# **Executive Summary Conditional Use Authorization**

HEARING DATE: FEBRUARY 20, 2014

1650 Mission St. Suite 400 San Francisco, CA 94103-2479

Reception: 415.558.6378

Fax:

415.558.6409

Planning Information: 415.558.6377

Date: February 13, 2014
Case No.: **2014.0148C** 

Project Address: 501 Laguna Street

Current Zoning: Hayes-Gough Neighborhood Commercial Transit District

40-X Height and Bulk District

Block/Lot: 0819/ 035

Project Sponsor: Sprint represented by

Maria Miller, Modus, Inc., 149 Natoma Street, 3<sup>rd</sup> Floor San Francisco, CA 94105

*Staff Contact:* Omar Masry – (415) 575-9116

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#### PROJECT DESCRIPTION

The proposal is to modify an existing macro wireless telecommunication services ("WTS") facility that would replace (3) panel antennas mounted within a single radome (cylinder) on the subject building, with three panel antennas in three individual locations, and replace equipment on the roof and in the basement, of the subject building, as part of Sprint's telecommunications network. Based on the presence of two existing macro WTS facilities, zoning and land use, the antennas are proposed on a Location Preference 2 Site (Co-Location) according to the WTS Siting Guidelines.

All (3) of the existing antennas would be replaced with three (3) panel antennas in three individual locations (sectors) on the roof of the building. The building features a lower roof height of approximately 34' above ground along the southern half of the Project Site, closest to Fell Street, and an upper roof height of approximately 42' above ground along the northern half of the Project Site, closest to Linden Street.

The Sector A antenna would be flush mounted, at approximately 47' above ground level, to an existing rooftop penthouse wall, and located approximately 5.5' from the roof edge along Laguna Street. The Sector B antenna would be screened within element composed of fibre-reinforced plastic (FRP) material painted and textured to mimic a stairwell penthouse, located approximately 6' from the nearest building edge along Laguna Street, with a maximum height of approximately 41' above ground level. The Sector C antenna would be housed within an element composed of FRP material, painted and textured to mimic an approximately 18" diameter roof mounted vent pipe. The faux vent pipe would be mounted at the same corner location as the existing radome, and be setback at least 6' from the nearest roof edge.

The actual antennas would measure approximately 72" high by 12" wide by 6" thick (Sectors A and B) and approximately 48" high by 12" wide by 8" thick (Sector C). The proposed modification would also

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feature the installation of six (6) radio relay units (RRUs) on the roof, with two RRUs mounted near each of the three antenna sectors. RRUs are typically mounted at locations near the base of the antenna, with a height of less than 36" and are used to enhance antenna capacity and reduce interference. The RRUs would be mounted in such a manner as to not be visible from adjacent public rights-of-way.

#### SITE DESCRIPTION AND PRESENT USE

The subject building is located on Assessor's Block 0819, Lot 035, at the northwest corner of Fell and Laguna Streets. The Project Site consists of two separate lots that together occupy the Laguna Street frontage on the west side between Fell and Linden Streets. 501 Laguna Street is a two-story building with ground-floor commercial and three dwelling units on the upper floors. 505 Laguna Street is a three-story building that also has ground-floor commercial and three dwelling units on the upper floors. Both buildings were constructed in the late 19th century, were identified in the Market and Octavia Area Plan architectural survey as historic resources, and appear to be contributing resources to a local historic district eligible for designation. The subject building features the following WTS facilities:

- Sprint macro WTS facility (Case Number 2001.0072C) consisting of three antennas housed within a single rooftop cylinder (radome), near the southeast corner of the roof of the subject building.
- AT&T Mobility macro WTS facility (Case 2011.0673C) consisting of three panel antennas. Two of the antennas are individually enclosed within two faux chimneys, and a third antenna is enclosed within a faux rooftop stairwell penthouse.

#### SURROUNDING PROPERTIES AND NEIGHBORHOOD

The subject building is located at the northwest corner of Fell and Laguna Streets, within the Hayes-Gough Neighborhood Commercial Transit District. The neighborhood is characterized by two to three-story buildings, with a large vacant lot at the southeast corner of Laguna and Fell Streets. The three buildings at the intersection of Laguna and Fell Streets are mixed-use with ground-floor commercial and upper story residential units. Buildings on Laguna Street between Fell Street and Hayes Street to the north are predominantly mixed-use. The buildings south, east and west of the site on Laguna and Fell Streets are primarily two to three-story residential buildings.

#### **ENVIRONMENTAL REVIEW**

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption. The Categorical Exemption and all pertinent documents may be found in the files of the Planning Department, as the custodian of records, at 1650 Mission Street, San Francisco.

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#### **HEARING NOTIFICATION**

TYPE	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Classified News Ad	20 days	January 31, 2014	January 29, 2014	22 days
Posted Notice	20 days	January 31, 2014	January 30, 2014	21days
Mailed Notice	20 days	January 31, 2014	January 31, 2014	20 days

#### PUBLIC COMMENT

The Project Sponsor held a Community Outreach Meeting for the proposed Project at 5:30 pm on January 9, 2014, at the San Francisco Public Library (Main branch), located at 100 Larkin Street. No community members attended the meeting. As of February 13, 2014, the Department has not received any comments regarding the proposed facility.

#### ISSUES AND OTHER CONSIDERATIONS

 Health and safety aspects of all wireless projects are reviewed under the Department of Public Health and the Department of Building Inspection. The RF emissions associated with this Project have been determined to comply with limits established by the Federal Communications Commission (FCC).

#### REQUIRED COMMISSION ACTION

Pursuant to Sections 303 and 720.83 of the Planning Code, Conditional Use Authorization is required for a WTS facility in the Hayes-Gough Neighborhood Commercial Transit Zoning District.

#### BASIS FOR RECOMMENDATION

This Project is necessary and/or desirable under Section 303 of the Planning Code for the following reasons:

- The Project complies with the applicable requirements of the Planning Code.
- The Project is consistent with the Objectives and Policies of the General Plan.
- The Project is consistent with the 1996 WTS Facilities Siting Guidelines, Planning Commission Resolution No. 14182, 16539, and 18523 supplementing the 1996 WTS Facilities Siting Guidelines.
- Health and safety aspects of all wireless projects are reviewed under the Department of Public Health and the Department of Building Inspections.
- The expected RF emissions fall well within the limits established by the FCC.
- The Project Site is considered a Location Preference 2 (Co-Location), according to the Wireless Telecommunications Services (WTS) Siting Guidelines, which means it is a preferred site.
- Based on propagation maps provided by Sprint, the project would provide coverage in an area that currently experiences several gaps in coverage and capacity.
- Based on the analysis provided by Sprint, the Project would provide additional capacity in an area that currently experiences insufficient service during periods of high data usage.

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- Based on independent third-party evaluation, the maps, data, and conclusions about service coverage and capacity provided by Sprint are accurate.
- The placement of antennas within (3) individual faux roof-mounted vent pipes, would ensure the proposed facility would not appear out of character with the subject building, nor impair surrounding views.
- Electronic equipment necessary for the facility would remain located on the roof and in a portion
  of the basement of the subject building. The roof-mounted equipment would be sufficiently set
  back from roof edges to minimize visibility, and the presence of equipment (roof or basement)
  will not significantly affect aesthetics, parking, or the use of the building.

RECOMMENDATION:		Approval with Conditions		
	Executive Summary		Project sponsor submittal	
	Draft Motion		Drawings: Proposed Project	
	Zoning District Map		Check for legibility	
	Height & Bulk Map		Photo Simulations	
	Parcel Map		Coverage Maps	
	Sanborn Map		RF Report	
	Aerial Photo		DPH Approval	
	Context Photos		Community Outreach Report	
	Site Photos		Independent Evaluation	
Exhibits above marked with an "X" are included in this packet om Planner's Initials				

### **Planning Commission Motion No. XXXXX**

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Maria Miller, Modus, Inc., 149 Natoma Street, 3<sup>rd</sup> Floor San Francisco, CA 94105

*Staff Contact:* Omar Masry – (415) 575-9116

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ADOPTING FINDINGS RELATING TO THE APPROVAL OF A CONDITIONAL USE AUTHORIZATION UNDER PLANNING CODE SECTIONS 303(c) AND 720.83 TO MODIFY AN EXISTING WIRELESS TELECOMMUNICATIONS SERVICES FACILITY TO CONSIST OF UP TO THREE PANEL ANTENNAS LOCATED ON THE ROOF AND ELECTRONIC EQUIPMENT ON THE ROOF AND IN THE BASEMENT OF AN EXISTING MIXED-USE BUILDING AS PART OF SPRINT'S WIRELESS TELECOMMUNICATIONS NETWORK WITHIN THE HAYES-GOUGH NEIGHBORHOOD COMMERCIAL TRANSIT DISTRICT, AND 40-X HEIGHT AND BULK DISTRICT.

#### **PREAMBLE**

On January 27, 2014, Sprint (hereinafter "Project Sponsor"), submitted an application (hereinafter "Application"), for Conditional Use Authorization on the property at 501 Laguna Street, Lot 035 in Assessor's Block 0819, (hereinafter "Project Site") to replace (3) panel antennas mounted within a single cylinder (radome) on the subject building, with three panel antennas in three individual locations, and replace equipment on the roof and in the basement, of the subject building, as part of Sprint's telecommunications network. Based on the presence of two existing macro WTS facilities, zoning and land use, the antennas are proposed on a Location Preference 2 Site (Co-Location) according to the WTS Facilities Siting Guidelines.

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption (Section 15303 of the California Environmental Quality Act). The Planning Commission has reviewed and concurs with said determination. The categorical

exemption and all pertinent documents may be found in the files of the Planning Department (hereinafter "Department"), as the custodian of records, at 1650 Mission Street, San Francisco.

On February 20, 2014, the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on the application for a Conditional Use Authorization.

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 in Application No. 2014.0148C, 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. Site Description and Present Use. The subject building is located on Assessor's Block 0819, Lot 035, at the northwest corner of Fell and Laguna Streets. The Project Site consists of two separate lots that together occupy the Laguna Street frontage on the west side between Fell and Linden Streets. 501 Laguna Street is a two-story building with groundfloor commercial and three-dwelling units on the upper floors. 505 Laguna Street is a three-story building that also has ground-floor commercial and three dwelling units on the upper floors. Both buildings were constructed in the late 19th century, were identified in the Market and Octavia Area Plan architectural survey as historic resources, and appear to be contributing resources to a local historic district eligible for designation. The subject building features the following WTS facilities:

Sprint macro WTS facility (Case Number 2001.0072C) consisting of three antennas housed within a single rooftop radome (cylinder), near the southeast corner of the roof of the subject building.

AT&T Mobility macro WTS facility (Case 2011.0673C) consisting of three panel antennas. Two of the antennas are individually enclosed within two faux chimneys, and a third antenna is enclosed within a faux rooftop stairwell penthouse.

3. Surrounding Properties and Neighborhood. The subject building is located at the northwest corner of Fell and Laguna Streets, within the Hayes-Gough Neighborhood Commercial Transit District. The neighborhood is characterized by two to three-story buildings, with a large vacant lot at the southeast corner of Laguna and Fell Streets. The

> three buildings at the intersection of Laguna and Fell Streets are mixed-use with groundfloor commercial and upper story residential units. Buildings on Laguna Street between Fell Street and Hayes Street to the north are predominantly mixed-use. The buildings south, east and west of the site on Laguna and Fell Streets are primarily two to threestory residential buildings.

4. **Project Description.** The proposal is to modify an existing macro wireless telecommunication services ("WTS") facility that would replace (3) panel antennas mounted within a single cylinder (radome) on the subject building, with three panel antennas in three individual locations, and replace equipment on the roof and in the basement, of the subject building, as part of Sprint's telecommunications network. Based on the presence of two existing macro WTS facilities, zoning and land use, the antennas are proposed on a Location Preference 2 Site (Co-Location) according to the WTS Facilities Siting Guidelines.

All (3) of the existing antennas would be replaced with three (3) panel antennas in three individual locations (sectors) on the roof of the building. The building features a lower roof height of approximately 34' above ground along the southern half of the Project Site, closest to Fell Street, and an upper roof height of approximately 42' above ground along the northern half of the Project Site, closest to Linden Street.

The Sector A antenna would be flush mounted, at approximately 47′ above ground level, to an existing rooftop penthouse wall, and located approximately 5.5′ from the roof edge along Laguna Street. The Sector B antenna would be screened within element composed of fibre-reinforced plastic (FRP) material painted and textured to mimic a stairwell penthouse, located approximately 6′ from the nearest building edge along Laguna Street, with a maximum height of approximately 41′ above ground level. The Sector C antenna would be housed within an element composed of FRP material, painted and textured to mimic an approximately 18″ diameter roof mounted vent pipe. The faux vent pipe would be mounted at the same corner location as the existing radome, and be setback at least 6′ from the nearest roof edge.

The actual antennas would measure approximately 72" high by 12" wide by 6" thick (Sectors A and B) and approximately 48" high by 12" wide by 8" thick (Sector C). The proposed modification would also feature the installation of six (6) radio relay units (RRUs) on the roof, with two RRUs mounted near each of the three antenna sectors. RRUs are typically mounted at locations near the base of the antenna, with a height of less than 36" and are used to enhance antenna capacity and reduce interference. The RRUs would be mounted in such a manner as to not be visible from adjacent public rights-of-way.

5. **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 WTS Facilities Siting *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, basements, 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 Facilities 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.

**6. Location Preference.** The WTS Facilities Siting Guidelines identify different types of zoning districts and building uses for the siting of wireless telecommunications facilities. Under the Guidelines, and based on presence of two existing macro WTS facilities, the antennas are proposed on a Location Preference 2 Site (Co-Location), which is a Preferred

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Location, according to the WTS Facilities Siting Guidelines.

- 7. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless facility is necessary to address coverage and capacity limitations of the existing Sprint macro facility, which is not able to provide sufficient coverage for voice services or meet network demands for 4G Long Term Evolution (LTE) data services. The network would operate in the 700 2,170 Megahertz (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.
- 8. **Radiofrequency (RF)** Emissions: The Project Sponsor retained EBI Consulting, 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*.
- 9. **Department of Public Health Review and Approval.** The proposed Project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Existing RF levels at ground level were less than 1% of the FCC public exposure limit. There are three (3) antennas operated by Sprint and three (3) antennas operated by AT&T Mobility installed on the roof of the subject building, and there were no other observed antennas within 100' of the Project Site.

Sprint proposes to replace (3) antennas and install three (3) panel antennas at the Project Site. The antennas would be mounted at a height of approximately 35' above the ground. The estimated ambient RF field from the proposed Sprint transmitters at ground level is calculated to be 0.0565 mW/sq. cm., which is 10.6% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 15' and does not reach any publicly accessible areas. However, this area does include a portion of the rooftop at the subject building. This prohibited access area should be marked with barriers and rooftop striping. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 5' of the front of the antennas while they are in operation.

- **10. Coverage and Capacity Verification.** The maps, data, and conclusion provided by Sprint to demonstrate need for coverage and capacity have been confirmed by EBI Consulting, an engineering consultant and independent third party to accurately represent the carrier's present and post-installation conclusions.
- **11. Maintenance Schedule**. The proposed facility would operate without on-site staff but with a two-person maintenance crew visiting the property approximately once a month and on an as-needed basis to service and monitor the facility.

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**12. Community Outreach.** The Project Sponsor held a Community Outreach Meeting for the proposed project at 5:30 pm on January 9, 2014, at the San Francisco Public Library (Main branch), located at 100 Larkin Street. No community members attended the meeting.

- 13. **Five-year plan:** Per the *Guidelines*, the Project Sponsor submitted an updated five-year plan, as required, in October 2013.
- 14. **Public Comment.** As of February 13, 2014, the Department has not received any comments regarding the proposed facility.
- 15. **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 720.83, a Conditional Use Authorization is required for the installation of Commercial Wireless Transmitting, Receiving or Relay Facility (Public Use).
- 16. **Planning Code Section 303** establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use Authorization. On balance, the Project does comply 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.
    - i. Desirable: San Francisco is a leader of the technological economy; it is important and desirable to the vitality of the City to have and maintain adequate telecommunications coverage and data capacity. This includes the installation and upgrading of systems to keep up with changing technology and increases in usage. It is desirable for the City to allow wireless facilities to be installed.
      - The proposed Project at 501 Laguna Street 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 nature of the vicinity. The addition of three (3) antennas and related support and protection features are so located, designed, and treated architecturally to minimize their visibility from public places, to avoid intrusion into public vistas, avoid disruption of the architectural design integrity of the Project Site or adjacent buildings, insure harmony with the existing neighborhood character and promote public safety. The Project has been reviewed and determined to not cause the removal or alteration of any significant architectural features of the subject building.
    - ii. Necessary: In the case of wireless installations, there are two criteria that the Commission reviews: coverage and capacity.

Coverage: San Francisco does have sufficient overall wireless coverage (note that this is separate from carrier capacity). San Francisco's unique coverage issues are due to topography and building heights. The hills and buildings disrupt lines of site between WTS base stations. Thus, telecommunication carriers continue to install additional installations to make sure coverage is sufficient.

Capacity: While a carrier may have adequate coverage in a certain area, the capacity may not be sufficient. With the continuous innovations in wireless data technology and demand placed on existing infrastructure, individual telecommunications carriers must upgrade and in some instances expand their facilities network to provide proper data and voice capacity. It is necessary for San Francisco, as a leader in technology, to have adequate capacity.

The proposed Project at 501 Laguna Street is necessary in order to achieve sufficient street and in-building mobile phone coverage and data capacity. Recent drive tests in the subject area conducted by the Sprint Radio Frequency Engineering Team provide that the Project Site remains the most viable location, based on factors including quality of coverage and aesthetics.

- 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:
  - i. Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

The Project must comply with all applicable Federal and State regulations to safeguard the health, safety and to ensure that persons residing or working in the vicinity will not be affected, and prevent harm to other personal property.

The Department of Public Health conducted an evaluation of potential health effects from Radio Frequency radiation, and has concluded that the proposed wireless transmission facilities will have no adverse health effects if operated in compliance with the FCC-adopted health and safety standards.

 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;

No increase in traffic volume is anticipated with the facilities operating unmanned, with a maintenance crew visiting the Site once a month or on an as-needed basis.

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iii. 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.

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

The three (3) additional antennas would be mounted to the east facing façade of the stairwell penthouse. The top of each antenna would be flush with the top of the penthouse roof, without significant increases in the overall bulk or dimensions of the building. The proposed antennas, screening collar elements (to hide the coaxial cable loop from view), and equipment will not affect landscaping, open space, 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 Project Site will not affect the primary use of the subject building for residential and limited retail commercial activities which are intended uses within the Hayes-Gough Neighborhood Commercial Transit District.

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

## HOUSING ELEMENT OBJECTIVES AND POLICIES

#### BALANCE HOUSING CONSTRUCTION AND COMMUNITY INFRASTRUCTURE

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.

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The Project will improve Sprint coverage and capacity along Van Ness Avenue and Lombard Street, which are primary neighborhood commercial corridors in the Marina neighborhood.

#### **URBAN DESIGN**

#### **HUMAN NEEDS**

Objective 4: IMPROVEMENT OF THE NEIGHBORHOOD ENVIRONMENT TO INCREASE PERSONAL SAFETY, COMFORT, PRIDE AND OPPORTUNITY.

POLICY 4.14: Remove and obscure distracting and cluttering elements.

The three (3) new antennas would be adequately flush mounted with minimal offset from the wall surface and accompanied by collar shrouds to minimize visibility of the coaxial cable loop. The six (6) replacement antennas would be located within previously approved screening elements. Therefore, the antenna installation method would reduce their visual impact, and minimize the possibility of introducing new elements considered distracting or cluttering. The height and bulk of the proposed antennas in relation to the scale of the building will not appear distracting nor create a cluttered visual aesthetic for the subject building or surrounding 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:** Encourage development, which provides substantial net benefits and minimizes undesirable consequences. Discourage development, which has substantial undesirable consequences that cannot be mitigated.

**Policy 2:** Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

The Project would 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 1:** Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

**Policy 3:** Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

The Site is an integral part of Sprint 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 1:** Maintain and enhance a favorable business climate in the City.

Policy 2: Promote and attract those economic activities with potential benefit to the City.

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

### VISITOR TRADE

**OBJECTIVES AND POLICIES** 

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.

The Project will ensure that residents and visitors have adequate public service in the form of Sprint telecommunications.

#### **COMMUNITY SAFETY ELEMENT**

#### **Objectives and Policies**

**OBJECTIVE 3:** ENSURE THE PROTECTION OF LIFE AND PROPERTY FROM THE EFFECTS OF FIRE OR NATURAL DISASTER THROUGH ADEQUATE EMERGENCY OPERATIONS PREPARATION.

**Policy 1:** Maintain a local agency for the provision of emergency services to meet the needs of San Francisco.

**Policy 2:** Develop and maintain viable, up-to-date in-house emergency operations plans, with necessary equipment, for operational capability of all emergency service agencies and departments.

- **Policy 3:** Maintain and expand agreements for emergency assistance from other jurisdictions to ensure adequate aid in time of need.
- Policy 4: Establish and maintain an adequate Emergency Operations Center.
- **Policy 5:** Maintain and expand the city's fire prevention and fire-fighting capability.
- **Policy 6:** Establish a system of emergency access routes for both emergency operations and evacuation.

The Project would 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.

- 18. **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 does comply 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.
    - No neighborhood-serving retail use would be displaced and the wireless communications network will enhance personal communication services.
  - 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 would be displaced or altered in any way by the granting of this Authorization.
  - C. That the City's supply of affordable housing be preserved and enhanced.
    - The Project would 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 would not be significantly impeded and neighborhood parking would 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 would cause no displacement of industrial and service sector activity.

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

Compliance with applicable structural safety and seismic safety requirements would be considered during the building permit application review process.

G. That landmarks and historic buildings be preserved.

The Project Site is a Potential Historic Resource that has been identified as a possible contributor to a district that appears eligible for local listing or designation. The subject building was developed in 1885. The Project Site is surrounded by residences to the south and west, which were developed in the late 19th century, and are considered Potential Historic Resources. As the antennas and screening elements would not be placed on, adversely affect character defining features of the Subject Building, nor impair views of adjacent buildings The Project would not obscure or detract from other potentially significant buildings or public views within the Western Addition neighborhood. As proposed the installation is compatible with the Secretary of the Interior's Standards for the treatment of historic properties.

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

The Project will have no adverse impact on parks or open space, or their access to sunlight or vistas.

- 19. 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.
- 20. The Commission hereby finds that approval of the Conditional Use Authorization would promote the health, safety, and welfare of the City.

#### **DECISION**

The Commission, after carefully balancing the competing public and private interests, and based upon the Recitals and Findings set forth above, in accordance with the standards specified in the Code, hereby approves the Conditional Use Authorization under Planning Code Sections 720.83 and 303 to install up to three (3) panel antennas, and associated equipment cabinets on the roof and in the basement of the Project Site and as part of a wireless transmission network operated by Sprint on a Location Preference 2 (Co-Location) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within the Hayes-Gough Neighborhood Commercial Transit District, and 40-X Height and Bulk District, and subject to the conditions of approval attached hereto as **Exhibit A**; in general conformance with the plans, dated October 1, 2013, and stamped "Exhibit B."

APPEAL AND EFFECTIVE DATE OF MOTION: Any aggrieved person may appeal this Conditional Use Authorization to the Board of Supervisors within thirty (30) days after the date of this Motion No. XXXXX. The effective date of this Motion shall be the date of this Motion if not appealed (after the 30-day period has expired) OR the date of the decision of the Board of Supervisors if appealed to the Board of Supervisors. For further information, please contact the Board of Supervisors at (415) 554-5184, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

**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 recommence the 90-day approval period.

CASE NO. 2014.0148C 501 Laguna Street

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **February 20, 2014**.

JONAS P. IONIN Commission Secretary

AYES:

NAYES:

ABSENT:

ADOPTED: February 20, 2014

SAN FRANCISCO
PLANNING DEPARTMENT

### **EXHIBIT A**

#### **AUTHORIZATION**

This authorization is for a Conditional Use Authorization under Planning Code Sections 720.83 and 303 to install up to three (3) panel antennas, and associated equipment cabinets on the roof and in the basement of the Project Site and as part of a wireless transmission network operated by Sprint on a Location Preference 2 (Co-Location) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within the Hayes-Gough Neighborhood Commercial Transit District, and 40-X Height and Bulk District, and subject to the conditions of approval attached hereto as **Exhibit A**; in general conformance with the plans, dated October 1, 2013, and stamped "Exhibit B."

#### 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 **February 20, 2014** under Motion No. XXXXX.

#### PRINTING OF CONDITIONS OF APPROVAL ON PLANS

The conditions of approval under the 'Exhibit A' of this Planning Commission Motion No. XXXXX 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 and Expiration. The authorization and right vested by virtue of this action is valid for three years from the effective date of the Motion. A building permit from the Department of Building Inspection to construct the project and/or commence the approved use must be issued as this Conditional Use Authorization is only an approval of the proposed project and conveys no independent right to construct the Project or to commence the approved use. The Planning Commission may, in a public hearing, consider the revocation of the approvals granted if a site or building permit has not been obtained within three (3) years of the date of the Motion approving the Project. 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. The Commission may also consider revoking the approvals if a permit for the Project has been issued but is allowed to expire and more than three (3) years have passed since the Motion was approved.

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

2. **Extension.** This authorization may be extended at the discretion of the Zoning Administrator only where failure to issue a permit by the Department of Building Inspection to perform said tenant improvements is caused by a delay by a local, State or Federal agency or by any appeal of the issuance of such permit(s).

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

#### **DESIGN - COMPLIANCE AT PLAN STAGE**

- 3. **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 415-575-6378, <u>www.sf-planning.org</u>.

Motion No. XXXXX CASE NO. 2014.0148C Hearing Date: February 20, 2014 501 Laguna Street

- 4. **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. Antennas 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.

For information about compliance, contact the Case Planner, Planning Department at 415-575-6378, <u>www.sf-planning.org</u>.

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

5. **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>

6. **Monitoring.** The Project requires monitoring of the conditions of approval in this Motion. The Project Sponsor or the subsequent responsible parties for the Project shall pay fees as established under Planning Code Section 351(e) (1) and work with the Planning Department for information about compliance.

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

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7. **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, www.sf-planning.org.

#### 8. Implementation Costs - WTS.

- a. 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.
- b. 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.
- c. 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
- 9. **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>
- 10. **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

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- 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.
  - i. Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 4.
  - ii. 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>.

- 11. **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, www.sf-planning.org

- 12. **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>
- 13. **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

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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**

- 14. **Community Liaison.** Prior to issuance of a building permit application 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 written notice of the name, business address, and telephone number of the community liaison. Should the contact information change, the Zoning Administrator 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, www.sf-planning.org
- 15. **Out of Service WTS**. The Project Sponsor or Property Owner shall remove antennas 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, www.sf-planning.org

- 16. **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>.
- 17. **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* 
  - For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, <u>www.sfdph.org</u>.
- 18. **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.

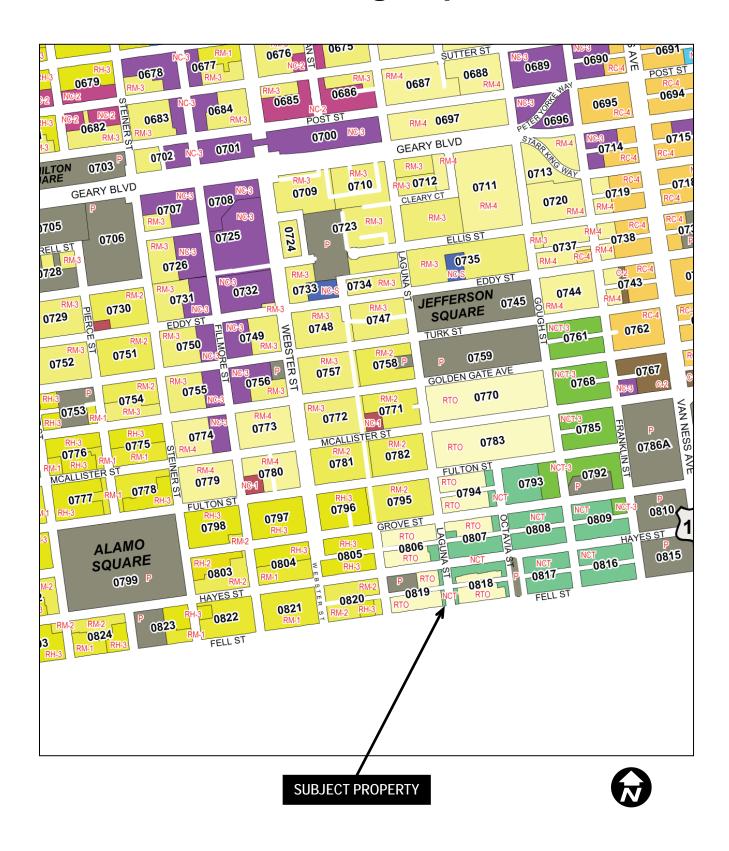
For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

19. **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, <a href="http://sfgov3.org/index.aspx?page=1421">http://sfgov3.org/index.aspx?page=1421</a>

SAN FRANCISCO PLANNING DEPARTMENT

## **Zoning Map**



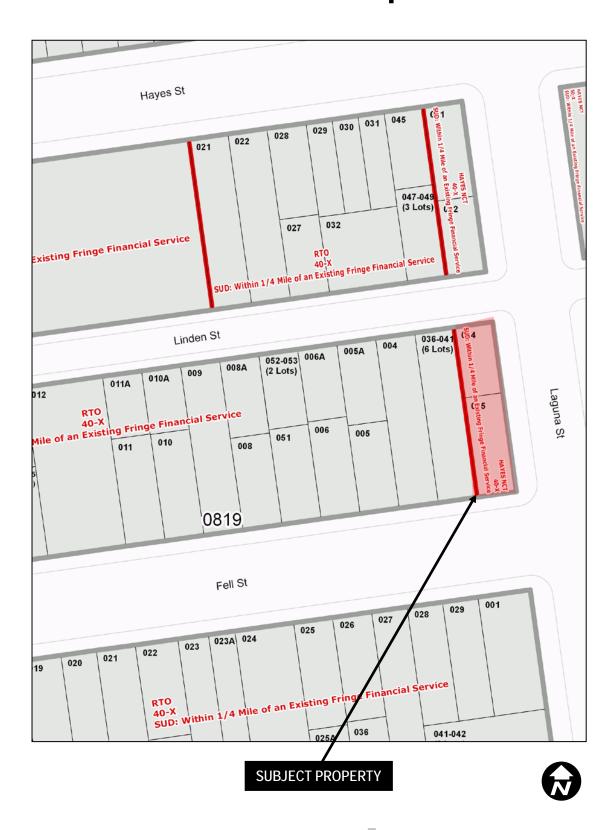
### **Aerial Photo**



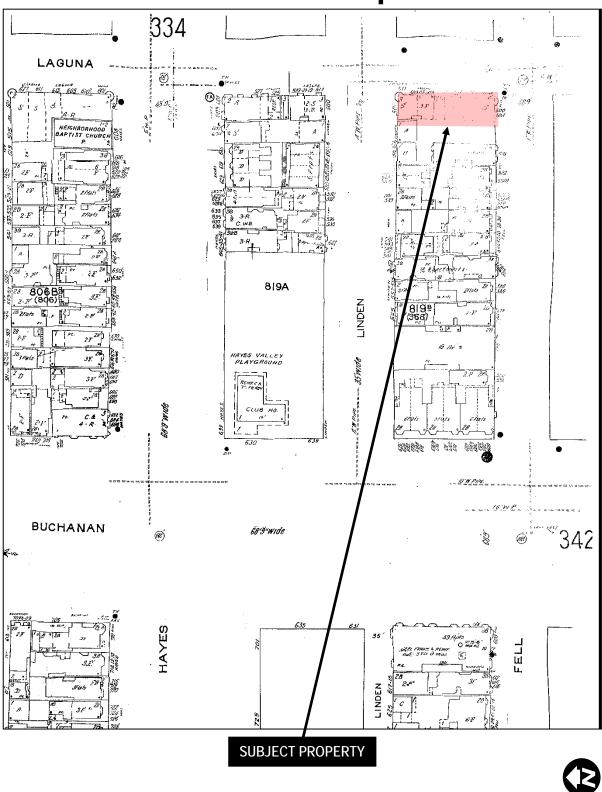
SUBJECT PROPERTY



# **Parcel Map**



# Sanborn Map\*



### **Contextual Photos**

<u>Subject Site:</u> 501 Laguna (view of south-east corner of the building - Laguna and Fell)



Close-up view of building at Laguna and Fell



**Subject Site:** View of west facade looking south at the site along Laguna



**<u>Subject Site:</u>** View of north-east corner of the building (Laguna and Linden)



501 Laguna St. 0819/035 2014.0148C

View looking west along Fell St. from the site



View looking north along Laguna from the site



501 Laguna St. 0819/035 2014.0148C

View looking east along Fell St. from the site



View looking south along Laguna from the site







500 Fell Street, San Francisco, CA

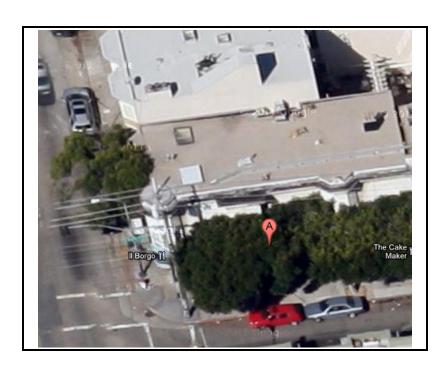
AdvanceSime Photo Simulation Solutions Contact (925) 202-8507





500 Fell Street, San Francisco, CA

### Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report



Prepared for: Sprint Nextel 6391 Sprint Parkway Mailstop: KSOPHT0101-Z2650 Overland Park, KS 66251-2650

Site No. SF54XC215A
II Borgo Restaurant
501 Laguna Street
San Francisco, California 94102
San Francisco County
37.775560; -122.426110 NAD83
Site Type: rooftop

EBI Project No. 62111765 December 9, 2013





501 Laguna St. 0819/035 2014.0148C

#### **EXECUTIVE SUMMARY**

## **Purpose of Report**

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Sprint Nextel to conduct radio frequency electromagnetic (RF-EME) monitoring and modeling for Sprint Site SF54XC215A located at 501 Laguna Street in San Francisco, California to determine RF-EME exposure levels from existing and proposed Sprint wireless communications equipment at this site. As described in greater detail in Section 11.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME monitoring and modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

EBI field personnel visited this site on August 5, 2011. This report contains a detailed summary of the RF EME analysis for the site.

This document addresses the compliance of Sprint's proposed transmitting facilities at the site and in relation to all collocated facilities at the site.



#### 1.0 LOCATION OF ALL EXISTING ANTENNAS AND FACILITIES AND EXISTING RF LEVELS

This project involves the removal of three (3) existing antennas replaced and the installation of (3) proposed Sprint wireless telecommunication antennas on a rooftop located at 501 Laguna Street in San Francisco, California. There are three Sectors (A, B, and C) proposed to be installed at the site, with one (1) antenna that may be installed per sector.

EBI conducted a site visit on August 5, 2011 at the time of the site visit no other carriers were collocated with the Sprint antennas on the rooftop located at 501 Laguna Street in San Francisco, California. Measurements were taken at the rooftop and ground to record existing RF-EME levels resulting from the existing Sprint antennas prior to the installation of Sprint's proposed equipment.

During the survey, no spatially averaged power density readings above 0.2902mW/cm², which is 29.0200% of the FCC's occupational MPE (145.1000% of the general public MPE) were encountered on any rooftop surface that was not already barricaded. It should be noted that the area within the painted barrier did have readings above the general public MPE. In addition, no spatially averaged power density readings greater than 0.00109mW/cm², which is 0.5450% of the FCC's uncontrolled or general public MPE were encountered at ground level.

# 2.0 LOCATION OR ALL APPROVED (BUT NOT INSTALLED) ANTENNAS AND FACILITIES AND EXPECTED RF LEVELS FROM THE APPROVED FACILITIES

There are no antennas or facilities that are approved and not installed based on information provided to EBI and Sprint at the time of this report.

# 3.0 Number and Types of WTS within 100 Feet of the Proposed Site and Estimates of Cumulative EMR Emissions at the Proposed Site

With the exception of the antennas mentioned in Section I.0, there are no other Wireless Telecommunication Service (WTS) sites observed within I00 feet of the proposed site.

# 4.0 LOCATION AND NUMBER OF THE SPRINT ANTENNAS AND BACK-UP FACILITIES PER BUILDING AND NUMBER AND LOCATION OF OTHER TELECOMMUNICATION FACILITIES ON THE PROPERTY

Sprint proposes the removal of removal of three (3) existing antennas and the installation of three (3) proposed Sprint wireless telecommunication antennas on a rooftop located at 501 Laguna Street in San Francisco, California. There are three Sectors (A, B, and C) proposed to be installed at the site, with one (1) antenna that may be installed per sector. In each sector, there is proposed to be one antenna transmitting in the 800 MHz and the 1900 MHz frequency. The Sector A antennas will be oriented 5° from true north. The Sector B antennas will be oriented 125° from true north. The Sector C antennas will be oriented 230° from true north. The bottoms of the antennas will range between approximately 1.5 and 8.5 feet the rooftop.

Based on drawings AT&T also has wireless antennas on the rooftop. These antennas were included in the modeling analysis.



# 5.0 POWER RATING FOR ALL EXISTING AND PROPOSED BACKUP EQUIPMENT SUBJECT TO THE APPLICATION

The operating power for modeling purposes was assumed to be 20 Watts per transmitter for the 800 MHz antenna and there will be one (I) transmitter operating at this frequency. Additionally, for modeling purposes it was assumed to be 20 Watts per transmitter and eight (8) transmitters operating at the I 900 MHz.

# 6.0 TOTAL NUMBER OF WATTS PER INSTALLATION AND THE TOTAL NUMBER OF WATTS FOR ALL INSTALLATIONS ON THE BUILDING

The effective radiated power (ERP) for the 800 MHz transmitter combined on site is 459 Watts. The ERP for the 1900 MHz transmitters combined on site is 6,760 Watts. The ERPs for other carriers on site was not provided.

# 7.0 PREFERRED METHOD OF ATTACHMENT OF PROPOSED ANTENNA WITH PLOT OR ROOF PLAN INCLUDING: DIRECTIONALITY OF ANTENNAS, HEIGHT OF ANTENNAS ABOVE NEAREST WALKING SURFACE, DISCUSS NEARBY INHABITED BUILDINGS

Based on the information provided to EBI, the information indicates that the proposed antennas are to be mounted within a faux vent and on penthouse walls on the roof, operating in the directions, frequencies, and heights mentioned in section 4.0 above. The surrounding area consists of urban commercial and residential neighborhoods.

# 8.0 ESTIMATED AMBIENT RADIO FREQUENCY FIELDS FOR THE PROPOSED SITE

Based on worst-case predictive modeling, there are predicted areas on the accessible rooftop-level walking/working surface related to the proposed Sprint antennas that exceed the FCC's occupational or general public exposure limits at this site. Based on worst-case modeling it is predicted that there may be an area within 4 feet of the proposed Sprint antennas that exceeds the FCC's occupational exposure limit at the main roof level. It is also predicted based on worst-case modeling that there may be an area within 13 feet of the proposed Sprint antennas that exceeds the FCC's general public exposure limit at the main roof level. At the nearest walking/working surfaces to the proposed Sprint antennas, the maximum power density is 11.143466mW/cm², which is 2,089.40 percent of the FCC's general public limit (417.88 percent of the FCC's occupational limit).

Based on worst-case predictive modeling, there are no areas at ground level related to the proposed Sprint antennas that exceed the FCC's occupational or general public exposure limits at this site. At ground level, the maximum power density generated by the Sprint antennas is 0.0565333mW/cm², which is 10.60 percent of the FCC's general public limit (2.12 percent of the FCC's occupational limit). The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix B.

Additionally, based on worst-case modeling at antenna face level there are modeled exceedances of the general public and occupational limits. It is predicted that there will be an occupational exceedance in front of the proposed Sprint antennas within 5 feet and a general public exceedance within 15 feet of the antenna face at antenna face level.



# 9.0 SIGNAGE AT THE FACILITY IDENTIFYING ALL WTS EQUIPMENT AND SAFETY PRECAUTIONS FOR PEOPLE NEARING THE EQUIPMENT AS MAY BE REQUIRED BY THE APPLICABLE FCC ADOPTED STANDARDS (DISCUSS SIGNAGE FOR THOSE WHO SPEAK LANGUAGES OTHER THAN ENGLISH)

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. Signage and a painted barrier is already installed for the existing antennas, signage and barriers should remain in place for the proposed antennas. There are fields in front of the proposed antennas and therefore barriers are recommended as shown in Appendix C.

Additionally, there are areas where workers elevated above the ground and rooftop may be exposed to power densities greater than the general population and occupational limits. Workers and the general public should be informed about the presence and locations of antennas and their associated fields.

At the time of the site survey, it was noted that there was 4 blue NOTICE signs posted on roof hatch, roof ladder, antenna housing, and conduit...

Additionally, access to this site is accomplished via a locked roof access door located on the main roof. Access to the facility is monitored and locked and as such, the general public is not able to access the rooftop.

## 10.0 STATEMENT ON WHO PRODUCED THIS REPORT AND QUALIFICATIONS

Please see the certifications attached in Appendix A below.

## 11.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**General public/uncontrolled exposure limits** apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not



employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table I and Figure I (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

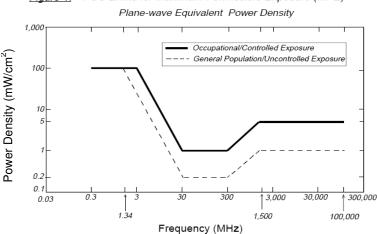
The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm²). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm²) and an uncontrolled MPE of 1 mW/cm² for equipment operating in the 1900 MHz frequency range. For the Sprint equipment operating at 800 MHz, the FCC's occupational MPE is 2.66 mW/cm² and an uncontrolled MPE of 0.53 mW/cm². These limits are considered protective of these populations.

T	able I: Limits for	Maximum Permiss	sible Exposure (MP	E)							
(A) Limits for Occupational/Controlled Exposure											
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)							
0.3-3.0	614	1.63	(100)*	6							
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6							
30-300	61.4	0.163	1.0	6							
300-I,500			f/300	6							
1,500-100,000			5	6							
(B) Limits for Gene	eral Public/Uncontro	olled Exposure									
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)							
0.3-1.34	614	1.63	(100)*	30							
1.34-30	824/f	2.19/f	(180/f²)*	30							
30-300	27.5	0.073	0.2	30							
300-I,500			f/1,500	30							
1,500-100,000			1.0	30							

f = Frequency in (MHz)



<sup>\*</sup> Plane-wave equivalent power density



<u>Figure 1.</u> FCC Limits for Maximum Permissible Exposure (MPE)

Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm <sup>2</sup>	I.00 mW/cm <sup>2</sup>
Cellular Telephone	870 MHz	2.90 mW/cm <sup>2</sup>	0.58 mW/cm <sup>2</sup>
Specialized Mobile Radio	855 MHz	2.85 mW/cm <sup>2</sup>	0.57 mW/cm <sup>2</sup>
Most Restrictive Freq, Range	30-300 MHz	I.00 mW/cm <sup>2</sup>	0.20 mW/cm <sup>2</sup>

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by Sprint in this area operate within a frequency range of 800-1900 MHz. Facilities typically consist of: I) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

## **Statement of Compliance**

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits <u>and</u> there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.



501 Laguna St. 0819/035 2014.0148C

#### 12.0 LIMITATIONS

This report was prepared for the use of Sprint Nextel. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information collected during the site survey andprovided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made

### 13.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed Sprint telecommunications equipment at the site located at 501 Laguna Street in San Francisco, California.

EBI has conducted theoretical modeling and on site monitoring to estimate the worst-case power density from Sprint antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements. As presented in the preceding sections, based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 13 feet of Sprint proposed antennas at the main roof level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 4 feet of Sprint proposed antennas at the main roof level.

Additionally, based on the FCC criteria, there are no measured areas on any accessible rooftop and ground-level walking/working surface related to the existing site conditions that exceed the FCC's occupational and general public exposure limits at this site. There was an area to the north of the antennas that was measured to exceed the FCC's general public limit, however that area already had painted warning lines.

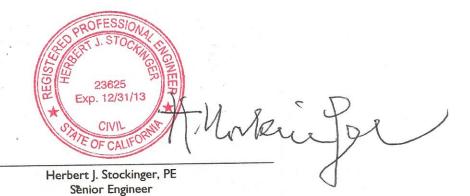
Signage has been installed at the site as presented in Section 9.0. Posting of the signage and installation of the recommended barriers brings the site into compliance with FCC rules and regulations.



# Appendix A Certifications



Reviewed and Approved by:



Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the building and related structures, as well as the impact of the antennas and broadcast equipment on the structural integrity of the building, are specifically excluded from EBI's scope of work.

# Field Personnel Certification

#### I, David Oliver, state that:

David Oliver

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have been trained in the proper use of the RF-EME measurement equipment, and have successfully completed EBI training in the policies and procedures for site survey protocols.
- All information collected during the site survey and contained in this report is true and accurate
  to the best of my knowledge and based on the data gathered.



# Preparer Certification

## I, Drew Duncklee, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have reviewed the data collected during the site survey and provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.



# Appendix B Roofview® Export File



**StartMapD**efinition

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StartSettingsData

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 Uptime
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 Mid Thr
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 Hi Thr
 Hi Color
 Over Color Ap Ht Mult Ap Ht Method

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 3
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StartAntennaData It is advisable to provide an ID (ant 1) for all antennas (MHz) Trans Trans Calc (ft) (ft) (ft) (ft) dBd BWdth Uptime ON Coax Coax Other Input ID Name Freq Power Count Len Type Loss Power Power Mfg Model Υ Z Type Aper Gain Pt Dir Profile flag SPT A1 Sprint 800 20 1 25 1/2 LDF 0.5 15.52494 Powerway P65-16-XLF 27 59 8.5 6 12.7 66;5 ON• 25 1/2 LDF SPT A1 Sprint 1900 20 2 0.5 31.04988 Powerway P65-16-XLF 27 59 8.5 6 15.1 63;5 ON• SPT A1 Sprint 1900 20 6 25 1/2 LDF 0.5 93.14965 Powerway P65-16-XLF 27 59 8.5 15.1 63;5 ON• 6 SPT B1 Sprint 800 20 1 25 1/2 LDF 0.5 15.52494 Powerway P65-16-XLF 29 39 1.5 6 12.7 66;125 ON• SPT B1 Sprint 1900 20 2 25 1/2 LDF 0.5 31.04988 Powerwavi P65-16-XLF 29 39 1.5 6 15.1 63;125 ON• 93.14965 Powerwav P65-16-XLF 29 SPT B1 Sprint 1900 20 25 1/2 LDF 0.5 39 1.5 15.1 63;125 ON• SPT C1 Sprint 800 20 1 25 1/2 LDF 0.5 15.52494 RFS APXVFRR12 34 13 2.5 10.5 72;230 ON• SPT C1 1900 20 2 25 1/2 LDF 0.5 31.04988 RFS APXVFRR12 34 13 2.5 4 13.9 65;230 ON• Sprint SPT C1 Sprint 1900 20 6 25 1/2 LDF 0.5 93.14965 RFS APXVFRR12 34 13 2.5 13.9 65;230 ON• 4 ATT A1 ATT 850 100 1 3 50.11872 SPD2P6515 22 85 9.015 4.29 12.6 63;45 ON• ATT A1 ATT 1900 20 1 3 10.02374 SPD2P6515 22 85 9.015 4.29 14.6 61:45 ON• 3 85 9.015 4.29 ATT 850 100 1 SPD2P6515 20 12.6 63;280 ON• ATT B1 50.11872 ATT B1 ATT 1900 20 1 3 10.02374 SPD2P6515 20 85 9.015 4.29 14.6 61;280 ON• ATT C1 ATT 850 100 1 3 50.11872 SPD2P6515 20 28 16.855 4.29 12.6 63;130 ON• ATT C1 ATT 1900 20 3 10.02374 SPD2P6515 20 28 16.855 4.29 14.6 61;130 ON• 1

List Of Area \$AE\$81:\$D

StartSymbolData

Sym Map Mark Roof X Roof Y Map Label Description (notes for this table only)

Sym 5 35 AC Unit Sample symbols

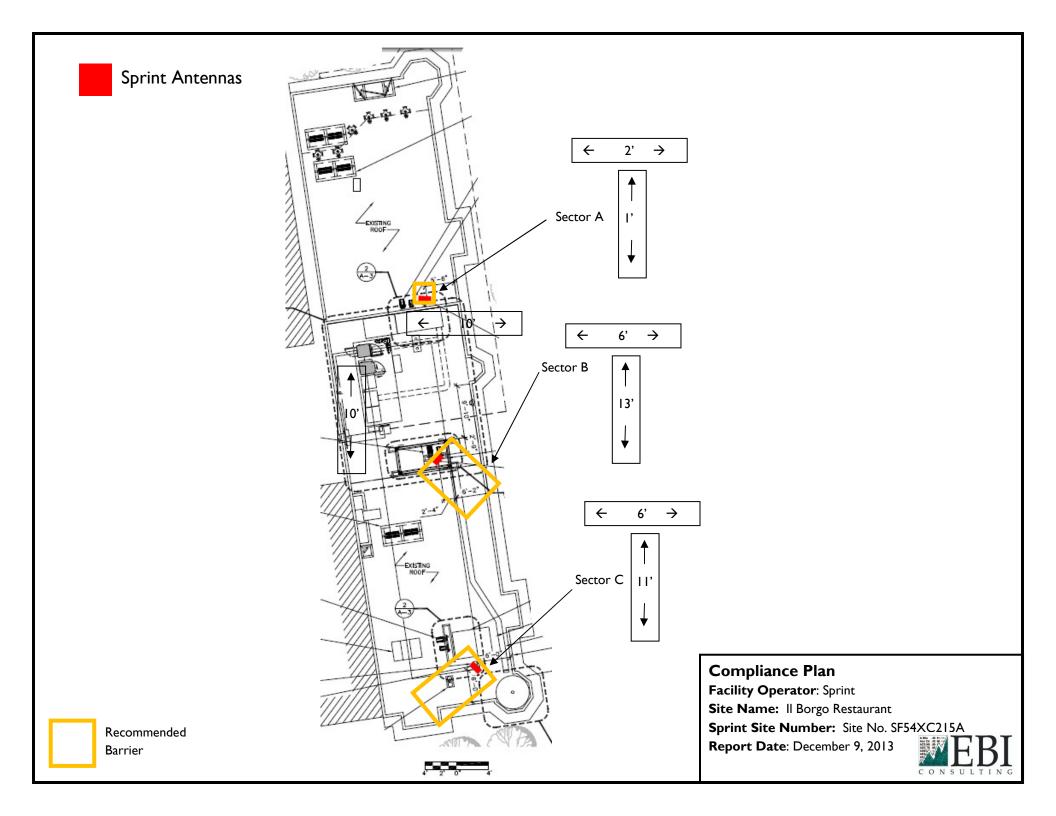
 Sym
 14
 5 Roof Access

 Sym
 45
 5 AC Unit

 Sym
 45
 20 Ladder

# Appendix C Site Plan and Barrier Recommendations





Barbara A. Garcia, MPA, Director of Health Rajiv Bhatia, MD, MPH, Director of EH

# **Review of Cellular Antenna Site Proposals**

Projec	ct Sponsor :	Sprint			Planne	er:	Omar M	asry	
RF E	ngineer Consu	ltant:	EBI Consul	ting			Phone Nu	mber:	(800) 786-2346
Projec	ct Address/Lo	cation:	501 Laguna	. St					
Site II	D: <u>682</u>		Site	No.:	SF54xc215A				_
inforn Teleco In ord	nation requirement communications er to facilitate q	ents are est Services Fa uicker app	cablished in the acility Siting (roval of this p	e San Fr Guidelin project, it	pefore approval of ancisco Planning es dated August is recommende e that all require	g D : 199 ed th	epartment V 96. at the proje	Vireless ct spons	
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		✓ Existing	g Antennas	No Existi	ng Antennas:	6			
v	pproved antenn	as. (WTS-l	,	,	antennas and fa	cili	ties. Expect	ed RF le	evels from the
	• Yes	<sup>)</sup> No							
•		• •			of the proposed Section 10.5.2)		e and provid	le estima	ntes of cumulative
	<ul><li>Yes</li></ul>	$\bigcirc$ No							
					nnas and back-u the property (W				and number and
	quipment subje		plication (WT		ng power) for all Section 10.4.1c		sting and p	roposed	backup
	o. The total num ouilding (roof or				the total number 1).	of	watts for all	installa	tions on the
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<b>X</b> p	erimeter where	the FCC st	tandards are e	xceeded	ls for the propos .) (WTS-FSG, S P, 200 µw/cm²)	ecti			ee-dimensional standard utilized
	Maximum RF	Exposure:	0.0565	mW/cm	Maximum RF I	Ехро	sure Percent	10.6	<u> </u>
<b>X</b> e	quipment as ma Discuss signage	y be requir for those w	red by any app who speak lang	olicable	ipment and safe FCC-adopted sta ther than English	anda			
		Exclusion_A itional_Exclu			Public Exclusion I Occupational Exc			15 5	<u> </u>

- **X** 10. Statement on who produced this report and qualifications.
- 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 1986-NCRP Approval of the subsequent Project Implementation Report is based on project sponsor completing recommendations by project consultant and DPH.

#### Comments:

There are 3 antennas operated by Sprint installed on the roof top of the building at 501 Laguna Street. Existing RF levels at ground level were less than 1% of the FCC public exposure limit. AT&T has 3 antennas also installed at this location. Sprint proposes to remove 3 antennas and to install 3 new antennas. The antennas are mounted at a height of about 35 feet above the ground. The estimated ambient RF field from the proposed Sprint transmitters at ground level is calculated to be 0.0565 mW/sq cm., which is 10.6% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 15 feet and includes portions of the rooftop areas. Barricades should be maintained and/or installed to prevent public access to these areas. Warning signs must be posted at the antennas, barricades and roof access points in English, Spanish and Chinese. Workers should not have access to within 5 feet of the front of the antennas while they are in operation.

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 S<sub>1</sub>

Dated: 12/19/2013

Signed:

Patrick Fosdahl

Environmental Health Management Section San Francisco Dept. of Public Health 1390 Market St., Suite 210, San Francisco, CA. 94102 (415) 252-3904

Fosdel

## **Service Area Definition**

## **Necessity of Proposed Site for Network Operations**

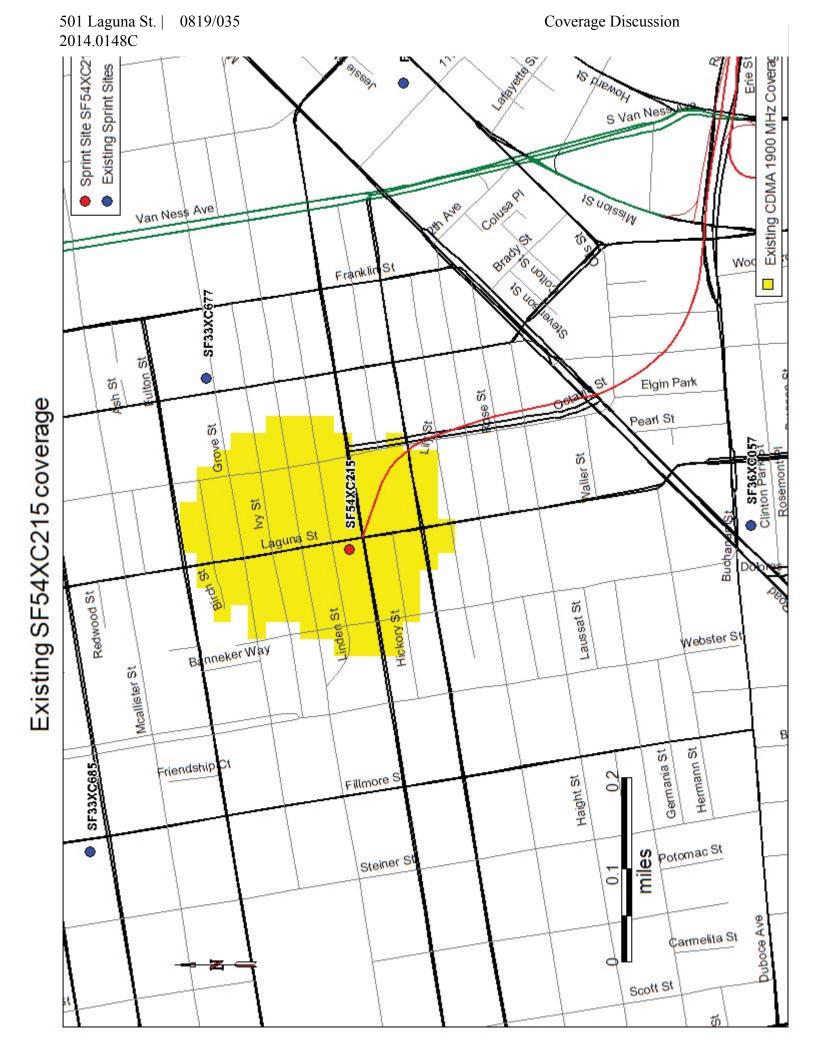
The proposed modification of an existing Sprint facility would replace the existing technology to 4G LTE (Fourth Generation Long Term Evolution) service, which provides improved performance by increasing data speed and reducing latency. 4G LTE is a successor to the current generation of UMTS 3G (radio frequencies used by third generation wireless Universal Mobile Telecommunications System networks). This update will enable Sprint to provide their users with significantly faster data rates for both uploading and downloading.

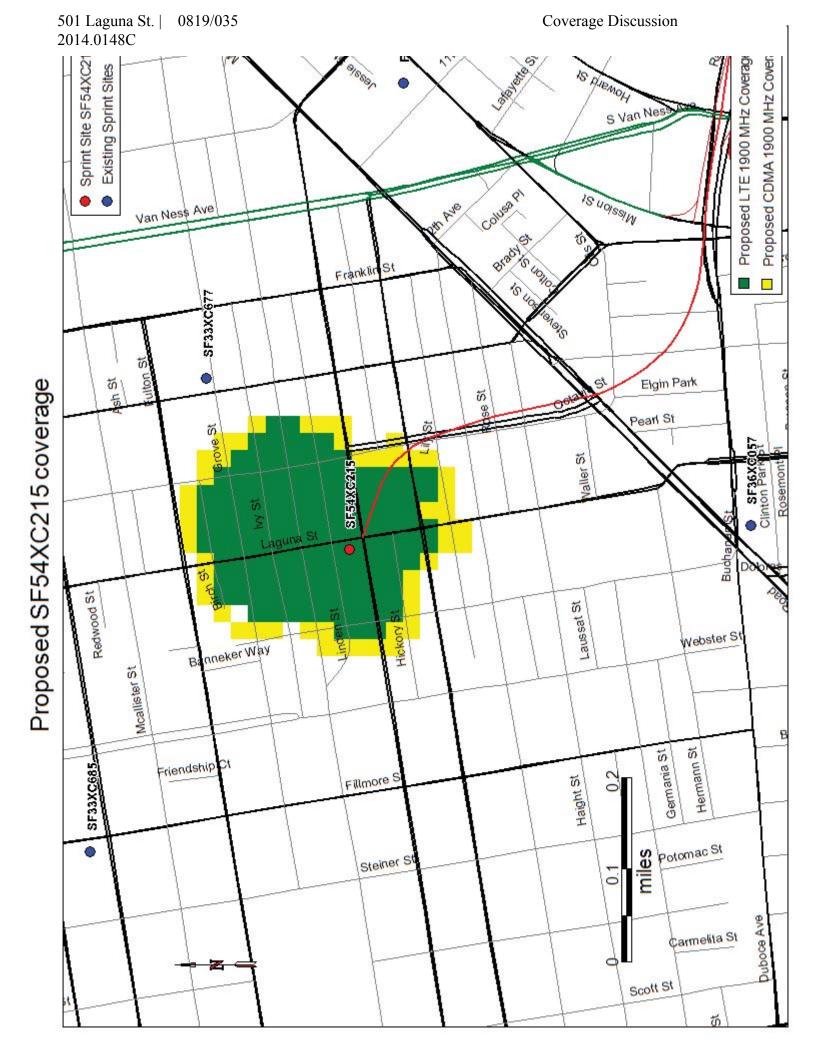
## **Description of Service Area**

The proposed facility is a necessary component of Sprint Wireless Network. The modernization of antennas at this site will provide improved voice and data service to the area surrounding the site roughly bounded by Fulton St. on the north, Gough St. on the east, Oak St on the south, and Webster St. on the west.

#### **Distance between Sites**

SF33XC677	370 Grove Street	- 0.5 mi
FS04XC028	1455 Market St.	- 0.6 mi
SF33XC667	1100 Oak St.	-0.8 mi
SF33XC685	1119 Fillmore St.	- 0.6 mi





501 Laguna St. 0819/035 2014.0148C

# Community Outreach Meeting Summary 501 Laguna Street (Sprint Site ID#: SF54XC215) January 9, 2014 5:30 pm San Francisco Public Library - Main Branch

# Present at the meeting:

Representing Sprint:
Maria Miller, Land Use Planner, Modus, Inc
David Oliver, Independent RF Engineer, EBI Consulting

# Meeting attendees:

none

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

To: Neighbors within 500 feet of 501 Laguna St., San Francisco, CA

Meeting Information

Date: Thursday, January 9th, 2014

5:30 p.m. Time:

Where: San Francisco Public Library 100 Larkin Street (at Grove)

> Martin Paley Conference Room - located next to the Page Desk on the 3rd Floor\*

**Applicant** 

Sprint c/o Modus Inc.

149 Natoma St., 3<sup>rd</sup> floor San Francisco, CA 94105

**Sprint Site Information** 

501 Laguna St. Address:

San Francisco, CA 94122

APN: 0819-035 Zoning: Hayes NCT

**Contact Information** 

Maria Miller 149 Natoma St., 3<sup>rd</sup> floor San Francisco, CA 94105

(415)450-5533

mmiller@modus-corp.com

\*This is not a Library Sponsored Program

Sprint has applied for zoning approval to upgrade an existing cell site on the roof top of 501 Laguna St. in San Francisco. The proposed modification would replace the existing antennas and equipment cabinets upgrading the facility to 4G LTE service, which provides improved performance by increasing data speed and reducing latency. This update will improve service for Sprint customers with significantly faster data rates for both uploading and downloading.

You are invited to attend an informational community meeting on Thursday, January 9th at 5:30 p.m. at the Main San Francisco Public Library. This project will be scheduled for a Planning Commission public hearing after the neighborhood meeting. Architectural plans and photo simulations will be available for your review at the meeting.

If you are unable to attend the meeting and would like to request information, please contact Maria Miller at (415) 450-5533 or at mmiller@modus-corp.com.

If you have any questions about the zoning process, you may contact Omar Masry, the project planner with San Francisco Planning Department at (415) 575-9116 or omar.masry@sfgov.org.

NOTE: If you require an interpreter to be present at the meeting, please contact our office at (415) 450-5533 or mmiller@moduscorp.com no later than January 3, 2014 and we will make every effort to provide you with an interpreter.

#### NOTIFICACIÓN DE REUNIÓN DE ALCANCE COMUNITARIO SOBRE UNA INSTALACIÓN DE COMUNICACIONES INALÁMBRICAS PROPUESTA PARA SU VECINDARIO

A: Vecinos A Menos De 500 Pies De 501 Laguna St., San Francisco, CA

#### Información de la reunión

Fecha: Jueves, 09 de enero 2014

Hora: 5:30 p.m.

Dónde: San Francisco Biblioteca Pública

100 Larkin Street (en Grove)

Martin Paley Sala de

Conferencias

- situado junto a la página turística en el 3er piso\*

#### **Solicitante**

Sprint Modus Inc.

149 Natoma St., 3<sup>rd</sup> floor San Francisco, CA 94105

Sprint Información del lugar

Dirección: 501 Laguna St.

San Francisco, CA 94122

APN: 0819-035 Zonificación: Hayes NCT

#### Información de contacto

Maria Miller 149 Natoma St., 3rd floor San Francisco, CA 94105 (415)450-5533 mmiller@modus-corp.com

\*Este programa no es patrocinado por la Biblioteca

Sprint ha solicitado la aprobación de zonificación para actualizar un sitio de celda existente en la azotea de 501 Laguna St. en San Francisco. La modificación propuesta sustituiría a las antenas existentes y los gabinetes de equipos que actualicen la instalación para el servicio 4G LTE, lo que proporciona un mejor rendimiento al aumentar la velocidad de datos y reducir la latencia. Esta actualización mejorará el servicio para los clientes de Sprint con velocidades de datos significativamente más rápidas, tanto para la carga y descarga.

Usted está invitado a asistir a una reunión de la comunidad informativa el Jueves, 09 de enero a las 5:30 pm en el San Francisco Public Library Principal. Este proyecto será programado para una audiencia pública de la Comisión de Planificación después de la reunión de vecinos. Planos y simulaciones fotográficas estarán disponibles para su revisión en la reunión.

Si usted no puede asistir a la reunión y desea solicitar información, por favor póngase en contacto con Maria Miller al (415) 450-5533 o al mmiller@modus-corp.com.

Si usted tiene alguna pregunta sobre el proceso de zonificación, puede comunicarse con Omar Masry, el planificador de proyecto con el Departamento de Planificación de San Francisco al (415) 575-9116 o omar.masry @ sfgov.org.

NOTA: Si necesita un intérprete esté presente en la reunión, por favor póngase en contacto con nuestra oficina al (415) 450-5533 o mmiller@modus-corp.com antes 3 de enero de 2014. Haremos todo lo posible para proporcionar un intérprete.

# 關於計畫在您所在街區安裝一座無線通信設施的社區資訊通報會通知 為了:在500英尺246 Judah(猶大街)的鄰居,三藩市

Sprint(斯普林特公司) 申請城市批准關於升級現有的天線站點,在246 Judah的天台. 它將天線升級至4G

LTE服務,以提高手機的接收和數據傳輸速度. 此更新將改善Sprint的客戶服務.

如果您想了解更多信息,請你參加會議在Park Police Station (公園派出所) 位於1899 Waller St(沃勒街),於下午6:00上週五,

12月13日。該項目將被安排在我們的鄰里會後舉行的計劃委員會公開聽證會。建築規劃和照 片將被看到在會議。

如果您無法出席會議,可以請求信息,聯繫Maria Miller(瑪麗亞)項目經理 於(415)450-5533或mmiller@modus-corp.com。

如果您對分區過程中有任何疑問,您可以聯繫 Omar Masry(奧馬),舊金山城市規劃師 於(415)575-9116或omar.masry@sfgov.org。 Sprint计划升级现有的天线就在旧金山246**圣犹大的屋**顶。 此更新将改善Sprint**的客**户服务与显著更快的数据传输速率 为上传和下载。

你被邀请参加一个会议,以了解更多关于该项目上周五, 12月13日下午6:00在公园派出所位于1899 Waller Street, San Francisco。该项目将被安排在我们的会议结束后的计划委 员会公开听证会。计划和照片将可用于您的评论在会议上

如果你不能出席会议,并想请求信息,请联系玛丽亚·米勒 (415) 450-5533或mmiller@modus-corp.com。

如果您对分区过程中有任何疑问,您可以联系奥马尔·马斯里,项目策划与旧金山规划署(415)575-9116或omar.masry@ sfgov.org。

\*\*\*

注意:如果你需要一个翻译陪你参加一个会议,不迟于20 14年1月3日与本办公室联系。请致电(415)450-5533或 mmiller@modus-corp.com,我们将尽力为您提供翻译。 Sprint Attn: Maria Miller 149 Natoma St. 3rd Floor San Francisco CA 94105 Presorted
First Class
U.S. Postage
PAID
Permit No. 514
Anaheim CA

# THIS IS AN INVITATION TO A COMMUNITY MEETING ESTA ES UNA INVITACIÓN A UNA REUNIÓN DE LA COMUNIDAD

这是一个邀请一个社区会议

379\*\*\*\*\*\*\*\*\*\*\*\*\*AUTO\*\*5-DIGIT 94102/1

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94105 @3732



# **Wireless Application Review**

Sprint SF54XC215
II Borgo Restaurant
501 Laguna Street
San Francisco, CA 94102

January 23, 2014



Prepared By: EBI Consulting

21 B Street Burlington, MA 01803 (781) 418-2322

Engineer: Scott Heffernan



# **Table of Contents**

1.0	Executive Summary	1
2.0	Site Description	1
3.0	Project Overview	1
4.0	Coverage	2
5.0	Emissions	5
6.0	Conclusion	6

# 1.0 Executive Summary

EBI Consulting has been hired to review an application by Sprint for a modification to an existing site located on a rooftop at 501 Laguna Street in San Francisco, California. The scope of this analysis is to review material submitted to the San Francisco Planning Department. This material includes site plans, coverage maps and an emissions report prepared by EBI Consulting. An alternate site analysis was not a part of this analysis as this is an upgrade to an existing site.

# 2.0 Site Description

Site Name: SF54XC215 – II Borgo Restaurant

Owner: James Stacy & Sylvan Corazzi

Site Description: Rooftop Wireless Facility

Address: 501 Laguna Street, San Francisco, CA 94102

**Ground Elevation:** 82 feet AMSL **Latitude:** 37.77556 N **Longitude:** -122.42611 W

# 3.0 Project Overview

Sprint is applying to modify an existing rooftop wireless facility located at 501 Laguna Street in San Francisco, California. The site modifications include the replacement of existing antennas and associated radio units located on site. The proposed modifications will allow for Sprint to upgrade their technology offerings to include a LTE rollout for higher data rates for their customers. The upgrades will also allow for Sprint to install equipment that will improve the performance of their existing wireless facility and provide better efficiencies for capacity as well.

Sprint is proposing to remove the existing tripod mounted panel antennas and replace with three Powerwave P65-16-XLPP-RR antennas, 1 per sector. The three antennas, which have a length of 48 inches, will be installed as follows. Sector A will be installed on the exiting penthouse wall with an azimuth of 5 degrees from true north. Sector B will be installed on a tripod mount with a faux penthouse structure installed around it with an azimuth of 125 degrees from true north. Sector C will be installed inside a faux vent pipe structure with an azimuth of 230 degrees from true north. The faux enclosures are constructed with RF permeable material which introduces minimal attenuation to the signal broadcast from the facility. The antennas will be mounted with an antenna centerline of 37 feet above the ground level. The existing rooftop is 34 feet 2 inches in height above ground level. The overall height of the proposed enclosures will be 47 feet above

501 Laguna St. 0819/035 2014.0148C

ground level for Sector A, 40 feet 9 inches above ground level for Sector B and 40 feet above ground level for sector C.

Additionally, Sprint is looking to remove / replace the existing radio cabinets located in the Sprint lease area on site and install Remote Radio Heads (RRH). The RRH is a small remote radio device typically located at or near the antenna location at a given site. This reduces cable loss incurred in bring the transmitted signal from radios located many feet from an antenna location and improves overall performance due to a typically reduced noise environment with the transmitters and receivers located immediately adjacent to the antennas. The RRH is typically fed by fiber optics for the transfer of data traffic from a control cabinet usually located with the remainder of a carrier's equipment.

# 4.0 Coverage

Coverage plots were submitted as part of the application from Sprint to the San Francisco Planning Board. The plots show existing coverage of their 1900 MHz footprint from this facility in yellow in exhibit 1. In the next plot, Exhibit 2, they are showing the resulting coverage for CDMA and LTE technologies at 1900 MHz. Sprint is proposing to install 1900 MHz and 800 MHz Remote Radio Heads at this site to provide service in both frequency bands. As is typical, the coverage plots presented are shown at the 1900 MHz frequency band as this will be the weaker coverage footprint under similar power settings. While 800 MHz may have the ability to provide a bit more robust footprint all things equal, the carrier can optimize the output and contain coverage as need be for uniformity between the two frequency bands or provide extended reach with the 800 MHz.

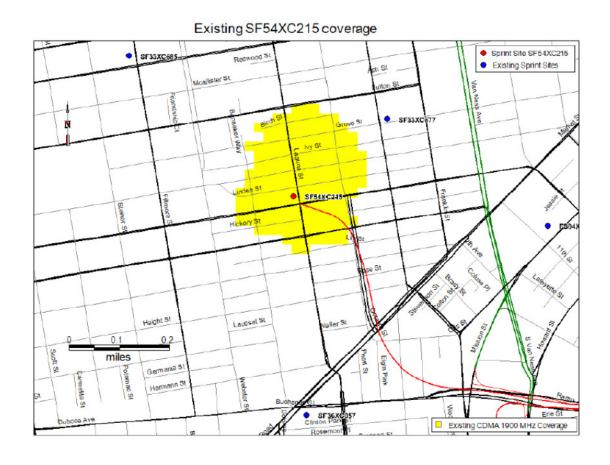


Exhibit 1: Existing Sprint 1900 MHz CDMA coverage

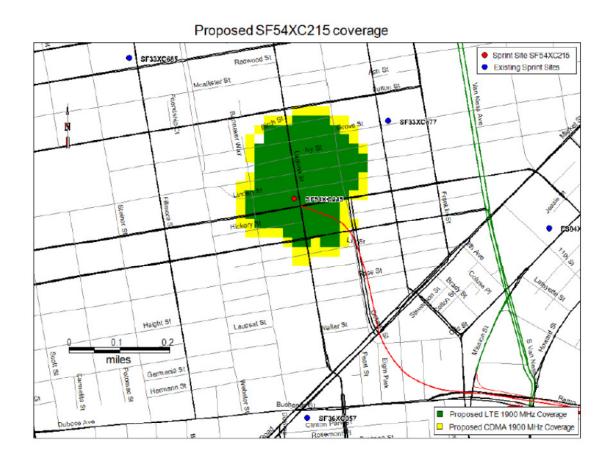


Exhibit 2: Proposed Sprint 1900 MHz CDMA / LTE coverage

Anticipated coverage from the proposed upgraded installation is what would be expected from a rooftop facility of this height and configuration in this geographic area. Anticipated coverage for the 1900 MHz CDMA / LTE footprint is shown as extending north approximately 0.2 miles just past Fulton Street, East approximately 0.15 miles to approximately Gough Street, South approximately 0.07 miles to the Oak Street area and west approximately 0.17 miles to the Webster street area.

Coverage from the proposed LTE radios is slightly less than the 1900 MHz CDMA footprint and shows up as the green footprint inside the yellow footprint representing the 1900 MHz CDMA footprint in Exhibit 2 above.

The provided plots represent coverage areas that fall in line with what we would expect from a site of this configuration and size. Additionally considering the location of the adjacent sites it appears that adequate overlap is possible in all directions to the neighboring sites for proper handoffs to adjacent cells.

501 Laguna St. 0819/035 2014.0148C

The area surrounding the site is comprised of very densely spaced residential and business dwellings as well as heavily traveled throughways. In a design scenario such as this a low antenna height facility is a great solution. It allows the carrier to handle a fairly large volume of traffic in a small area. The low antenna height also allows the carrier to contain the footprint very effectively for spectrum reuse considerations on surrounding sites and to reduce interference upon adjacent cells. Additionally, by utilizing existing structures such as rooftops the carrier is able to provide the desired service without the introduction of a new structure.

# 5.0 Emissions Compliance

An emissions study was completed on the existing Sprint site located at 501 Laguna Street in San Francisco, California by EBI Consulting on June 18, 2013. The study analyzed emissions compliance for this site based upon FCC standards set forth in Bulletin OET65.

The report states that the emissions on the rooftop walking surface had a maximum power density value of 89.55% of the FCC allowable limit for general public exposure. This equates to 17.91% of the FCC allowable limit for occupational exposure. Additionally a maximum survey value of 0.27% was found at ground level surrounding the building. This is well within the allowable limits.

Since this rooftop is a controlled area, meaning the general public does not have access to the area, no further mitigation techniques are needed. There appears to be sufficient control measures in place through access control and signage at all access points and antenna locations. One note is that the new Sprint installation will spread the three sectors apart on the roof top area and will break up the concentration of all transmitting antennas clustered in one area. This may or may not reduce the maximum power density value surveyed in any one area as the pointing directions of each antenna will be pointing off the rooftop instead of across it in certain instances as the current configuration does.

Additionally, AT&T has a faux chimney antenna enclosure on this rooftop. The emissions from their facility were captured in this survey and were part of the composite value at all survey locations.

With these recommendations the site appears to be in full compliance with all FCC and OSHA standards with regards to emissions and notification.

501 Laguna St. 0819/035 2014.0148C

## 6.0 Conclusion

EBI Consulting was tasked with reviewing the Sprint application for proposed site upgrades to their existing facility at 501 Laguna Street in San Francisco, California. The project includes the replacement of existing antennas on site with broadband panel antennas capable of handling both 1900 MHz and 800 MHz frequency bands. Additionally, Sprint is proposing to install Remote Radio Heads at the antenna locations and replace some of the existing equipment cabinets located within the Sprint lease area on site. These upgrades will ultimately allow Sprint to provide greater service levels and capacity to its customers without having to introduce a new facility. All upgrades proposed to be made to this site are fairly minor in nature and since the antennas will be inside concealment shrouds the change in aesthetics will be minimal.

Sprint has provided coverage plots showing existing and proposed coverage from this facility. Both scenarios depicted coverage footprints that would be expected from a facility of this height and configuration. It appears that the coverage data provided is accurate and appropriate for this site.

Sprint has supplied an emissions study for this existing facility prepared by EBI Consulting. The report demonstrates that the facility is in full compliance with all applicable federal requirements regarding emissions and signage.

Based upon our analysis of the Sprint proposed upgrades to their facility at 501 Laguna Street in San Francisco, California, we feel this is a very acceptable proposal. Sprint is proposing to upgrade a site that already exists. The upgrades will benefit existing and future customers in this coverage area. Sprint has proposed a design solution that allows for their upgrades to be fulfilled and keep the aesthetics concerns of the community in mind

Scott Heffernan

RF Engineering Director

//A A//

**EBI Consulting** 

21 B Street Burlington, MA 01803

# NETWORK VISION MMBTS LAUNCH

# IL BORGO RESTAURAN

SF54XC215-A ROOFTOP

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

Sprint® LATITUDE: 37° 46' 32.2206" N (37.77556000) LONGITUDE: 122° 25' 34.3806" W (-122.42611000)

# SF BAY MARKET

#### CALIFORNIA STATE CODE COMPLIANCE:

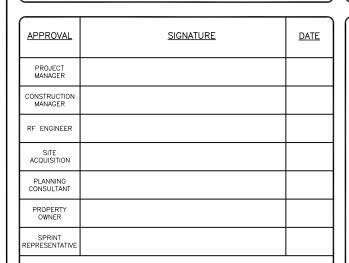
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- CALIFORNIA ADMINISTRATIVE CODE (INCL TITLE 24 & 25)
- 2010 CALIFORNIA BUILDING CODE
- CITY/COUNTY ORDINANCES
  BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
  2010 MECHANICAL CALIFORNIA CODE
- ZOTO MECHANICAL CALIFORNIA CODE
  ANSI/EJA-222-F LIFE SAFETY CODE NFPA-101
  2010 CALIFORNIA PLUMBING CODE
  2010 CALIFORNIA ELECTRICAL CODE
  2010 LOCAL BUILDING CODE

#### ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.

# CODE BLOCK



SIGNATURE BLOCK



VICINITY MAP



DEPART FROM SAN FRANCISCO INTERNATIONAL AIRPORT
START GOING TOWARD T-1 TURNAROUND AND GO 0.3 MILES
TAKE RAMP ONTO US-101 N TOWARD SAN FRANCISCO AND GO 12.6 MILES
CONTINUE ON OCTAVIA BLVD AND GO 0.3 MILES
TURN LEFT ON FELL ST AND GO 0.1 MILE
ARRIVE AT 500 FELL ST, SAN FRANCISCO ON THE RIGHT (IL BORGO RESTAURANT)

DRIVING DIRECTIONS

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY

- (3) EXISTING PANEL ANTENNAS TO BE REMOVED AND REPLACED WITH (3) NEW PANEL INTENNAS MOUNTED ON ROOF OF EXISTING BUILDING (1 ANTENNA PER SECTOR) AND (6) RRU'S MOUNTED ON ROOF (2 PER SECTOR)
- (2) EXISTING EQUIPMENT CABINETS TO BE HOT-SWAPPED WITH (2) NEW EQUIPMENT CABINETS AND (2) EXISTING EQUIPMENT CABINETS TO BE REMOVED AT BASEMENT.
- ANTENNA TRANSMISSION LINES FROM EQUIPMENT CABINETS TO ANTENNAS-PAINTED TO MATCH AS APPLICABLE PER PLANS
- EXISTING 200AMP SERVICE POWER TO REMAIN

# PROJECT DESCRIPTION

#### **APPLICANT:**

SPRINT 6580 SPRINT PARKWAY OVERLAND PARK, KS 66251 PH: (866) 400-6040

#### **PROPERTY INFORMATION:**

PROPERTY OWNER: JAMES STACY AND SYLVAN CORAZZI

1444 WALLER STREET SAN FRANCISCO, CA 94117 ADDRESS:

(415) 863-4707

ZONING CLASSIFICATION: NCT - HAYES NCT BUILDING CODE: 2010 CBC

CONSTRUCTION TYPE: TELECOM FACILITY

OCCUPANCY: S-2, M

JURISDICTION: CITY OF SAN FRANCISCO

CURRENT USE: TELECOMMUNICATIONS FACILITY / FLAT & STORE PROPOSED USE: TELECOMMUNICATIONS FACILITY / FLAT & STORE

HEIGHT & BULK: 40-X

PARCEL NUMBER(S):

PROIECT SUMMARY

SHEET DESCRIPTION

T-2 BATTERY SPECIFICATIONS & DATA CHART

T-4 FMF\_RFPORT

> T-5 EMF REPOR T-6 EMF REPORT T-7 FMF\_RFPORT

T-9 EME\_REPORT EMF REPORT

T-11 EMF REPORT T-12 FIRE DEPARTMENT CHECKLIST

GENERAL NOTES & SYMBOLS

A-1 SITE PLAN

A-1.1 ENLARGED SITE PLAN

A-2 EXISTING EQUIPMENT/LEASE AREA PLAN & ANTENNA PLAN

A-3 PROPOSED EQUIPMENT/LEASE AREA PLAN & ANTENNA PLAN

EXISTING & PROPOSED SOUTHEAST ELEVATION EXISTING & PROPOSED NORTHEAST ELEVATION

A-5 EQUIPMENT DETAILS

A-7 CONSTRUCTION DETAILS

A-8 CABLE COLOR CODING REQUIREMENTS

FIBER PLAN

F-2 FIBER ONE-LINE DIAGRAM

F-3 FIBER INSTALLATION DETAILS

E-1 FLECTRICAL SINGLE-LINE DIAGRAM & NOTES

E-2 DC POWER DIAGRAM & POWER CONDUIT DETAILS E-3 POWER & TELCO DETAILS

E-4 SCHEMATIC GROUNDING PLAN

GROUNDING DETAILS

## SHEET INDEX

ARCHITECT:
THOMAS R. HOLLAND, AIA
PACIFIC TELECOM SERVICES, LLC
149 NATOMA STREET, 3RD FLOR
SAN FRANCISCO, CA 94105 CONTACT: JAMILA SELBY PH: (989) 714-5509

#### ZONING MANAGER:

MODUS, INC. 149 NATOMA STREET, 3RD FLOOR SAN FRANCISCO, CA 94105 CONTACT: KYRA O'MALLEY PH: (415) 574-1517

#### LEASING MANAGER

MODUS, INC. 149 NATOMA STREET, 3RD FLOOR SAN FRANCISCO, CA 94105 CONTACT: ERIC RYAN PH: (510) 508-4865

#### CONSTRUCTION MANAGER

OVERLAND CONTRACTING 2999 OAK ROAD, SUITE 490 WALNUT CREEK, CA 94597 CONTACT: ART CUNNINGHAM PH: (925) 852–8896

#### TELCO COMPANY:

PH: T.B.D.

# **POWER COMPANY:**

PH: (800) 743-5000

#### **EQUIPMENT PROVIDER:**

SAMSUNG TELECOMMUNICATIONS AMERICA (STA) 1301 EAST LOOKOUT DRIVE RICHARDSON, TX 75082 PH: (972) 761-7000

# PROJECT TEAM

At all new services & grounding trenches, provide "WARNING" tape at 12" below grade.



DIG ALERT "CALL BEFORE YOU DIG" 1-800-227-2600

UTILITY NOTIFICATION CENTER OF NORTHERN CALIFORNIA









149 NATOMA STREET, 3RD FLOOR

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

# IL BORGO RESTAURANT SF54XC215-A

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

	REVISIONS									
REV.	DATE	DESCRIPTION	INITIALS							
2	04/25/12	ISSUED FOR 100% CONSTRUCTION	СВК							
3	05/29/12	ISSUED FOR 100% CONSTRUCTION	СВК							
4	11/27/12	ISSUED FOR 90% CONSTRUCTION	RC							
5	11/29/12	REVISED FOR 90% CONSTRUCTION	NL							
6	12/07/12	REVISED FOR FINAL CONSTRUCTION	SS							
7	12/11/12	REVISED FOR FINAL CONSTRUCTION	NL							
8	10/01/13	REVISED FOR PERMIT	LB							
		T FOR CONSTRUCTION UNLESS BELED AS CONSTRUCTION SET								

LICENSURE

SHEET TITLE:

TITLE SHEET

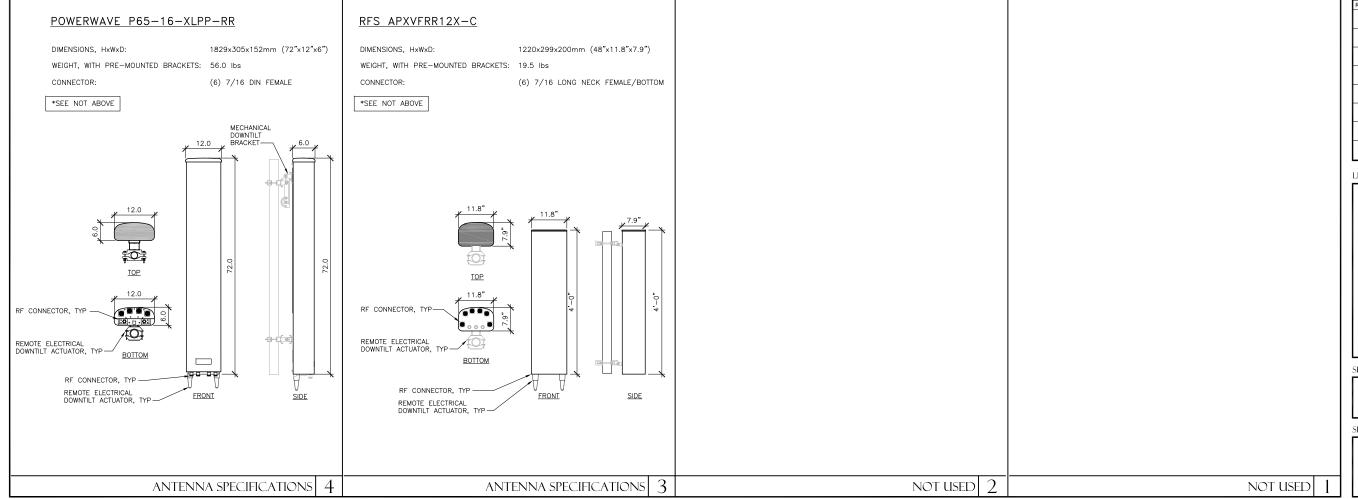
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REVISION:

		ANTENNA SCHEDULE															
	SECTOR	TECHNOLOGY	ANTENNA MODEL	RAD CENTER	AZIMUTH	RRU FREQ.	RRU MODEL	NUMBER OF RRU's	No. OF FILTERS	No. OF JUMPERS	JUMPER LENGTH (1/2" DIA)	RET CABLES LENGTH	No. OF HYBRID CABLES	HYBRID CABLE LENGTH (LINEAR FEET)	No. OF COAX CABLES	COAX DIA.	COAX LENGTH
ALPHA SECTOR	A1	800/1900MHz	P65-16-XLPP-RR	44'-0"	5*	800 MHz	RRH-C2	1	1	2	25'	25'		80'	N/A	N/A	N/A
55						1.9 GHz	RRH-P4	1	0	4	25'	25'	1		,	,	
ਲ਼	A2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
- %	D1	800/1900MHz		77' 0"	125*	800 MHz	RRH-C2	1	1	2	25'	25'					
BETA	B1	800/ 1900MH2	P65-16-XLPP-RR	37'-0"	125	1.9 GHz	RRH-P4	1	0	4	25'	25'		80'	N/A	N/A	N/A
Ki B	B2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1		N/A	N/A	N/A
۷ %	04	800/1900MHz		771 07	230°	800 MHz	RRH-C2	1	1	2	25'	25'					
₹5	CI	000/1900MH2	APXVFRR12X-C	37'-0"	230	1.9 GHz	RRH-P4	1	0	4	25'	25'		80'	N/A	N/A	N/A
GAMMA SECTOR	C2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1		N/A	N/A	N/A

\*NOTE: THE INFORMATION PROVIDED ABOVE MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING/ INSTALLING ANY EQUIPMENT.

ANTENNA INFORMATION TAKEN FROM 03/14/12 EBTS











PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

# IL BORGO RESTAURANT SF54XC215-A

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

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7	12/11/12	REVISED FOR FINAL CONSTRUCTION	NL								
8	10/01/13	REVISED FOR PERMIT	LB								
	NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET										

LICENSURE:

ANTENNA SCHEDULE 5



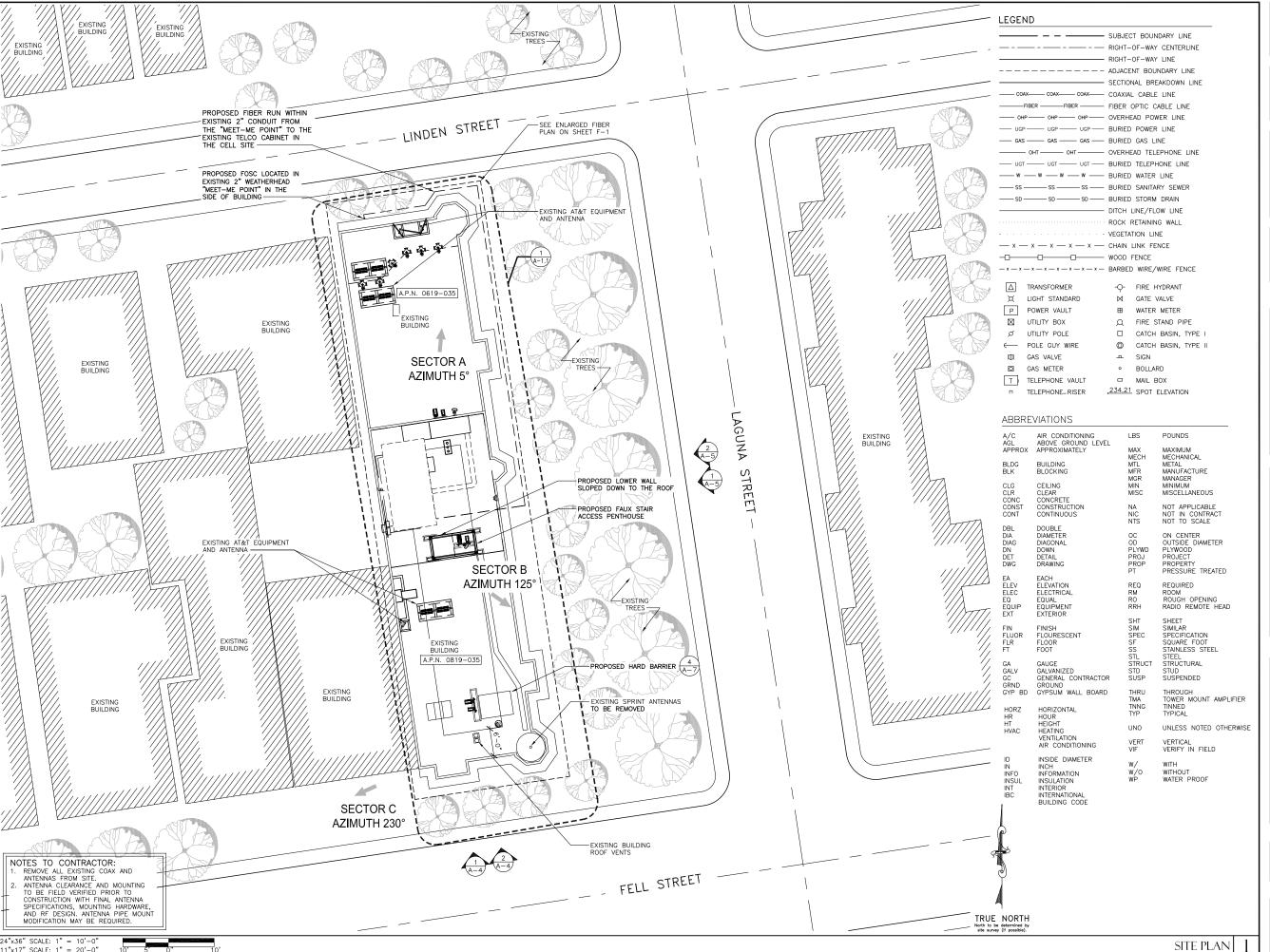
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ANTENNA SPECIFICATIONS & SCHEDULE

SHEET NUMBER:

REVISION:

T-3









149 NATOMA STREET, 3RD FLOOR SAN FRANCISCO, CA 94105



PROJECT INFORMATION:

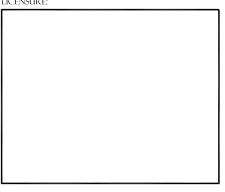
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# IL BORGO RESTAURANT SF54XC215-A

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

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LICENSURE



SHEET TITLE:

SITE PLAN

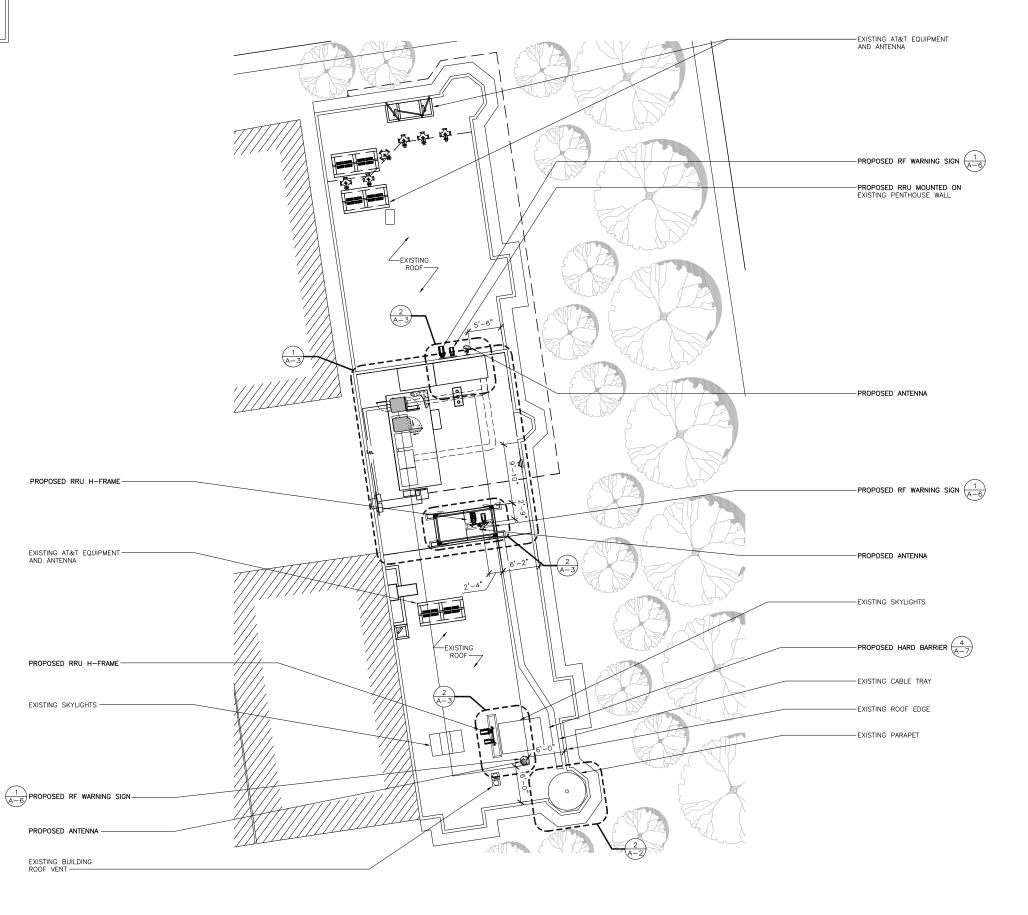
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REVISION:

A-1

NOTES TO CONTRACTOR:

VERIFICATION THAT THE EXISTING
STRUCTURE AND PROPOSED ANTENNA
ATTACHMENTS CAN SUPPORT THE
PROPOSED ANTENNA LOADING SHALL BE
PERFORMED BY A REGISTERED STRUCTURAL
ENGINEER.











PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

# IL BORGO RESTAURANT SF54XC215-A

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

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SHEET TITLE:

ENLARGED SITE PLAN

SHEET NUMBER:

REVISION:

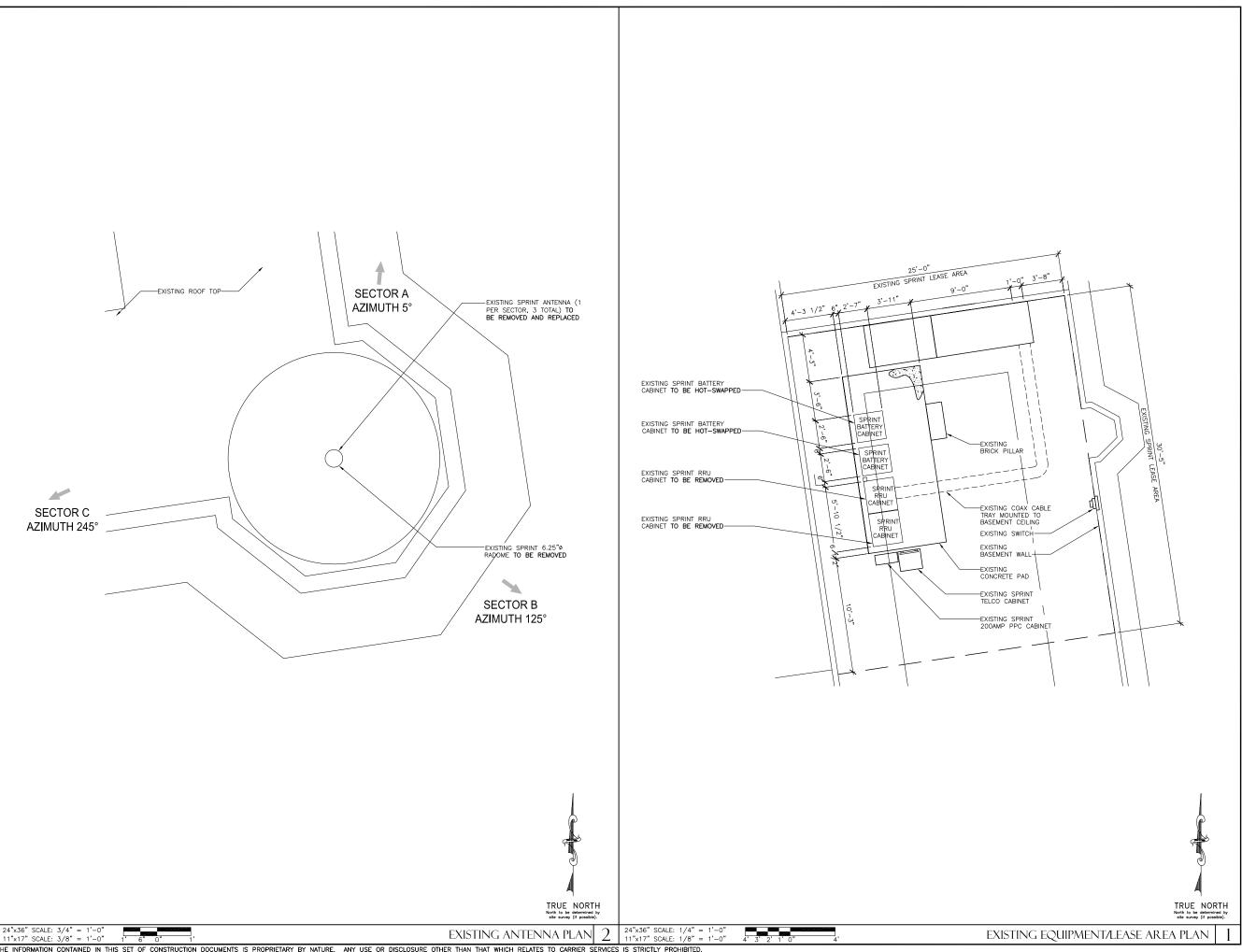
A-1.1

8

24"x36" SCALE: 3/16" = 1'-0" 11"x17" SCALE: 3/32" = 1'-0" 4' 2' 0" 4'

ENLARGED SITE PLAN

TRUE NORTH
North to be determined by site survey (if possible).









149 NATOMA STREET, 3RD FLOOR SAN FRANCISCO, CA 94105



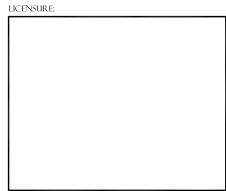
PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

# IL BORGO RESTAURANT SF54XC215-A

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

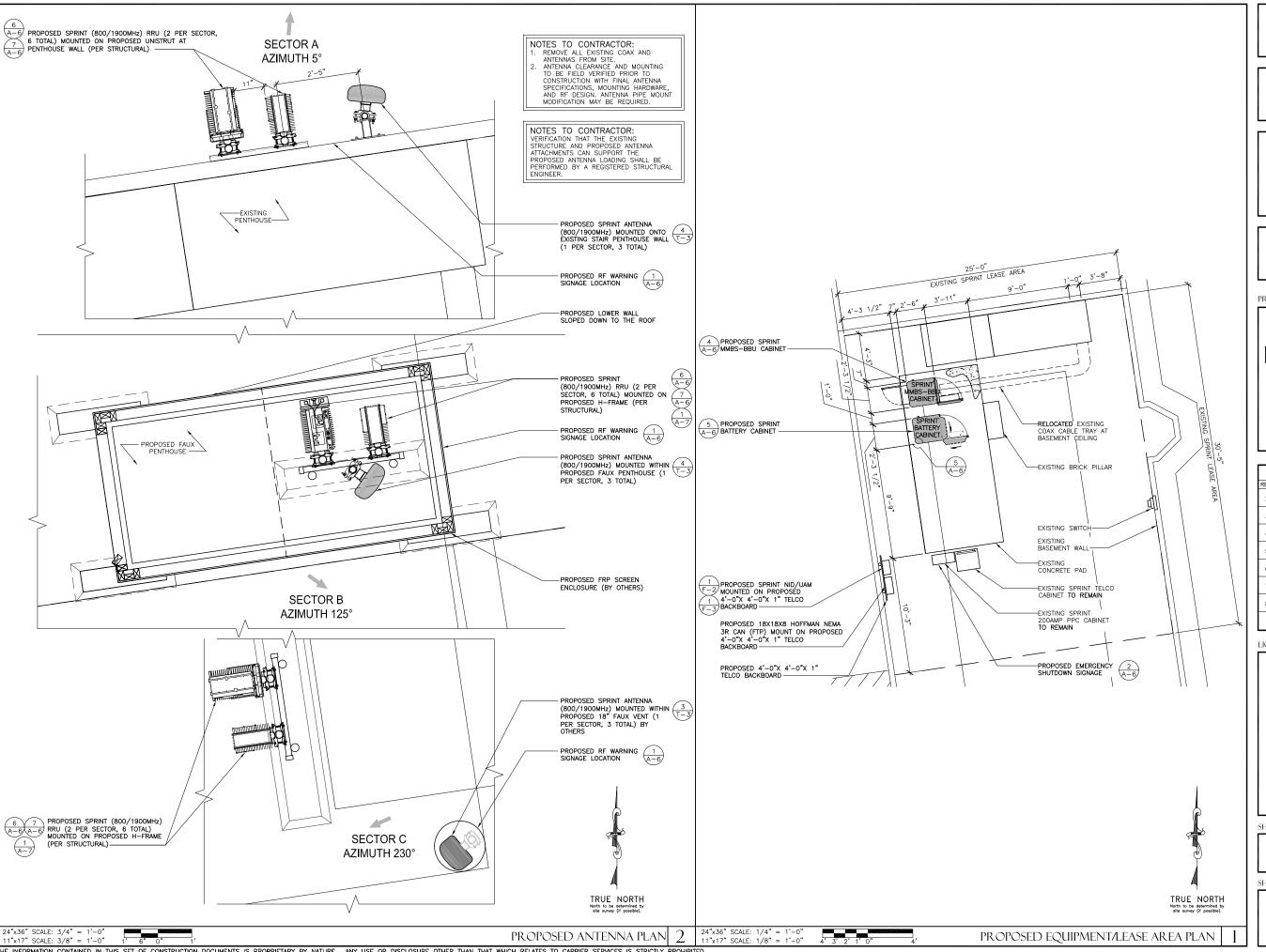
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EXISTING EQUIPMENT/LEASE

SHEET NUMBER:

REVISION:









149 NATOMA STREET, 3RD FLOOR SAN FRANCISCO, CA 94105



PROJECT INFORMATION:

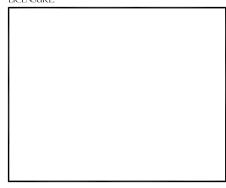
NETWORK VISION MMBTS LAUNCH

# IL BORGO RESTAURANT SF54XC215-A

501 LAGUNA STREET SAN FRANCISCO, CA 94102 SAN FRANCISCO COUNTY

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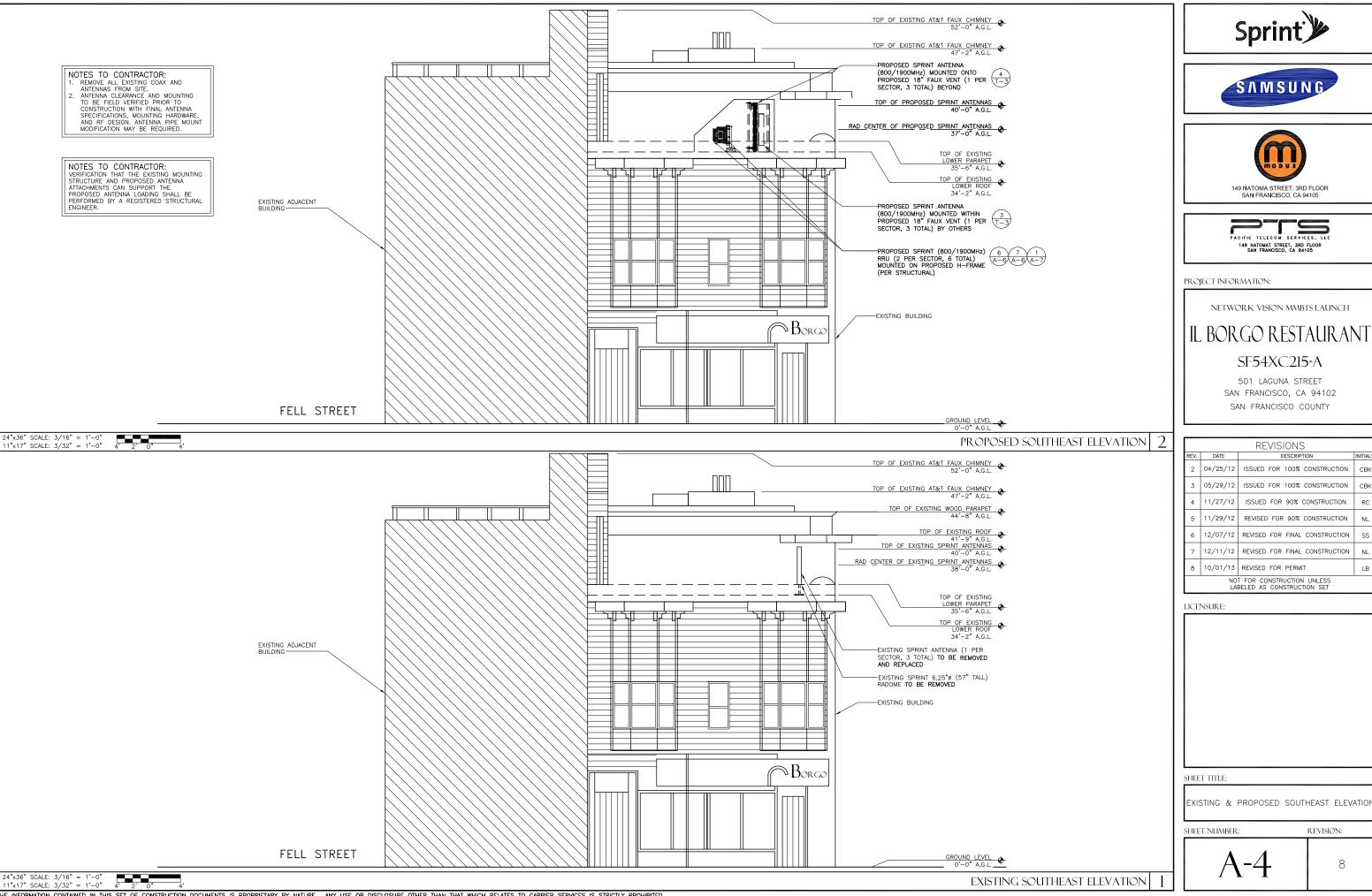
LICENSURE:



PROPOSED EQUIPMENT/LEASE AREA PLAN & ANTENNA PLAN

SHEET NUMBER:

REVISION:







# IL BORGO RESTAURANT

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
2	04/25/12	ISSUED FOR 100% CONSTRUCTION	свк
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