER THE FIELD CONDITIONS. GROUNDING CONDUCTORS SHALL NOT MAKE CONTACT WITH ANY METALLIC CONDUITS, SURFACES OR EQUIPMENT.
- 25. PROVIDE PVC SLEEVES WHERE GROUNDING CONDUCTORS PASS THROUGH THE
- 26. INSTALL GROUND BUSHINGS ON ALL METALLIC CONDUITS AND BOND TO THE

BUILDING WALLS AND /OR CEILINGS.

EQUIPMENT GROUND BUSS IN THE PANEL BOARD.

- 27. GROUND ANTENNA BASES, FRAMES, CABLE RACKS AND OTHER METALLIC COMPONENTS WITH #2 GROUNDING CONDUCTORS AND CONNECT TO INSULATED SURFACE MOUNTED GROUND BARS. CONNECTION DETAILS SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS FOR GROUNDING.
- 28. ALL PROPOSED GROUNDING CONDUCTORS SHALL BE ROUTED AND CONNECTED TO THE MAIN GROUND BAR OR EXISTING GROUND RING.

AT&T Site ID:

GILROY, CALIFORNIA 95020

Vendor:





San Ramon, California 94583 CROWN CASTLE BU: 827822

5001 Executive Parkway

AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG

CHECKED BY: MEP M|11/16/2020|90% CDS 6/4/2020 90% CDS K 6/3/2020 90% CDS J |5/29/2020 |90% CDS H 3/20/2020 90% CDS G 2/19/2020 90% CDS F | 11/15/19 | 90% CDS E 109/26/19 190% CDS D |09/18/19 | 90% CDS C |08/30/19 | 90% CDS B |04/01/19 | 90% CDS A 03/08/19 90% CDS

Licensor:

DATE

DESCRIPTION

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PROFESSIONAL ENGINEER, TO ALTER THIS

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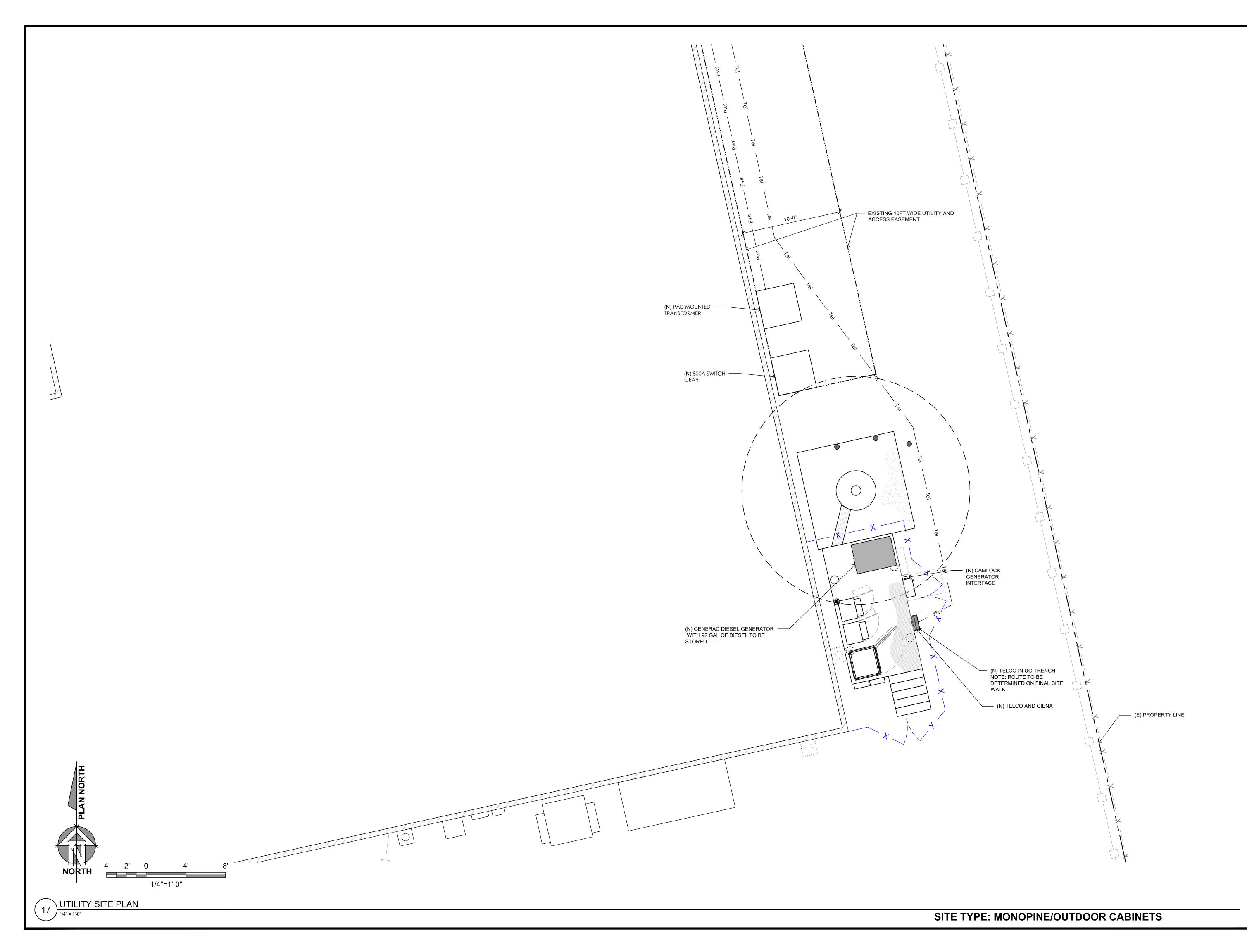
1/16/2020

90% CDS

GENERAL ELECTRICAL/

**GROUNDING NOTES** 

SHEET NUMBER:



CCL01924 4350 MONTEREY RD

AT&T Site ID:

4350 MONTEREY RD GILROY, CALIFORNIA 95020

Vendor:





CROWN CASTLE BU: 827822

AT&T SITE NO: CCL01924

POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG

CHECKED BY: MEP

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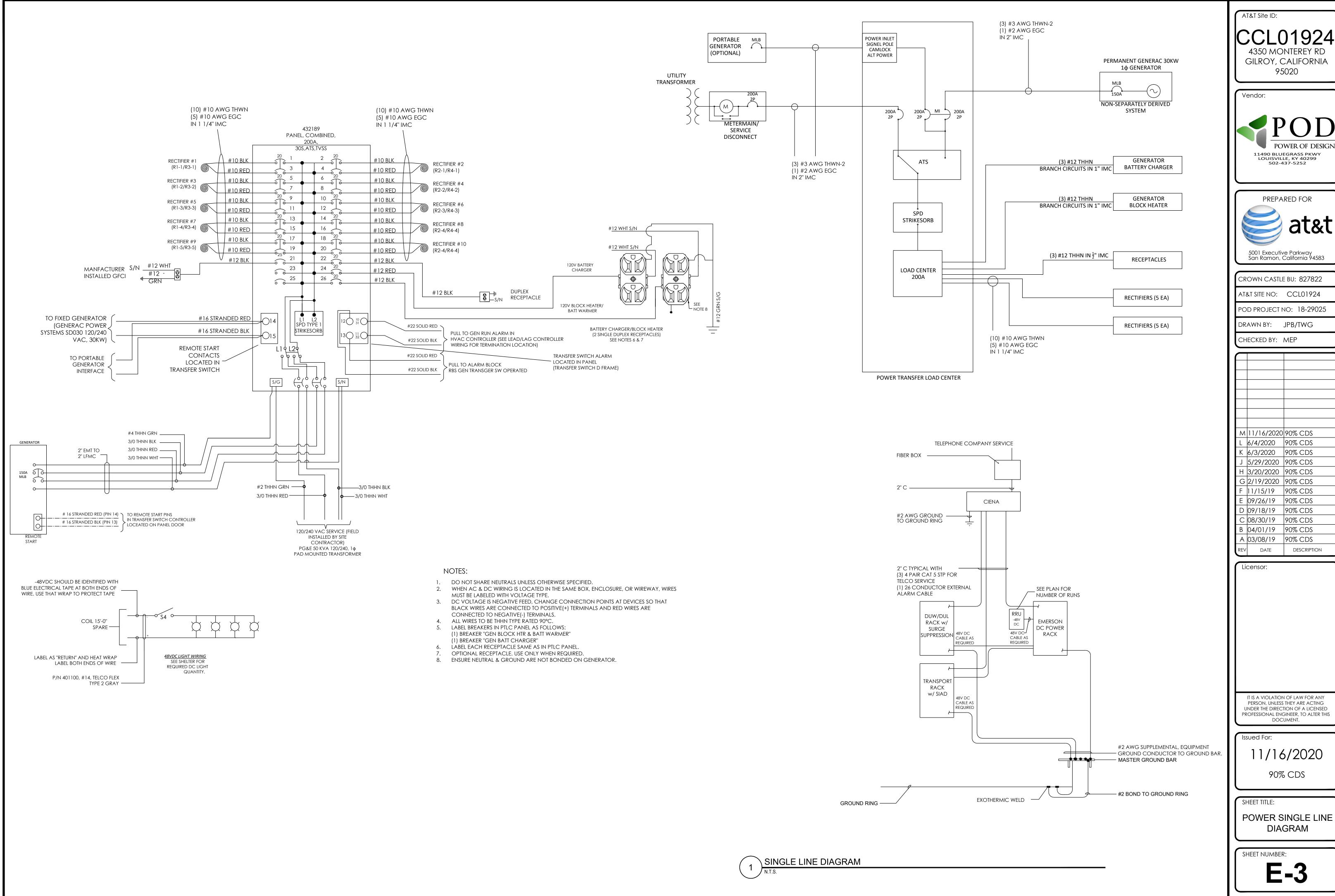
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SHEET TITLE:

UTILITY SITE PLAN

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**E-2** 



GILROY, CALIFORNIA

11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252

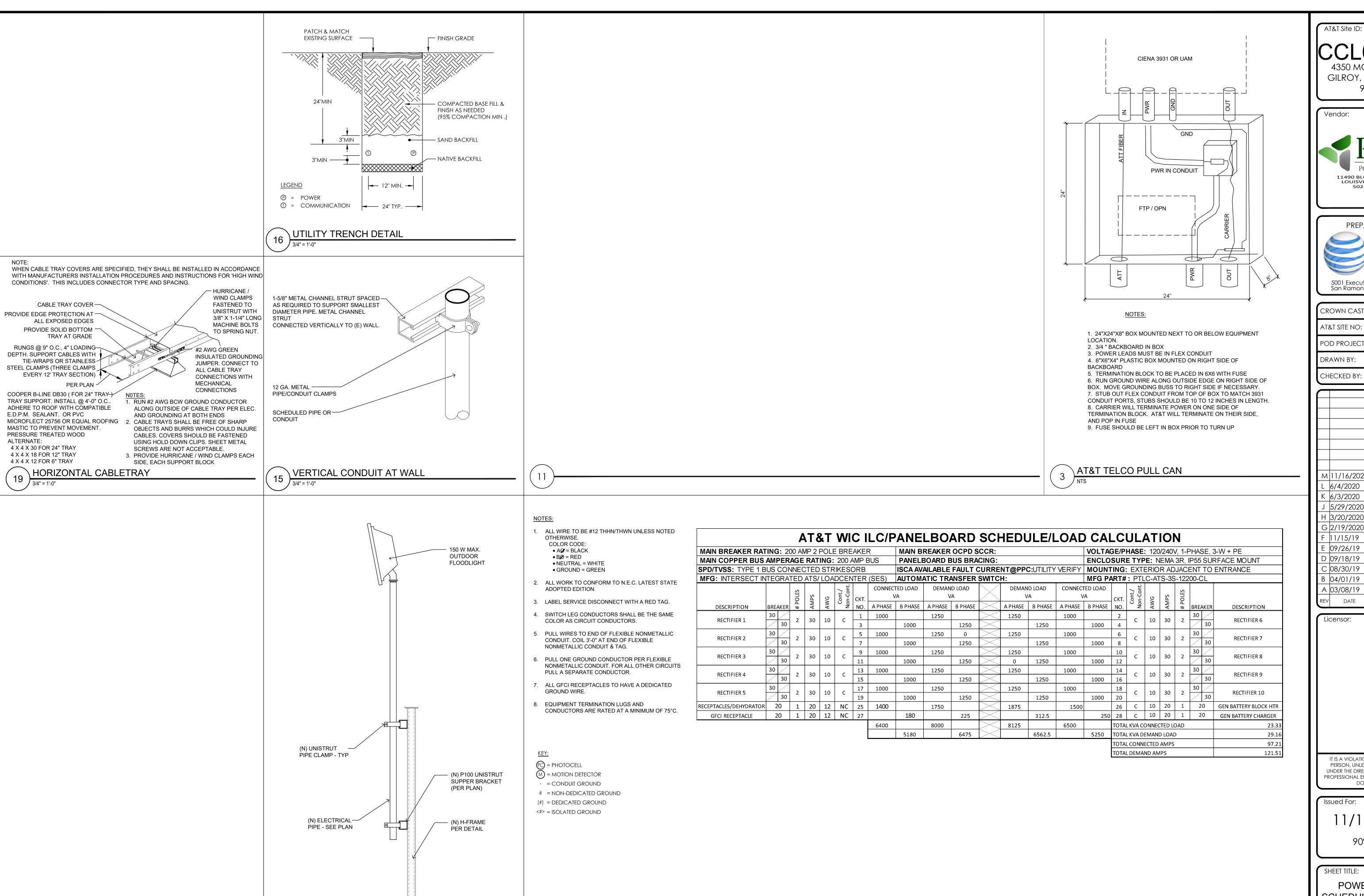


CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

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11/16/2020



A/C PANEL SCHEDULE

MAINTENANCE LIGHT DETAIL

GILROY, CALIFORNIA



95020



CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924

POD PROJECT NO: 18-29025

DRAWN BY: JPB/TWG

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DESCRIPTION

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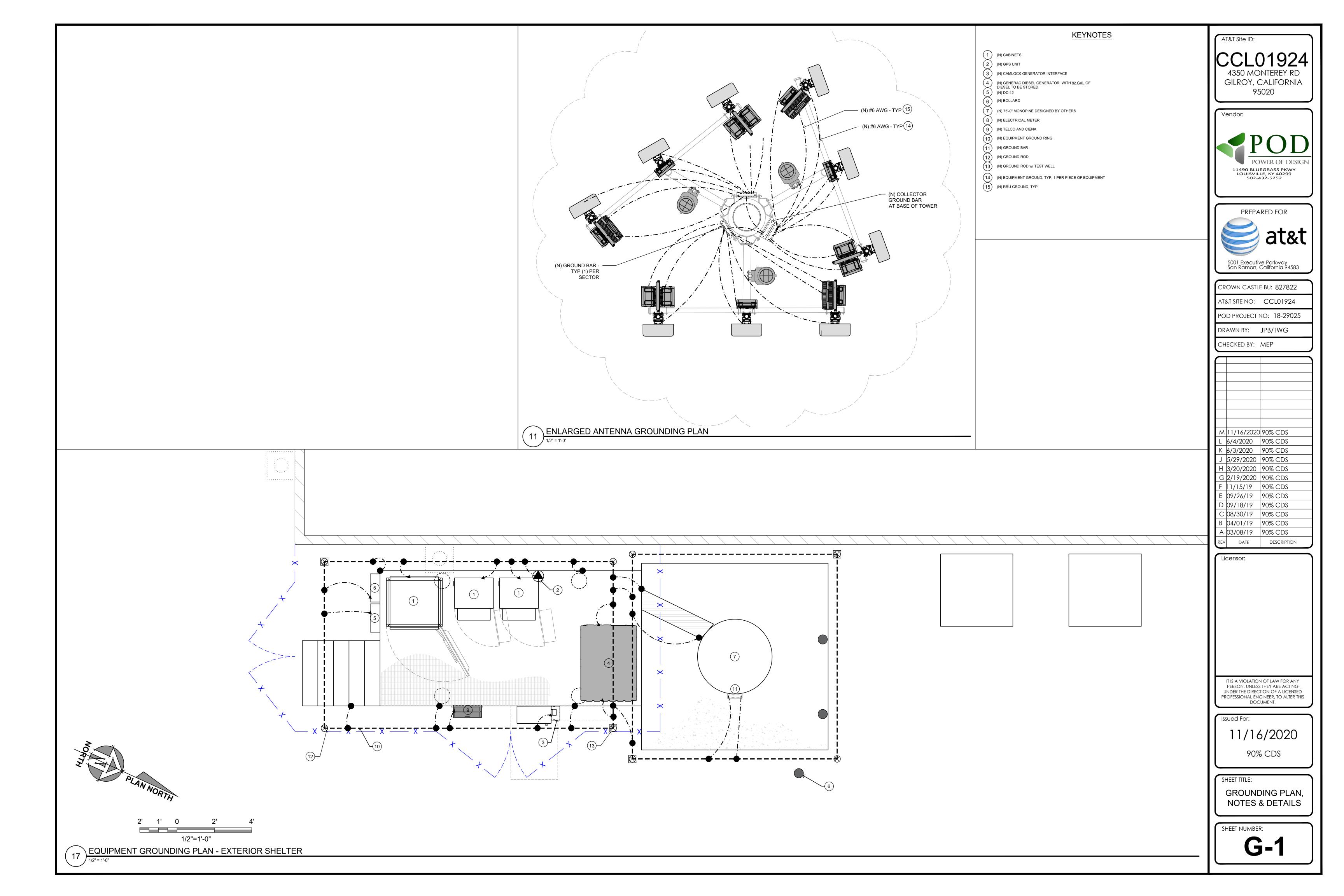
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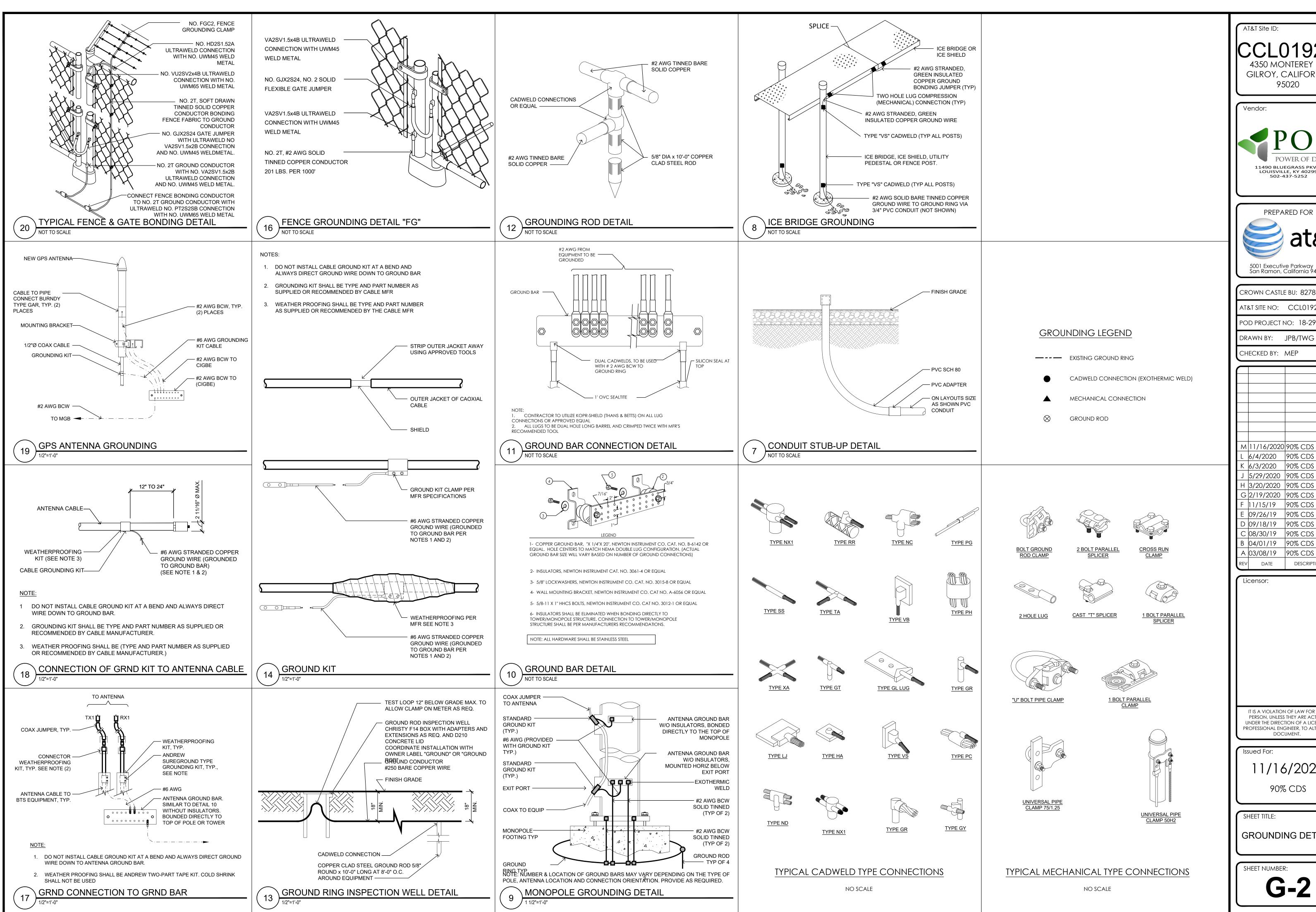
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SHEET TITLE:

**POWER PANEL** SCHEDULE & DETAILS

SHEET NUMBER:





GILROY, CALIFORNIA

95020

Vendor:





CROWN CASTLE BU: 827822 AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025

CHECKED BY: MEP

Μ	11/16/2020	90% CDS
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Κ	6/3/2020	90% CDS
J	5/29/2020	90% CDS
Н	3/20/2020	90% CDS
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REV	DATE	DESCRIPTION

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Issued For:

1/16/2020

90% CDS

**GROUNDING DETAILS** 

SHEET NUMBER:

## **GENERAL CONSTRUCTION NOTES:**

- 1. PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 2. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- 3. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
- 4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- 5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC / UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
- 6. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT / ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT / ENGINEER.
- 7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
- 8. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
- 9. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT / ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
- 10. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT / ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT / ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
- 11. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
- 12. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED / DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO IT'S ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT / ENGINEER AT COMPLETION OF PROJECT.
- 13. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
- 14. INCLUDE MISC. ITEMS PER AT&T SPECIFICATIONS

## **APPLICABLE CODES, REGULATIONS AND STANDARDS:**

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

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

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

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
   TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND
- ANTENNA SUPPORTING STRUCTURES
   INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND
- IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
- -IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")
- TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63
- NETWORK
  EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
- TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
- TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS
- TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS

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

## **ABBREVIATIONS**

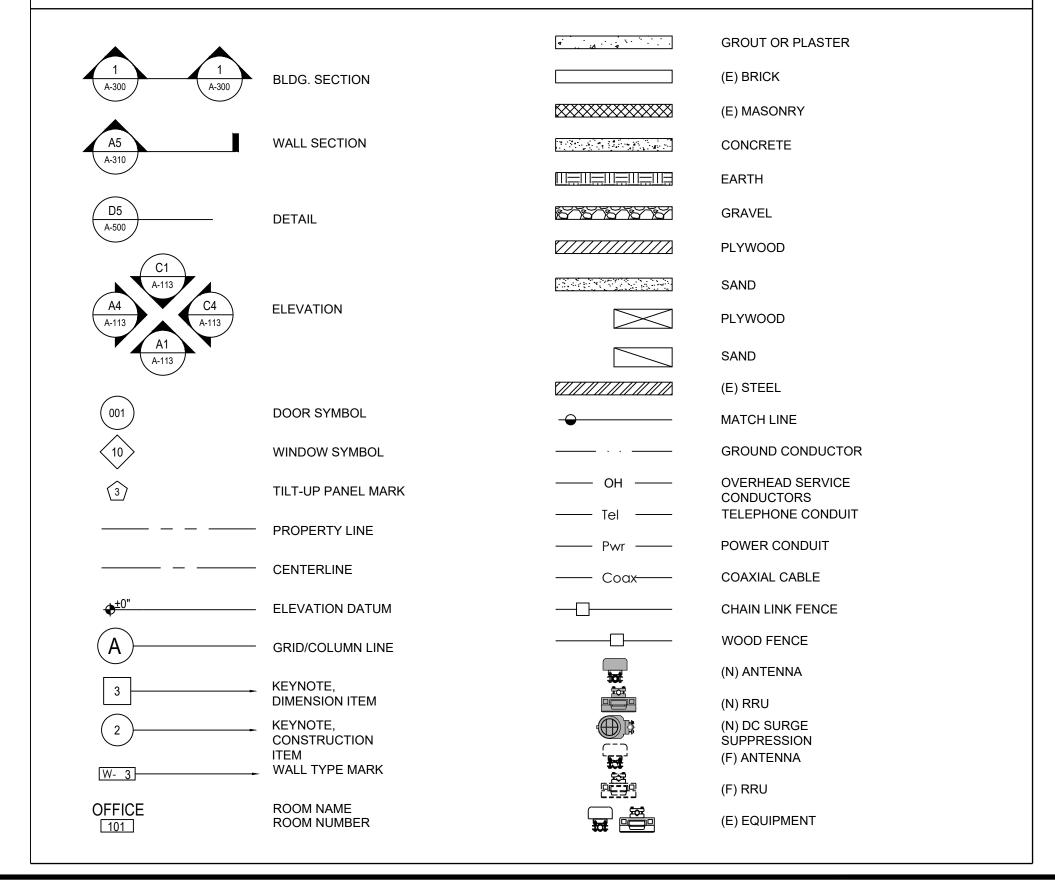
A.B.	ANCHOR BOLT	IN. ( " )	INCH(ES)
ABV.	ABOVE	INT.	INTERIOR
ACCA	ANTENNA CABLE COVER ASSEMBLY	LB.(#)	POUND(S)
ADD'L	ADDITIONAL	L.B.	LAG BOLTS
A.F.F.	ABOVE FINISHED FLOOR	L.F.	LINEAR FEET (FOOT)
A.F.G.	ABOVE FINISHED GRADE	L.	LONG(ITUDINAL)
ALUM.	ALUMINUM	MAS.	MASONRY
ALT.	ALTERNATE	MAX.	MAXIMUM
ANT.	ANTENNA	M.B.	MACHINE BOLT
APPRX.	APPROXIMATE(LY)	MECH.	MECHANICAL
ARCH.	ARCHITECT(URAL)	MFR.	MANUFACTURER
AWG.	AMERICAN WIRE GAUGE	MIN.	MINIMUM
BLDG.	BUILDING	MISC.	MISCELLANEOUS
BLK.	BLOCK	MTL.	METAL
BLKG.	BLOCKING	(N)	NEW
BM.	BEAM	NÓ.(#)	NUMBER
B.N.	BOUNDARY NAILING	N.T.S.	NOT TO SCALE
BTCW.	BARE TINNED COPPER WIRE	O.C.	ON CENTER
B.O.F.	BOTTOM OF FOOTING	OPNG.	OPENING
B/U	BACK-UP CABINET	P/C	PRECAST CONCRETE
CAB.	CABINET	PCS	PERSONAL COMMUNICATION SERVICES
CANT.	CANTILEVER(ED)	PLY.	PLYWOOD
C.I.P.	CAST IN PLACE	PPC	POWER PROTECTION CABINET
CLG.	CEILING	PRC	PRIMARY RADIO CABINET
CLG. CLR.		P.S.F.	
COL.	CLEAR		POUNDS PER SQUARE FOOT
	COLUMN	P.S.I.	POUNDS PER SQUARE INCH
CONC.	CONCRETE	P.T.	PRESSURE TREATED
CONN.	CONNECTION(OR)	PWR.	POWER (CABINET)
CONST.	CONSTRUCTION	QTY.	QUANTITY
CONT.	CONTINUOUS	RAD.(R)	RADIUS
d	PENNY (NAILS)	REF.	REFERENCE
DBL.	DOUBLE	REINF.	REINFORCEMENT(ING)
DEPT.	DEPARTMENT	REQ'D/	REQUIRED
D.F.	DOUGLAS FIR	RGS.	RIGID GALVANIZED STEEL
DIA.	DIAMETER	SCH.	SCHEDULE
DIAG.	DIAGONAL	SHT.	SHEET
DIM.	DIMENSION	SIM.	SIMILAR
DWG.	DRAWING(S)	SPEC.	SPECIFICATIONS
DWL.	DOWEL(S)	SQ.	SQUARE
EA.	EACH	S.S.	STAINLESS STEEL
EL.	ELEVATION	STD.	STANDARD
ELEC.	ELECTRICAL	STL.	STEEL
ELEV.	ELEVATOR	STRUC.	STRUCTURAL
EMT.	ELECTRICAL METALLIC TUBING	TEMP.	TEMPORARY
E.N.	EDGE NAIL	THK.	THICK(NESS)
ENG.	ENGINEER	T.N.	TOE NAIL
EQ.	EQUAL	T.O.A.	TOP OF ANTENNA
EXP.	EXPANSION	T.O.C.	TOP OF CURB
EXST.(E)	EXISTING	T.O.F.	TOP OF FOUNDATION
EXT. `´	EXTERIOR	T.O.P.	TOP OF PLATE (PARAPET)
FAB.	FABRICATION(OR)	T.O.S.	TOP OF STEEL
F.F.	FINISH FLOOR	T.O.W.	TOP OF WALL
F.G.	FINISH GRADE	TYP.	TYPICAL
FIN.	FINISH(ED)	U.G.	UNDER GROUND
FLR.	FLOOR	U.L.	UNDERWRITERS LABORATORY
FDN.	FOUNDATION	U.N.O.	UNLESS NOTED OTHERWISE
F.O.C.	FACE OF CONCRETE	V.I.F.	VERIFY IN FIELD
F.O.M.	FACE OF MASONRY	W.I.I .	WIDE (WIDTH)
F.O.S.	FACE OF STUD	w/	WITH
F.O.W.	FACE OF WALL	w/ WD.	WOOD
F.S.			
	FINISH SURFACE	W.P.	WEATHERPROOF
FT.(')	FOOT (FEET)	WT.	WEIGHT
FTG.	FOOTING	C P- L	CENTERLINE
G.	GROWTH (CABINET)	ρ <u>-</u> 	PLATE, PROPERTY LINE
GA.	GAUGE	_	
GI.	GALVANIZE(D)		
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER		
GLB. (GLU-LAM)	GLUE LAMINATED BEAM		
GPS	GLOBAL POSITIONING SYSTEM		
GRND.	GROUND		
HDR.	HEADER		
HGR.	HANGER		

## SYMBOLS LEGEND

ICGB.

HEIGHT

ISOLATED COPPER GROUND BUS



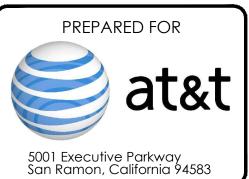
CCL01924
4350 MONTEREY RD
GILROY, CALIFORNIA

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CROWN CASTLE BU: 827822

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drawn by: JPB/TWG

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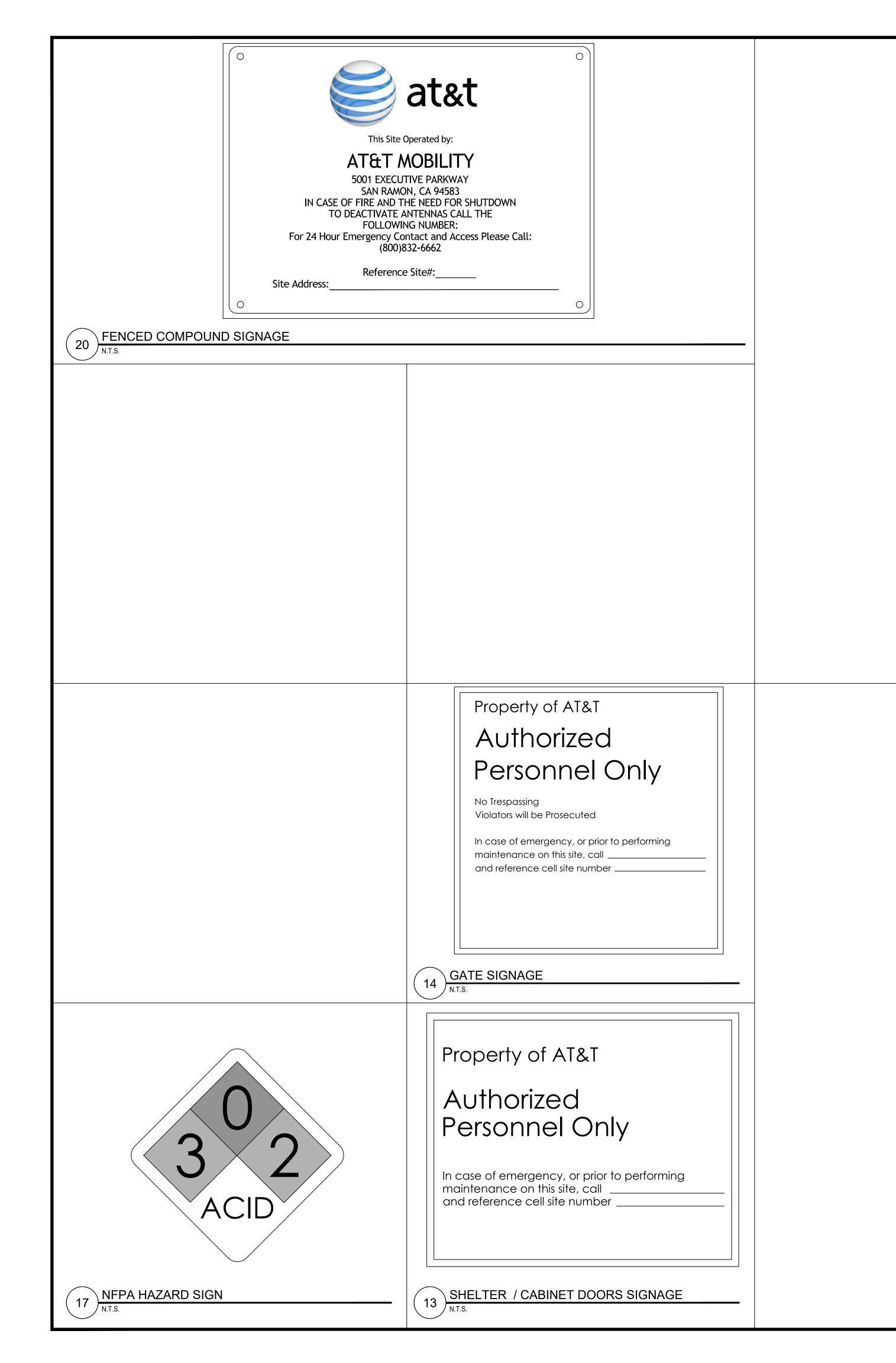
90% CDS

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1



SIGNAGE AND STRIPING INFORMATION

- 1. THE FOLLOWING INFORMATION IS A GUIDELINE W/ RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATIONS SHOULD BE IN CONFLICT W/ ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
- 2. THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 1mWcm\*2 AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mWcm\*2 3. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR WORKING PLATFORM LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
- 4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND
- 5. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES & STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
- 6. ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR Y THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED IN PLAIN SIGHT AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES. THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY w/ ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS SHALL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
- 7. PHOTOS OF ALL STRIPING, BARRICADES & SIGNAGE SHALL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE w/ FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS-HATCH PATTERN AS DETAILED BY THE CONSTRUCTION DRAWINGS. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO AS NOT TO BLOCK OR INTERFERE w/ THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED w/ FADE RESTRAINT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED, & SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER w/ A DETAILED SHOP DRAWING OF EACH BARRICADE. UPON CONSTRUCTION COMPLETION.

GENERAL NOTES

rename me to this view "dwg" name

M | 11/16/2020 | 90% CDS 6/4/2020 90% CDS K 6/3/2020 90% CDS J 5/29/2020 90% CDS H |3/20/2020 |90% CDS G 2/19/2020 90% CDS F 11/15/19 90% CDS E 09/26/19 90% CDS D 09/18/19 90% CDS C 08/30/19 90% CDS B 04/01/19 90% CDS A 03/08/19 90% CDS

DESCRIPTION

AT&T Site ID:

Vendor:

GILROY, CALIFORNIA

95020

11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252

PREPARED FOR

5001 Executive Parkway

CROWN CASTLE BU: 827822

AT&T SITE NO: CCL01924

DRAWN BY: JPB/TWG

CHECKED BY: MEP

POD PROJECT NO: 18-29025

San Ramon, California 94583

Licensor:

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

Issued For:

11/16/2020

90% CDS

SITE SIGNAGE

SHEET NUMBER:

GN-2

	SAFETY DATA SHEET	
I. PI	RODUCT IDENTIFICATION	
MANUFACTURER/SUPPLIER	CHEMICAL/TRADE NAME	MARATHON and SPRINTER
GNB Industrial Power	(as used on label)	Valve Regulated Lead Acid Battery
A division of Exide Technologies		
3950 Sussex Avenue	PRODUCT ID	UN2800
Aurora, IL 60504-7932		
FOR FURTHER INFORMATION	CHEMICAL FAMILY/	Electrical Storage Battery
Primary Contact:	CLASSIFICATION	Monobloc type
Exide MSDS Support (770) 421-3485		
	TOD TO CENTRAL	

FOR EMERGENCY Secondary Contact: Joe Bolea (423) 989-6377 CHEMTREC (800) 424-9300 Fred Ganster (610) 921-4052 (703) 527-3887 - Collect 24-hour Emergency Response Contact Ask for Environmental Coordinato

II. HAZARD IDENTIFICATION

GHS Codes: Causes severe skin burns and eye damage Harmful if inhaled. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated STOT RE 2 Extremely flammable gas (hydrogen) Very toxic to aquatic life with long lasting effects. Skin Corr. 1A Do not breathe dust/fume/gas/mist/vapors/spray. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Flam. Gas 1

IF ON SKIN (or hair): Remove/Take off immediately all taminated clothing. Rinse skin with water/shower. P304/340 IF INHALED: Remove victim to fresh air and keep at rest in a osition comfortable for breathing. P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Immediately call a POISON CENTER or doctor/physician. Keep away from heat/sparks/open flames/hot surfaces. No Do not breathe dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face Store in well-ventilated area

Avoid release to the environment

Store locked up. Collect spillage

Dispose of contents/container in accordance with local/regional/national/international regulation. WARNING: Batteries subjected to abusive charging at excessively high currents for prolonged periods of time without vent caps in place may create a surrounding atmosphere of the offensive strong inorganic acid mist containing sulfuric acid. Reactivity: Highly reactive with water and alkalis

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Aquatic Chronic

Aquatic Acute 1

#### X. STABILITY & REACTIVITY DATA Stability: Stable

## Conditions to Avoid: Prolonged overcharging and overheating current; sparks and other sources of ignition.

Electrolyte: Contact of sulfuric acid with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, most metals, carbides, chlorates, nitrates, and picrate, sulfur trioxide gas, strong oxidizers, and water.

Lead compounds: Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent

hydrogen, potassium, carbides, sulfides, phosphorus, sulfur and reducing agents. Hazardous Decomposition Products: Electrolyte: Sulfur trioxide, carbon monoxide, sulfuric acid mist, sulfur dioxide, hydrogen sulfide, hydrogen.

Contact with metals may produce toxic sulfur dioxide fumes and may release flammable hydrogen gas. No further concern for

Lead compounds: Temperatures above the melting point are likely to produce toxic metal fume, vapor, or dust; contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas

## Hazardous Polymerization: Will Not Occur

Electrolyte: Harmful by all routes of entry. Under normal conditions of use, sulfuric acid vapors and mist are not generated. Sulfuric acid vapors and mist may be generated when product is overheated, oxidized, or otherwise processed or damaged. Lead compounds: Under normal conditions of use, lead dust, vapors, and fumes are not generated. Hazardous exposure can occur

Acute Toxicity: Electrolyte: LC<sub>50</sub> rat: 375 mg/m<sup>3</sup>; LC<sub>50</sub>: guinea pig: 510 mg/m<sup>3</sup> Inhalation LD<sub>50</sub>: Elemental Lead: Acute Toxicity Point Estimate = 4500 ppmV (based on lead bullion) Oral LD 50: Electrolyte: rat: 2140 mg/kg Elemental lead: Acute Toxicity Estimate (ATE) = 500 mg/kg body weight (based on lead bullion)

#### Electrolyte: Breathing of sulfuric acid vapors or mists may cause severe respiratory irritation. Lead compounds: Inhalation of lead dust or fumes may cause irritation of upper respiratory tract and lungs.

Electrolyte: May cause severe irritation of mouth, throat, esophagus, and stomach. Lead compounds: Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhea, and severe cramping. This may lead rapidly to systemic toxicity. Acute ingestion should be treated by physician. Chronic exposure to lead compounds can cause anemia; neuropathy, particularly of the motor nerves with wrist drop; kidney damage; reproductive changes in both males and

Skin Contact: Electrolyte: Severe irritation, burns, and ulceration. Sulfuric acid is not readily absorbed through the skin and is not a dermal

#### Eve Contact: Electrolyte: Severe irritation, burns, cornea damage, blindness.

Lead compounds: Not absorbed through the skin and is not a dermal sensitizer.

## Lead compounds: May cause eye irritation.

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Synergistic Products Electrolyte: No known synergistic products Lead compounds: Synergistic effects have been noted with heavy metals (arsenic, cadmium, mercury), N-nitroso-N-(hydroxyethyl)ethylamine, N-(4-fluoro-4-biphenyl)acetamide, 2-(nitrosoethylamine)ethanol, and benzo[a]pyrene Copper: Exposure to dietary cadmium, ferrous iron, and stannous tin can result in decreased copper absorption

## Additional Information:

Medical Conditions Generally Aggravated by Exposure: Overexposure to sulfuric acid mist may cause lung damage and aggravate pulmonary conditions. Contact of electrolyte (water and

Tin: Affects the metabolism of various essential minerals such as zinc, copper, and iron

#### II. COMPOSITION/INFORMATION ON INGREDIENTS 71-76 7440-50-8 Tin lectrolyte (sulfuric acid) 440-31-5 7664-93-9 9003-07-0 Talc (Non-Asbestos Type) 14807-96-6 Plate separator material:

## Take proper precautions to ensure you own health and safety before attempting to rescue a victim and provide first aid.

Electrolyte: Remove to fresh air immediately. If breathing is difficult, give oxygen. Lead compounds: Remove from exposure, gargle, wash nose, eyes and lips; consult physician

Skin Contact: Electrolyte: Flush with large amounts of water for at least 15 minutes; remove contaminated clothing completely, including shoes, and do not wear clothes again until cleaned. If acid is splashed on shoes, remove and discard if they <u>Lead compounds</u>: Wash immediately with soap and water. Lead compounds are not readily absorbed through the skin.

Electrolyte and Lead compounds: Flush immediately with large amounts of water for at least 15 minutes; consult

#### <u>Electrolyte</u>: Give large quantities of water; **do not** induce vomiting; consult physician. Lead compounds: Consult physician immediately.

### V. FIRE FIGHTING MEASURES LEL = 4.1% (hydrogen gas in air); UEL = 74.2% Extinguishing media: CO<sub>2</sub>; foam; dry chemical

Use positive pressure, self-contained breathing apparatus. Beware of acid splatter during water application and wear acid-resistant clothing, gloves, face and eye protection. If batteries are on charge, shut off power to the charging equipment, but, note that strings of series connected batteries may still pose risk of electric shock even when charging equipment is shut down. Hazardous Combustion Products:

In operation, or when on charge, batteries generate hydrogen and oxygen gases (hydrogen is highly flammable and oxygen supports combustion). They must always be assumed to contain these gases which, if ignited by burning cigarette, naked flame or spark, may cause battery explosion with dispersion of casing fragments and corrosive liquid electrolyte. Carefully follow manufacturer's instructions for installation and service. Keep away all sources of gas ignition, ensure that adequate ventilation is provided, and do not allow metallic articles to simultaneously contact the negative and positive terminals of a battery.

VI. ACCIDENTAL RELEASE MEASURES

VII. HANDLING AND STORAGE

Remove combustible materials and all sources of ignition. Stop flow of material and contain spill by diking with soda ash, etc. Carefully neutralize spill with soda ash, etc. Make certain mixture is neutral then collect residue and place in a drum or other suitable container with a label specifying "contains hazardous waste" or (if uncertain call distributor regarding proper labeling procedures). Dispose of as hazardous waste. I f battery is leaking, place battery in a heavy duty plastic bag. Wear acid resistant boots, face shield, chemical splash goggles and acid resistant gloves. Do not allow discharge of acid to sewer. Acid must be managed in accordance with approved local, state, and federal requirements. Consult state environmental agency and/or federal EPA.

Single batteries pose no risk of electric shock but there may be increasing risk of electric shock from strings of connected batteries exceeding three 12-volt units. Batteries are non-spillable - potential for exposure to contents only during recycling or if outer casing is cracked or damaged.

Store batteries under roof in cool, dry, well-ventilated areas that are separated from incompatible materials and from activities which may create flames, sparks, or heat. Keep away from metallic objects that could bridge the terminals on a battery and create a dangerous short-circuit.

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sulfuric acid solution) with skin may aggravate skin diseases such as eczema and contact dermatitis. Contact of electrolyte (water and sulfuric acid solution) with eyes may damage cornea and/or cause blindness. Lead and its compounds can aggravate some forms of kidney, liver, and neurologic diseases.

All heavy metals, including the hazardous ingredients in this product, are taken into the body primarily by inhalation and ingestion. Most inhalation problems can be avoided by adequate precautions such as ventilation and respiratory protection covered in Section VIII. Follow good personal hygiene to avoid inhalation and ingestion: wash hands, face, neck and arms thoroughly before eating, smoking or leaving the work site. Keep contaminated clothing out of non-contaminated areas, or wear cover clothing when in such areas. Restrict the use and presence of food, tobacco and cosmetics to non-contaminated areas. Work clothes and work equipment used in contaminated

#### This product is intended for industrial use only and should be isolated from children and their environment XII. ECOLOGICAL INFORMATION

areas must remain in designated areas and never taken home or laundered with personal non-contaminated clothing.

Environmental Fate: lead is very persistent in soil and sediments. No data on environmental degradation. Mobility of metallic lead between ecological compartments is slow. Bioaccumulation of lead occurs in aquatic and terrestrial animals and plants but little bioaccumulation occurs through the food chain. Most studies include lead compounds and not elemental lead.

#### Environmental Toxicity: Aquatic Toxicity: Sulfuric acid: 24-hr LC<sub>50</sub>, freshwater fish (*Brachydanio rerio*): 82 mg/L 96 hr- LOEC, freshwater fish (Cyprinus carpio): 22 mg/L

48 hr LC<sub>50</sub> (modeled for aquatic invertebrates): <1 mg/L
XIII. DISPOSAL INFORMATION Neutralize as described above for a spill, collect residue and place in a container labeled as containing Sulfuric Acid:

hazardous waste. Dispose of as a hazardous waste. If uncertain about labeling procedures, call your local battery distributor or listed contact. DO NOT FLUSH LEAD CONTAMINATED ACID TO SEWER.

#### XIV. TRANSPORT INFORMATION GROUND - US-DOT/CAN-TDG/EU-ADR/APEC-ADR: UN 2800, 8, PG III

Label: "NON-SPILLABLE" or "NON-SPILLABLE BATTERY" For US, refer to 49 CFR 173.159 for details.

AIRCRAFT - ICAO- IATA:

For air shipments, reference IATA Dangerous Goods Regulations Special Provision A67 and Packing Instruction 872.

VESSEL - IMO-IMDG: For shipments by water, reference IMDG Special Provision 238 and Packing Instruction P003.

ADDITIONAL INFORMATION: Non-Spillable Battery complies with the provisions listed in 49 CFR 173.159. Does not require marking with an identification number or hazardous label and is not subject to hazardous shipping paper requirements.

Each battery and the outer packaging must be plainly and durably marked "NON-SPILLABLE" or "NON-SPILLABLE BATTERY". Batteries must be kept upright at all times and packaged as required to prevent short circuits. Transport may require packaging and paperwork, including the Nature and Quantity of goods, per applicable origin/destination/customs

#### points as-shipped. XV. REGULATORY INFORMATION

EPA SARA Title III

Section 302 EPCRA Extremely Hazardous Substances (EHS): Sulfuric acid is a listed "Extremely Hazardous Substance" under EPCRA, with a Threshold Planning Quantity (TPQ) of 1,000

EPCRA Section 302 notification is required if 500 lbs or more of sulfuric acid is present at one site. An average automotive/commercial battery contains approximately 5 lbs of sulfuric acid. Contact your GNB representative for additional

Section 304 CERCLA Hazardous Substances:

Reportable Quantity (RQ) for spilled 100% sulfuric acid under CERCLA (Superfund) and EPCRA (Emergency Planning and Community Right to Know Act) is 1,000 lbs. State and local reportable quantities for spilled sulfuric acid may vary.

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There is a possible risk of electric shock from charging equipment and from strings of series connected batteries, whether or not being charged. Shut-off power to chargers whenever not in use and before detachment of any circuit connections. Batteries being charged will generate and release flammable hydrogen gas. Charging space should be ventilated. Keep battery vent caps in position. Prohibit smoking and avoid creation of flames and sparks nearby. Wear face and eye protection when near batteries being charged.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION								
Ingredient		Occupational Exposure Limits (mg/m³)						
	US OSHA	US ACGIH	US NIOSH	Quebec PEV	Ontario OEL	EU OEL		
Inorganic compounds								
of:								
Lead	0.05	0.05	0.05	0.05	0.05	0.15(b)		
Copper	1	1	1	1	1(a)	0.1(d)		
Tin	2	2	2	2	2	2		
Electrolyte (sulfuric	1	0.2	1	1	0.2	0.05(c)		
acid/water solution)								

- (a) as dusts/mists
- (b) as inhalable aerosol
  - (c) thoracic fraction (d) based on OEL for Netherlands

Engineering Controls (Ventilation): Store and handle in well-ventilated area. If mechanical ventilation is used, components must be acid-resistant. Handle batteries cautiously. Make certain vent caps are on securely. If battery case is damaged, avoid bodily contact with internal components. Wear protective clothing, eye and face protection, when charging or handling batteries. Follow all manufacturers' recommendat when stacking or palletizing. Do not allow metallic materials to simultaneously contact both the positive and negative terminals of the batteries. Use a battery carrier to lift a battery or place hands at opposite corners to avoid spilling acid through the vents. Avoid contact with internal components of the batteries.

#### Hygiene Practices: Wash hands thoroughly before eating, drinking or smoking after handling batteries.

Respiratory Protection (NIOSH/MSHA approved): None required under normal conditions. If an overcharging or overheating condition exists and concentrations of sulfuric acid mist are known or suspected to exceed PEL, use NIOSH or MSHA-approved respiratory protection.

None required under normal conditions. If battery case is damaged, use rubber or plastic acid-resistant gloves with elbow-length

gauntlet, acid-resistant apron, clothing, and boots. None required under normal conditions. If battery case is damaged, chemical goggles or face shield.

In areas where water and sulfuric acid solutions are handled in concentrations greater than 1%, emergency eyewash stations and

		EMICAL DATA - ELECTROLYTE	
Boiling Point@760 mm Hg	Electrolyte: 219 to 237° F	Specific Gravity @ 77°F (H <sub>2</sub> O=1)	1.1394 to 1.3028
Melting Point	Not Applicable	Vapor Pressure (mm Hg)	13.5 to 20.8
% Solubility in Water	100	pH	Less than 1
Evaporation Rate	Less Than 1	Vapor Density (AIR=1)	Greater than 1
(Butyl acetate=1)		Viscosity	Not applicable
Appearance and Odor Threshold	Sulfuric Acid: A clear liquid with a sharp, penetrating, pungent odor.	% Volatiles by Volume @70°F	Not Applicable
	A battery is a manufactured article; no apparent odor.		
Octanol Water Partition	Not Applicable		
Coefficient (K <sub>ow</sub> )			

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Section 311/312 Hazard Categorization: EPCRA Section 312 Tier Two reporting is required for non-automotive batteries if sulfuric acid is present in quantities of 500 lbs or more and/or if lead is present in quantities of 10,000 lbs or more.

Section 313 EPCRA Toxic Substances: Supplier Notification: This product contains a toxic chemical or chemicals subject to the reporting requirements of section 313 of (Title) III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Electrolyte: Sulfuric Acid 7664-93-9 If you distribute this product to other manufacturers in SIC Codes 20 through 39, this information must be provided with the first

Percent by Weight

shipment of each calendar year. Note: The Section 313 supplier notification requirement does not apply to batteries that are "consumer products".

TSCA: Each ingredient chemical listed in Section III of this SDS is also listed on the TSCA Registry.

OSHA: Considered hazardous under Hazard Communication Act (29CFR1910.1200)

Spent lead-acid batteries are not regulated as hazardous waste when recycled. Spilled sulfuric acid is a characteristic hazardous waste; EPA hazardous waste number <u>D002</u> (corrosivity) and <u>D008</u> (lead).

GNB supports preventative actions concerning ozone depletion in the atmosphere due to emissions of CFC's and other ozone depleting chemicals (ODC's), defined by the USEPA as Class I substances. Pursuant to Section 611 of the Clean Air Act endments (CAAA) of 1990, finalized on January 19, 1993, GNB established a policy to eliminate the use of Class I ODC's prior to the May 15, 1993 deadline

NFPA Hazard Rating for sulfuric acid: Flammability (Red)

US State Notifications and Warnings:	Identification	Notifications/Warning
California	California Proposition 65	"WARNING: This product contains lead, a chemical known to the State of California to cause cancer, or birth defects or other reproductiv harm."
		Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.
		The following chemicals identified to exist in the finished product as distributed into commerce are known to the State of California to cause cancer, birth defects or to cause reproductive harm:
		Strong inorganic acid mists including sulfuric acid; CAS #: NA; 16-18% wt
	Consumer Product Volatile Organic Compound Emissions	Lead – CAS No. 7439-92-1; 71-76% wt.  This product is not regulated as a consumer product for purposes of CARB/OTC VOC Regulations, as sold for the intended purpose and into the industrial/commercial supply chain.
Country/ Organization	Identification	Notifications/Warning
Canada	All chemical substances in this product are listed on the CEPA DSL/NDSL or are exempt from list requirements.	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
		Refer to the Controlled Products Regulations for product labeling

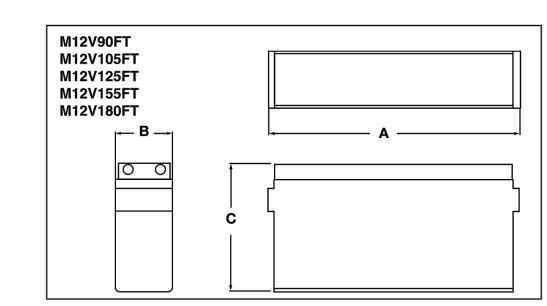
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INDIVIDUAL BATTERY STRING CAPACITY: 155 AMP HRS QUANITY OF BATTERY STRINGS: TOTAL BATTERY CAPACITY 310 AMP-HOURS DC PLANT PRIMARY VOLTAGE: 48 VOLTS DC PLANT PRIMARY VOLTAGE LOAD: 268 AMPS DC PLANT SCONDARY VOLTAGE 24V LOAD: ESTIMATED BATTERY RESERVE TIME: 4.19 HOURS kWh=(AMP HOURS X VOLTS )/1000= 14.9 kWh



Voltage VPC @ 25°C VPC @ 20°C A 175 | 22.00 | 4.90 | 12.50 | 559 | 124 | 318 | 133 | 60.



MARATHON® Front Terminal Electrical Data hort Circuit Current

Float Voltage & Charging Constant Voltage charging is recommended Recommended float voltage: 2.27 VPC @ 25°C (77°F) Float Voltage Range: 2.25 to 2.30 VPC @ 25°C (77°F) Equalize voltage: 2.35 VPC for 24 Hours or 2.40 VPC for 12 Hours

NOTE: Design and/or specifications subject to change without notice. If questions arise, contact your local GNB sales representative for clarification

#### (mOhms) Amps M12V90FT M12V105FT 3125 3814 M12V125FT M12V155FT 3883

Internal

Resistance

MARATHON

## From the World Leader in

## VRLA Battery Technology

Designed for durability in Telecommunications and Electric Utility applications, the GNB® Industrial Power Front Terminal MARATHON® series provides high performance and reliability in long duration discharge applications. The location of the terminals on the front (vs. the top) of the battery greatly facilitates the installation and maintenance of the product when placed in a cabinet enclosure or on a standard relay rack tray. The MARATHON® Front Terminal battery series highlights another example of GNB's extensive experience and worldwide leadership in VRLA technology.

## "Designed-in" Quality Manufacturing

Quality manufacturing processes for the MARATHON® series batteries incorporate the industry's most advanced technologies including: an automated helium leak detection system, a computer controlled "fill by weight" acid filler, and a temperature controlled water bath formation process.

## Each and every unit is capacity tested. **High Performance MARATHON® Features**

- Patented "Diamond Side-Wall" Design maintains structural
- integrity in higher operating temperatures Durable Flame Retardant Polypropylene Container and Cover complies with UL94 V-0; 28% L.O.I.
- Carry Handles facilitate ease of installation
- High-Compression Absorbent Glass Mat (AGM) Technology
- ensures greater than 99% recombination efficiency • Integrated Flash Arrestor ultrasonically welded into cover for
- 10 Year Design Life in float applications @ 25°C (77°F); 12 year @ 20°C (68°F)
- Superior Lead-Tin-Calcium Positive Alloy helps to resist
- Higher Vent Opening Pressure minimizes unnecessary gassing; one-way self resealing device
- Front Accessible Copper Alloy, 6 mm, Female Terminals ensures low resistance, high integrity connections
- "Easy On\Easy Off" Terminal Post Protector
- provides added safety
- Post Design accomodates voltage/diagnostic probes
- Footprint Ready fits in all standard 23" Relay Rack Applications
- Compliance: Designed in accordance with IEC 60896-21/-22

secure and safe protection

• No Transport Restrictions: Complies with IATA/ICAO Special Provision A67; DOT-CFR Title 49; IMDG Amendment 34-08

UL Recognized Component



Applications

MARATHON® Batteries

VRLA technology designed

for long life and high

**Telecommunications** 

Switchgear Control Power

• Industrial Long Duration

Distributed Power

Communications

performance in:

Cellular

Broadband

Electric Utility

incorporate GNB's advanced

DATTEDY INTODIAATION

					BATTERYIN	IFORMATION					
BATTERY MODEL	TOTAL # OF BATTERY UNITS INSTALLED	TOTAL ELECTROLYTE VOLUME (GAL) PER UNIT	TOTAL ELECTROLYTE WEIGHT (LBS) PER UNIT	% SULFURIC =	ACID VOLUME / UNIT ELECTROLYTE VOLUME/UNIT	% SULFURIC ACID BY = WEIGHT	TOTAL ACID WEIGHT TOTAL ELECTROLYTE WEIGHT	TOTAL SULFURIC VOL (GAL)	TOTAL UNITS X SULFURIC VOL/UNIT	% SULFURIC =	ACID VOLUME / UNIT ELECTROLYTE VOLUME/UNIT
GBN INDUSTRIAL POWER MARATHON M12V180FT	8 UNITS	2.17 GAL	23.80 LBS	29.95% =	0.65 GAL / 2.17 GAL	41.9% = 9	.98 LBS/23.80 LBS	17.36 GAL = 8 UN	ITS X 2.17 / UNIT	79.84 LBS =	= 8 UNITS X 9.98 LBS

GILROY, CALIFORNIA 95020

Vendor:





5001 Executive Parkway San Ramon, California 94583 CROWN CASTLE BU: 827822

AT&T SITE NO: CCL01924 POD PROJECT NO: 18-29025 DRAWN BY: JPB/TWG

CHECKED BY: MEP

M 11/16/2020 90% CDS 6/4/2020 90% CDS K 6/3/2020 90% CDS J 5/29/2020 90% CDS H |3/20/2020 |90% CDS G 2/19/2020 90% CDS F | 11/15/19 | 90% CDS E 09/26/19 90% CDS D 09/18/19 90% CDS C 08/30/19 90% CDS B 04/01/19 90% CDS A 03/08/19 90% CDS DESCRIPTION DATE

Licensor:

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

Issued For:

1/16/2020

90% CDS

DOCUMENT.

SHEET TITLE: **BATTERY** 

**SPECIFICATIONS** 

SHEET NUMBER:

## ATTACHMENT E Color and Materials Board

From: Christian Hill <christianwhill@gmail.com>
Sent: Thursday, September 3, 2020 10:27 AM

To: Tran, Lara

Subject: Re: [EXTERNAL] Invoice for PLN19-0206 (4350 Monterey Road,

Gilroy)

Lara,

Please find attached the color samples for the tree (trunk/pole/equipment, foliage). Let me know if you need more detail or if this will suffice.

Thank you! Christian



Larson Base Brown for trunk/pole/equipment



Larson Standard Dark Green for foliage



Larson Standard Light Green for foliage



Foliage mix of Larson Dark Green and Larson Light Green.

Christian Hill Beacon Development, LLC m. 707-342-2096 e. christianwhill@gmail.com



This email may contain confidential or privileged material. Use or disclosure of it by anyone other than the recipient is unauthorized. If you are not an intended recipient, please delete this email.

On Aug 31, 2020, at 9:03 AM, Tran, Lara < <a href="mailto:lara.tran@pln.sccgov.org">lara.tran@pln.sccgov.org</a> wrote:

Thanks for the update, Christian.

Warm regards,

<image001.png> LARA TRAN

Associate Planner

**Department of Planning and Development** 

#### **County of Santa Clara**

70 W. Hedding Street | 7th Floor | East Wing San Jose | CA 95110 Phone: (408) 299-5759 lara.tran@pln.sccgov.org

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Please visit our website.

Click <u>here</u> to look up unincorporated property zoning information.

Questions on the status of a building permit? Please e-mail: <u>PLN-PermitCenter@pln.sccgov.org</u>

From: Christian Hill <christianwhill@gmail.com>

**Sent:** Friday, August 28, 2020 3:30 PM **To:** Tran, Lara < lara.tran@pln.sccgov.org>

Subject: [EXTERNAL] Re: Invoice for PLN19-0206 (4350 Monterey Road, Gilroy)

Importance: High

Lara,

The fees were paid today (receipt attached). I hope to have the tree color samples early next week.

Thank you, Christian

On Aug 24, 2020, at 5:48 PM, Tran, Lara < <a href="mailto:lara.tran@pln.sccgov.org">lara.tran@pln.sccgov.org</a> wrote:

Hello Christian,

Attached is the invoice for the geology review fee of the geotechnical report for PLN19-0206. Please have the invoice paid as soon as possible.

The applicant can pay online by creating an account on the <u>County Public Portal website</u>. Please visit and review the <u>instructions</u> for payment online. If online payment is not an option, the applicant can pay in person on the 7<sup>th</sup> floor at 70 W. Hedding Street, San Jose, CA 95110.

Let me know if you have any questions.

#### Warm regards,

<image001.png>

#### **LARA TRAN**

Associate Planner

## Department of Planning and Development County of Santa Clara

70 W. Hedding Street | 7th Floor | East Wing San Jose | CA 95110 Phone: (408) 299-5759 lara.tran@pln.sccgov.org

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Please visit our website.

Click <u>here</u> to look up unincorporated property zoning information. Questions on the status of a building permit? Please e-mail: <u>PLN-PermitCenter@pln.sccgov.org</u>

<Invoice for PLN19-0206 (4350 Monterey Road, Gilroy).pdf>

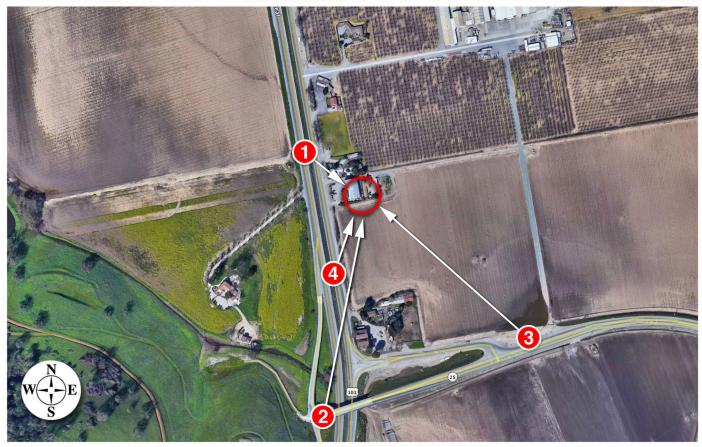
## **ATTACHMENT F Photo Simulations**



































# ATTACHMENT G Radio Frequency Emissions Compliance Report

### Radio Frequency Emissions Compliance Report For AT&T Mobility

Site Name: SF829 Highways 25 & 101 Site Structure Type: Monopine
Address: 4350 Monterey Road Latitude: 36.96461
Gilroy, California Longitude: -121.55122

Report Date: April 30, 2019 Project: New Build

#### **Compliance Statement**

Based on information provided by AT&T Mobility and predictive modeling, the SF829 Highways 25 & 101 installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the Monopine to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

#### Certification

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



#### **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.

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	Limits for General Populati	ion/ Uncontrolled Exposure	Limits for Occupational/ Controlled Exposure		
Frequency (MHz)	Power Density (mW/cm²)	Averaging Time (minutes)	Power Density (mW/cm²)	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:

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

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

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

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

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

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

#### **Analysis**

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

- Install (9) new panel antennas
- Install (15) new RRUs

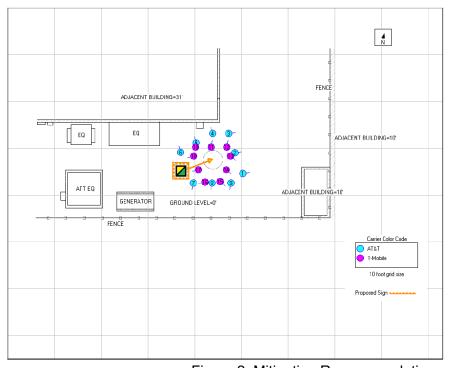
The antennas will be mounted on a 75-foot monopine with centerlines 70 feet above ground level. The antennas will be oriented towards 70, 180 and 330 degrees. The radio equipment to be operated at this location is capable of a maximum of 40W per 4G channel at 700 MHz, 40W per 4G channel at 850 MHz, 40W per 4G channel at 1900 MHz, 40W per 4G channel at 2100 MHz, and 25W per 4G channel at 2300 MHz. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. Panel antennas have been installed at this site by other wireless operators. Assumed operating parameters for these antennas are listed in Appendix A.



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 1.7638% of the FCC General Population limits. Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 2.1404% 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 1.4203% of the FCC General Population limits. Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 1.6276% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

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



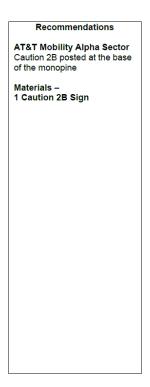


Figure 2: Mitigation Recommendations



## Appendix A: Assumed Parameters for Antennas Installed by Other Operators

Antenna	Comican	Manufashuan	Datte	Dand	Mech Az	Mech DT	H BW	Length	TPO	Channala	Loss	Gain	ERP	EIRP	Rad Center
#:	Carrier:	Manufacturer	Pattern:	Band:	(deg):	(deg):	(deg):	(m):	(W):	Channels:	(dB):	(dBd):	(W):	(W):	(ft):
10	T-Mobile	COMMSCOPE	F-65C-R1 02DT	600	0	0	60	2.4384	30	4	0	13.57	2730	4479	33
11	T-Mobile	AMPHENOL	HEX336CW0000x-T00	700	0	0	36	1.84912	30	2	0	13.7	1407	2308	33
11	T-Mobile	AMPHENOL	HEX336CW0000x-T00	1900	0	0	33	1.84912	40	2	0	16.4	3492	5729	33
12	T-Mobile	AMPHENOL	HEX336CW0000x-T00	2100	0	0	34	1.84912	40	2	0	16.7	3742	6139	33
13	T-Mobile	COMMSCOPE	F-65C-R1 02DT	600	120	0	60	2.4384	30	4	0	13.57	2730	4479	33
14	T-Mobile	AMPHENOL	HEX336CW0000x-T00	700	120	0	36	1.84912	30	2	0	13.7	1407	2308	33
14	T-Mobile	AMPHENOL	HEX336CW0000x-T00	1900	120	0	33	1.84912	40	2	0	16.4	3492	5729	33
15	T-Mobile	AMPHENOL	HEX336CW0000x-T00	2100	120	0	34	1.84912	40	2	0	16.7	3742	6139	33
16	T-Mobile	COMMSCOPE	F-65C-R1 02DT	600	240	0	60	2.4384	30	4	0	13.57	2730	4479	33
17	T-Mobile	AMPHENOL	HEX336CW0000x-T00	700	240	0	36	1.84912	30	2	0	13.7	1407	2308	33
17	T-Mobile	AMPHENOL	HEX336CW0000x-T00	1900	240	0	33	1.84912	40	2	0	16.4	3492	5729	33
18	T-Mobile	AMPHENOL	HEX336CW0000x-T00	2100	240	0	34	1.84912	40	2	0	16.7	3742	6139	33

## **ATTACHMENT H**

Geotechnical Report by Tower Engineering Professionals, Inc. (dated August 2, 2020)

Date: August 7, 2020

Brian Leegwater Crown Castle One Park Place, Suite 300 Dublin, CA 94568 Office: (925) 737-1016

Subject:

CCI Designation:

**Subsurface Exploration Report** 

Site Number: 827822

**Site Name:** SF829 Hwy's 25 & 101

Tower Engineering Professionals, Inc.

326 Tryon Road

(919) 661-6351

Raleigh, NC 27603

Geotech@tepgroup.net

Engineering Firm Designation: TEP Project Number: 73569.424116

Site Data: 4350 Monterey Rd., Gilroy, CA 95020 (Santa Clara County)

Latitude N36° 57' 52.6", Longitude W121° 33' 4.4"

75 Foot – Proposed Monopine Tower

Dear Brian Leegwater,

Tower Engineering Professionals, Inc. (TEP) is pleased to submit this "Subsurface Exploration Report" to evaluate subsurface conditions in the tower area as they pertain to providing support for the tower foundation.

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions in this report are based on the applicable standards of TEP's practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

The analyses and recommendations submitted herein are based, in part, upon the data obtained from the subsurface exploration. The soil conditions may vary from what is represented in the boring log. While some transitions may be gradual, subsurface conditions in other areas may be quite different. Should actual site conditions vary from those presented in this report, TEP should be provided the opportunity to amend its recommendations as necessary.

We at *Tower Engineering Professionals, Inc.* appreciate the opportunity of providing our continuing professional services to you and Crown Castle. If you have any questions or need further assistance on this or any other projects please give us a call.

Report Prepared/Reviewed by: Jason E. Lafollette, E.I. / John D. Longest, P.E.

Respectfully submitted by:

William H. Martin, P.E.





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- 3) SITE EXPLORATION
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#### 13) APPENDIX A

Aerial Layout Topographic Layout Boring Layout

#### 14) APPENDIX B

Laboratory Testing Summary

#### 15) APPENDIX C

**Boring Log** 





#### 1) PROJECT DESCRIPTION

Based on the preliminary drawings, it is understood a monopine communications tower will be constructed at the referenced site. The structure loads will be provided by the tower manufacturer.

#### 2) PREVIOUS EXPLORATION

A previous subsurface exploration was not available at the time of this report.

#### 3) SITE EXPLORATION

The field exploration included the performance of one soil test boring (B-1) to the planned depth of 51.5 feet (bgs) approximately 30 feet north of the proposed monopine tower. The boring was performed by a truck mounted drill rig using continuous flight hollow stem augers to advance the hole. Split-spoon samples and Standard Penetration Resistance Values (N-values) were obtained in accordance with ASTM D 1586 at a frequency of three samples in the top 10 feet and two samples every 10 feet thereafter.

The Split-spoon samples were transported to the TEP laboratory where they were classified by a Geotechnical Engineer in general accordance with the Unified Soil Classification System (USCS), using visual-manual identification procedures (ASTM D 2488). Additional laboratory testing included the performance of Soil Water Content (ASTM D 2216), Atterberg Limits (ASTM D 4318), Percent Finer than #200 Sieve (ASTM D 1140), Sieve Particle-Size Gradation (ASTM D 6913) tests, Pocket Penetrometer, and Torvane testing.

A Boring Location Plan showing the approximate boring location, a Boring Log presenting the subsurface information obtained and a brief guide to interpreting the boring log are included in the Appendix.

#### 4) SITE CONDITIONS AND REGIONAL GEOLOGY

The site is located at 4350 Monterey Rd. in Gilroy, Santa Clara County, California. The proposed tower and compound are located at a winery. The ground topography is relatively level.

The project site is located within the Pacific Border physiographic province in California. Near surface materials in this area are generally comprised of alluvium and marine from the Pleistocene to Holocene epochs. A study of area soils from the available literature (USDA Web Soil Survey) shows that the near surface material consists of Yolo loam (YaA). Adjacent soils near surface materials consist of Campbell silty clay loam (Ca).



#### 5) SUBSURFACE CONDITIONS

The following description of subsurface conditions is brief and general. For more detailed information, the individual Boring Log contained in Appendix C - Boring Log may be consulted.

#### 5.1) Soil

The USCS classification of the materials encountered in the boring include GW, CL, GP, CL-ML, and CH. The Standard Penetration Resistance ("N" Values) recorded in the materials ranged from 2 to 20 blows per foot of penetration.

#### 5.2) Rock

Rock was not encountered in the boring. Refusal of auger advancement was not encountered in the boring.

#### 5.3) Subsurface Water

Subsurface water was encountered at a depth of 10 feet (bgs) in the boring at the time of drilling. It should be noted the subsurface water level will fluctuate during the year, due to seasonal variations and construction activity in the area.

#### 5.4) Frost

The TIA frost depth for Santa Clara County California is 5 inches.



#### 6) TOWER FOUNDATION DESIGN

Based on the boring data, it is the opinion of TEP that a single drilled shaft can be used to support the new tower. If the drilled shaft foundation option is utilized, design of the foundation should be adjusted to terminate in a known material. The following presents TEP's conclusions and recommendations regarding the foundation types.

Due to the presence of submerged soils with low blow counts, the site is likely to be subject to liquefaction during a seismic event. Liquefaction is the loss of a soil's shear strength due to the increase in pore water pressure resulting from seismic vibrations. During this loss in shear strength deep foundations at this site have the potential to experience problems such as a loss of skin friction in liquefiable layers and downdrag forces as a result of subsidence/settlement of soils overlying liquefiable layers.

A preliminary liquefaction induced settlement in excess of almost 4 inches was calculated based on the peak ground acceleration (PGA) of 0.661g, a maximum earthquake magnitude ( $M_{max}$ ) of 7.08, as well as the results of the subsurface exploration. Several clay-containing layers were not considered liquefiable based on plasticity of the soils.

Potentially liquefiable layers were identified at the site from a depth of 10 to 20 feet (bgs). The peak ground acceleration (PGA) of 0.661g, a maximum earthquake magnitude ( $M_{max}$ ) of 7.08, as well as the results of the subsurface exploration.

#### 6.1) Shallow Foundation

Shallow foundation parameters are not being provided as they are not recommended as part of a design due to the proximity of the structure. Drilled shaft design parameters may be found in Section 6.2. Shallow foundation construction considerations have been provided in Section 9 should they be necessary for the installation of auxiliary and equipment structure foundations, should they be needed.



#### 6.2) Drilled Shaft Foundation

The following values may be used for analysis of a drilled shaft foundation. TEP recommends the side frictional and lateral resistance values developed in the top section of the caisson for a depth equal to the half the diameter of the caisson or the frost depth, whichever is greater, be neglected in the calculations. The values are based on the current ground surface elevation.

Due to the liquefaction potential of soils from depths of 10 to 20 feet (bgs) it is recommended the foundation bear below 25 feet (bgs) to avoid excessive settlements. A smooth walled permanent casing may be used to help isolate soils from downdrag effects. Side frictional resistance values provided below may be reduced by 50 percent for the depths where casing is installed.

Table 1 – Drilled Shaft Foundation Analysis Parameters

De	pth	Soil	Gross Ultimate	Ultimate Side Frictional	Cohesion	Friction Angle	<i>Total</i> Unit
Тор	Bottom	3011	Bearing <sup>1</sup> (psf)	Resistance <sup>2</sup> (psf)	(psf)	(degrees)	Weight <sup>3</sup> (pcf)
0	5	GW	2725	130	-	34	114
5	7.5	CL	5975	420	775	-	105
7.5	10	GP	4150	480	-	35	113
10	15	GP⁴	1025	400 -		24	113
15	20	CL-ML⁴	850	850 50 100 -		-	100
20	25	СН	6600	410	750	-	105
25	30	СН	5775	350	650	-	105
30	35	СН	6275	380	700	-	105
35	40	СН	5850	350	650	-	110
40	45	СН	7925	480	875	-	110
45	50	СН	7050	420	775	-	110
50	51.5	СН	7275	440	800	-	110

#### Notes:

#### 6.3) Modulus of Subgrade Reaction

A vertical modulus of subgrade reaction and a horizontal modulus of subgrade reaction may be derived using the following equations and soil parameters for analysis of foundations.

$$k_{s-v} = 12 (SF) Q_a$$
  
 $k_{s-h} = k_{s-v} B$ 

Qa = Allowable Bearing Capacity (ksf)

SF = Factor of Safety

B = Base width (ft), use 1 if B<1ft.

k<sub>s-v</sub> = Vertical Modulus of Subgrade Reaction (kcf)

k<sub>s-h</sub> = Horizontal Modulus of Subgrade Reaction (ksf)





<sup>1)</sup> The bearing values provided are gross ultimate. If the bearing depth of the foundation is less than 5 diameters below the ground surface the bearing values listed in Table 1 – Shallow Foundation Analysis Parameters should be utilized.

<sup>2)</sup> The side frictional resistance values provided are ultimate.

<sup>3)</sup> Total unit weights provided. Effective unit weights can be achieved by subtracting unit weight of water from the total unit weight below the subsurface water level of 10.0 feet (bgs).

<sup>4)</sup> The identified layer may be subject to liquefaction. During a seismic event this layer may lose shear strength and subsidence of overlying layers may generate negative skin friction on deep foundations. To account for seismic conditions, post liquefaction residual shear strength values have been provided in the identified layers.

#### 7) SEISMIC DESIGN CONSIDERATIONS AND GEOLOGIC HAZARDS

The following sections were assembled to provide site-specific seismic design parameters, and address potential site seismic hazards and/or geologic hazards identified.

#### 7.1) Seismic Design Parameters

The Site Class per Table 1613.5.2, of the 2016 California Building Code (2019 CBC) based on the site soil conditions is Site Class F. The following seismic design parameters were obtained from the US Seismic Hazard Design Maps available through the USGS. A risk category of I – III was assumed.

PGA:	0.661g
S <sub>S</sub> :	1.528g
S <sub>1</sub> :	0.615g
F <sub>a</sub> :	N/A
F <sub>v</sub> :	N/A
S <sub>DS</sub> :	N/A
Sn1:	N/A

Ground motion values provided above are in accordance with the 2016 ASCE-7 Standard.

#### 7.2) Seismic Hazard Review

Seismic hazards were reviewed in accordance with California Geological Survey's Special Publication 117A Guidelines for Evaluating and Mitigating Seismic Hazards in California 2008. Based on information available from Caltrans ARS Online (<a href="http://dap3.dot.ca.gov/ARS Online/">http://dap3.dot.ca.gov/ARS Online/</a>), faults were mapped in the vicinity of the project site. Below is a selection of the 5 closest faults identified.

Fault Name	Distance (miles)
Sargent fault zone (Southeastern Section)	1.39
Calaveras fault zone (Southern Calaveras Section)	3.98
Calaveras fault zone (Central Calaveras Fault Section)	4.51
San Andreas fault zone (Santa Cruz Mountains Section)	5.01
Zayante-Vergeles fault zone	9.49

Due to the presence of loose submerged sands at the site, it was determined that a site-specific liquefaction potential analysis was necessary at this project location. The ground surrounding the tower site can be described as being relatively level. Considering the site topography and that loose to medium dense materials were encountered, it is not likely that the site should be considered susceptible to landslides or flows. Additionally the site is not located within an area identified as being prone to faulting per CGS maps, in accordance with the Alquist-Priolo Earthquake Fault Zoning Act and the Seismic Hazards Mapping Act.

Based upon our evaluations, the existing tower and associated lightly loaded structures are acceptable from a geotechnical engineering standpoint. It appears that the grading and existing structures will be safe from land slide, settlement, and slippage under the anticipated design loadings and conditions. The existing tower and associated lightly loaded structures should not impose any adverse effect on existing adjacent land or structures.





#### 7.3) Geologic Hazard Review

Based on the subsurface exploration, site specific geologic hazards including, but not limited to shrink/swell soils, collapsible soils, problematic shales, karst, and indicators of potential slope failures were not encountered in the boring. As noted in Section 6 of this report, potentially liquefiable soils were encountered between the depths of 10 and 20 feet (bgs). As is customary, any known geologic hazards identified during exploration and subsequent analysis will be noted in the report.

#### 8) SOIL RESISTIVITY, pH, SULFATE, AND CHLORIDE

Soil resistivity was performed at the site utilizing a Miller 400A – 4 pin resistance meter in accordance with ASTM G57-06 (Standard Test Method for Measurement of Soil Resistivity Using the Wenner Four-Electrode Method). Soil resistivity testing was performed adjacent to the centerline of the proposed tower. Representative lines showing the approximate location and orientation of the resistivity tests can be found in the Boring Layout in Appendix A.

**Table 3 - Soil Resistivity Test Results** 

Post Spacing (ft)	<i>North - South</i> Resistivity (ohm-cm)	East - West Resistivity (ohm-cm)
2	5,700	4,200
4	7,300,000	9,900
8	1,600	2,200
16	-	6,100

Soil resistivity was performed at the TEP laboratory in accordance with ASTM G187-05 (Standard Test Method for Measurement of Soil Resistivity Using the Two Electrode Soil Box Method). Test results indicated a result of 130,000 ohms-cm. The pH testing was performed at the TEP laboratory utilizing a Hanna Instruments Direct Soil pH Meter. Test results indicated a pH of 6.79. Sulfate and chloride testing was performed at the TEP laboratory utilizing chemical analysis. Test results indicate a sulfate content of 50 ppm and a chloride content of 25 ppm.



#### 9) CONSTRUCTION CONSIDERATIONS - SHALLOW FOUNDATION

#### 9.1) Excavation

The boring data indicates excavation to the expected subgrade level for the shallow foundation will extend through gravel and clay. A large tracked excavator should be able to remove the materials with minimal to moderate difficulty.

Excavations should be sloped or shored in accordance with local, state and federal regulations, including OSHA (29 CFR Part 1926) excavation trench safety standards. It is the responsibility of the contractor for site safety. This information is provided as a service and under no circumstance should TEP be assumed responsible for construction site safety.

#### 9.2) Foundation Evaluation/Subgrade Preparation

After excavation to the design elevation for the footing, the materials should be evaluated by a Geotechnical Engineer or a representative of the Geotechnical Engineer prior to reinforcement and concrete placement. This evaluation should include probing, shallow hand auger borings and dynamic cone penetrometer testing (ASTM STP-399) to help verify that suitable residual material lies directly under the foundation and to determine the need for any undercut and replacement of unsuitable materials. Loose surficial material should be compacted in the excavation prior to reinforcement and concrete placement to stabilize surface soil that may have become loose during the excavation process. TEP recommends a 6-inch layer of compacted crushed stone be placed just after excavation to aid in surface stability.

#### 9.3) Fill Placement and Compaction

Backfill materials placed above the shallow foundation to the design subgrade elevation should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. To be considered for use, backfill materials should have a maximum dry density of at least 100 pounds per cubic foot as determined by standard Proctor (ASTM D 698), a Liquid Limit no greater than 40, a Plasticity Index no greater than 20, a maximum particle size of 4 inches, and 20 percent or less of the material having a particle size between 2 and 4 inches. Because small handheld or walkbehind compaction equipment will most likely be used, backfill should be placed in thin horizontal lifts not exceeding 6 inches (loose).

Fill placement should be monitored by a qualified Materials Technician working under the direction of a Geotechnical Engineer. In addition to the visual evaluation, a sufficient amount of in-place field density tests should be conducted to confirm the required compaction is being attained.

#### 9.4) Reuse of Excavated Soil

The gravel and clay that meets the above referenced criteria can be utilized as backfill based on dry soil and site conditions at the time of construction.



#### 10) CONSTRUCTION CONSIDERATIONS - DRILLED SHAFTS

Based on TEP's experience a conventional drilled shaft rig (Hughes Tool LDH or equivalent) can be used to excavate to the termination depth of TEP's boring. An earth auger can typically penetrate the materials encountered to the termination depth of the boring with minimal to moderate difficulty. Special excavation equipment may be necessary for a shaft greater that 60-inches in diameter. If hole collapse is encountered during construction, the design and geotechnical engineers should be contacted immediately to make any necessary adjustments.

Due to the subsurface water and the gravel, the contractor should utilize the "slurry" method for shaft construction. The following are general procedure recommendations in drilled shaft construction using the "slurry" method:

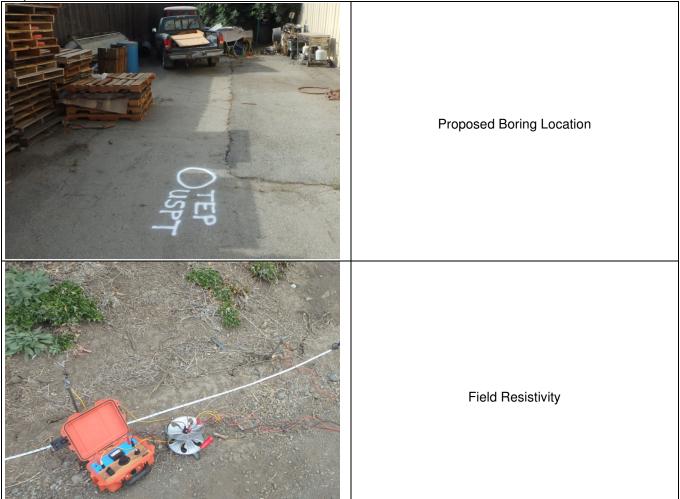
- Slurry drilled shafts are constructed by conventional caisson drill rigs excavating beneath a drilling mud slurry. Typically, the slurry is introduced into the excavation after the groundwater table has been penetrated and/or the soils on the sides of the excavation are observed to be caving-in. When the design shaft depth is reached, fluid concrete is placed through a tremie pipe at the bottom of the excavation.
- 2) The slurry level should be maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the subsurface water level.
- 3) Inspection during excavation should include verification of plumbness, maintenance of sufficient slurry head, monitoring the specific gravity, pH and sand content of the drilling slurry, and monitoring any changes in the depth of the excavation between initial approval and prior to concreting.
- 4) A removable steel casing should be installed in the shaft to prevent caving of the excavation sides due to soil relaxation. Loose soils in the bottom of the shaft should be removed.
- 5) The specific gravity or relative density of the drilling mud slurry should be monitored from the initial mixing to the completion of the excavation. An increase in the specific gravity or density of the drilling slurry by as much as 10 percent is indicative of soil particles settling out of the slurry onto the bottom of the excavation. This settling will result in a reduction of the allowable bearing capacity of the bottom of the drilled shaft.
- 6) After approval, the drilled shaft should be concreted as soon as practical using a tremie pipe.
- 7) For slurry drilled shafts, the concrete should have a 6 to 8 inch slump prior to discharge into the tremie. The bottom of the tremie should be set at about one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie should be used, or a sliding plug introduced into the tremie before the concrete, to reduce the potential for the concrete being contaminated by the slurry. The bottom of the tremie must be maintained in concrete during placement, which should be continuous.
- 8) The protective steel casing should be extracted as concrete is placed. A head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the casing.
- 9) Additional concrete should be placed via the tremie causing the slurry to overflow from the excavation in order to reduce the likelihood of slurry pockets remaining in the drilled shaft.

If variability in the subsurface materials is encountered, a representative of the Geotechnical Engineer should verify that the design parameters are valid during construction. Modification to the design values presented above may be required in the field.





#### 11) SITE PHOTOGRAPHS



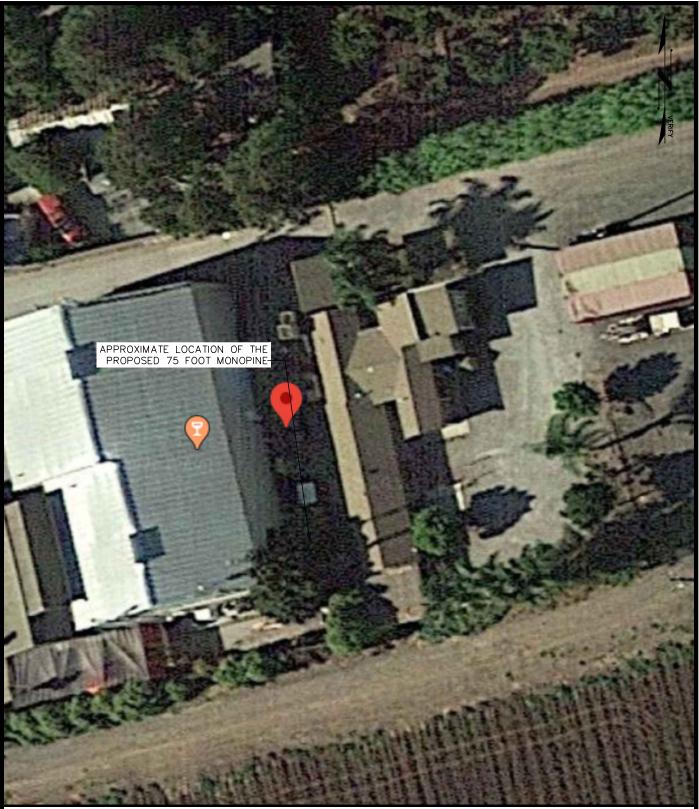
12) SAMPLE PHOTOGRAPHS





#### **APPENDIX A**

AERIAL LAYOUT, TOPOGRAPHIC LAYOUT, & BORING LAYOUT



## **AERIAL LAYOUT**

SCALE: N.T.S. PHOTO CREDIT: MAPS/GOOGLE.COM

PREPARED BY:

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603 (919) 661-6351 www.tepgroup.net PREPARED FOR:



2000 CORPORATE DRIVE CANONSBURG, PA 15317 (724) 416-2000 PROJECT INFORMATION:

SF829 HWY'S 25 & 101 SITE #: 827822

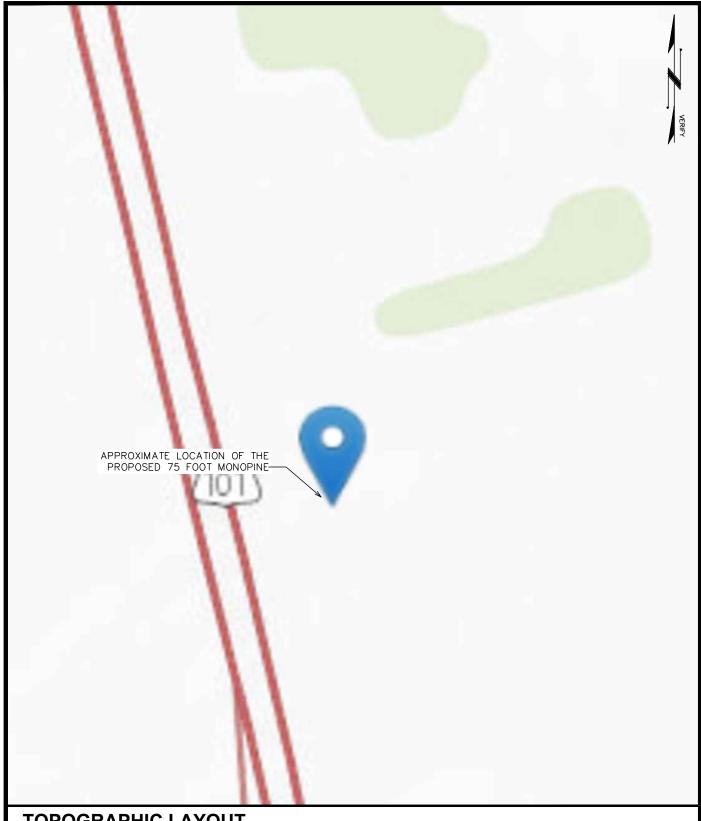
> 4350 MONTEREY RD GILROY, CA 95020 (SANTA CLARA COUNTY)

REVISION:

TEP JOB #:73569.42411

SHEET NUMBER:

**C-1** 



# **TOPOGRAPHIC LAYOUT**

SCALE: N.T.S. PHOTO CREDIT: USGS.GOV

PREPARED BY:

**TOWER ENGINEERING PROFESSIONALS** 326 TRYON ROAD RALEIGH, NC 27603 (919) 661-6351 www.tepgroup.net

PREPARED FOR:



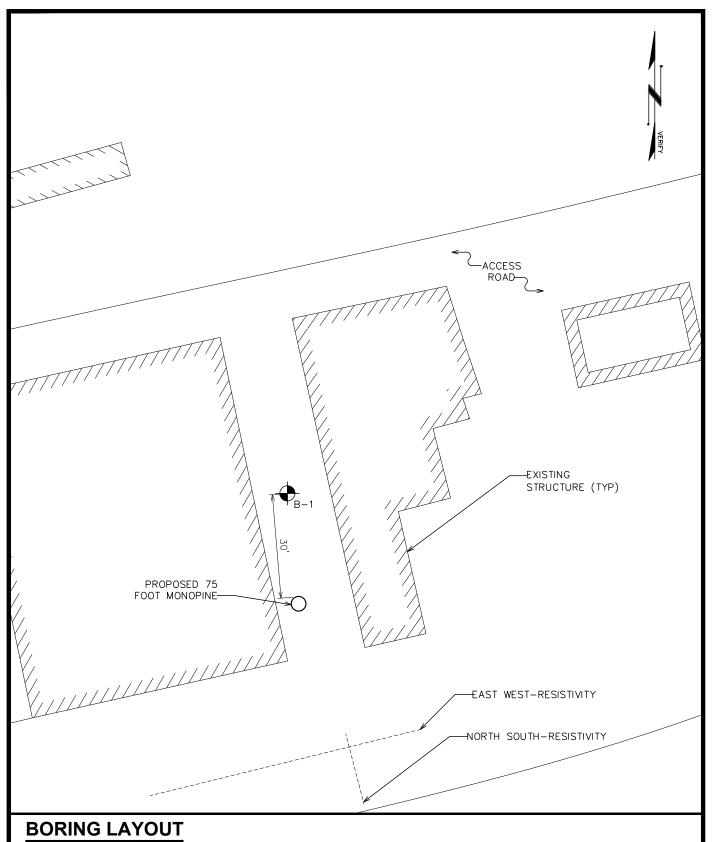
2000 CORPORATE DRIVE CANONSBURG, PA 15317 (724) 416-2000

PROJECT INFORMATION:

#### SF829 HWY'S 25 & 101 SITE #: 827822

4350 MONTEREY RD GILROY, CA 95020 (SANTA CLARA COUNTY)

REVISION: 0	
TEP JOB #:73569.4241	16
SHEET NUMBER:	



SCALE: N.T.S.

PREPARED BY:

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PREPARED FOR:



2000 CORPORATE DRIVE CANONSBURG, PA 15317 (724) 416-2000 PROJECT INFORMATION:

#### SF829 HWY'S 25 & 101 SITE #: 827822

4350 MONTEREY RD GILROY, CA 95020 (SANTA CLARA COUNTY)

REVISION:	0
TEP JOB #	:73569.424116
SHEET NUM	/BER:
	2

# APPENDIX B LABORATORY TESTING SUMMARY

#### **Tower Engineering Professionals, Inc.**

326 Tryon Road, Raleigh, North Carolina 27603 (Ph) 919.661.6351 (Fax) 919.661.6350



Project Name: 827822 - SF829 Hwy's 25 &101 Date: Augest 3, 2020

TEP Project No.: 73569.424116 Engineer: JDL

## **Laboratory Results Summary**

Boring	Sample ID	Depth [ft]	Moisture Content [%]	Liquid Limit	Plastic Limit	Plasticity Index	Percent Fines [%]	USCS Soil Classification
B-1	S1	2.5	15.4	-	-	-	4	Well graded gravel (GW), with sand
B-1	S2	5	25.0	-	-	-	-	-
B-1	S3	7.5	16.6	-	-	-	3.8	Poorly graded gravel (GP), with sand
B-1	S4	10	11.3	-	-	-	-	-
B-1	S5	15	28.6	28	21	7	79.7	Silty clay (CL-ML), with sand
B-1	S6	20	36.4	56	22	34	88.7	Fat clay (CH)
B-1	S7	25	29.7	-	1	-	1	-
B-1	S8	30	29.3	-	-	-	-	-
B-1	S9	35	35.2	-	1	-	1	-
B-1	S10	40	33.7	-	-	-	-	-
B-1	S11	45	28.3	-	-	-	-	-
B-1	S12	50	30.3	-	-	-	-	-

#### **Tower Engineering Professionals, Inc.**

326 Tryon Road, Raleigh, North Carolina 27603 (Ph) 919.661.6351 (Fax) 919.661.6350



Project Name: 827822 - SF829 Hwy's 25 & 101 Date: August 3, 2020

TEP Project No.: 73569.424116 Engineer: JDL

# Particle Size Analysis Results ASTM D 6913

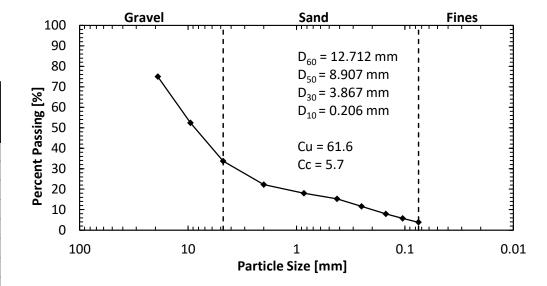
Boring B-1 Sample S-1 Depth 2.5

Sieve	Percent
Number	Passing
	[%]
3/4"	100.0
3/8"	56.0
4	44.6
10	33.0
20	24.5
40	17.3
60	12.2
100	8.1
140	5.8
200	4.0

100	Gravel		Sand	Fines	
90			D <sub>60</sub> = 9.916 mm		
80	Ē	i I	$D_{50} = 7.007 \text{ mm}$	i I	4
<b>—</b> 70	Ē	!	$D_{30} = 1.595  \text{mm}$	1	-
Percent Passing [%] 80 00 00 00 00 00 00 00 00 00 00 00 00			$D_{10} = 0.196 \text{ mm}$	1	3
<b>sing</b> 50	Ē	<b>\</b>		1	]
SSB			Cu = 50.9	1	1
<b>E</b> 40	Ē		Cc = 1.3	į	1
30	Ē		<u></u>	į	1
20	E	į			-
<b>1</b> 0	F	į	*	_ !	4
0	<u>E</u>		1111111111		
-	100	10	1	0.1	0.01
		Particl	e Size [mm]		

Boring B-1 Sample S-3 Depth 7.5

Sieve	Percent
Number	Passing
	[%]
3/4"	75.0
3/8"	52.4
4	33.7
10	22.2
20	18.0
40	15.2
60	11.6
100	7.9
140	5.7
200	3.8



**APPENDIX C** 

**BORING LOG** 



Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603

Telephone: 919.661.6351

**LOG OF BORING B-1** 

1 OF 1 PROJECT SITE ID: Email: geotech@tepgroup.net 827822 73569

SF829 Hwy's 25 & 101 | CITY, STATE HOLE SIZE DRILLING METHOD DATE STARTED Gilroy, California
DRILL RIG TYPE **7/27/2020**DATE COMPLETE Hollow Stem Auger 2 3/4in TOTAL DEPTH 7/1/1976 140lbs / 30in **Auto Hammer** 51.5 FT **Truck** GROUND EL. CHECKED BY BACKFILL DEPTH/EL. GROUNDWATER IFI JDI **□** 10.0/ ATD

BORING LOCATION				JEL			JDL	Cuttings		<sup>▽</sup> 10.0/ AT	D		
BORIN	G LOCA	HON	Appro	xama	tely	30 f	eet north of the propose	d tower					
SAMPLE NUMBER	SAMPLE LENGTH (INCHES)	BLOW COUNTS (N) REC% / RQD%	ELEVATION (FEET)	DEPTH (FEET)	SAMPLE GRAPHIC	USCS GRAPHIC	DESCRIPTION AND O	CLASSIFICATION	REM	IARKS	POCKET PEN TSF	UNCONFINED STRENGTH, PSF	UNIT WEIGHT PCF
				+			0.0-5.0: Medium dense, g well graded GRAVEL (	gray, fine to coarse, GW), with sand, moist					
S1	18	7-6-6 (12)		Ţ	×								
S2	18	2-2-2 (4)			X		5.0-7.5: Soft, brown, lean sand, moist	CLAY (CL), trace	TV = 2.0 tsf		1		
S3	18	4-6-12 (18)		1	X		7.5-10.0: Medium dense, GRAVEL (GP), with sa	brown, poorly graded					
S4	18	4-10-10 (20)	_	10	X		10.0-15.0: wet	,					
				+ ,,									
S5	18	1-1-1 (2)	-	+ 15 + -	X		15.0-20.0: Very soft, brow (CL-ML), with sand, we	vn, silty CLAY et	TV = 0.5 tsf		1		
S6	18	2-2-3	_	20	X		20.0-40.0: Medium stiff, g	gray, fat CLAY (CH),	TV = 2.5 tsf		1		
		(5)		+			trace Sariu, wet						
S7	18	1-1-4 (5)	-	-25 -	X				TV = 2.0 tsf		1		
	18	2-2-3	-	30	Y				TV = 1.5 tsf		1		
		(5)		+								-	
S9	18	1-2-3 (5)	-	<del>-</del> 35	X				TV = 1.0 tsf		1		
			-	+ + +40			40.0.45.0. 4. 2455		T) 45 to 6				
S10	18	2-4-6 (10)		+ + +	X		40.0-45.0: to stiff		TV = 1.5 tsf		1	_	
S11	18	4-4-4	_	-45 -45	X		45.0-50.0: to medium stiff	f	TV = 2.5 tsf		1	_	
		(8)		† †									
S12	18	2-5-5 (10)	-	+50 +	X		50.0-51.5: to stiff		TV = 1.0 tsf		1		
		(10)		‡			51.5: Boring Terminated TV = Pocket Torvane She	ear Test					
			-	<del>-</del> 55									
				1					1				



Tower Engineering Professionals, Inc.

326 Tryon Road Raleigh, NC 27603

Telephone: 919-661-6351 Email: Geotech@tepgroup.net

### Key to Soil Symbols and Terms

#### TERMS DESCRIBING CONSISTENCY OR CONDITION

**COARSE-GRAINED SOILS** (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

 Descriptive Terms
 SPT Blow Count

 Very Loose
 < 4</td>

 Loose
 4 to 10

 Medium Dense
 11 to 30

 Dense
 31 to 50

 Very Dense
 > 50

**FINE-GRAINED SOILS** (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms SPT Blow Count

 Very Soft
 < 2</td>

 Soft
 2 to 4

 Medium Stiff
 5 to 8

 Stiff
 9 to 15

 Very Stiff
 16 to 30

 Hard
 > 30

#### **GENERAL NOTES**

- Classifications are bases on the Unified Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.
- 2. Surface elevations are based on topographic maps and estimated locations and should be considered approximate.
- 3. Descriptions on these boring logs apply only at the specific boring locations and at the time the borings were made. They are not guaranteed to be representative of subsurface condition at other locations or

	Group Symbols	Typical Names	Sampler Symbols						
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	Split Spoon						
5000	GP	Poorly-graded gravels, little or no fines/sands	Standard Penetration Test (SPT)						
	GM	Silty gravels, gravel-sand-silt mixtures  Pushed Shelby Tube							
	GC	Clayey gravels, gravel-sand-silt mixtures	Auger Cuttings						
	sw	Well-graded sands, gravelly sands, little or no fines							
	SP	Poorly-graded sands, little or no fines/sands/gravels  Dynamic Cone Pend							
	SM	Silty sands, sand-silt mixtures	Hand Auger						
	sc	Clayey sands, sand-clay mixtures	Rock Core						
	ML	Inorganic silts and very fine sands, rock floor, silty or clayey fine sands or clayey silts with slight plasticity	Log Abbreviations						
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	ATD - At Time of Drilling						
	OL	Organic silts and organic silty clays of low plasticity	AD - After Drilling  EOD - End of Drilling						
	МН	Inorganic silts, micaceous or distomaceous fine sandy or silty soils, elastic silts	RMR - Rock Mass Rating						
	СН	Inorganic clays of high plasticity, fat clays  WOH - Weight of Hammer  WOR - Weight of Rod							
	ОН	Organic clays of medium to high plasticity, organic silts	REC - Rock Core Recovery						
γ γ <sub>γ</sub> γ	PT	Peat and other highly organic soils	RQD - Rock Quality Designation						

# Information Regarding This Subsurface Exploration Report

The information contained in this report has been specifically tailored to the needs of the client at the time the report was provided, for the specific purpose of the project named in this report. The attached report may not address the needs of contractors, civil engineers, or structural engineers. Anyone other than the named client should consult with the geotechnical engineer prior to utilizing the information contained in the report.

It is always recommended that the full report be read. While certain aspects of the report may seem unnecessary or irrelevant; just as each project and site are unique, so are the subsurface investigation reports and the information contained in them. Several factors can influence the contents of these reports, and the geotechnical engineer has taken into consideration the specific project, the project location, the client's objectives, potential future improvements, etc. If there is any question about whether the attached report pertains to your specific project or if you would like to verify that certain factors were considered in the preparation of this report, it is recommended that you contact the geotechnical engineer.

Geotechnical subsurface investigations often are prepared during the preliminary stages of a project and aspects of the project may change later on. Some changes may require a report revision or additional exploration. Some changes that often need to be brought to the attention of the geotechnical engineer include changes in location, size and/or type of structure, modifications to existing structures, grading around the project site, etc. Some naturally occurring changes can also develop that impact the information contained in this geotechnical report such as earthquakes, landslides, floods, subsurface water levels changing, etc. It is always recommended that the geotechnical be informed of known changes at the project site.

Subsurface exploration reports are generated based on the analysis and professional opinions of a geotechnical engineer based on the results of field and laboratory data. Often subsurface conditions can vary – sometimes significantly – across a site and over short distances. It often is helpful to retain the geotechnical engineer's services during the construction process. Otherwise, the geotechnical cannot assume responsibility or liability for report recommendations which may have needed to change based on changing site conditions or misinterpretation of recommendations.

Geotechnical engineers assemble testing and/or boring logs based on their interpretation of field and laboratory data. Testing and/or boring logs should always be coupled with the subsurface exploration report. The geotechnical engineer and Tower Engineering Professionals cannot be held reliable for interpretations, analyses, or recommendations based solely on the testing and/or boring log if it is independent of the prepared report.

The scope of the subsurface exploration report does not include an assessment or analysis of environmental conditions, determination of the presence or absence of wetlands or hazardous or toxic materials on or below the ground surface. Any notes regarding odors, fill, debris, or anything of that nature are offered as general information for the client, often to help identify or delineate natural soil boundaries.

For additional information, please contact the geotechnical engineer named in the attached report.

