



## EXECUTIVE SUMMARY CONDITIONAL USE AUTHORIZATION

#### Hearing Date: September 3, 2020

Record No.:	2020-000620CUA
Project Address:	5140-5150 Geary Boulevard
Zoning:	Geary Boulevard Neighborhood Commercial Zoning District
	Geary Blvd Formula Retail Pet Supply Store and Formula Retail Eating and
	Drinking Subdistrict Special Use District
	40-X Height and Bulk District
Block/Lot:	1447/049
Project Sponsor:	Derek Turner
	1225 Clay Street #5
	San Francisco, CA 94108
Property Owner:	Amy and John Palmer
	100 Shoreline Hwy STE 160B
	Mill Valley, CA 94941
	David and Anne Banks
	233 Cervantes Blvd
	San Francisco, CA 94118
Staff Contact:	Ashley Lindsay – 628.652.7360
	Ashley.Lindsay@sfgov.org
<b>Recommendation:</b>	Approval with Conditions

### **Project Description**

- The Project includes installation of twelve (12) panel antennas as part of the AT&T Mobility Telecommunications Network. Antennas and ancillary equipment will be screened within four (4) FRP boxes, and additional ancillary equipment will be proposed at ground level within a proposed chain link fence enclosure at the rear of the subject building.
  - a. (3) antennas will be screened behind (1) FRP box adjacent to the northern parapet of the existing rooftop;
  - b. (3) antennas will be screened behind (1) FRP box adjacent to the southern parapet of the existing rooftop;

- c. (3) antennas will be screened behind (1) FRP box adjacent to the southeast corner of the existing rooftop, and
- d. (3) antennas will be screened behind (1) FRP box adjacent to the southwest corner of the existing rooftop.

### **Required Commission Action**

In order for the Project to proceed, the Commission must grant a Conditional Use Authorization, pursuant to Planning Code Sections 739 and 303 to allow a macro wireless telecommunications facility within the Geary Boulevard Neighborhood Commercial District.

#### **Issues and Other Considerations**

- Public Comment & Outreach.
  - **Support/Opposition:** The Department has received 3 letters in opposition to the Project.
    - The opposition to the Project is centered around radio frequency and design.
  - **Outreach**: The Sponsor has hosted a meeting within the community, on December 2, 2019.

### **Environmental Review**

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 1 categorical exemption.

### **Basis for Recommendation**

The Department finds that the Project is, on balance, consistent with the Wireless Telecommunications Services (WTS) Facilities Siting Guidelines and the Objectives and Policies of the General Plan. The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services. The Department also finds the project to be necessary, desirable, and compatible with the surrounding neighborhood, and not to be detrimental to persons or adjacent properties in the vicinity.

### **Attachments:**

Draft Motion – Conditional Use Authorization with Conditions of Approval Exhibit B – Plans and Renderings Exhibit C – Environmental Determination Exhibit D – Land Use Data Exhibit E – Maps and Context Photos Exhibit F – Radio Frequency Report Exhibit G – Coverage Maps Exhibit H – Independent Evaluation



Exhibit I – Alternatives Site Analysis & Design Justification Exhibit J – Project Sponsor Brief



### SAN FRANCISCO PLANNING DEPARTMENT

### Planning Commission Draft Motion HEARING DATE: SEPTEMBER 3, 2020

Record No.:	2020-000620CUA	415.558.6378
Project Address:	5140-5150 Geary Boulevard	Fax:
Zoning:	Geary Boulevard Neighborhood Commercial Zoning District	415.558.6409
	Geary Blvd Formula Retail Pet Supply Store and Formula Retail Eating and	
	Drinking Subdistrict Special Use District	Information: 415.558.6377
	40-X Height and Bulk District	410.000.0077
Block/Lot:	1447/ 049	
Project Sponsor:	Derek Turner	
	1225 Clay Street #5	
	San Francisco, CA 94108	
Property Owner:	Amy and John Palmer	
	100 Shoreline Hwy STE 160B	
	Mill Valley, CA 94941	
	David and Anne Banks	
	233 Cervantes Blvd	
	San Francisco, CA 94118	
Staff Contact:	Ashley Lindsay – 628.652.7360	
	Ashley.Lindsay@sfgov.org	

1650 Mission St.

CA 94103-2479

Suite 400 San Francisco,

Reception:

ADOPTING FINDINGS RELATING TO A CONDITIONAL USE AUTHORIZATION PURSUANT TO PLANNING CODE SECTION 303(c) AND 739, TO INSTALL A NEW ROOFTOP AT&T MOBILITY MACRO WIRELESS TELECOMMUNICATIONS FACILITY CONSISTING OF (12) PANEL ANTENNAS AS PART OF THE AT&T MOBILITY TELECOMMUNICATIONS NETWORK. ANTENNAS WILL BE SCREENED WITHIN FOUR (4) FRP BOXES, AND ANCILLARY EQUIPMENT WILL BE PROPOSED AT GROUND LEVEL WITHIN A PROPOSED CHAIN LINK FENCE ENCLOSURE. THE SUBJECT PROPERTY IS LOCATED WITHIN THE GEARY BOULEVARD NCD (NEIGHBORHOOD COMMERCIAL DISTRICT), GEARY BOULEVARD FORMULA RETAIL PET SUPPLY STORE AND FORMULA RETAIL EATING AND DRINKING SUBDISTRICT, AND THE 40-X HEIGHT AND BULK DISTRICTS, AND ADOPTING FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

#### PREAMBLE

On January 15, 2020, Derek Turner on behalf of AT&T Mobility (hereinafter "Project Sponsor") filed Application No. 2020-000620CUA (hereinafter "Application") with the Planning Department (hereinafter "Department") for a Conditional Use Authorization to construct a new macro wireless telecommunications facility (hereinafter "Project") 5140-5150 Geary Boulevard, Block 1447 Lot 049 (hereinafter "Project Site").

On August 25, 2020the Project was determined to be exempt from the California Environmental Quality Act ("CEQA") as a Class 1 Categorical Exemption under CEQA as described in the determination contained in the Planning Department files for this Project.

On September 3, 2020, the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Authorization Application No. 2020-000620CUA .

The Planning Department Commission Secretary is the custodian of records; the File for Record No. 2020-000620CUA is located at 49 South Van Ness Avenue, Suite 1400, San Francisco, California.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the applicant, Department staff, and other interested parties.

**MOVED**, that the Commission hereby authorizes the Conditional Use Authorization as requested in Application No. 2020-000620CUA, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

#### FINDINGS

Having reviewed the materials identified in the preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

- 1. The above recitals are accurate and constitute findings of this Commission.
- 2. **Project Description.** The Project includes installation of twelve (12) panel antennas as part of the AT&T Mobility Telecommunications Network. Antennas and ancillary equipment will be screened within four (4) FRP boxes, and additional ancillary equipment will be proposed at ground level within a proposed chain link fence enclosure at the rear of the subject building.
  - a. (3) antennas will be screened behind (1) FRP box adjacent to the northern parapet of the existing rooftop;
  - b. (3) antennas will be screened behind (1) FRP box adjacent to the southern parapet of the existing rooftop;
  - c. (3) antennas will be screened behind (1) FRP box adjacent to the southeast corner of the existing rooftop, and
  - d. (3) antennas will be screened behind (1) FRP box adjacent to the southwest corner of the existing rooftop.
- 3. **Site Description and Present Use.** The Project is located on one lot which has approximately 50 feet of frontage along Geary Boulevard. The project site contains one existing 3-story residential building with ground floor commercial use.

- 4. **Surrounding Properties and Neighborhood.** The Project Site is located within the Geary Boulevard Neighborhood Commercial Zoning Districts. It is a linear district located along a heavily trafficked thoroughfare which also serves a major transit route. The immediate context is mixed in character with commercial, residential, and office uses.
- 5. **Public Outreach and Comments.** The Sponsor held a community meeting on December 2, 2019 at 6:30 PM to 7:30 PM at Argonne Playground, 463 18<sup>th</sup> Avenue, San Francisco, CA 94121. Approximately 11 community members attended the meeting. The topics of discussion included site design, entitlement process, and EMF-related health concerns. The Department received correspondence from (3) people regarding the proposed project. The correspondence has primarily expressed opposition to the project. Much of the opposition expressed concerns about radio frequency, and design.
- 6. **Past History and Actions.** The Planning Commission adopted the *Wireless Telecommunications Services (WTS) Facilities Siting Guidelines (*"Guidelines") for the installation of wireless telecommunications facilities in 1996. These Guidelines set forth the land use policies and practices that guide the installation and approval of wireless facilities throughout San Francisco. A large portion of the Guidelines was dedicated to establishing location preferences for these installations. The Board of Supervisors, in Resolution No. 635-96, provided input as to where wireless facilities should be located within San Francisco. The Guidelines were updated by the Commission in 2003 and again in 2012, requiring community outreach, notification, and detailed information about the facilities to be installed.

Section 8.1 of the Guidelines outlines Location Preferences for wireless facilities. There are five primary areas were the installation of wireless facilities should be located:

- 1. Publicly-used Structures: such facilities as fire stations, utility structures, community facilities, and other public structures;
- 2. Co-Location Site: encourages installation of facilities on buildings that already have wireless installations;
- 3. Industrial or Commercial Structures: buildings such as warehouses, factories, garages, service stations;
- 4. Industrial or Commercial Structures: buildings such as supermarkets, retail stores, banks; and
- 5. Mixed-Use Buildings in High Density Districts: buildings such as housing above commercial or other non-residential space.

Section 8.1 of the WTS Siting Guidelines further stipulates that the Planning Commission will not approve WTS applications for Preference 5 or below Location Sites unless the application describes (a) what publicly-used building, co-location site or other Preferred Location Sites are located within the geographic service area; (b) what good faith efforts and measures were taken to secure these more Preferred Locations, (c) explains why such efforts were unsuccessful; and (d) demonstrates

that the location for the site is essential to meet demands in the geographic service area and the Applicant's citywide networks.

Before the Planning Commission can review an application to install a wireless facility, the Project Sponsor must submit a five-year facilities plan, which must be updated biannually, an emissions report and approval by the Department of Public Health, Section 106 Declaration of Intent, an independent evaluation verifying coverage and capacity, a submittal checklist and details about the facilities to be installed.

Under Section 704(B)(iv) of the 1996 Federal Telecommunications Act, local jurisdictions cannot deny wireless facilities based on Radio Frequency (RF) radiation emissions so long as such facilities comply with the FCC's regulations concerning such emissions.

- 7. **Location Preference.** The *WTS Facilities Siting Guidelines* identify different types of zoning districts and building uses for the siting of wireless telecommunications facilities. Based on the zoning and land use, the proposed WTS facility is at a Location Preference 5 Site (Mixed Use Buildings in High Density Districts) according to the WTS Facilities Siting Guidelines, making it a desired location. The Project Sponsor provided an alternative sites analysis which describes other preferred locations that were explored.
- 8. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless network is designed to address coverage and capacity needs in the area. The network will operate in the WCS, AWS, PCS, Cellular, and 700 MHz bands, which are regulated by the Federal Communications Commission (FCC) and must comply with the FCC-adopted health and safety standards for electromagnetic radiation and radio frequency radiation.
- 9. **Radiofrequency (RF) Emissions:** The Project Sponsor retained Hammett and Edison, Inc, a radio engineering consulting firm, to prepare a report describing the expected RF emissions from the proposed facility. Pursuant to the Guidelines, the Department of Public Health reviewed the report and determined that the proposed facility complies with the standards set forth in the Guidelines.

**Department of Public Health Review and Approval.** The Project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Radio-Frequency (RF) levels from the proposed AT&T Mobility transmitters at any nearby publicly accessible building or area would 99% of the FCC public exposure limit.

There are no antennas existing on the roof top of the building at 5140-5150 Geary Blvd. Existing RF levels at ground level were around 1% of the FCC public exposure limit. No other antennas were observed within 100 feet of this site. AT&T Wireless proposes to install 12 new antennas. The antennas are mounted at a height of 43 feet above the ground and 5.5 feet above the roof. The estimated ambient RF field from the proposed AT&T Wireless transmitters at ground level is calculated to be 0.37 mW/sq cm., which is 72 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 80 feet and does not

reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 33 feet of the front of the antennas while they are in operation. Barricades shall be installed as noted in RF report shown in Figure 3. Measurements shall be taken at the roof of the residence to the north when modifications are complete, in order to confirm that actual exposure levels there do comply with the FCC public exposure limits. In addition, measurements shall also be taken at ground level to confirm exposure levels are within the FCC Public limit.

- 10. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by AT&T Mobility to demonstrate the need for outdoor and indoor coverage and capacity have been determined by Hammett and Edison, Inc., an engineering consultant and independent third party, to accurately represent the carrier's present and post-installation conclusions.
- 12. **Maintenance Schedule**. The facility would operate without on-site staff but with a maintenance crew visiting the property to service and monitor the facility.
- 13. **Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the Planning Code in the following manner:
  - A. **Use.** Per Planning Code Section 739, a Conditional Use Authorization is required for a macro WTS facility (Utility and Infrastructure Use).
- 14. **Conditional Use Findings.** Planning Code Section 303 establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use authorization. On balance, the project complies with said criteria in that:
  - A. The proposed new uses and building, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable, and compatible with, the neighborhood or the community.

The Project at 5140-5150 Geary Boulevard is generally desirable and compatible with the surrounding neighborhood because the Project will not conflict with the existing uses of the property and will be designed to be compatible with the surrounding neighborhood. The overall location, setback from public streets, height and design of the proposed facility, including visible screening elements is situated so as to avoid intrusion into public vistas, and to insure harmony with the existing neighborhood character and promote public safety.

B. The proposed project will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity. There are no features of the project that could be detrimental to the health, safety or convenience of those residing or working the area, in that:

(1) Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

The Project height and bulk of the existing building will remain the same and will not significantly alter the existing appearance or character of the project vicinity. The proposed work will not affect the building envelope, yet the inclusion of outside seating will alter the use of the property.

(2) The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading;

The Planning Code does not require parking or loading for a telecommunications wireless facility. The proposed use is designed to meet the needs of the immediate neighborhood and should not generate significant amounts of vehicular trips from the immediate neighborhood or citywide.

(3) The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

While some noise and dust may result from the installation of the antennas and transceiver equipment, noise or noxious emissions from continued use are not likely to be significantly greater than ambient conditions due to the operation of the wireless communication network.

(4) Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs;

The facility will not affect landscaping, open space, required parking, lighting or signage at the Project Site or surrounding area.

C. That the use as proposed will comply with the applicable provisions of the Planning Code and will not adversely affect the General Plan.

The Project complies with all relevant requirements and standards of the Planning Code and is consistent with objectives and policies of the General Plan as detailed below.

D. That the use as proposed would provide development that is in conformity with the purpose of the applicable Neighborhood Commercial District.

*The proposed project is consistent with the stated purposed of Geary Boulevard NCD - in that the facility will be consistent with the existing scale and character of the area.* 

15. **General Plan Compliance.** The Project is, on balance, consistent with the following Objectives and Policies of the General Plan:

#### HOUSING ELEMENT

#### **Objectives and Policies**

#### **OBJECTIVE 12:**

BALANCE HOUSING GROWTH WITH ADEQUATE INFRASTRUCTURE THAT SERVES THE CITY'S GROWING POPULATION.

#### Policy 12.3:

Ensure new housing is sustainable supported by the City's public infrastructure systems.

The Project will improve AT&T Mobility coverage and capacity within the Inner Richmond neighborhood.

#### COMMERCE AND INDUSTRY ELEMENT

#### **Objectives and Policies**

#### **OBJECTIVE 1:**

MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.

#### Policy 1.1:

Encourage development, which provides substantial net benefits and minimizes undesirable consequences. Discourage development, which has substantial undesirable consequences that cannot be mitigated.

#### Policy 1.2:

Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

The Project will enhance the total city living and working environment by providing communication services for residents and workers within the City. Additionally, the Project would comply with Federal, State and Local performance standards.

#### **OBJECTIVE 2:**

MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY.

#### Policy 2.1:

Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

#### Policy 2.3:

Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

SAN FRANCISCO PLANNING DEPARTMENT The Site will be an integral part of a new wireless communications network that will enhance the City's diverse economic base.

#### **OBJECTIVE 4:**

IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.

#### Policy 4.1:

Maintain and enhance a favorable business climate in the City.

#### Policy 4.2:

Promote and attract those economic activities with potential benefit to the City.

The Project will benefit the City by enhancing the business climate through improved communication services for residents and workers.

#### VISITOR TRADE

#### **OBJECTIVE 8:**

ENHANCE SAN FRANCISCO'S POSITION AS A NATIONAL CENTER FOR CONVENTIONS AND VISITOR TRADE.

#### Policy 8.3:

Assure that areas of particular visitor attraction are provided with adequate public services for both residents and visitors.

#### **COMMUNITY SAFETY ELEMENT**

#### **Objectives and Policies**

#### **OBJECTIVE 3:**

ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER.

#### Policy 1.20

Increase communication capabilities in preparation for all phases of a disaster and ensure communication abilities extend to hard-to-reach areas and special populations.

#### Policy 2.4

Bolster the Department of Emergency Management's role as the City's provider of emergency planning and communication, and prioritize its actions to meet the needs of San Francisco.

#### Policy 2.15

Utilize advancing technology to enhance communication capabilities in preparation for all phases of a disaster, particularly in the high-contact period immediately following a disaster.

#### Policy 3.7:

Develop a system to convey personalized information during and immediately after a disaster.

*The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services.* 

- 16. **Planning Code Section 101.1(b)** establishes eight priority-planning policies and requires review of permits for consistency with said policies. On balance, the project complies with said policies in that:
  - A. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses be enhanced.

The wireless communications network will enhance personal communication services for businesses and customers in the surrounding area.

B. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.

No residential uses will be displaced in any way by the granting of this Authorization.

C. That the City's supply of affordable housing be preserved and enhanced,

The Project will have no adverse effect on housing in the vicinity.

D. That commuter traffic not impede MUNI transit service or overburden our streets or neighborhood parking.

Due to the nature of the Project and minimal maintenance or repair, municipal transit service will not be significantly impeded and neighborhood parking will not be overburdened.

E. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced.

The Project will not cause any displacement of industrial and service sector activity.

F. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake.

The Project will be designed and will be constructed to conform to the structural and seismic safety requirements of the Building Code. This proposal will not impact the property's ability to withstand an earthquake.

G. That landmarks and historic buildings be preserved.

Currently, the Project Site does not contain any City Landmarks or historic buildings.

H. That our parks and open space and their access to sunlight and vistas be protected from development.

The Project will not adversely affect parks or open space, nor their access to sunlight or public vistas.

- 17. The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, as designed, the Project would contribute to the character and stability of the neighborhood and would constitute a beneficial development.
- 18. The Commission hereby finds that approval of the Conditional Use Authorization would promote the health, safety and welfare of the City.

#### DECISION

That based upon the Record, the submissions by the Applicant, the staff of the Department and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby **APPROVES Conditional Use Authorization Application No. 2020-000620CUA** subject to the following conditions attached hereto as "EXHIBIT A" in general conformance with plans on file, dated August 21, 2020, and stamped "EXHIBIT B", which is incorporated herein by reference as though fully set forth.

**Protest of Fee or Exaction:** You may protest any fee or exaction subject to Government Code Section 66000 that is imposed as a condition of approval by following the procedures set forth in Government Code Section 66020. The protest must satisfy the requirements of Government Code Section 66020(a) and must be filed within 90 days of the date of the first approval or conditional approval of the development referencing the challenged fee or exaction. For purposes of Government Code Section 66020, the date of imposition of the fee shall be the date of the earliest discretionary approval by the City of the subject development.

If the City has not previously given Notice of an earlier discretionary approval of the project, the Planning Commission's adoption of this Motion, Resolution, Discretionary Review Action or the Zoning Administrator's Variance Decision Letter constitutes the approval or conditional approval of the development and the City hereby gives **NOTICE** that the 90-day protest period under Government Code Section 66020 has begun. If the City has already given Notice that the 90-day approval period has begun for the subject development, then this document does not re-commence the 90-day approval period.

I hereby certify that the Planning Commission ADOPTED the foregoing Motion on September 3, 2020.

Jonas P. Ionin Commission Secretary

AYES:

NAYS:

ABSENT:

ADOPTED: September 3, 2020

## **EXHIBIT A**

#### **AUTHORIZATION**

This authorization is for a conditional use to allow a Wireless Telecommunications Use (d.b.a. AT&T Mobility) located at 5140-5150 Geary Boulevard, Block 1447, and Lot 049 pursuant to Planning Code Section(s) **303 and 739** within the **Geary Boulevard Neighborhood Commercial** District, **Geary Boulevard Formula Retail Pet Supply Store and Formula Retail Eating and Drinking** Subdistrict, and a **40-X** Height and Bulk District; in general conformance with plans, dated **August 21, 2020**, and stamped "EXHIBIT B" included in the docket for Record No. **2020-000620CUA** and subject to conditions of approval reviewed and approved by the Commission on **September 3, 2020** under Motion No **XXXXXX**. This authorization and the conditions contained herein run with the property and not with a particular Project Sponsor, business, or operator.

#### **RECORDATION OF CONDITIONS OF APPROVAL**

Prior to the issuance of the building permit or commencement of use for the Project the Zoning Administrator shall approve and order the recordation of a Notice in the Official Records of the Recorder of the City and County of San Francisco for the subject property. This Notice shall state that the project is subject to the conditions of approval contained herein and reviewed and approved by the Planning Commission on **September 3, 2020** under Motion No **XXXXXX**.

#### PRINTING OF CONDITIONS OF APPROVAL ON PLANS

The conditions of approval under the 'Exhibit A' of this Planning Commission Motion No. **XXXXXX** shall be reproduced on the Index Sheet of construction plans submitted with the site or building permit application for the Project. The Index Sheet of the construction plans shall reference to the Conditional Use authorization and any subsequent amendments or modifications.

#### SEVERABILITY

The Project shall comply with all applicable City codes and requirements. If any clause, sentence, section or any part of these conditions of approval is for any reason held to be invalid, such invalidity shall not affect or impair other remaining clauses, sentences, or sections of these conditions. This decision conveys no right to construct, or to receive a building permit. "Project Sponsor" shall include any subsequent responsible party.

#### **CHANGES AND MODIFICATIONS**

Changes to the approved plans may be approved administratively by the Zoning Administrator. Significant changes and modifications of conditions shall require Planning Commission approval of a new Conditional Use authorization.

# Conditions of Approval, Compliance, Monitoring, and Reporting PERFORMANCE

1. **Validity.** The authorization and right vested by virtue of this action is valid for three (3) years from the effective date of the Motion. The Department of Building Inspection shall have issued a Building Permit or Site Permit to construct the project and/or commence the approved use within this three-year period.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

2. **Expiration and Renewal.** Should a Building or Site Permit be sought after the three (3) year period has lapsed, the project sponsor must seek a renewal of this Authorization by filing an application for an amendment to the original Authorization or a new application for Authorization. Should the project sponsor decline to so file, and decline to withdraw the permit application, the Commission shall conduct a public hearing in order to consider the revocation of the Authorization. Should the Commission not revoke the Authorization following the closure of the public hearing, the Commission shall determine the extension of time for the continued validity of the Authorization.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

- 3. **Diligent pursuit.** Once a site or Building Permit has been issued, construction must commence within the timeframe required by the Department of Building Inspection and be continued diligently to completion. Failure to do so shall be grounds for the Commission to consider revoking the approval if more than three (3) years have passed since this Authorization was approved. *For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org*
- 4. **Extension.** All time limits in the preceding three paragraphs may be extended at the discretion of the Zoning Administrator where implementation of the project is delayed by a public agency, an appeal or a legal challenge and only by the length of time for which such public agency, appeal or challenge has caused delay.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

5. **Conformity with Current Law.** No application for Building Permit, Site Permit, or other entitlement shall be approved unless it complies with all applicable provisions of City Codes in effect at the time of such approval.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

#### **DESIGN – COMPLIANCE AT PLAN STAGE**

6. **Final Materials.** The Project Sponsor shall continue to work with Planning Department on the building design. Final materials, glazing, color, texture, landscaping, and detailing shall be subject to Department staff review and approval. The architectural addenda shall be reviewed and approved by the Planning Department prior to issuance.

For information about compliance, contact the Case Planner, Planning Department at 415-558-6378, <u>www.sf-planning.org</u>

- 7. **Rooftop Mechanical Equipment.** Pursuant to Planning Code 141, the Project Sponsor shall submit a roof plan to the Planning Department prior to Planning approval of the building permit application. Rooftop mechanical equipment, if any is proposed as part of the Project, is required to be screened so as not to be visible from any point at or below the roof level of the subject building. *For information about compliance, contact the Case Planner, Planning Department at 415-558-6378, www.sf-planning.org*
- 8. **Plan Drawings WTS**. Prior to the issuance of any building or electrical permits for the installation of the facilities, the Project Sponsor shall submit final scaled drawings for review and approval by the Planning Department ("Plan Drawings"). The Plan Drawings shall describe:
  - A. Structure and Siting. Identify all facility related support and protection measures to be installed. This includes, but is not limited to, the location(s) and method(s) of placement, support, protection, screening, paint and/or other treatments of the antennas and other appurtenances to insure public safety, insure compatibility with urban design, architectural and historic preservation principles, and harmony with neighborhood character.
  - B. For the Project Site, regardless of the ownership of the existing facilities. Identify the location of all existing antennas and facilities; and identify the location of all approved (but not installed) antennas and facilities.
  - C. Emissions. Provide a report, subject to approval of the Zoning Administrator, that operation of the facilities in addition to ambient RF emission levels will not exceed adopted FCC standards with regard to human exposure in uncontrolled areas.

For information about compliance, contact the Case Planner, Planning Department at 415-558-6378, <u>www.sf-planning.org</u>

- 9. Screening WTS. To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:
  - A. Modify the placement of the facilities;
  - B. Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;
  - C. Install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95.2 1982, to notify persons that the facility could cause exposure to RF emissions;

- D. Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.
- E. To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:
- F. Antennas and back up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual effects;
- G. Rooftop installations shall be setback such that back up facilities are not viewed from the street;
- H. Antennae attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and
- I. Although co location of various companies' facilities may be desirable, a maximum number of antennas and back up facilities on the Project Site shall be established, on a case by case basis, such that "antennae farms" or similar visual intrusions for the site and area is not created.
- 6. Install the Wireless Telecommunications Facility, per Exhibit B (plans), such that
  - a. (3) antennas will be screened behind (1) FRP box adjacent to the northern parapet of the existing rooftop;
  - b. (3) antennas will be screened behind (1) FRP box adjacent to the southern parapet of the existing rooftop;
  - c. (3) antennas will be screened behind (1) FRP box adjacent to the southeast corner of the existing rooftop;
  - d. (3) antennas will be screened behind (1) FRP box adjacent to the southwest corner of the existing rooftop, and
  - e. No equipment will be attached to the roof top parapet, and additional ancillary equipment will be proposed at ground level within a proposed chain link fence enclosure at the rear of the subject building and will not be visible from public views.

For information about compliance, contact the Case Planner, Planning Department at 415-558-6378, <u>www.sf-planning.org</u>

#### **MONITORING - AFTER ENTITLEMENT**

- Enforcement. Violation of any of the Planning Department conditions of approval contained in this Motion or of any other provisions of Planning Code applicable to this Project shall be subject to the enforcement procedures and administrative penalties set forth under Planning Code Section 176 or Section 176.1. The Planning Department may also refer the violation complaints to other city departments and agencies for appropriate enforcement action under their jurisdiction. For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>
- 11. **Revocation due to Violation of Conditions.** Should implementation of this Project result in complaints from interested property owners, residents, or commercial lessees which are not resolved by the Project Sponsor and found to be in violation of the Planning Code and/or the specific conditions of approval for the Project as set forth in Exhibit A of this Motion, the Zoning

Administrator shall refer such complaints to the Commission, after which it may hold a public hearing on the matter to consider revocation of this authorization.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

12. **Implementation Costs - WTS**. The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.

The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with implementation of the conditions of approval contained in this authorization, including costs incurred by this Department, the Department of Public Health, the Department of Technology, Office of the City Attorney, or any other appropriate City Department or agency. The Planning Department shall collect such costs on behalf of the City.

The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility, which are assessed by the City pursuant to all applicable law. *For information about compliance, contact Code Enforcement, Planning Department at* 415-575-6863, *www.sf-planning.org* 

13. **Implementation and Monitoring - WTS**. In the event that the Project implementation report includes a finding that RF emissions for the site exceed FCC Standards in any uncontrolled location, the Zoning Administrator may require the Applicant to immediately cease and desist operation of the facility until such time that the violation is corrected to the satisfaction of the Zoning Administrator.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

- 14. **Project Implementation Report WTS**. The Project Sponsor shall prepare and submit to the Zoning Administrator a Project Implementation Report. The Project Implementation Report shall:
  - A. Identify the three dimensional perimeter closest to the facility at which adopted FCC standards for human exposure to RF emissions in uncontrolled areas are satisfied;
  - B. Document testing that demonstrates that the facility will not cause any potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.
  - C. The Project Implementation Report shall compare test results for each test point with applicable FCC standards. Testing shall be conducted in compliance with FCC regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday weekday with the subject equipment measured while operating at maximum power.
  - D. Testing, Monitoring, and Preparation. The Project Implementation Report shall be prepared by a certified professional engineer or other technical expert approved by the

Department. At the sole option of the Department, the Department (or its agents) may monitor the performance of testing required for preparation of the Project Implementation Report. The cost of such monitoring shall be borne by the Project Sponsor pursuant to the condition related to the payment of the City's reasonable costs.

- E. Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 4.
- F. Approval. The Zoning Administrator shall request that the Certification of Final Completion for operation of the facility not be issued by the Department of Building Inspection until such time that the Project Implementation Report is approved by the Department for compliance with these conditions.

*For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, <u>www.sfdph.org</u>* 

15. **Coverage and Capacity Verification.** Use is authorized as long as an independent evaluator, selected by the Planning Department, determines that the information and conclusions submitted by the wireless service provider in support of its request for conditional use are accurate. The wireless service provider shall fully cooperate with the evaluator and shall provide any and all data requested by the evaluator to allow the evaluator to verify that the maps, data, and conclusions about service coverage and capacity submitted are accurate. The wireless service provider shall bear all costs of said evaluation. The independent evaluator, upon request by the wireless service provider shall keep the submitted data confidential and shall sign a confidentiality agreement acceptable to the wireless service provider. The independent evaluator shall be a professional engineer licensed by the State of California.

*For information about compliance, contact the Case Planner, Planning Department at* 415-575-9079, *www.sf-planning.org*.

- 16. **Notification prior to Project Implementation Report WTS.** The Project Sponsor shall undertake to inform and perform appropriate tests for residents of any dwelling units located within 25 feet of the transmitting antenna at the time of testing for the Project Implementation Report.
  - A. At least twenty calendar days prior to conducting the testing required for preparation of the Project Implementation Report, the Project Sponsor shall mail notice to the Department, as well as to the resident of any legal dwelling unit within 25 feet of a transmitting antenna of the date on which testing will be conducted. The Applicant will submit a written affidavit attesting to this mail notice along with the mailing list.
  - B. When requested in advance by a resident notified of testing pursuant to subsection (a), the Project Sponsor shall conduct testing of total power density of RF emissions within the residence of that resident on the date on which the testing is conducted for the Project Implementation Report.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

17. **Installation - WTS.** Within 10 days of the installation and operation of the facilities, the Project Sponsor shall confirm in writing to the Zoning Administrator that the facilities are being

maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

18. **Periodic Safety Monitoring - WTS.** The Project Sponsor shall submit to the Zoning Administrator 10 days after installation of the facilities, and every two years thereafter, a certification attested to by a licensed engineer expert in the field of EMR/RF emissions, that the facilities are and have been operated within the then current applicable FCC standards for RF/EMF emissions. *For information about compliance, contact the Environmental Health Section, Department of Public Health* 

at (415) 252-3800, <u>www.sfdph.org</u>

#### OPERATION

19. **Community Liaison.** Prior to issuance of a building permit to construct the project and implement the approved use, the Project Sponsor shall appoint a community liaison officer to deal with the issues of concern to owners and occupants of nearby properties. The Project Sponsor shall provide the Zoning Administrator and all registered neighborhood groups for the area with written notice of the name, business address, and telephone number of the community liaison. Should the contact information change, the Zoning Administrator and registered neighborhood groups shall be made aware of such change. The community liaison shall report to the Zoning Administrator what issues, if any, are of concern to the community and what issues have not been resolved by the Project Sponsor.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

20. **Out of Service** – **WTS**. The Project Sponsor or Property Owner shall remove antennae and equipment that has been out of service or otherwise abandoned for a continuous period of six months.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

21. Emissions Conditions – WTS. It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for revocation.

*For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, <u>www.sfdph.org</u>* 

22. Noise and Heat – WTS. The WTS facility, including power source and cooling facility, shall be operated at all times within the limits of the San Francisco Noise Control Ordinance. The WTS facility, including power source and any heating/cooling facility, shall not be operated so as to cause the generation of heat that adversely affects a building occupant.

*For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, www.sfdph.org* 

23. **Transfer of Operation – WTS**. Any carrier/provider authorized by the Zoning Administrator or by the Planning Commission to operate a specific WTS installation may assign the operation of the facility to another carrier licensed by the FCC for that radio frequency provided that such transfer is made known to the Zoning Administrator in advance of such operation, and all conditions of approval for the subject installation are carried out by the new carrier/provider.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, <u>www.sf-planning.org</u>

24. **Compatibility with City Emergency Services – WTS**. The facility shall not be operated or caused to transmit on or adjacent to any radio frequencies licensed to the City for emergency telecommunication services such that the City's emergency telecommunications system experiences interference, unless prior approval for such has been granted in writing by the City. *For information about compliance, contact the Department of Technology,* 415-581-4000, *http://sfgov3.org/index.aspx?page=1421* 



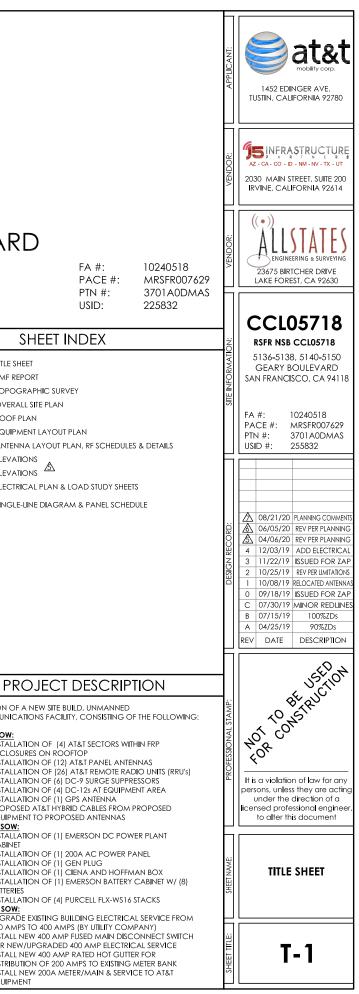
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## CCL05718 RSFR NSB CCL05718 ROOFTOP 5136-5138, 5140-5150 (

5136-5138, 5140-5150 GEARY BOULEVARD SAN FRANCISCO, CA 94118



## AT&T Mobility • Proposed Base Station (Site No. CCL05718) 5140 Geary Boulevard • San Francisco, California FA No. 10240518, USID No. 225832, PA No. 3701A0DMAS

#### Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a personal wireless telecommunications carrier, to evaluate the base station (Site No. CCL05718) proposed to be located at 5140 Geary Boulevard in San Francisco. California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

#### Background

The San Francisco Department of Public Health has adopted an 11-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable limits set by the FCC for exposures are shown in Figure 1. The most restrictive limit for exposures of unlimited duration at several wireless service bands are as follows:

Wireless Service Band	Transmit Frequency	"Uncontrolled" Public Limit	Occupational Limi (5 times Public)
Microwave (point-to-point)	1-80 GHz	1.0 mW/cm2	5.0 mW/cm2
Millimeter-wave	24-47	1.0	5.0
Part 15 (WiFi & other unlicensed)	2-6	1.0	5.0
CBRS (Citizens Broadband Radio)	3,550 MHz	1.0	5.0
BRS (Broadband Radio)	2,490	1.0	5.0
WCS (Wireless Communication)	2,305	1.0	5.0
AWS (Advanced Wireless)	2,110	1.0	5.0
PCS (Personal Communication)	1,930	1.0	5.0
Cellular	869	0.58	2.9
SMR (Specialized Mobile Radio)	854	0.57	2.85
700 MHz	716	0.48	2.4
600 MHz	617	0.41	2.05
[most restrictive frequency range]	30-300	0.20	1.0

#### Checklist

Reference has been made to information provided by AT&T, including zoning drawings by All States Engineering and Surveying, dated October 25, 2019. It should be noted that the calculation results in this Statement include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operations. Figure 2 describes the calculation methodologies. reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). This methodology is an

AT&T Mobility • Proposed Base Station (Site No. CCL05718) 5140 Geary Boulevard • San Francisco, California FA No. 10240518, USID No. 225832, PA No. 3701A0DMAS

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that

operation of the base station proposed by AT&T Mobility at 5140 Geary Boulevard in San Francisco,

California, can comply with the prevailing standards for limiting human exposure to radio frequency

energy and, therefore, need not for this reason cause a significant impact on the environment. Th

highest calculated level in publicly accessible areas is much less than the prevailing standards allow

for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Erecting barricades and taking measurements

recommended to establish compliance with public exposure limits: training authorized personnel.

marking roof areas, and posting explanatory signs are recommended to establish compliance with

Exp. 6-30-2021

#### HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO (2019)

occupational exposure limits.

November 26, 2019

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### AT&T Mobility • Proposed Base Station (Site No. CCL05718) 5140 Geary Boulevard • San Francisco, California FA No. 10240518, USID No. 225832, PA No. 3701A0DMAS

industry standard for evaluating RF exposure conditions and has been demonstrated through numerous field tests to be a conservative prediction of exposure levels.

1. The location, identity, and total number of all operational radiating antennas installed at this site. There are reported no wireless base stations installed at the site.

List all radiating antennas located within 100 feet of the site that could contribute to the cumulative radio frequency energy at this location.

There are reported no other WTS facilities within 100 feet of the site.

. Provide a narrative description of the proposed work for this project. AT&T proposes to install twelve antennas. This is consistent with the scope of work described in the

drawings for transmitting elements.

4. Provide an inventory of the make and model of antennas or transmitting equipment being installed or removed.

AT&T proposes to install twelve CCI directional panel antennas, six Model BSA-M65R-BUU-H4 and six Model OPA-45R-BUU5CA. The antennas would be mounted at an effective heights between 41 and 43 feet above ground, about 51/2 feet above the roof, and would be oriented in groups of three toward 10°T, 80°T, 172°T, and 265°T. The 265°T and 352°T groups would employ up to 9° and 4° electrical downtilt, respectively; the remaining two groups would employ up to 18° downtilt. As indicated in the drawings, no mechanical downtilt would be employed.

Describe the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level. This description may be based on field measurements or calculations.

Because there are no antennas at the site presently, existing RF levels for a person on the roof near the proposed antenna locations and at ground near the site are presumed to be well below the applicable public exposure limit.

 Provide the maximum effective radiated power per sector for the proposed installation. The p should be reported in watts and reported both as a total and broken down by frequency band. allation. The power The maximum effective radiated power proposed from each antenna group is shown in the table below. Power has been reduced in certain groups to keep exposure levels at nearby buildings below the public limit

HAMMETT & EDISON, INC. CONSULTING ENGINEERS

V8YP.2 Page 1 of 5

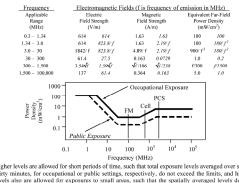
V8YP.2 Page 5 of 5

V8YP.2 Page 2 of 5

#### FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE CS-05.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits paph for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure tions, with the latter limits (in italics and/or dashed) up to five times more restricti



Frequency (MHz) Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain in frequined to obtain more accurate projections. terrain, if required to obtain more accurate projections.

#### HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN REAKCISCO (2019)

## AT&T Mobility • Proposed Base Station (Site No. CCL05718) 5140 Geary Boulevard • San Francisco, California FA No. 10240518, USID No. 225832, PA No. 3701A0DMAS

	Maximum Effective Radiated Power					
Band	10°T	80°T	172°T	265°T		
WCS	1,030	3,210	4,130	3,210 watts		
AWS	1,780	5,280	7,120	5,280		
PCS	6,530	4,620	6,530	4,620		
Cellular	840	1,800	3,360	1,800		
700 MHz	4,240	4,320	7,700	4,320		
	14.420	19.230	28.840	19.230 watts		

7. Describe the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area.

The maximum calculated level at any nearby building is 99% of the public exposure limit; this oc at the roof of the residence located to the north, about 40 feet away.

8. Report the estimated cumulative radio frequency fields for the proposed site at ground level. For a person anywhere at ground, the maximum RF exposure level due to the proposed AT&T operation is calculated to be 0.37 mW/cm<sup>2</sup>, which is 72% of the applicable public exposure limit. Cumulative RF levels at ground level near the site are therefore estimated to be well below the applicable public limit.

9. Provide the maximum distance (in feet) the three dimensional perimeter of the radio frequency nergy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas.

The three-dimensional perimeters of RF levels equal to the public and occupational exposure limits are calculated to extend up to 80 and 33 feet out from the antenna faces, respectively, and to much lesser distances above below and to the sides: this does not reach any publicly accessible areas

10. Provide a description of whether or not the public has access to the antennas. Describe any existing or proposed warning signs, barricades, barriers, rooftop striping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted atom laws. standards.

It is recommended that barricades be erected, as shown in Figure 3, to preclude inadvertent access by unauthorized persons to areas in front of the antennas. It is recommended that measurements be conducted at the roof of the residence to the north when modifications are complete, in order to confirm that actual exposure levels there do comply with the FCC public exposure limits.

To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use and lockout/tagout procedures, be provided to all authorized personnel who have access to the structure, including employees and contractors of AT&T and of the property owner. No access within 33 feet directly in

HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO (2019)

V8YP.2 Page 3 of 5

#### RFR.CALC<sup>™</sup> Calculation Methodology

#### Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all scures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

#### Near Field.

A CONSULTING ENGINEERS

Near Field. Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidrectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

$$\label{eq:star} \text{For a panel or whip antenna. power density} \quad S = \frac{180}{\theta_{\text{BW}}} \times \frac{0.1 \times P_{\text{net}}}{\pi \times D \times h}, \ \text{in $mW/\text{cm}^2$}.$$

and for an aperture antenna, maximum power density  $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi + 12}$ , in mW/cm<sup>2</sup>,

- - h = aperture height of antenna, in meters, and

= aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of nower density

Far Field OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density  $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times 100 \times RFF^2}$ , in mW/cm<sup>2</sup>,

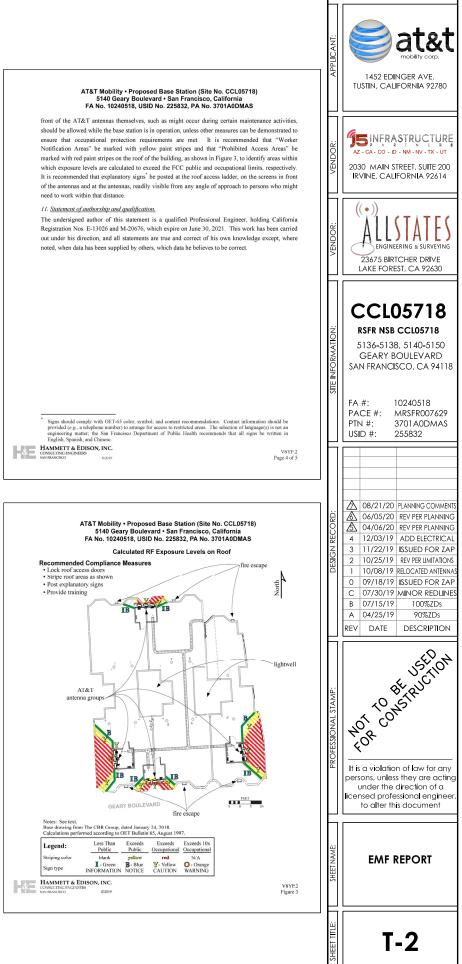
 $4 \times \pi \times D^2$ where ERP = total ERP (all polarizations), in kilowatts,

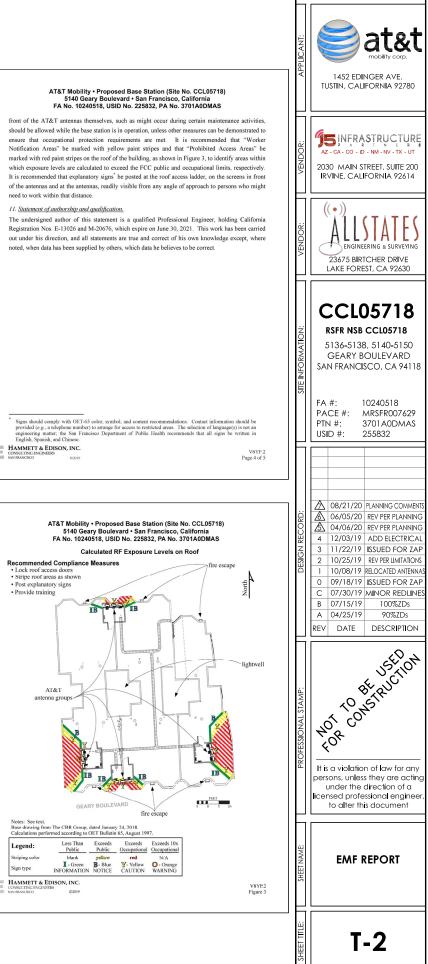
 $\label{eq:resonance} \begin{array}{l} \text{RFF} & \text{three-dimensional relative field factor toward point of calculation, and} \\ D & \text{distance from antenna effective height to point of calculation, in meters.} \end{array}$ 

The factor of 2.56 accounts for the increase in power density of the to accutation, in metrics. The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula is used in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency sources. The program also allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings, to obtain more accurate projections.



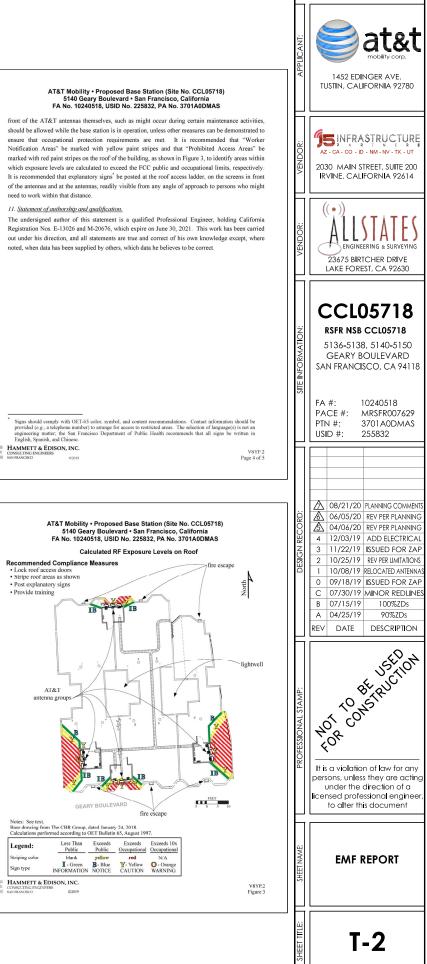
which exposure levels are calculated to exceed the FCC public and occupational limits, respectively

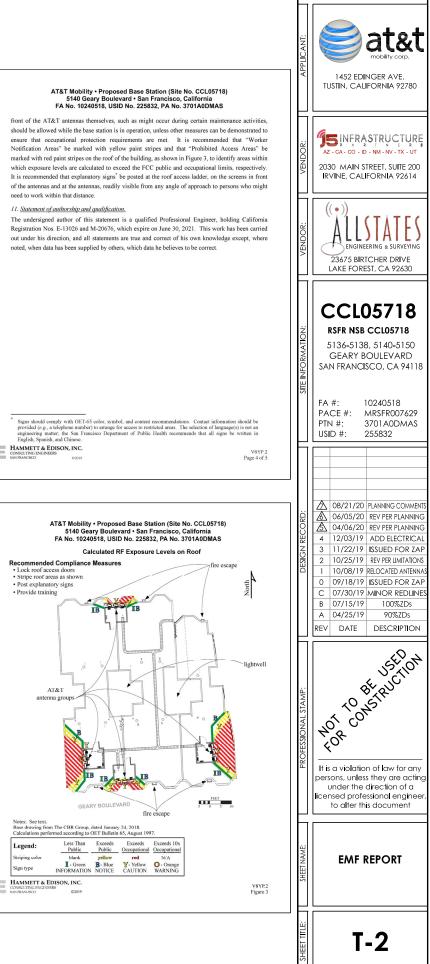


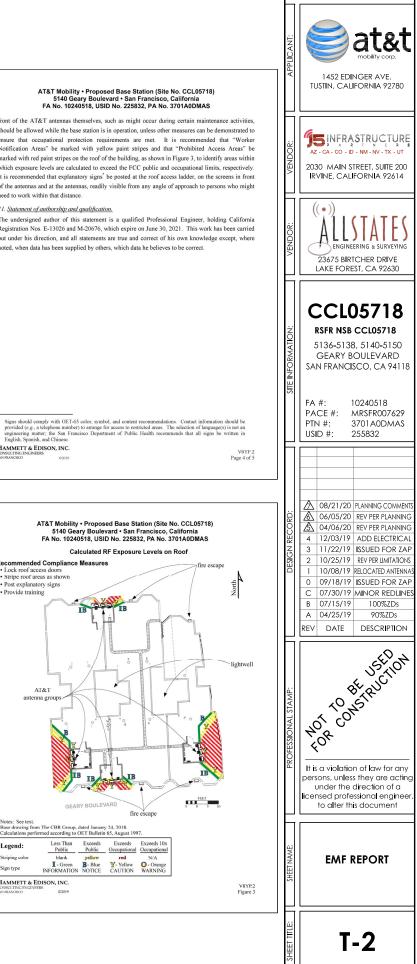


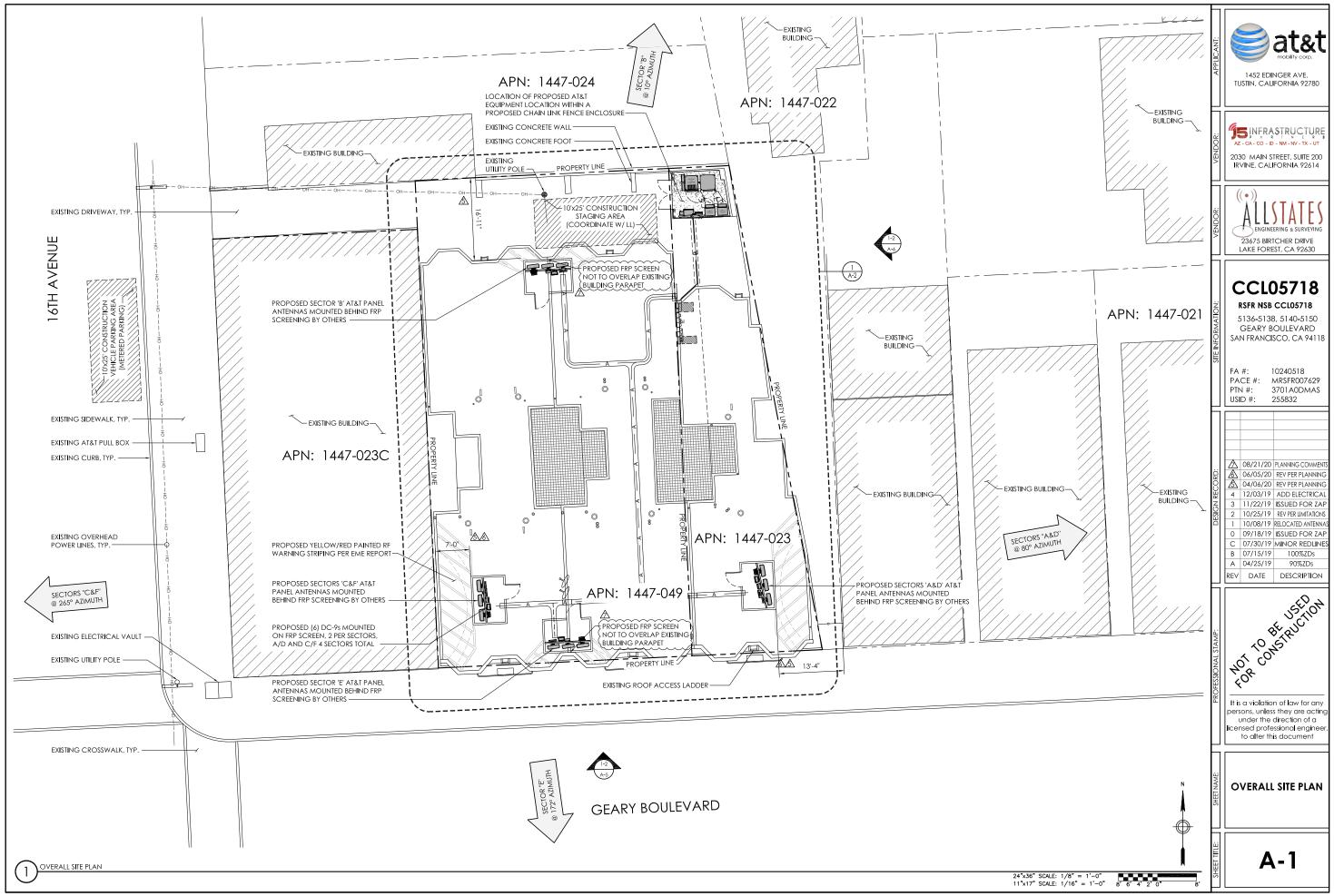


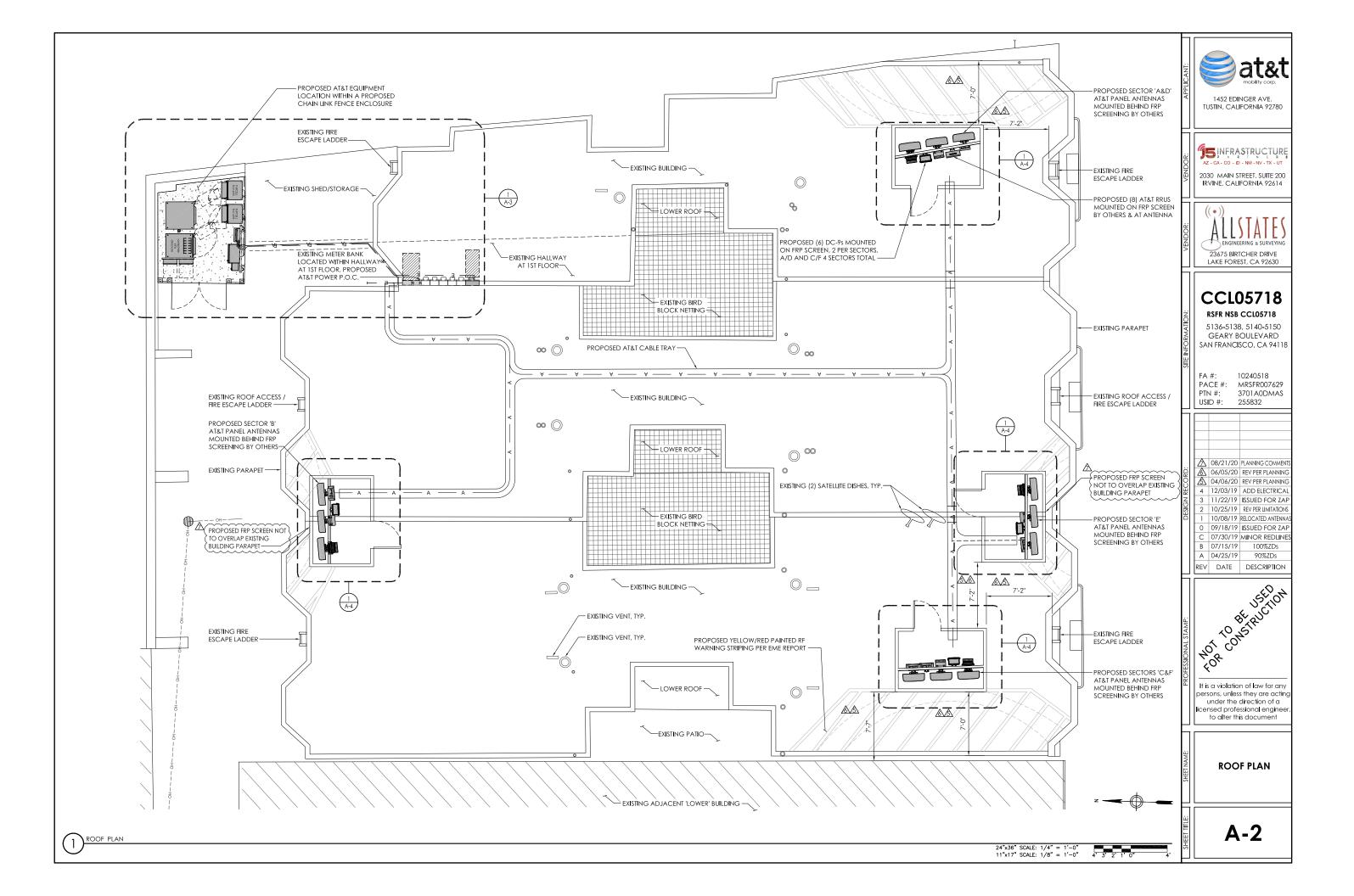
Methodology Figure 2

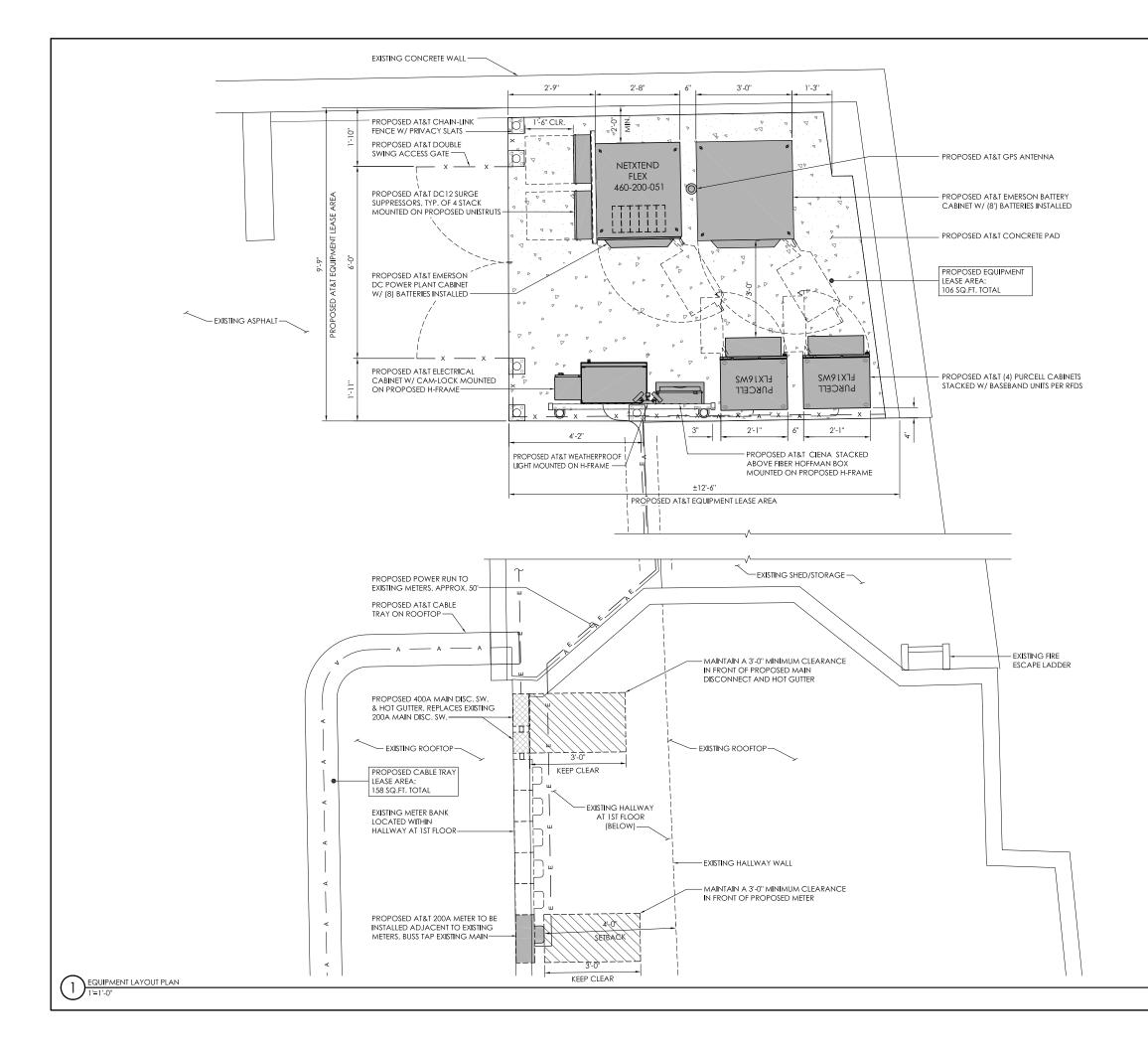


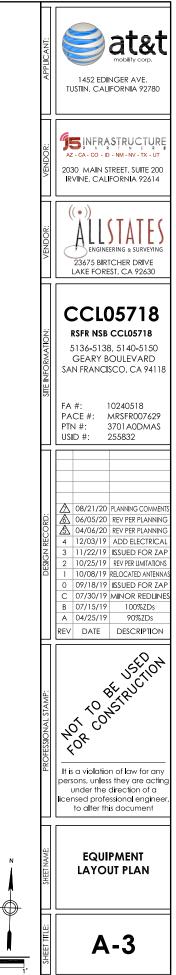


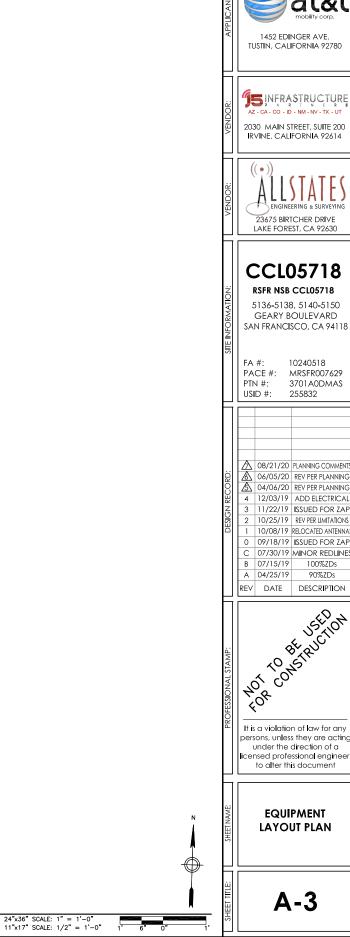




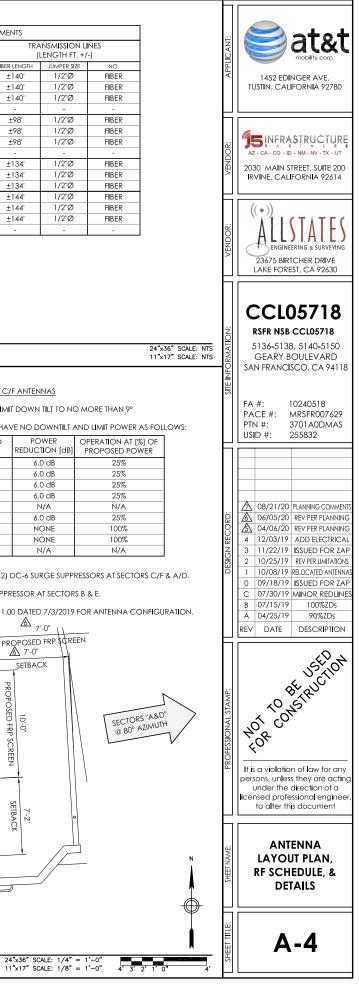




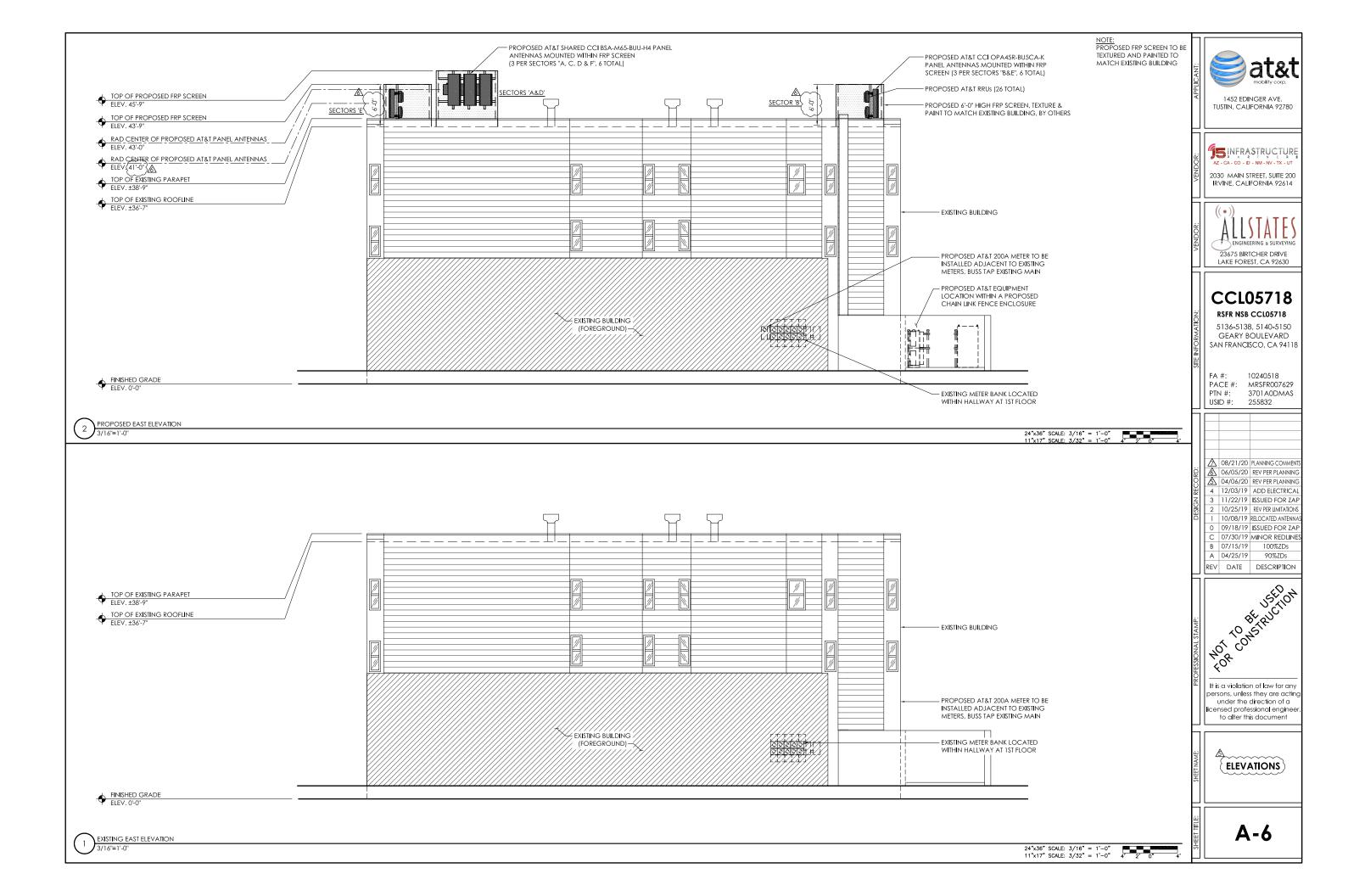


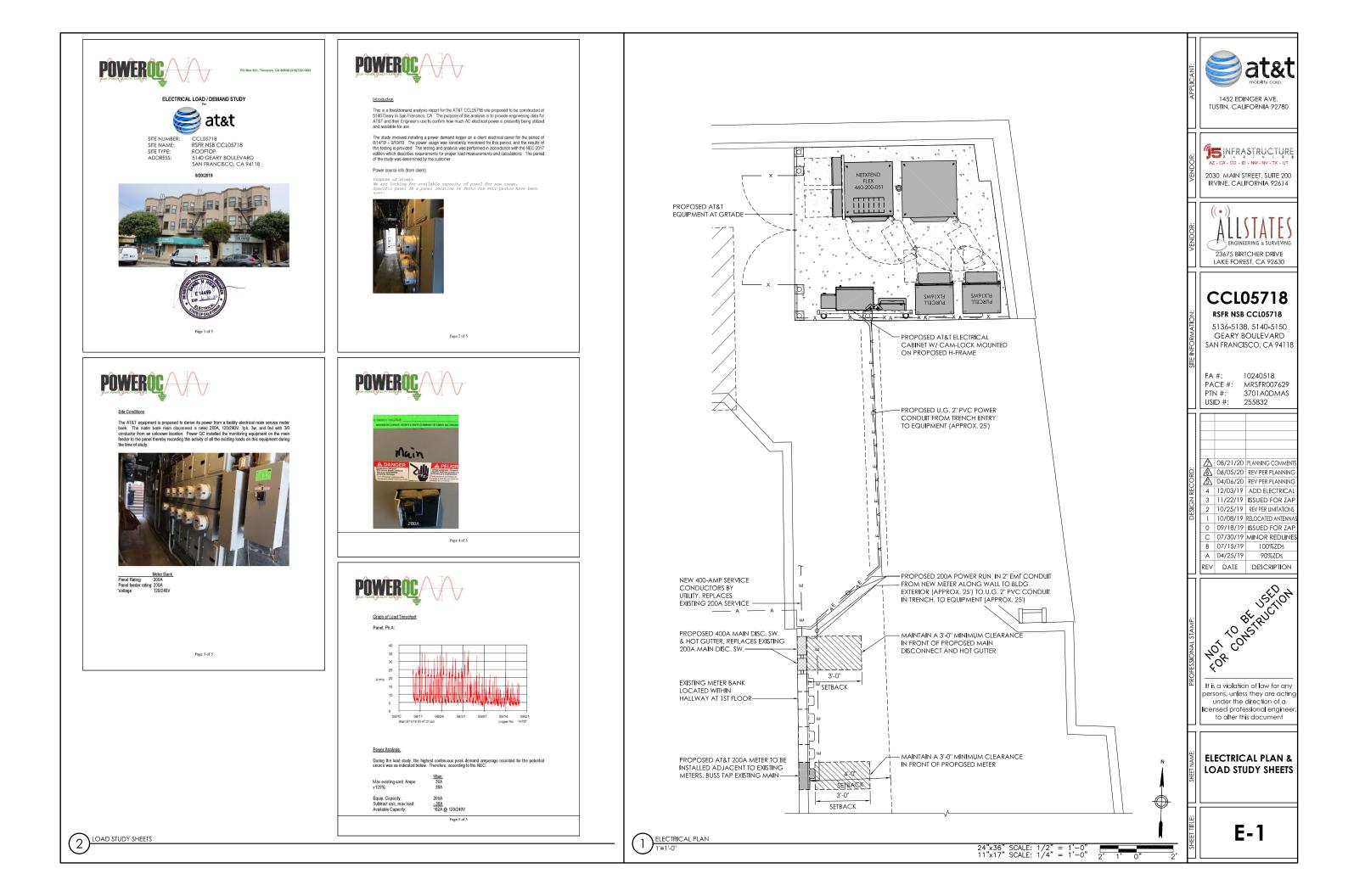


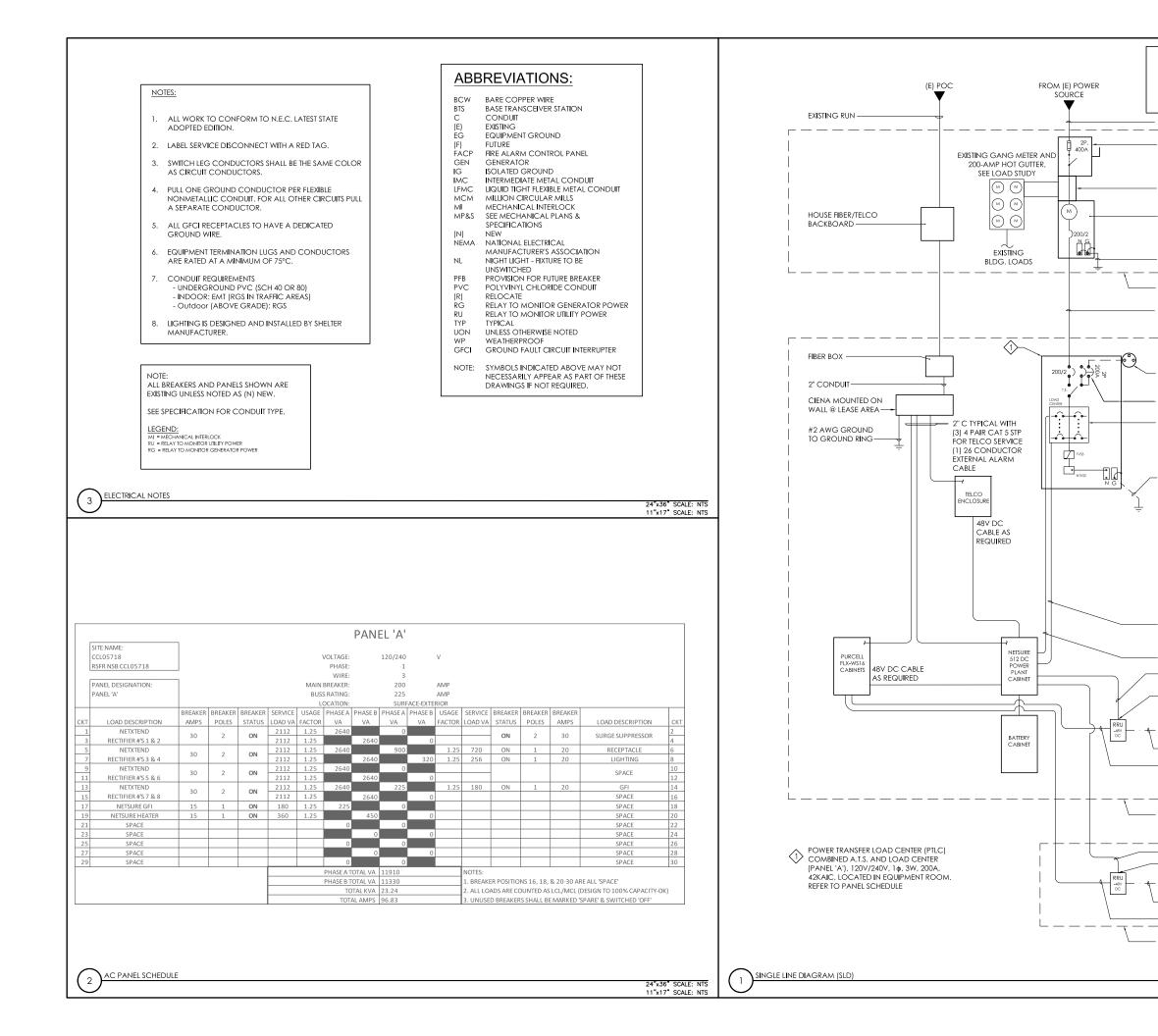
PROPOSED	RRU LOCATION         MINIMUM CLEARANCES           (DISTANCE FROM ANTENNA)         ABOVE         BELOW         SIDES	SECTOR RRU TYPE	RRU LOCATION MINIMUM CLEA		FINAL ANT	TENNA & TRANSMISSION CABLE RI	EQUIREMENT
POS.1 4449 B5/B12	UP ±10'-0" 16" 12" 8"	POS.1 4449 B5/B12	UP ±10'-0" 16" 12"	8" SECTOR	TECHNOLOGY	ANTENNA SIZE AZIM	NUTH
POS.1 8843 B2/B66 POS.2 4478 B14	UP         ±10'-0"         16"         12"         8"           UP         ±10'-0"         16"         12"         8"	POS.1 8843 B2/B66 POS.2 4478 B14	UP         ±10'-0"         16"         12"           UP         ±10'-0"         16"         12"	8" 8" 90 = POS. 1		MFR./MODEL # 41 80	FIBER LEN
□         POS.2         4478 B14           ○         POS.2         8843 B25/B66           ✓         POS.3         RRUS E2 B29	UP         ±10'-0"         16"         12"         8"           UP         ±10'-0"         16"         12"         8"	U         POS.2         4478 B14           V         POS.2         8843 B25/B66           V         POS.3         RRUS E2 B29           V         POS.3         4415 B30	UP         ±10'-0"         16"         12"           UP         ±10'-0"         16"         12"	8" 8" 8" 8" 8" 8" 8" 8" 8" 8"		IBSA-M65R-BUU-H4-K 4' 80	
POS.3 4415 B30	UP         ±10'-0"         16"         12"         8"           UP         ±10'-0"         16"         12"         8"	POS.3 4415 B30	UP         ±10'-0"         16"         12"           UP         ±10'-0"         16"         12"	8" POS. 3 POS. 4	LTE 700/ LTE WCS CCI I	IBSA-M65R-BUU-H4-K 4' 80	)° ±14
POS.3 RRUS E2 B29 POS.3 4415 B30	UP         ±10'-0"         16"         12"         8"           UP         ±10'-0"         16"         12"         8"	POS.3 RRUS E2 B29 POS.3 4415 B30	UP         ±10'-0"         16"         12"           UP         ±10'-0"         16"         12"	8" P1		CI OPA45R-BU5CA-K 4'-7" 10	)° ±98
RRU TYPE	RRU LOCATION MINIMUM CLEARANCES	103.5 4415 830		8" 2 B2 D B2 B3 B4		CI OPA45R-BU5CA-K 4'-7" 10 CI OPA45R-BU5CA-K 4'-7" 10	
PROPOSED POS.1 4449 B5/B12	(DISTANCE FROM ANTENNA)         ABOVE         BELOW         SIDES           UP         ±10'-0"         16"         12"         8"			D4			
POS.1 8843 B2/B66	UP ±10'-0" 16" 12" 8"			р С С Ц Ц Ц Ц Ц Е 1 Е 2		CI OPA45R-BU5CA-K 4'-7" 172 CI OPA45R-BU5CA-K 4'-7" 172	
POS.2 4478 B14 POS.3 RRUS E2 B29	UP         ±10'-0"         16"         12"         8"           UP         ±10'-0"         16"         12"         8"			U F E3	LTE 700/ LTW WCS CCI	CI OPA45R-BU5CA-K 4'-7" 172	
POS.3 4415 B30 RRU TYPE	UP         ±10'-0"         16"         12"         8"           RRULOCATION         MINIMUM CLEARANCES			22 <u>□</u> 0 <u>∞</u> POS. 1 POS. 2		IBSA-M65R-BUU-H4-K 4' 26. IBSA-M65R-BUU-H4-K 4' 26.	
SECTOR PROPOSED	(DISTANCE FROM ANTENNA) ABOVE BELOW			입 등 POS. 3		IBSA-M65R-BUU-H4-K 4' 26	
POS.1 4449 B5/B12 Z POS.1 8843 B2/B66	UP         ±10'-0''         16''         12''         8''           UP         ±10'-0''         16''         12''         8''			∽ = POS. 4	-		-
O 1 00.1 00 00 00 00 00 00 00 00 00 00 00 00 00	UP ±10'-0" 16" 12" 8"	NOTES TO CONTRACTO	DR:				
	UP         ±10'-0"         16"         12"         8"           UP         ±10'-0"         16"         12"         8"		O REFER TO AT&I'S MOST CURRENT RADIO				
			SHEET (RFDS) PRIOR TO CONSTRUCTION. /ERE DETERMINED BASED ON VISUAL				
		INSPECTION DURIN	NG SITE-WALK. CONTRACTOR TO VERIFY DURING PRE-CONSTRUCTION WALK.				
		ACTUAL LENGTH D	JURING PRE-CONSTRUCTION WALK.				
NTS							
PROPOSED LEASE AREAS:		ED FRP SCREEN		EXISTING ROOF		LIMITATIONS TO SECTORS	BAND C/FA
PROPOSED SECTOR 'A' & 'D'					.PET	ANTENNAS AT SECTOR C	
LEASE AREA: 70 SQ.FT. TOTAL		ROOF ACCESS /	10'-0" PROPOSED FRP SCREEN			ANTENNAS AT SECTOR B	
PROPOSED SECTOR 'B'	A DR FIRE ESCA	APE LADDER	3'-0" 3'-0"				
LEASE AREA:	NUTH B					CARRIER	OWER R
70 SQ.FT. TOTAL							00 W 80 W
PROPOSED SECTOR 'C' & 'F' LEASE AREA:		ed at&t cci Bu5ca-k panel antennas				AWS 1	60 W
70 SQ.FT. TOTAL		D WITHIN FRP SCREEN CTORS "B & E", 6 TOTAL)					60 W N/A
PROPOSED SECTOR 'E' LEASE AREA:		/				700 1C 1	60 W
70 SQ.FT. TOTAL		ED AT&T RRUS TOR E, 26 TOTAL)					60 W
PROPOSED CABLE TRAY		ED AT&T DC-9 SURGE SUPPRESSOR	2'-0" 3'-0" 5'-0" 9		<u> </u>		N/A
LEASE AREA: 158 SQ.FT. TOTAL		D ON PROPOSED FRP SCREEN TED HERE, 6 TOTAL), SEE NOTES	<u>2'-0'</u> <u>3'-0''</u> <u>5'-0''</u> <u>0</u>	∽		NOTES:	
						1. CONTRACTOR TO IN	
	200					<ol><li>INSTALL (1) DC-6 SUF</li></ol>	
			<u>0</u>				
			C) REE Z			3. PLEASE REFER TO RFI	DS REV 1.00 [
					11	3. PLEASE REFER TO RF	
		۵				3. PLEASE REFER TO RF	DS REV 1.00 [
	7=0	A SCREEN		BSA-M65-B	D AT&T SHARED CCI UU-HA PANEL ANTENNAS	3. PLEASE REFER TO RF	PROF
	7'-0" PROPOSED FRP	-		BSA-M65-B		3. PLEASE REFER TO RF	PROF
	7=0	-		BSA-M65-B	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN	3. PLEASE REFER TO RF	PROF
	7=0	-		ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) —    D AT&T DC-9 SURGE SUPPRESS(		PROF
	7=0	-		ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) —	OR	PROF
	7=0	-	PROPOSED 10	ATELLITE DISHES, TYP.	UU-HA PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — UD AT&T DC-9 SURGE SUPPRESSO ON PROPOSED FRP SCREEN		PROF
4	PROPOSED AT&T SHARED CCI	-	PROPOSED 10	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — D AT&T DC-9 SURGE SUPPRESSO O N PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- A A A A D (4) 7-0" HIGH FRP SCREEN	OR	PROF
SECTORS "C&F"	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN	SCREEN	PROPOSED TO A STORY A	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL)	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS	SCREEN	PROPOSED 10	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — D AT&T DC-9 SURGE SUPPRESS( ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F', 6 TOTAL)	SCREEN	PROPOSED TO A STORY A	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — AT&T DC-9 SURGE SUPPRESSO O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- ED HERE, 6 TOTAL), SEE NOTES- D (4) 7-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS I	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F", 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN	SCREEN	PROPOSED FROM A 5'-0'	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — U D AT&T DC-9 SURGE SUPPRESS( O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- CON PROPOSED FRP SCREEN D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS 1 D AT&T RRUS	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F", 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN (2 MOUNTED HERE, 6 TOTAL), SEE NOTES	SCREEN	PROPOSED FROM A 5'-0'	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — U D AT&T DC-9 SURGE SUPPRESS( O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- CON PROPOSED FRP SCREEN D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS 1 D AT&T RRUS	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F", 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN (2 MOUNTED HERE, 6 TOTAL), SEE NOTES PROPOSED AT&T RRUS (8 AT SECTORS C & F, 26 TOTAL)	SCREEN	PROPOSED FRP SCREEN	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — U D AT&T DC-9 SURGE SUPPRESS( O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- CON PROPOSED FRP SCREEN D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS 1 D AT&T RRUS	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F', 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN (2 MOUNTED HERE, 6 TOTAL), SEE NOTES PROPOSED AT&T RRUS (8 AT SECTORS C & F, 26 TOTAL)	SCREEN	PROPOSED FRP SCREEN	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — U D AT&T DC-9 SURGE SUPPRESS( O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- CON PROPOSED FRP SCREEN D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS 1 D AT&T RRUS	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F', 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN (2 MOUNTED HERE, 6 TOTAL), SEE NOTES PROPOSED AT&T RRUS (8 AT SECTORS C & F, 26 TOTAL)	SCREEN	PROPOSED FRP SCREEN	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — U D AT&T DC-9 SURGE SUPPRESS( O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- CON PROPOSED FRP SCREEN D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS 1 D AT&T RRUS	OR	PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F', 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN (2 MOUNTED HERE, 6 TOTAL), SEE NOTES PROPOSED AT&T RRUS (8 AT SECTORS C & F, 26 TOTAL)	SCREEN	PROPOSED FRP SCREEN	ATELLITE DISHES, TYP.	UU-HA PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — D AT&T DC-9 SURGE SUPPRESSC O N PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- COMPROPOSED FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS D AT&T RRUS ORS A & D, 26 TOTAL)		PROF
SECTORS "C&F" @ 265° AZIMUTH	PROPOSED AT&T SHARED CCI BSA-M65-BUU-H4 PANEL ANTENNAS MOUNTED WITHIN FRP SCREEN (3 PER SECTORS "A, C, D & F", 6 TOTAL) PROPOSED AT&T DC-9 SURGE SUPPRESSOR MOUNTED ON PROPOSED FRP SCREEN (2 MOUNTED HERE, 6 TOTAL), SEE NOTES PROPOSED AT&T RRUS (8 AT SECTORS C & F, 26 TOTAL)	SCREEN	PROPOSED FRP SCREEN	ATELLITE DISHES, TYP.	UU-H4 PANEL ANTENNAS WITHIN FRP SCREEN TORS "A, C, D & F", 6 TOTAL) — U D AT&T DC-9 SURGE SUPPRESS( O ON PROPOSED FRP SCREEN ED HERE, 6 TOTAL), SEE NOTES- CON PROPOSED FRP SCREEN D (4) 7'-0" HIGH FRP SCREEN PAINTED TO MATCH SUILDING, BY OTHERS 1 D AT&T RRUS		PROF











KVA LOAD CALC:			
TOTAL DESIGN CURRENT:       ±100A         SERVICE VOLTAGE:       240V         TOTAL CONNECTED LOAD:       ±24KVA		APPLICANT	dlæl
(E) CABLES BY UTILITY CO.			1452 EDINGER AVE. TUSTIN, CALIFORNIA 92780
NEW 2P, 400A MAIN DISC. SWITCH, NEMA 1 (SQ. D #H225 OR APVD. EQ.) REPLACES OLD 200A MAIN DISC. SW.			
NEW 400A NEMA 1 HOT-GUTTER		VENDOR:	AZ - CA - CO - ID - NM - NV - TX - UT
NEW 200A, 120/240V, 1Ø, 3W METER/MAIN DISCONNECT; 4 -CLIP W/ TEST-BLOCK BYPASS (B-LINE 224 MTB OR APPROVED EQUAL)			
AWG #2 TO 5/8"Ø x 10"L GROUND ROD		ENDOR:	ALLSTATES
GROUND FLOOR BUILDING UTILITY AREA		VEN VEN	23675 BIRTCHER DRIVE
2" C (3) #3/0, (1) #4 GROUND, APPROX. 50' FT. (VD=0.7%)		H	LAKE FOREST, CA 92630
			CCL05718
GENERATOR CONNECTION (OPTION)		MATION:	<b>RSFR NSB CCL05718</b> 5136-5138, 5140-5150 GEARY BOULEVARD
MECHANICAL INTERLOCK		<b>INFORMAT</b>	San Francisco, ca 94118
SEE PANEL SCHEDULE		SITE	FA #: 10240518
			PACE #: MRSFR007629 PTN #: 3701A0DMAS USID #: 255832
#2 GROUNDING ELECTRODE CONDUCTOR TO MASTER		F	
GROUND BAR			
1 1/2°C - (10) #8 + 5 #10 GND 2 #12 + 1 #12 GND; L=±55' 3/4°C - 2 #12 + 1 #12 GND; L=±55'		DESIGN RECORD:	Image: Constraint of the second sec
48V DC CABLE AS REQUIRED			July 1
SEE PLAN FOR NUMBER OF RRU'S AND CABLE RUNS		PROFESSIONAL STAMP:	REV DATE DESCRIPTION
AT&T EQUIPMENT AT GRADE (NE COR. OF	PROPERTY)		persons, unless they are acting under the direction of a licensed professional engineer, to alter this document
48V DC CABLE AS REQUIRED		Π	
SEE PLAN FOR NUMBER OF RRU'S AND CABLE RUNS		EET NAME:	SINGLE-LINE DIAGRAM & PANEL
COAX TO SECTORS 'B' & 'C' ANTENNAS		SHEET	SCHEDULE
		H	
	"F' SCREENING) "x36" scale: nts "x17" scale: nts	SHEET TITLE:	E-2





HOTOSIMULATION INSTALLATION OF (12) ANTENNAS, (26) RRUS INSIDE (4) PROPOSED FRP ENCLOSURES









PHOTOSIMULATION INSTALLATION OF (12) ANTENNAS, (26) RRUS INSIDE (4) PROPOSED FRP ENCLOSURES



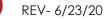






HOTOSIMULATION INSTALLATION OF (12) ANTENNAS, (26) RRUS INSIDE (4) PROPOSED FRP ENCLOSURES



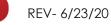


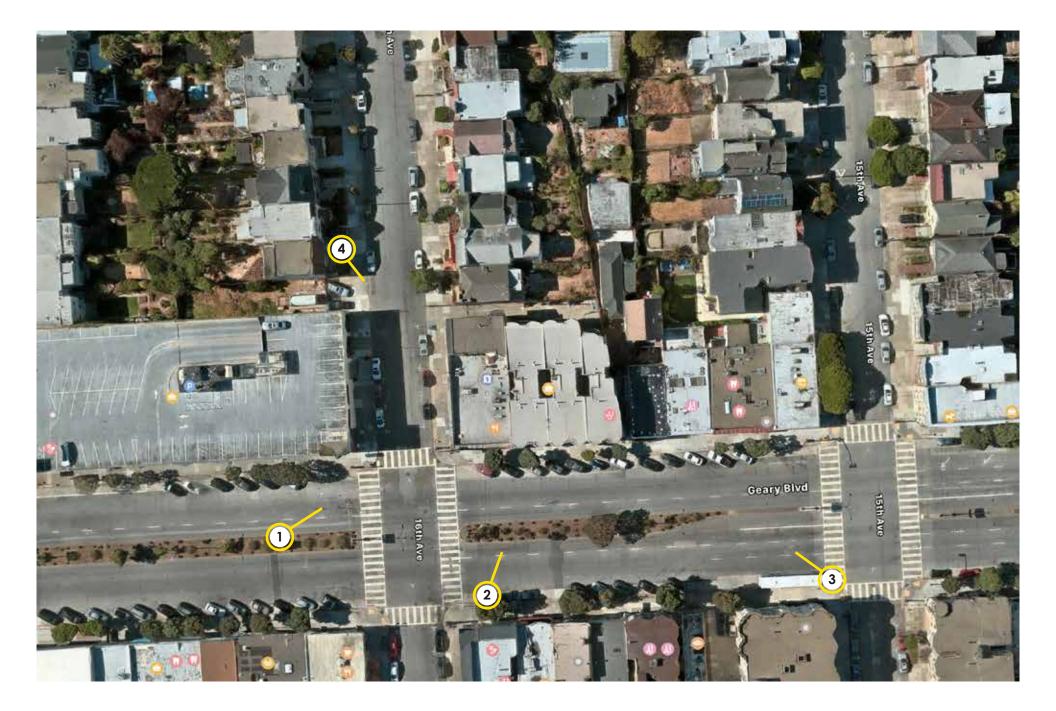




PHOTOSIMULATION INSTALLATION OF (12) ANTENNAS, (26) RRUS INSIDE (4) PROPOSED FRP ENCLOSURES











## SAN FRANCISCO PLANNING DEPARTMENT

## **CEQA Categorical Exemption Determination**

#### **PROPERTY INFORMATION/PROJECT DESCRIPTION**

Project Address		Block/Lot(s)		
5140 Geary Boulevard		1447049		
Case No.		Permit No.		
2020-000620PRJ				
Addition/	Demolition (requires HRE for	New		
Alteration	Category B Building)	Construction		
Project description for Planning Department approval.				
The Project includes installation of twelve (12) panel antennas as part of the AT&T Mobility Telecommunications				
Network. Antennas and	ancillary equipment will be screened within four (4	) FRP boxes. Additional ancillary		
equipment will be propose	sed at ground level at the rear of the subject buildi	ng.		

#### **STEP 1: EXEMPTION CLASS**

-	The project has been determined to be categorically exempt under the California Environmental Quality Act (CEQA).				
	Class 1 - Existing Facilities. Interior and exterior alterations; additions under 10,000 sq. ft.				
	<b>Class 3 - New Construction.</b> Up to three new single-family residences or six dwelling units in one building; commercial/office structures; utility extensions; change of use under 10,000 sq. ft. if principally permitted or with a CU.				
	<ul> <li>Class 32 - In-Fill Development. New Construction of seven or more units or additions greater than 10,000 sq. ft. and meets the conditions described below:</li> <li>(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.</li> <li>(b) The proposed development occurs within city limits on a project site of no more than 5 acres substantially surrounded by urban uses.</li> <li>(c) The project site has no value as habitat for endangered rare or threatened species.</li> <li>(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.</li> <li>(e) The site can be adequately served by all required utilities and public services.</li> <li>FOR ENVIRONMENTAL PLANNING USE ONLY</li> </ul>				
	Class				

#### STEP 2: CEQA IMPACTS TO BE COMPLETED BY PROJECT PLANNER

	<b>Air Quality:</b> Would the project add new sensitive receptors (specifically, schools, day care facilities, hospitals, residential dwellings, and senior-care facilities within an Air Pollution Exposure Zone? Does the project have the potential to emit substantial pollutant concentrations (e.g., backup diesel generators, heavy industry, diesel trucks, etc.)? ( <i>refer to EP_ArcMap &gt; CEQA Catex Determination Layers &gt; Air Pollution Exposure Zone</i> )				
	<ul> <li>Hazardous Materials: If the project site is located on the Maher map or is suspected of containing hazardous materials (based on a previous use such as gas station, auto repair, dry cleaners, or heavy manufacturing, or a site with underground storage tanks): Would the project involve 50 cubic yards or more of soil disturbance - or a change of use from industrial to residential?</li> <li>Note that a categorical exemption shall not be issued for a project located on the Cortese List if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Maher program, a DPH waiver from the Maher program, or other documentation from Environmental Planning staff that hazardous material effects would be less than significant (refer to EP_ArcMap &gt; Maher layer).</li> </ul>				
	<b>Transportation:</b> Does the project involve a child care facility or school with 30 or more students, or a location 1,500 sq. ft. or greater? Does the project have the potential to adversely affect transit, pedestrian and/or bicycle safety (hazards) or the adequacy of nearby transit, pedestrian and/or bicycle facilities?				
	Archeological Resources: Would the project result in soil disturbance/modification greater than two (2) feet below grade in an archeological sensitive area or eight (8) feet in a non-archeological sensitive area? If yes, archeo review is required ( <i>refer to EP_ArcMap &gt; CEQA Catex Determination Layers &gt; Archeological Sensitive Area</i> )				
	<b>Subdivision/Lot Line Adjustment:</b> Does the project site involve a subdivision or lot line adjustment on a lot with a slope average of 20% or more? ( <i>refer to EP_ArcMap &gt; CEQA Catex Determination Layers &gt; Topography</i> ). If yes, Environmental Planning must issue the exemption.				
	Slope = or > 25%: Does the project involve any of the following: (1) square footage expansion greater         than 500 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of         soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography) If box is         checked, a geotechnical report is required and Environmental Planning must issue the exemption.				
	<b>Seismic: Landslide Zone:</b> Does the project involve any of the following: (1) square footage expansion greater than 500 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) <b>If box is checked, a geotechnical report is required and Environmental Planning must issue the exemption.</b>				
	Seismic: Liquefaction Zone: Does the project involve any of the following: (1) square footage expansion greater than 500 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report will likely be required and Environmental Planning must issue the exemption.				
Com	ments and Planner Signature (optional): Ashley Lindsay				

## STEP 3: PROPERTY STATUS - HISTORIC RESOURCE

TO BE COMPLETED BY PROJECT PLANNER

PROP	PROPERTY IS ONE OF THE FOLLOWING: (refer to Property Information Map)		
	Category A: Known Historical Resource. GO TO STEP 5.		
	Category B: Potential Historical Resource (over 45 years of age). GO TO STEP 4.		
	Category C: Not a Historical Resource or Not Age Eligible (under 45 years of age). GO TO STEP 6.		

#### STEP 4: PROPOSED WORK CHECKLIST

#### TO BE COMPLETED BY PROJECT PLANNER

Check	Check all that apply to the project.			
	1. Change of use and new construction. Tenant improvements not included.			
	2. Regular maintenance or repair to correct or repair deterioration, decay, or damage to building.			
	3. Window replacement that meets the Department's Window Replacement Standards. Does not include storefront window alterations.			
	4. Garage work. A new opening that meets the <i>Guidelines for Adding Garages and Curb Cuts</i> , and/or replacement of a garage door in an existing opening that meets the Residential Design Guidelines.			
	5. Deck, terrace construction, or fences not visible from any immediately adjacent public right-of-way.			
	6. <b>Mechanical equipment installation</b> that is not visible from any immediately adjacent public right-of-way.			
	7. <b>Dormer installation</b> that meets the requirements for exemption from public notification under <i>Zoning Administrator Bulletin No. 3: Dormer Windows</i> .			
	8. <b>Addition(s)</b> that are not visible from any immediately adjacent public right-of-way for 150 feet in each direction; does not extend vertically beyond the floor level of the top story of the structure or is only a single story in height; does not have a footprint that is more than 50% larger than that of the original building; and does not cause the removal of architectural significant roofing features.			
Note:	Project Planner must check box below before proceeding.			
	Project is not listed. GO TO STEP 5.			
	Project does not conform to the scopes of work. GO TO STEP 5.			
	Project involves four or more work descriptions. GO TO STEP 5.			
	Project involves less than four work descriptions. GO TO STEP 6.			

## STEP 5: CEQA IMPACTS - ADVANCED HISTORICAL REVIEW

#### TO BE COMPLETED BY PROJECT PLANNER

Chec	k all that apply to the project.		
	1. Project involves a <b>known historical resource (CEQA Category A)</b> as determined by Step 3 and conforms entirely to proposed work checklist in Step 4.		
	2. Interior alterations to publicly accessible spaces.		
	3. Window replacement of original/historic windows that are not "in-kind" but are consistent with existing historic character.		
	4. Façade/storefront alterations that do not remove, alter, or obscure character-defining features.		
	5. Raising the building in a manner that does not remove, alter, or obscure character-defining features.		
	6. <b>Restoration</b> based upon documented evidence of a building's historic condition, such as historic photographs, plans, physical evidence, or similar buildings.		

	7. Addition(s), including mechanical equipment that are minimally visible from a public right-of-way					
	and meet the Secretary of the Interior's Standa	rds for Rehabilitation.				
	8. <b>Other work consistent</b> with the Secretary of <i>Properties</i> (specify or add comments):	f the Interior Standards for the Treatment of Historic				
	9. Other work that would not materially impair a	a historic district (specify or add comments):				
	(Requires approval by Senior Preservation Planner/Preservation Coordinator)					
	10. <b>Reclassification of property status</b> . (Requires approval by Senior Preservation Planner/Preservation					
	Reclassify to Category A	Reclassify to Category C				
	a. Per HRER or PTR dated	(attach HRER or PTR)				
	b. Other <i>(specify)</i> :					
	Note: If ANY box in STEP 5 above is	checked, a Preservation Planner MUST sign below.				
	Project can proceed with categorical exemption review. The project has been reviewed by the Preservation Planner and can proceed with categorical exemption review. GO TO STEP 6.					
Propos	<b>Comments (optional):</b> Proposal conforms with SOIS (proportions, materials, and dimensions) including minimally visible enclosures for wireless equipment on rooftop.					
Preser	rvation Planner Signature: Natalia Kwia	tkowska				
	STEP 6: CATEGORICAL EXEMPTION DETERMINATION TO BE COMPLETED BY PROJECT PLANNER					

Project Approval Action:	Signature:
Planning Commission Hearing	Ashley Lindsay
	08/25/2020

Please note that other approval actions may be required for the project. Please contact the assigned planner for these approvals.

#### STEP 7: MODIFICATION OF A CEQA EXEMPT PROJECT

#### TO BE COMPLETED BY PROJECT PLANNER

In accordance with Chapter 31 of the San Francisco Administrative Code, when a California Environmental Quality Act (CEQA) exempt project changes after the Approval Action and requires a subsequent approval, the Environmental Review Officer (or his or her designee) must determine whether the proposed change constitutes a substantial modification of that project. This checklist shall be used to determine whether the proposed changes to the approved project would constitute a "substantial modification" and, therefore, be subject to additional environmental review pursuant to CEQA.

#### MODIFIED PROJECT DESCRIPTION

Modified Project Description:

#### DETERMINATION IF PROJECT CONSTITUTES SUBSTANTIAL MODIFICATION

Compared to the approved project, would the modified project:			
	Result in expansion of the building envelope, as defined in the Planning Code;		
	Result in the change of use that would require public notice under Planning Code Sections 311 or 312;		
	Result in demolition as defined under Planning Code Section 317 or 19005(f)?		
	Is any information being presented that was not known and could not have been known at the time of the original determination, that shows the originally approved project may no longer qualify for the exemption?		
lf at l	If at least one of the above boxes is checked, further environmental review is required.		

#### DETERMINATION OF NO SUBSTANTIAL MODIFICATION

The proposed modification would not result in any of the above changes.					
approv website with Ch	If this box is checked, the proposed modifications are categorically exempt under CEQA, in accordance with prior project approval and no additional environmental review is required. This determination shall be posted on the Planning Department website and office and mailed to the applicant, City approving entities, and anyone requesting written notice. In accordance with 10 with Chapter 31, Sec 31.08j of the San Francisco Administrative Code, an appeal of this determination can be filed within 10 days of posting of this determination.				
Plani	Planner Name: Date:				



## SAN FRANCISCO PLANNING DEPARTMENT

# Land Use Information\*

PROJECT ADDRESS: 5140-5150 GEARY BLVD RECORD NO.: 2020-000620CUA 1650 Mission St. Suite 400 San Francisco, CA 94103-2479

Reception: 415.558.6378

415.558.6409

Fax:

Planning Information: **415.558.6377** 

	EXISTING	PROPOSED	NET NEW
	GROSS SQUARE F	DOTAGE (GSF)	
Parking GSF			
Residential GSF	16,290	0	16,290
Retail/Commercial GSF			
Office GSF			
Industrial/PDR GSF Production, Distribution, & Repair			
Medical GSF			
Visitor GSF			
CIE GSF			
Usable Open Space			
Public Open Space			
Other(    )			
TOTAL GSF	16,290	0	16,290
	EXISTING	NET NEW	TOTALS
	PROJECT FEATURES (	Units or Amounts)	
Dwelling Units - Affordable			
Dwelling Units - Market Rate			
Dwelling Units - Total			
Hotel Rooms			
Number of Buildings			
Number of Stories			
Parking Spaces			
Loading Spaces			
Bicycle Spaces			
Car Share Spaces			
Other(    )			

	EXISTING	PROPOSED	NET NEW
LAND USE - RESIDENTIAL			
Studio Units			
One Bedroom Units			
Two Bedroom Units			
Three Bedroom (or +) Units			
Group Housing - Rooms			
Group Housing - Beds			
SRO Units			
Micro Units			
Accessory Dwelling Units			

\*This Land Use Table includes only information related to the installation of a wireless telecommunications facility use. This table does not include information about the entire building.



San Francisco City and County **Department of Public Health** 

London Breed, Mayor Grant Colfax, MD, Director of Health

Environmental Health Branch

Stephanie K.J. Cushing, MSPH, CHMM, REHS Director of Environmental Health

#### **Review of Cellular Antenna Site Proposals**

<b>Project Sponsor :</b> AT&T	Wireless Planner	r: <u>Ashley Lindsay</u>
<b>RF Engineer Consultant:</b>	Hammett & Edison	Phone Number: (707) 996-5200
Project Address/Location:	5140 Geary Blvd	
Site ID: 3449	SiteNo.: CCL05718	<b>Report Dated:</b> 11/26/2019

The following information is required to be provided before approval of this project can be made. These information requirements are established in the San Francisco Planning Department Wireless Telecommunications Services Facility Sitting Guidelines dated August 1996.

In order to facilitate quicker approval of this project, it is recommended that the project sponsor review this document before submitting the proposal to ensure that all requirements are included.

**X** 1. The location, identity and total number of all operational radiating antennas installed at this site was provided. (WTS-FSG, Section 10.4.1, Section 11, 2b)

Number of Existing Antennas: 0

- X 2. A list of all radiating antennas located within 100 feet of the site which could contribute to the cumulative radio frequency energy at this location was provided. (WTS-FSG, Section 10.5.2) • Yes  $\bigcirc$  No
- X 3. A narrative description of the proposed work for this project was provided. The description should be consistent with scope of work for the final installation drawings. (WTS-FSG, Section 10)

• Yes ○ No

- **X** 4. An inventory of the make and model of antennas or transmitting equipment being installed or removed was provided. The antenna inventory included the proposed installation height above the nearest walking/working surface, the height above ground level and the orientations of the antennas. (WTS-FSG, Section 10.5.2) • Yes  $\bigcirc$  No
- **X** 5. A description of the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level was provided. A description of any assumptions made when doing the calculations was also provided. (WTS-FSG, Section 10.4.1a, Section 10.4.1c, Section 10.5)

• Yes O No

**X** 6. The maximum effective radiated power per sector for the proposed installation was provided along with the frequency bands used by the antennas. (WTS-FSG, Section 10.1.2, Section 10.5.1)

Maximum Effective Radiated Power: 28840 Watts

- X 7. Based on the antenna orientation, the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area was provided. (WTS-FSG, Section 10.4, Section 10.5.1) Maximum percent of applicable FCC public standard at the nearest building or structure: 99 % 40 Distance to this nearby building or structure: feet
- **X** 8. The estimated maximum cumulative radio frequency fields for the proposed site at ground level. (WTS-FSG, Section 10.5) Maximum RF Exposure: 0.37 mW/cm<sup>2</sup>

Maximum RF Exposure Percent: 72 % **X** 9. The maximum distance (in feet) the three dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas was provided. Any potential walking/working surfaces exceeding regulatory standards were identified. (WTS-FSG, Section 10.9.2)

Public Exclusion Area	Public Exclusion In Feet:	80
Occupational Exclusion Area	Occupational Exclusion In Feet:	33

X 10. A description of whether or not the public has access to the antennas was provided. A description was also provided of any existing or proposed warning signs, barricades, barriers, rooftop stripping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards. All signs will be provided in English, Spanish and Chinese. (WTS-FSG, Section 9.5, Section 10.9.2)

● Yes ○ No

X 11. Statement regarding the engineer who produced the report and their qualifications was provided. The engineer is licensed in the State of California. (WTS-FSG, Section 11,8)

• Yes O No

X Approved. Based on the information provided the following staff believes that the project proposal will comply with the current Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC standard <u>CFR47 1.1310</u> Approval of the subsequent Project Implementation Report is based on project sponsor completing recommendations by project consultant and DPH.

#### Comments:

There are no antennas existing on the roof top of the building at 5140 Geary Blvd. Existing RF levels at ground level were around 1% of the FCC public exposure limit. No other antennas were observed within 100 feet of this site. AT&T Wireless proposes to install 12 new antennas. The antennas are mounted at a height of 43 feet above the ground and 5.5 feet above the roof. The estimated ambient RF field from the proposed AT&T Wireless transmitters at ground level is calculated to be 0.37 mW/sq cm., which is 72 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 80 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 33 feet of the front of the antennas while they are in operation. Barricades shall be installed as noted in RF report shown in Figure 3. Measurements shall be taken at the roof of the residence to the north when modifications are complete, in order to confirm that actual exposure levels there do comply with the FCC public exposure limits. In addition, meaurements shall also be taken at ground level to confirm exposure levels are within the FCC Public limit.

Not Approved, additional information required.

**Not Approved**, does not comply with Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC Standard

1 Hours spent reviewing

Charges to Project Sponsor (in addition to previous charges, to be received at time of receipt by Sponsor)

Signed:

Dated: 1/7/2020

Arthur Duque Environmental Health Management Section San Francisco Dept. of Public Health 1390 Market St., Suite 210, San Francisco, CA. 94102 (415) 252-3966

### Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a personal wireless telecommunications carrier, to evaluate the base station (Site No. CCL05718) proposed to be located at 5140 Geary Boulevard in San Francisco, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

### Background

The San Francisco Department of Public Health has adopted an 11-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable limits set by the FCC for exposures are shown in Figure 1. The most restrictive limit for exposures of unlimited duration at several wireless service bands are as follows:

	Transmit	"Uncontrolled"	Occupational Limit
Wireless Service Band	Frequency	Public Limit	(5 times Public)
Microwave (point-to-point)	1–80 GHz	$1.0 \text{ mW/cm}^2$	$5.0 \text{ mW/cm}^2$
Millimeter-wave	24–47	1.0	5.0
Part 15 (WiFi & other unlicensed)	2–6	1.0	5.0
CBRS (Citizens Broadband Radio)	3,550 MHz	1.0	5.0
BRS (Broadband Radio)	2,490	1.0	5.0
WCS (Wireless Communication)	2,305	1.0	5.0
AWS (Advanced Wireless)	2,110	1.0	5.0
PCS (Personal Communication)	1,930	1.0	5.0
Cellular	869	0.58	2.9
SMR (Specialized Mobile Radio)	854	0.57	2.85
700 MHz	716	0.48	2.4
600 MHz	617	0.41	2.05
[most restrictive frequency range]	30-300	0.20	1.0

#### Checklist

Reference has been made to information provided by AT&T, including zoning drawings by All States Engineering and Surveying, dated October 25, 2019. It should be noted that the calculation results in this Statement include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operations. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). This methodology is an



HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO ©2019

industry standard for evaluating RF exposure conditions and has been demonstrated through numerous field tests to be a conservative prediction of exposure levels.

1. <u>The location, identity, and total number of all operational radiating antennas installed at this site.</u>

There are reported no wireless base stations installed at the site.

2. <u>List all radiating antennas located within 100 feet of the site that could contribute to the cumulative radio frequency energy at this location.</u>

There are reported no other WTS facilities within 100 feet of the site.

3. <u>Provide a narrative description of the proposed work for this project.</u>

AT&T proposes to install twelve antennas. This is consistent with the scope of work described in the drawings for transmitting elements.

4. <u>Provide an inventory of the make and model of antennas or transmitting equipment being installed</u> <u>or removed.</u>

AT&T proposes to install twelve CCI directional panel antennas, six Model BSA-M65R-BUU-H4 and six Model OPA-45R-BUU5CA. The antennas would be mounted at an effective heights between 41 and 43 feet above ground, about 5½ feet above the roof, and would be oriented in groups of three toward 10°T, 80°T, 172°T, and 265°T. The 265°T and 352°T groups would employ up to 9° and 4° electrical downtilt, respectively; the remaining two groups would employ up to 18° downtilt. As indicated in the drawings, no mechanical downtilt would be employed.

5. <u>Describe the existing radio frequency energy environment at the nearest walking/working surface</u> to the antennas and at ground level. This description may be based on field measurements or calculations.

Because there are no antennas at the site presently, existing RF levels for a person on the roof near the proposed antenna locations and at ground near the site are presumed to be well below the applicable public exposure limit.

6. <u>Provide the maximum effective radiated power per sector for the proposed installation</u>. The power should be reported in watts and reported both as a total and broken down by frequency band.

The maximum effective radiated power proposed from each antenna group is shown in the table below. Power has been reduced in certain groups to keep exposure levels at nearby buildings below the public limit.



	<u> </u>	Maximum Effecti	ive Radiated Pow	ver
Band	10°T	80°T	172°T	265°T
WCS	1,030	3,210	4,130	3,210 watts
AWS	1,780	5,280	7,120	5,280
PCS	6,530	4,620	6,530	4,620
Cellular	840	1,800	3,360	1,800
700 MHz	4,240	4,320	7,700	4,320
	14,420	19,230	28,840	19,230 watts

7. <u>Describe the maximum cumulative predicted radio frequency energy level for any nearby publicly</u> <u>accessible building or area.</u>

The maximum calculated level at any nearby building is 99% of the public exposure limit; this occurs at the roof of the residence located to the north, about 40 feet away.

8. <u>Report the estimated cumulative radio frequency fields for the proposed site at ground level.</u>

For a person anywhere at ground, the maximum RF exposure level due to the proposed AT&T operation is calculated to be  $0.37 \text{ mW/cm}^2$ , which is 72% of the applicable public exposure limit. Cumulative RF levels at ground level near the site are therefore estimated to be well below the applicable public limit.

9. <u>Provide the maximum distance (in feet) the three dimensional perimeter of the radio frequency</u> <u>energy level equal to the public and occupational exposure limit is calculated to extend from the</u> <u>face of the antennas.</u>

The three-dimensional perimeters of RF levels equal to the public and occupational exposure limits are calculated to extend up to 80 and 33 feet out from the antenna faces, respectively, and to much lesser distances above, below, and to the sides; this does not reach any publicly accessible areas.

10. <u>Provide a description of whether or not the public has access to the antennas.</u> <u>Describe any</u> <u>existing or proposed warning signs, barricades, barriers, rooftop striping or other safety</u> <u>precautions for people nearing the equipment as may be required by any applicable FCC-adopted</u> <u>standards.</u>

It is recommended that barricades be erected, as shown in Figure 3, to preclude inadvertent access by unauthorized persons to areas in front of the antennas. It is recommended that measurements be conducted at the roof of the residence to the north when modifications are complete, in order to confirm that actual exposure levels there do comply with the FCC public exposure limits.

To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use and lockout/tagout procedures, be provided to all authorized personnel who have access to the structure, including employees and contractors of AT&T and of the property owner. No access within 33 feet directly in



front of the AT&T antennas themselves, such as might occur during certain maintenance activities, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that "Worker Notification Areas" be marked with yellow paint stripes and that "Prohibited Access Areas" be marked with red paint stripes on the roof of the building, as shown in Figure 3, to identify areas within which exposure levels are calculated to exceed the FCC public and occupational limits, respectively. It is recommended that explanatory signs<sup>\*</sup> be posted at the roof access ladder, on the screens in front of the antennas and at the antennas, readily visible from any angle of approach to persons who might need to work within that distance.

## 11. Statement of authorship and qualification.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2021. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

<sup>\*</sup> Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter; the San Francisco Department of Public Health recommends that all signs be written in English, Spanish, and Chinese.



#### Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by AT&T Mobility at 5140 Geary Boulevard in San Francisco, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Erecting barricades and taking measurements are recommended to establish compliance with public exposure limits; training authorized personnel, marking roof areas, and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

-13026REGIS -20676 William F. Hammett, P.E. p. 6-30-2021 707/996-5200

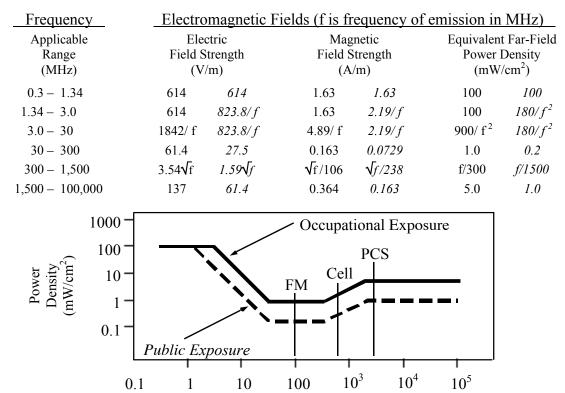
November 26, 2019



## FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:



Frequency (MHz)

Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



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## RFR.CALC<sup>™</sup> Calculation Methodology

## Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

#### Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density  $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$ , in mW/cm<sup>2</sup>,

and for an aperture antenna, maximum power density  $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$ , in mW/cm<sup>2</sup>,

where  $\theta_{BW}$  = half-power beamwidth of antenna, in degrees,

 $P_{net}$  = net power input to antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of antenna, in meters, and

 $\eta$  = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

## Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density 
$$\mathbf{S} = \frac{2.56 \times 1.64 \times 100 \times \mathrm{RFF}^2 \times \mathrm{ERP}}{4 \times \pi \times \mathrm{D}^2}$$
, in mW/cm<sup>2</sup>,

where ERP = total ERP (all polarizations), in kilowatts,

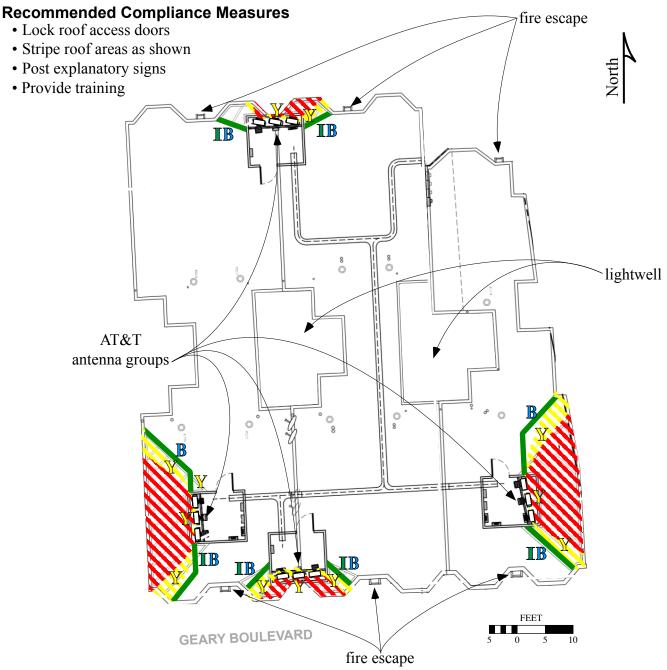
RFF = three-dimensional relative field factor toward point of calculation, and

D = distance from antenna effective height to point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 ( $1.6 \times 1.6 = 2.56$ ). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula is used in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency sources. The program also allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings, to obtain more accurate projections.



Calculated RF Exposure Levels on Roof



Notes: See text.

Base drawing from The CBR Group, dated January 24, 2018. Calculations performed according to OET Bulletin 65, August 1997.

Legend:	Less Than Public	Exceeds Public	Exceeds Occupational	Exceeds 10x Occupational
Striping color	blank	yellow	red	N/A
Sign type	∎ - Green INFORMATION	B - Blue NOTICE	<b>Y</b> - Yellow CAUTION	O - Orange WARNING



WILLIAM F. HAMMETT, P.E. RAJAT MATHUR, P.E. ROBERT P. SMITH, JR. ANDREA L. BRIGHT, P.E. NEIL J. OLIJ, P.E. BRIAN F. PALMER MANAS REDDY M. DANIEL RO

Robert L. Hammett, P.E. 1920-2002 Edward Edison, P.E. 1920-2009

DANE E. ERICKSEN, P.E. CONSULTANT

#### BY E-MAIL MHILL@J5IP.COM

November 26, 2019

Ms. Misako Hill Senior Project Manager/Zoning Specialist J5 Infrastructure Partners 2030 Main Street, Suite 1300 Irvine, California 92614

Dear Misako:

As requested, we have conducted the review required by the City of San Francisco of the coverage maps that AT&T Mobility will submit as part of its application package for its base station proposed to be located at 5140 Geary Boulevard (Site No. CCL05718). This is to fulfill the submittal requirements for Planning Department review.

## **Executive Summary**

We concur with the maps provided by AT&T. The maps provided to show the before and after conditions represent the carrier's present and post-installation coverage.

AT&T proposes to install six CCI Model BSA-M65R-BUU-H4 and six CCI Model OPA-45R-BUU5CA directional panel antennas. The twelve antennas would be mounted at an effective height between 41 and 43 feet above ground, 5½ feet above the roof, and would be oriented in groups of three toward 10°T, 80°T, 172°T, and 265°T. The maximum effective radiated power proposed by AT&T in any direction would be 28,840 watts, representing simultaneous operation at 4,130 watts for WCS, 7,120 watts for AWS, 6,530 watts for PCS, 3,360 watts for cellular, and 7,700 watts for SMR MHz service.

AT&T provided for review two coverage maps, dated September 18, 2019, attached for reference. The maps show AT&T's 4G LTE 700 MHz coverage in the area <u>before</u> and <u>after</u> the site is operational. Both the before and after maps show three levels of coverage, which AT&T colors and defines as follows:

Green	Reliable service indoors / outdoors
Yellow	Reliable coverage in-transit / Indoor coverage less reliable
Blue	Reliable coverage outdoors only / Indoor coverage less reliable

Ms. Misako Hill, page 2 November 26, 2019

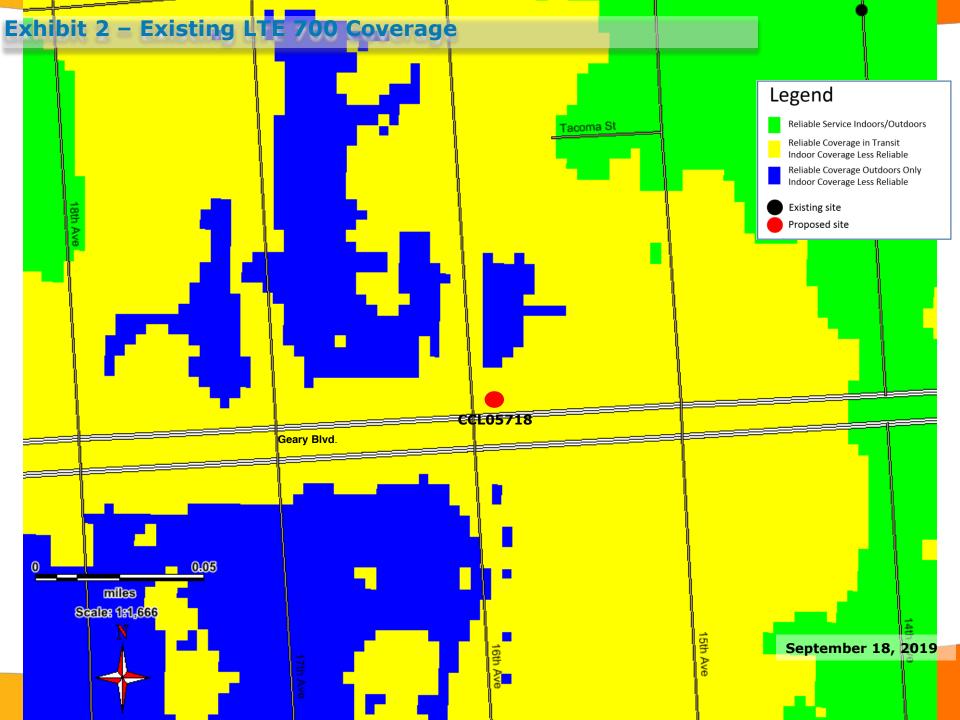
We undertook a two-step process in our review. As a first step, we obtained information from AT&T on the software and the service thresholds that were used to generate its coverage maps. This carrier uses commercially available software to produce the maps. The service thresholds that AT&T uses to are in line with industry standards, similar to the thresholds used by other wireless service providers.

As a second step, we conducted our own drive test, using an Ascom TEMS Pocket network diagnostic tool with built-in GPS, to measure the actual AT&T LTE 4G 700 MHz signal strength in the vicinity of the proposed site. Our fieldwork was conducted on November 18, 2019, between 11:20 AM and 11:50 AM, along a measurement route selected to cover all the streets within the map area that AT&T had indicated would receive improved service.

Based on the measurement data, we conclude that the AT&T 4G LTE 700 MHz coverage map showing the service area without the proposed installation includes areas of relatively weak signal levels in the carrier's present coverage. The map submitted to show the after coverage with the proposed base station in operation was reportedly prepared on the same basis as the map of the existing conditions and so is expected to accurately illustrate the improvements in coverage.

We appreciate the opportunity to be of service. Please let us know if any questions arise on this matter.

Sincerely yours, E-13026 M-20676 William F. Hammett, P.E lw Enclosures



# Exhibit 3 – Proposed LTE 700 Coverage – 5140 Geary Blvd @ RC = 42 ft.



From:	Derek Turner
То:	Lindsay, Ashley (CPC)
Cc:	Misako Hill; cammy.blackstone@att.com
Subject:	PLANNING COMMENT: 5140 Geary Blvd - 2020-000620CUA - CCL05718
Date:	Wednesday, May 20, 2020 12:19:25 PM
Attachments:	CCL05718 Revised Figure 3 05142020.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi Ashley,

I hope you are well.

Please find attached a response diagram regarding the sectors not adhering to the 1-1 setback.

As you know, each of the four antenna groups was carefully sited and configured to meet two requirements:

1) 4-foot clear access to all six of the fire escape ladders, required by the SFFD, and 2) RF exposure levels at all nearby buildings in compliance with FCC guidelines.

Figure 3 attached shows by the eight green lines the recommended locations for barricades to restrict access to areas that should not be entered by unauthorized persons.

These were determined for compliance with federal RF requirements; there are no additional areas of restricted access for compliance with SFFD requirements.

We do expect that the four equipment enclosures would be kept locked, making those areas, too, not available to unauthorized persons.

Please let me know if you have any further questions and I can loop in Bill Hammett from Hammett and Edison.

Thank you, Derek Turner Site Acquisition and Zoning Specialist J5 Infrastructure Partners M (415)420-4922| E <u>dturner@J5IP.com</u> | <u>www.J5IP.com</u>



On Apr 28, 2020, at 1:15 PM, Misako Hill <<u>MHill@J5IP.Com</u>> wrote:

From: Lindsay, Ashley (CPC) <<u>ashley.lindsay@sfgov.org</u>> Sent: Monday, April 20, 2020 12:53 PM To: Derek Turner <<u>dturner@J5IP.Com</u>> Cc: Misako Hill <<u>MHill@J5IP.Com</u>> Subject: Re: 5140 Geary Blvd - 2020-000620CUA - PCL-CCL05718 Hello Derek,

Thank you for the RF report, I have saved it to the record.

Regarding design alternatives, Planning appreciates the feedback. As you may be aware, at past hearings the Planning Commission has made comment about consolidating sectors/screening, and reducing visibility for other wireless facility projects. In preparation of explaining this projects' design options/constraints to the Planning Commission, can you clarify, elaborate and, or in addition use visual reference of the rooftop to explain the following:

\* Provide specific distances from fire escape landings that need to be maintained, and clarify the specific Fire and RF requirements. It may be helpful to include a sheet in the plan set to illustrate which areas of the roof cannot be utilized due to Fire/RF requirements.

\* It appears there are multiple fire escape roof landing ladders. Do all fire escape landing ladders require clearance? How many are required by Fire Code?

\* Please note that the FRP box/sector E is of most concern as it appears to be sited at the building edge and is closest an adjacent street. Please note that screening materials cannot be attached to the building edge, parapet wall for Sector B and E.

Please let me know if I can provide additional information and do not hesitate to reach out with any questions.

Best, Ashley

Ashley Lindsay Planner | Wireless Coordinator Southwest Team, Current Planning Division San Francisco Planning Department 1650 Mission Street, Suite 400, San Francisco, CA 94103 Direct: 415-558-6373 | www.sfplanning.org<http://www.sfplanning.org/>

# AT&T MOBILITY ALTERNATIVE SITE ANALYSIS CN5718 (Replacement Upgrade to CN5210)

Site Address: 5136-5138 Geary Blvd, 5140 -5150 Geary Blvd. San Francisco, CA 94121



February 28, 2020

## Locating a site and evaluation of alternative sites

AT&T real estate and construction experts work through Section 8.1 of the WTS Facilities Siting Guidelines, which state the "Preferred Locations Within A Particular Service Area." The team examines preferred locations (most desirable to least desirable under Section 8.1) until a location is found to close the significant service coverage gap.

Once a location is identified, the team confirms that the site is (1) serviceable (it has sufficient electrical power and telephone service as well as adequate space for equipment cabinets, antennas, construction, and maintenance) and (2) meets necessary structural and architectural requirements (the existing structure is not only sturdy enough to handle the equipment without excessive modification but also that the antennas may be mounted in such a way that they can meet the dual objective of not being obstructed while also being visually obscured or aesthetically unobtrusive).

## **Location Preference**

The building located at 5136-5138 Geary Blvd, 5140 -5150 Geary Blvd (the "Subject Location") is a Preference 4 Preferred Location in that it is a Commercial building located within the NC-3 Neighborhood Commercial-Moderate Scale zoning district. **Site Justification** 

The proposed search ring is located in an area with several zoning districts: NC-3 – Neighborhood Commercial Moderate-scale, RH-2 Residential House two family. The uses in the search ring area vary from public, residential, wholly commercial, and mixed- use.

The Subject Location for the wireless facility is a Commercial Building located at 5136-5138 Geary Blvd, 5140 -5150 Geary Blvd. The Subject Location is the preferred location as it is the only location that can satisfy all of the primary network objectives, with the least visual impact on the surrounding environment.

The Service Improvement Area is roughly bordered by 20<sup>th</sup> Ave, and California Street, 16<sup>th</sup> Ave, and Balboa Street. The Subject Property is located at 5136-5138 Geary Blvd, 5140 -5150 Geary Blvd., which is centrally located within the defined search area, as well as being the main commercial corridor of the Richmond District Neighborhood. The Subject Property is situated to the West of Park Presidio, South of Clement, and to the East of 25<sup>th</sup> Ave, North of Balboa, and on the Geary Blvd. bus route. It is centrally located in a busy neighborhood commercial corridor, comprised of

eateries, neighborhood-serving businesses, multi-family residential units, as well as main Highway access and other public transportation routes. The area surrounding this neighborhood commercial corridor is primarily comprised of commercial, mixed use, church, and single-family and multi-family residential units.

The proposed installation includes the installation of nine (9) panel antennas within an existing rooftop structure and associated equipment on the roof deck of the existing building at the Subject Location. The antennas would be located behind radio frequency transparent panels designed to match the existing façade integrated into an existing rooftop structure. The 7 associated equipment cabinets RRU units, and 2 battery back up units would be located on the roof deck of the building, and not visible to the public.

The NC-3 – Neighborhood Commercial moderate scale, and RH-2 Residential House two family zoning districts encourage public, residential, commercial, and mixed- uses. The Subject Location is surrounded mostly by small neighborhood serving public and commercial uses, such as restaurants and shops, as well as single and multi-family dwellings.

The height and bulk district for all zoning districts in the area is 40 - X. The height limits and small commercial and residential nature of the area creates a neighborhood that has similar building mass, scale, and architectural styles. Mounting the antennas on the roof as proposed would provide the height necessary for an unimpeded signal path to the defined service coverage area, while not deterring from the existing architecture of the subject building and overall neighborhood environment. As a Preference 4 Preferred Location, with an architecturally compatible design, the Subject Location is the least intrusive means by which AT&T Mobility can close the existing significant service coverage gap. The improved signal quality and capacity for the proposed geographic service area is shown on the attached service maps.

Upon construction of the proposed macro site at 5136-5138 Geary Blvd, 5140 -5150 Geary Blvd. and upon final integration within the existing and planned network, AT&T Mobility intends to decommission and remove the existing micro facility currently located at 5339 Geary Blvd. The construction of the proposed macro facility at the Subject Location, coupled with the removal of the existing microcell facility at 5339 Geary Blvd will improve AT&T Mobility's service coverage by reducing the interference from the micro sites in the area and allowing the proposed facility to fill the significant service coverage gap.

The following represents the results of this investigation, and the team's analysis

of each alternative location:

1. <u>Publicly-used structures</u>: We investigated the area and there are (2) Preference 1 locations identified.



378 18<sup>th</sup> Avenue- Alternative A-1449/022

The Golden Gate Christian Reformed Church is located approximately 1/2 block East and 1/2 block North of the Subject Location on the East side of 16th Avenue in the NC-3 zoning district within of the Radio Engineers search area. Unfortunately, the height of the Anderson Theatre would block signal West on Geary Ave. As a result, it was determined that this was not a viable candidate.



## 380 18<sup>th</sup> Avenue- Alternative B-1449/021B

The Rectory of the Golden Gate Christian Reformed Church is located approximately 1/2 block East and 1/2 block North of the Subject Location on the East side of 16th Avenue in the NC-3 zoning district within of the Radio Engineers search area. Unfortunately, the height of the Anderson Theatre would block signal West on Geary Ave. As a result, it was determined that this was not a viable candidate.

- 2. <u>Co-Location Site</u>: We investigated the area and there were no co-location opportunities identified within the defined search area.
- 3. <u>Industrial or Commercial Structures</u>: We investigated the area and there were no Preference 3 locations identified.
- 4. <u>Industrial or Commercial Structures</u>: We investigated the area and there were six (6) Preference 4 locations identified.



5240 Geary Blvd- Alternative C-1448/045

The Ross building is located approximately 1 block East of the subject property on the North side of Geary Blvd. Zoning is NC-3 with a 40X bulk/height classification. It was the preferred candidate of the Radio Frequency engineers. As a preference 4 wholly commercial building, it is also preferred by the City of San Francisco WTS. The owners of the property were approached for a number of months and were not amenable to leasing space for wireless telecommunications.



5420 Geary Blvd-Alternative D- 1450/019A

This property located directly across the street from the subject property on the North side of Geary Blvd and is a Commercial/Retail building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 4, wholly commercial. While within the search ring and a preferred preference level than the subject property, its lower height would have blocked signal to the East and West along Geary Blvd. As a result, it was determined that this was not a viable candidate.



5241 Geary Blvd.-Alternative E-1258/035

This property located on the South side of Geary Blvd approximately 1 block East

of the subject property and is a Commercial/Retail building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 4, wholly commercial. While within the search ring and a preferred preference level than the subject property, its lower height would have blocked signal to the East and West along Geary Blvd. As a result, it was determined that this was not a viable candidate.



5255 Geary Blvd.- Alternative F -1528/033

This property located directly across the street from the subject property on the South side of Geary Blvd approximately 1 block East of the subject property and is a Commercial/Retail building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 4, wholly commercial. While within the search ring and a preferred preference level than the subject property, its lower height would have blocked signal to the East and West along Geary Blvd. As a result, it was determined that this was not a viable candidate.



5327 Geary Blvd.- Alternative G-1527/037

This property located on the South side of Geary Blvd approximately 1 block East of the subject property and is a Commercial/Retail building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 4, wholly commercial. While within the search ring and a preferred preference level than the subject property, its lower height would have blocked signal to the West along Geary Blvd. As a result, it was determined that this was not a viable candidate.



5411 Geary Blvd.-Primary Candidate-1526/035

This is the subject property and is a Commercial/Retail building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 4, wholly commercial. It is in the search ring and the height and location of the rooftop

structure provides both height and E/W coverage along Geary Blvd without obstruction. In addition, its existing rooftop structure provides an existing architectural element in which to locate antennas with no change to the architecture of the building.



5435 Geary Blvd.- Alternative H-1526/031

This property located West of the subject property on the South side of Geary Blvd approximately 1/2 block from the subject property and is a Commercial/Retail building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 4, wholly commercial. While within the search ring and a preference level the same as the subject property, its lower height would have blocked signal to the West and East along Geary Blvd. As a result, it was determined that this was not a viable candidate.

5. <u>Mixed Use Buildings in High Density Districts</u>: We investigated the area and there were nine (9) Preference 5 locations identified (in addition to the proposed site).



5430 Geary Blvd.-Alternative I- 1450/019B

This property located NW of the subject property on the North side of Geary Blvd and is a mixed use, retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, its lower height would require significant additional height difficult to integrate into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5400 Geary Blvd.-Candidate J-1450/008

This property, the Alexander Theatre, located across the street from the subject property on the North side of Geary Blvd and is an approved mixed use, restaurant, retail and residential building. The Zoning is NC-3 with a 40X height/bulk

classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, its designated historic significance made it less preferable. As a result, it was determined that this was not a viable candidate.



5340 Geary Blvd.- Alternative K-1449/021A

This property located NE of the subject property on the North side of Geary Blvd and is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, its lower height would require significant additional height difficult to integrate into the architecture of the building. As a result, it was determined that this was not a viable candidate.



## 5332 Geary Blvd.- Alternative L-1449/021

This property located NE of the subject property on the North side of Geary Blvd approximately 1 block East of the subject property. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, its lower height would require significant additional height difficult to integrate into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5320 Geary Blvd.- Alternative M-1449/020

This property located NE of the subject property on the North side of Geary Blvd approximately 1 block East of the subject property. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, its lower height would require significant additional height difficult to integrate into the architecture of the building. As a result, it was determined that this was not a viable candidate.



395 17<sup>th</sup> Ave.- Alternative N-1449/019A

This property located NE of the subject property on the North side of Geary Blvd. approximately 1 block to the East. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5301 Geary Blvd.- Alternative O -1527/001

This property located East of the subject property on the South side of Geary Blvd. approximately 1 block to the East. It is a mixed use retail and residential building.

The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5231 Geary Blvd.- Alternative P-1527/038

This property located NE of the subject property on the South side of Geary Blvd. approximately 1 block to the East. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5339 Geary Blvd.- Alternative Q-1527/036

This property, the location of the current AT&T microcell is located E of the subject property on the South side of Geary Blvd. approximately 1/2 block to the East. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building as two antenna screening structures would be needed due to the length of the building. As a result, it was determined that this was not a viable candidate.



5401 Geary Blvd.- Alternative R-1526/001

This property located East of the subject property on the South side of Geary Blvd

adjacent to the subject property. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5421 Geary Blvd.- Alternative S-1526/034

This property located West of the subject property on the South side of Geary Blvd adjacent to the subject property. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building. As a result, it was determined that this was not a viable candidate.



5427 Geary Blvd.- Alternative T-1526/033

This property located West of the subject property on the South side of Geary Blvd <sup>1</sup>/<sub>2</sub> block from the subject property. It is a mixed use retail and residential building. The Zoning is NC-3 with a 40X height/bulk classification. It is a WTS preference 5. While within the search ring and the same preference level as the subject property, it was difficult to integrate antennas close to Geary Blvd. into the architecture of the building. As a result, it was determined that this was not a viable candidate.

- 6. <u>Limited Preference Sites</u>: We investigated the area and there were no Preference 6 locations identified within the search area.
- 7. <u>**Disfavored Sites**</u>: We investigated the area and there are two (2) residential locations identified within the search area.



407 17<sup>th</sup> Ave- Alternative U-1527/002

This property located East of the subject property on West side of 17<sup>th</sup> Ave at Geary Blvd, 1 block from the subject property. It is a residential building. The Zoning is RH-2 with a 40X height/bulk classification. It is a WTS preference 7. As a result, it was determined that this was not a viable candidate.



406 18<sup>th</sup> Ave- Alternative V- 1527/035

This property located East of the subject property on the East side of  $18^{th}$  Ave at Geary Blvd, 1/2 block from the subject property. It is a residential building. The Zoning is RH-2 with a 40X height/bulk classification. It is a WTS preference 7. As a result, it was determined that this was not a viable candidate.

	Location	Block / Lot	Zoning District	Building Type	WTS Siting Preference
А	378 18 <sup>th</sup> Ave	1449/022	NC-3	Church/Public	1
В	380 18 <sup>th</sup> Ave	1449/021B	NC-3	Church/Public	1
С	5240 Geary	1448/045	NC-3	Commercial	4
D	5420 Geary	1450/019A	NC-3	Commercial	4
Е	5241 Geary	1258/035	NC-3	Commercial	4
F	5255 Geary	1528/033	NC-3	Commercial	4
G	5327 Geary	1527/037	NC-3	Commercial	4
Н	5435 Geary	1526/031	NC-3	Commercial	4
Ι	5430 Geary	1450/019B	NC-3	Mixed Use	5
J	5400 Geary	1450/008	NC-3	Mixed Use	5
K	5340 Geary	1449/021A	NC-3	Mixed Use	5
L	5332 Geary	1449/021	NC-3	Mixed Use	5
М	5320 Geary	1449/020	NC-3	Mixed Use	5
N	395 17 <sup>th</sup> Ave	1449/019A	NC-3	Mixed Use	5
0	5301 Geary	1527/001	NC-3	Mixed Use	5
Р	1527 Geary	1527/038	NC-3	Mixed Use	5

# **Alternative Site Locations Summary**

Q	5339	1548/025	NC-3	Mixed Use	5
	Geary				
R	5401	1526/001	NC-3	Mixed Use	5
	Geary				
S	5421	1526/034	NC-3	Mixed Use	5
	Geary				
Т	5427	1526/033	NC-3	Mixed Use	5
	Geary				
U	407 17 <sup>th</sup>	1527/002	RH-2	Residential	7
	Ave				
V	406 18 <sup>th</sup>	1527/035	RH-2	Residential	7
	Ave				

Please see following page, which is a map that locates each of the alternative sites discussed above.



### NOTICE OF COMMUNITY OUTREACH MEETING ON A WIRELESS COMMUNICATION FACILITY PROPOSED IN YOUR NEIGHBORHOOD

To: Neighborhood Groups and Neighbors & Owners within 500' radius of 5140 Geary Blvd, San Francisco, CA 94118

**Meeting Information** AT&T Mobility is proposing to install a wireless communication facility at 5140 Geary Blvd. needed by AT&T Mobility as part of its San Francisco Date: Monday, December 2, 2019 wireless network. The proposed site is an unmanned facility consisting of the Time: 6:30 p.m. installation of twelve (12) panel antennas. The antennas will be mounted and screened on the roof. The associated equipment would be located on the ground Where: Argonne Playground at street level of the building, not visible to the public. Plans and photo 463 18th Avenue simulations will be available for your review at the meeting. San Francisco, CA 94121 If you have any questions regarding the proposal and are unable to attend the Site Information meeting, please contact the AT&T Mobility Hotline at (415) 646-0972 and an Address: 51410 Geary Blvd. AT&T Mobility specialist will return your call. Please contact the San Francisco Parcel #: 1447/049 Planning Department CPC Wireless Team at (415) 558-6378 if you have any NC-3-Neighborhood Commercial, questions regarding the planning process. Moderate Scale NOTE: If you require an interpreter to be present at the meeting or need an Applicant assistive hearing device, please contact our office at 925-268-8280 no later AT&T Mobility than 5:00pm on Monday, November 25, 2019 and we will make every effort to accommodate your request. **Contact Information** AT&T Mobility Hotline (415) 646-0972

# NOTIFICACIÓN DE REUNIÓN DE ALCANCE COMUNITARIO SOBRE UNA INSTALACIÓN DE COMUNICACIONES INALÁMBRICAS PROPUESTA EN SU BARRIO

Para: Grupos del vecindario, vecinos y propietarios dentro de un radio de 500' de 5140 Geary Blvd, San Francisco, CA 94118

Información de la reunión

Fecha: lunes, 2 de diciembre de 2019 Hora: 06:30 p. m.

Dónde: Argonne Playground 463 18th Avenue San Francisco, CA 94121

Información del lugar Dirección: 51410 Geary Blvd. Parcela #: 1447/049 NC -3-Vecindario comercial, escala moderada

Solicitante AT&T Mobility

**Información de contacto** Línea Directa de AT&T Mobility (415) 646-0972 AT&T Mobility propone instalar una instalación de comunicaciones inalámbricas en 5140 Geary Blvd. necesaria para AT&T Mobility como parte de su red inalámbrica en San Francisco. La ubicación propuesta de AT&T Mobility es una instalación sin personal que consiste en la instalación de doce (12) antenas panel. Las antenas se montarán y ocultarán de la vista en la terraza. Los equipos asociados se ubicarían en la planta baja al nivel de la calle del edificio, y no estarán visibles al público. Habrá planos y fotos disponibles para que usted los revise en la reunión.

Si tiene preguntas relacionadas con la propuesta y no puede asistir a la reunión, por favor llame a la Línea Directa de AT&T Mobility, (415) 646-0972, y un especialista de AT&T Mobility le devolverá el llamado. Por favor, contacte con el equipo CPC Wireless del Departamento de Planificación de San Francisco al (415) 558-6378 si tiene alguna pregunta relacionada con el proceso de planificación.

NOTA: Si necesita que un intérprete esté presente en la reunión, o un dispositivo para asistencia auditiva, por favor, contacte con nuestra oficina al 925-268-8280 antes del lunes, 25 de noviembre de 2019 a las 5:00 p.m., y haremos todo lo posible para adaptarnos a su solicitud.

### 社区推广会议通知:与您的小区内的无线通信设备相关的提议

### 致:在加州旧金山市 Geary Blvd 5140号(邮编:94118)方圆500英尺内的社区团体及邻居和业主

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<b>会议信息</b> 日期:2019年12月2日星期一 时间:下午6:30	AT&T 移动提议在 Geary Blvd. 5140号安装一个无线通信设备,作为旧金 山无线网络的一部分,满足 AT&T 移动的需求。计划场地为无人设施, 有十二(12)个面板天线。天线将被安装在屋顶上,并且会被掩藏起来
地点:Argonne Playground 463 18th Avenue San Francisco, CA 94121	。其他相关设备将会被安置在建筑物的街道水平地面上,公众看不见的 地方。将在会上向您展示计划内容及模拟图片,供您审阅。
<b>场地信息</b> 地址:Geary Blvd. 51410 号 土地号:1447/049 NC-3 - 社区商业、中等规模	您如有任何关于该提议的问题,但无法出席会议,请拨打 AT&T 移动热线:(415) 646-0972,AT&T 移动的专业人员将回复您的电话。如果您对该规划过程有任何问题,请拨打电话 (415) 558-6378,联系旧金山市规划部 CPC 无线小组。
申 <b>请人</b> AT&T 移动 <b>联系信息</b> AT&T 移动热线(415)646-0972	注意:如果您在会议期间需要一名翻译人员在场或者需要使用辅助听力设备,请在2019年11月25日星期一下午5点前联系我们的办公室,联系电话 925-268-8280,我们将尽全力满足您的要求。

# ABISO NG OUTREACH NA PULONG NG KOMUNIDAD SA PANUKALANG WIRELESS NA PASILIDAD NG KOMUNIKASYON SA INYONG KAPITBAHAYAN

### Sa: Mga Pangkat ng Kapitbahayan at May-ari sa loob ng 500' radius ng

### 5140 Geary Blvd, San Francisco, CA 94118

#### **Impormasyon sa Pulong**

Petsa: Lunes, Disyembre 2, 2019 Oras: 6:30 p.m.

### Saan: Argonne Playground 463 18th Avenue San Francisco, CA 94121

Impormasyon sa Site Address: 51410 Geary Blvd. Parcel #: 1447/049 NC-3-Neighborhood Commercial, Moderate Scale

**Aplikante** AT&T Mobility

**Impormasyon sa Pakikipag-ugnayan** AT&T Mobility Hotline (415) 646-0972 Pinapanukala ng AT&T Mobility na magkabit ng wireless na pasilidad na pangkomunikasyon sa 5140 Geary Blvd. na kailangan ng AT&T Mobility bilang bahagi ng wireless network nito sa San Francisco. Ang panukalang lugar ay isang walang taong pasilidad na binubuo ng pagkakabit ng labing-dalawang (12) panel antena. Ikakabit ang mga antena at ii-screen sa bubong. Ang kaugnay na kagamitan ay ilalagay sa lupa at lebel ng kalye sa likod ng gusali, na hindi makikita ng publiko. Ang mga plano at simulasyong litrato ay maaari niyong repasuhin sa pulong.

Kung mayroon kayong anumang mga tanong tungkol sa panukala at hindi kayo makakadalo sa pulong, mangyaring makipag-ugnayan sa AT&T Mobility Hotline sa (415) 646-0972 at ang AT&T Mobility specialist ay tatawag sa iyo. Mangyaring makipag-ugnayan sa San Francisco Planning Department CPC Wireless Team sa (415) 558-6378 kung may anumang mga tanong kayo patungkol sa proseso ng pagpaplano.

TANDAAN: Kung kailangan niyong mayroong tagapagsaling-wika sa pulong o kailangan ng pantulong na aparato sa pandinig, mangyaring makipag-ugnayan sa aming tanggapan sa 925-268-8280 nang hindi lalagpas sa 5:00pm sa Lunes, Nobyembre 25, 2019, at gagawin namin lahat ng aming makakaya para pagbigyan ang inyong hiling.

# Summary of Discussion from CUP Meeting Site No. CCL05718 (5140 Geary Blvd) Community Meeting #2

Meeting Date: December 2, 2019 Meeting Time: 6:30pm – 7:30pm Meeting Address: Argonne Playground, 463 18th Ave, San Francisco Project Address: 5140 Geary Blvd. Project Representatives:

- Cammy Blackstone, AT&T External Affairs
- Marcello Pontin, AT&T Mobility
- Derek Turner, J5 Infrastructure Partners
- Evan Wynn, J5 Infrastructure Partners
- Daniel Ro, Hammett & Edison
- Luis Cuadra, BergDavis Public Affairs

## Summary

AT&T Mobility held a second community meeting on Monday, December 2, 2019 from 6:30 pm – 8:00pm to share its plans to install a wireless facility at 5140 Geary Blvd. Approximately 11 community members attended the meeting.

The format of the meeting was "science fair" style to provide neighbors an opportunity to meet with members of the project team in small group discussions and receive answers to their specific questions. Three stations were set up to facilitate conversations about site design, the entitlement process and EMF-related health concerns.

Following is a summary of community members questions and responses from AT&T's team.

### **Design/Site Selection/Process**

Question #1: Why did you chose this location?

**Answer:** We look at locations that meet our placement requirements then conduct a simulation. Note: AT&T also made available a list of the 22 alternative sites that were considered during the site selection process.

**Questions #2:** Why did AT&T abandon the Ross site? **Answer:** The property owner discontinued lease negotiations because of plans to develop the property.

**Question #3**: How far apart are these facilities? **Answer:** In dense, urban environments they're typically 3-4 blocks apart.

# Question #4: Why do you need another site?

**Answer:** Geary Blvd. is a commercial thoroughfare – capacity and usage has increased dramatically. AT&T needs to provide maximum connectivity for both existing customers and the rapidly growing San Francisco population.

# EMF

There was extensive discussion concerning RF exposure, safety standards, measurements and research. Meeting attendees were particularly interested in FCC limits and information on long terms health impacts. Additionally, neighbors are concerned that there are already two wireless facilities in the immediate vicinity.

# **Action Items**

At the request of individual neighbors, AT&T is researching the following:

- Modify the RF enclosure to compliment the window bays of the existing residential building.
- Add a roof to the proposed RF enclosure.
- Noise dampening solution for the generator located in the exterior building corridor.