



SAN FRANCISCO PLANNING DEPARTMENT

Executive Summary Conditional Use Authorization

HEARING DATE: JANUARY 16, 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: January 9, 2014
Case No.: **2011.1146C**
Project Address: **1633 Taraval Street**
Current Zoning: Taraval Street Neighborhood Commercial District
Taraval Street Restaurant Subdistrict
65-A Height and Bulk District
Block/Lot: 2399/ 041
Project Sponsor: Sprint represented by
Maria Miller, Modus, Inc.
149 Natoma Street, 3rd Floor
San Francisco, CA 94105
Staff Contact: Omar Masry – (415) 575-9116
Omar.Masry@sfgov.org

PROJECT DESCRIPTION

The proposal is to modify an existing macro wireless telecommunication services (“WTS”) facility consisting of replacing (2) two roof-mounted panel antennas with three (3) roof-mounted panel antennas, and replacing equipment on the roof and in the garage, of the subject building, as part of Sprint’s telecommunications network. Based on the zoning and land use, the antennas are proposed on a Location Preference 6 Site (Limited Preference Location, Individual Neighborhood Commercial District) according to the WTS Siting Guidelines.

The existing macro WTS facility consists of one panel antenna attached to the outside face of the building parapet along Taraval Street, and a second panel antenna mounted to a tripod located near the southern edge of the roof. The proposed antennas would be located in three sectors on the roof of the approximately 30-foot tall building; with associated electronic equipment necessary to run the facility on the roof, and in the garage. The first two sectors (“B” and “C”) would feature two antennas housed within two structures, composed of fibre-reinforced plastic (FRP), then painted and textured to mimic vent pipes.

The remaining sector (“A”) would feature one antenna mounted on the roof and five feet back from the roof edge along Taraval Street. The antenna would be screened from view along Taraval Street by a faux replacement parapet element composed of radio-frequency transparent material, textured and painted to mimic a building element, that is three feet taller than the existing parapet. The actual antennas would measure approximately 48” high by 12” wide by 12” thick. The proposed modification would also feature the installation of six (6) radio relay units (RRUs) on the roof, with two (2) RRUs adjacent to the base of each antenna sector.

SITE DESCRIPTION AND PRESENT USE

The subject building is located on Assessor's Block 2399, Lot 041, on the south side of Taraval Street, between 26th and 27th Avenues. The Project site is within the Taraval Street Neighborhood Commercial Zoning District, Taraval Street Restaurant Subdistrict, and 65-A Height and Bulk District. The Project Site contains a three-story, approximately 32-foot tall, mixed-use building featuring two stories of residential apartments above ground level commercial spaces.

SURROUNDING PROPERTIES AND NEIGHBORHOOD

The subject building is located along the Taraval Street neighborhood commercial corridor within the Parkside Neighborhood. The Project Site is surrounded by a single-family (RH-1 Zoning) neighborhood to the south, and a combination of mixed-use developments (residential ground level apartments above ground floor commercial space) and single-story commercial buildings to the east, west, and to the north, across Taraval Street.

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.

HEARING NOTIFICATION

TYPE	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Classified News Ad	20 days	December 27, 2013	December 25, 2013	22 days
Posted Notice	20 days	December 27, 2013	December 20, 2013	27 days
Mailed Notice	20 days	December 27, 2013	December 24, 2013	23 days

PUBLIC COMMENT

The Project Sponsor held a Community Outreach Meeting for the proposed project on December 2, 2013, at the Taraval Police Station, located at 2345 24th Avenue. Two (2) community members attended the meeting. Members inquired about health effects of RF emissions, safety standards, design of the facility, and presence of a recently approved AT&T Mobility Macro WTS facility in the area (2395 26th Avenue).

As of January 9, 2014, the Department has received one comment from a community member, in opposition to the Project, over concerns including the format of the Project Sponsor's Community Outreach Meeting notice, and the visibility of the antennas, equipment and RF safety related barriers or striping.

Roof striping and barriers, such as the existing railing surrounding the southernmost antenna, is utilized to restrict exposure to RF emissions which may exceed safety limits established by the Federal Communications Commission (FCC). The Project Sponsor intends to rely on roof striping, instead of

railing, which would reduce the overall amount of equipment visible from upper floors of nearby buildings. However, final determination on the use of railing, striping, or other barriers to access, is typically approved at the time building plans are reviewed.

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 Inspections.
- An updated Five Year Plan with approximate longitudinal and latitudinal coordinates of proposed locations, including the subject site is on file with the Planning Department.
- All required public notifications were conducted in compliance with the City's code and policies.

REQUIRED COMMISSION ACTION

Pursuant to Section 741.83 of the Planning Code, Conditional Use authorization is required for a WTS facility in the Taraval Street Neighborhood Commercial District 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 and Resolutions No. 16539 and No. 18523 supplementing the 1996 WTS 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 6, (Limited Preference Location, Individual Neighborhood Commercial District) according to the Wireless Telecommunications Services (WTS) Siting Guidelines.
- 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.
- Based on independent third-party evaluation, the maps, data, and conclusions about service coverage and capacity provided by Sprint are accurate.
- The use of screening methods for antennas, such as faux vent pipes and a faux parapet extension, would ensure the proposed facility would not appear out of character with the subject building, nor have a negative impact on surrounding views.
- Electronic equipment necessary for the facility would be located on the roof and in a portion of the garage of the subject building and will not significantly impact aesthetics, parking, or the use of the building for residents and commercial tenants.

- The proposed project has been reviewed by staff and found to be categorically exempt from further environmental review. The proposed changes to the subject building do not result in a significant impact on the resource. The proposed antenna project is categorically exempt from further environmental review pursuant to the Class 3 exemptions of California Environmental Quality Act.
- A Five Year Plan with approximate longitudinal and latitudinal coordinates of proposed locations, including the subject site, was submitted.
- All required public notifications were conducted in compliance with the City's code and policies.

RECOMMENDATION: <u>Approval with Conditions</u>	
<input checked="" type="checkbox"/> Executive Summary	<input checked="" type="checkbox"/> Project sponsor submittal
<input checked="" type="checkbox"/> Draft Motion	Drawings: <u>Proposed Project</u>
<input checked="" type="checkbox"/> Zoning District Map	<input checked="" type="checkbox"/> Check for legibility
<input type="checkbox"/> Height & Bulk Map	<input checked="" type="checkbox"/> Photo Simulations
<input checked="" type="checkbox"/> Parcel Map	<input checked="" type="checkbox"/> Coverage Maps
<input checked="" type="checkbox"/> Sanborn Map	<input checked="" type="checkbox"/> RF Report
<input checked="" type="checkbox"/> Aerial Photo	<input checked="" type="checkbox"/> DPH Approval
<input checked="" type="checkbox"/> Context Photos	<input checked="" type="checkbox"/> Community Outreach Report
<input checked="" type="checkbox"/> Site Photos	<input checked="" type="checkbox"/> Independent Evaluation

Exhibits above marked with an "X" are included in this packet _____ om _____ Planner's Initials



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Planning Commission Motion No.

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Block/Lot: 2399/041
Project Sponsor: Maria Miller, Modus, Inc.
149 Natoma Street, 3rd Floor
San Francisco, CA 94105
Staff Contact: Omar Masry – (415) 575-9116
Omar.Masry@sfgov.org

ADOPTING FINDINGS RELATING TO THE APPROVAL OF A CONDITIONAL USE AUTHORIZATION UNDER PLANNING CODE SECTIONS 303(c) AND 741.83 TO MODIFY AN EXISTING WIRELESS TELECOMMUNICATIONS SERVICES FACILITY TO CONSIST OF UP TO THREE SCREENED PANEL ANTENNAS LOCATED ON THE ROOFTOP AND ELECTRONIC EQUIPMENT ON THE ROOF AND IN THE GARAGE OF AN EXISTING MIXED-USE BUILDING AS PART OF SPRINT'S WIRELESS TELECOMMUNICATIONS NETWORK WITHIN THE TARAVAL STREET NEIGHBORHOOD COMMERCIAL DISTRICT, TARAVAL STREET RESTAURANT SUBDISTRICT, AND 65-A HEIGHT AND BULK DISTRICT.

PREAMBLE

On October, 13, 2011, Sprint (hereinafter "Project Sponsor"), submitted an application (hereinafter "Application"), for Conditional Use Authorization on the property at 1633 Taraval Street, Lot 041 in Assessor's Block 2399, (hereinafter "Project Site") to modify an existing wireless telecommunications services (WTS) facility to consist of three (3) screened panel antennas located on the roof of the subject building, and equipment located on the roof and in the garage, as part of Sprint's telecommunications network, within the Taraval Street Neighborhood Commercial District Zoning District, Taraval Street Restaurant Subdistrict, and 65-A Height and Bulk District.

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 January 16, 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. 2011.1146C, 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 2399, Lot 041, on the south side of Taraval Street, between 26th and 27th Avenues. The Project site is within the Taraval Street Neighborhood Commercial Zoning District, Taraval Street Restaurant Subdistrict, and 65-A Height and Bulk District. The Project Site contains a three-story, approximately 32-foot tall, mixed-use building featuring two stories of residential apartments above ground level commercial spaces.
3. **Surrounding Properties and Neighborhood.** The subject building is located along the Taraval Street neighborhood commercial corridor within the Parkside Neighborhood. The Project Site is surrounded by a single-family (RH-1 Zoning) neighborhood to the south; and a combination of mixed-use developments (residential ground level apartments above ground floor commercial space) and single-story commercial buildings to the east, west, and to the north, across Taraval Street.
4. **Project Description.** The proposal is to modify an existing macro wireless telecommunication services ("WTS") facility consisting of replacing (2) two roof-mounted panel antennas with three (3) roof-mounted panel antennas, and replacing equipment on the roof and in the garage, of the subject building, as part of Sprint's telecommunications network.

The existing macro WTS facility features one (1) panel antenna attached to the outside face of the building parapet along Taraval Street, and a second panel antenna mounted to

a tripod located near the southern edge of the roof. The proposed antennas would feature three (3) antennas, located in three locations (sectors) on the roof of the approximately 30-foot tall building; with associated electronic equipment necessary to run the facility on the roof, and in the garage. The first two sectors ("B" and "C") would feature individual antennas housed within two elements, composed of fibre-reinforced plastic (FRP), then painted and textured to mimic faux vent pipe elements. The remaining sector ("A") would feature one antenna mounted on the roof and set back five feet from the roof edge along Taraval Street. The antenna would be screened from view along Taraval Street by a faux parapet element composed of radio-frequency transparent material, textured and painted to mimic a building element. The faux parapet would rise three feet higher than the existing parapet. The actual antennas would measure approximately 48" high by 12" wide by 12" thick.

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

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

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

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

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

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 the zoning and land use, the antennas are proposed on a Location Preference 6 Site (Limited Preference, Individual Neighborhood Commercial District) according to the WTS Siting Guidelines.

As the existing Sprint macro WTS facility (Case No. 2001.0581) was approved (September 6, 2001) pursuant to the WTS Facilities Siting Guidelines, no alternative site analysis is required.

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 micro-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 800 – 1,900 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 around 1% of the FCC public exposure limit. There are two antennas operated by Sprint installed on the roof of the subject building, and there were no other observed antennas within 100 feet of the Project site.

Sprint proposes to install three (3) panel antennas at the Project Site. The antennas would be mounted at a height of approximately 31 feet above the ground. The estimated ambient RF field from the proposed Sprint transmitters at ground level is calculated to be 0.0634 mW/sq. cm., which is 11.9% of the FCC public exposure limit. The three

dimensional perimeter of RF levels equal to the public exposure limit extends 12 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish, and Chinese. Workers should not have access to the area (6 feet) directly in front of the antenna while it is 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.
12. **Community Outreach.** The Project Sponsor held a Community Outreach Meeting for the proposed project on December 2, 2013, at the Taraval Police Station, located at 2345 24th Avenue. Two (2) community members attended the meeting. Members inquired about health effects of RF emissions, safety standards, design of the facility, and presence of a recently approved, though not yet constructed, AT&T Mobility Macro WTS facility in the area (2395 26th Avenue).
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 January 9, 2014, the Department has received one comment from a community member, in opposition to the Project, over concerns including the format of the Project Sponsor's Community Outreach Meeting notice, and the visibility of the antennas, equipment and RF safety related barriers or striping.
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 741.83, a Conditional Use authorization is required for the installation of Commercial Wireless Transmitting, Receiving or Relay Facility.
16. **Planning Code Section 303** establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use approval. 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 1633 Taraval 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 replacement of the front parapet and placement of 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 1633 Taraval 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 subject property 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.

- ii. 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.

- 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 antennas would be placed in elements designed to mimic chimneys, without significant increases in the overall bulk or dimensions of the building. The proposed antennas, screening elements, 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 proposed installation is a Public Use and is consistent with the purpose of the Taraval Street Neighborhood Commercial District, in that the Project is located on an existing building and would not alter the overall character of the building or surrounding area. Furthermore, the facility would not impact the primary use of the building for commercial and residential uses.

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

HOUSING ELEMENT

BALANCE HOUSING CONSTRUCTION AND COMMUNITY INFRASTRUCTURE

OBJECTIVE 12 – BALANCE HOUSING GROWTH WITH ADEQUATE INFRASTRUCTURE THAT SERVES THE CITY'S GROWING POPULATION.

POLICY 12.2 – Consider the proximity of quality of life elements, such as open space, child care, and neighborhood services, when developing new housing units.

POLICY 12.3 – Ensure new housing is sustainable supported by the City's public infrastructure systems.

The Project will improve Sprint coverage and capacity along Taraval Street, which is a primary neighborhood commercial corridor in the Parkside 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 antennas would be adequately concealed to reduce their visual impact, thereby minimizing the possibility of introducing new elements considered distracting or cluttering. The height and bulk of the proposed faux parapet and chimneys 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

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 impact 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.

- 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 subject site is not a landmark building, nor is the site located in a designated historic district. The subject site was developed in 1991 and is considered a Potential Historic Resource. The subject site is surrounded by single-family residences to the south, which were developed between the 1920s and 1950s, and are considered Potential Historic Resources. The

project would feature screening elements visible from select locations along adjacent public rights of way. However the placement and design of the screening structures would not obscure or detract from other potentially significant buildings or public views within the Parkside / Outer Sunset Neighborhood, or the Taraval Street corridor.

- 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.

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 741.83 and 303 to install up to three (3) screened (faux vent pipes and faux parapet extensions) panel antennas on the rooftop, and associated equipment cabinets on the roof and in the garage of the Project Site and as part of a wireless transmission network operated by Sprint on a Location Preference 6 (Limited Preference, Individual Neighborhood Commercial District) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within the Taraval Street Neighborhood Commercial District, Taraval Street Restaurant Subdistrict, and 65-A Height and Bulk District, and subject to the conditions of approval attached hereto as **Exhibit A**; in general conformance with the plans, dated October 24, 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. xxxx. 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.

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **January 16, 2014**.

JONAS P. IONIN
Commission Secretary

AYES:

NAYES:

ABSENT:

ADOPTED: January 16, 2014

EXHIBIT A

AUTHORIZATION

This authorization is for a Conditional Use Authorization under Planning Code Sections 741.83 and 303 to install up to three (3) screened (faux vent pipes and faux parapet extensions) panel antennas on the rooftop, and associated equipment cabinets on the roof and in the garage of the Project Site and as part of a wireless transmission network operated by Sprint on a Location Preference 6 (Limited Preference, Individual Neighborhood Commercial District) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within the Taraval Street Neighborhood Commercial District, Taraval Street Restaurant Subdistrict, and 65-A Height and Bulk District, and subject to the conditions of approval attached hereto as Exhibit A; in general conformance with the plans, dated October 24, 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 **January 16, 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, www.sf-planning.org.

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, www.sf-planning.org.

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, www.sf-planning.org.

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, www.sf-planning.org

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

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, www.sf-planning.org

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

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, www.sfdph.org.

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, www.sf-planning.org

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

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, www.sfdph.org.

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, www.sfdph.org.

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 Health at (415) 252-3800, www.sfdph.org.

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, <http://sfgov3.org/index.aspx?page=1421>

Zoning Map



SUBJECT PROPERTY



Case Number 2011.1146C
Sprint Macro WTS Facility
1633 Taraval Street

Aerial Photo



SUBJECT PROPERTY



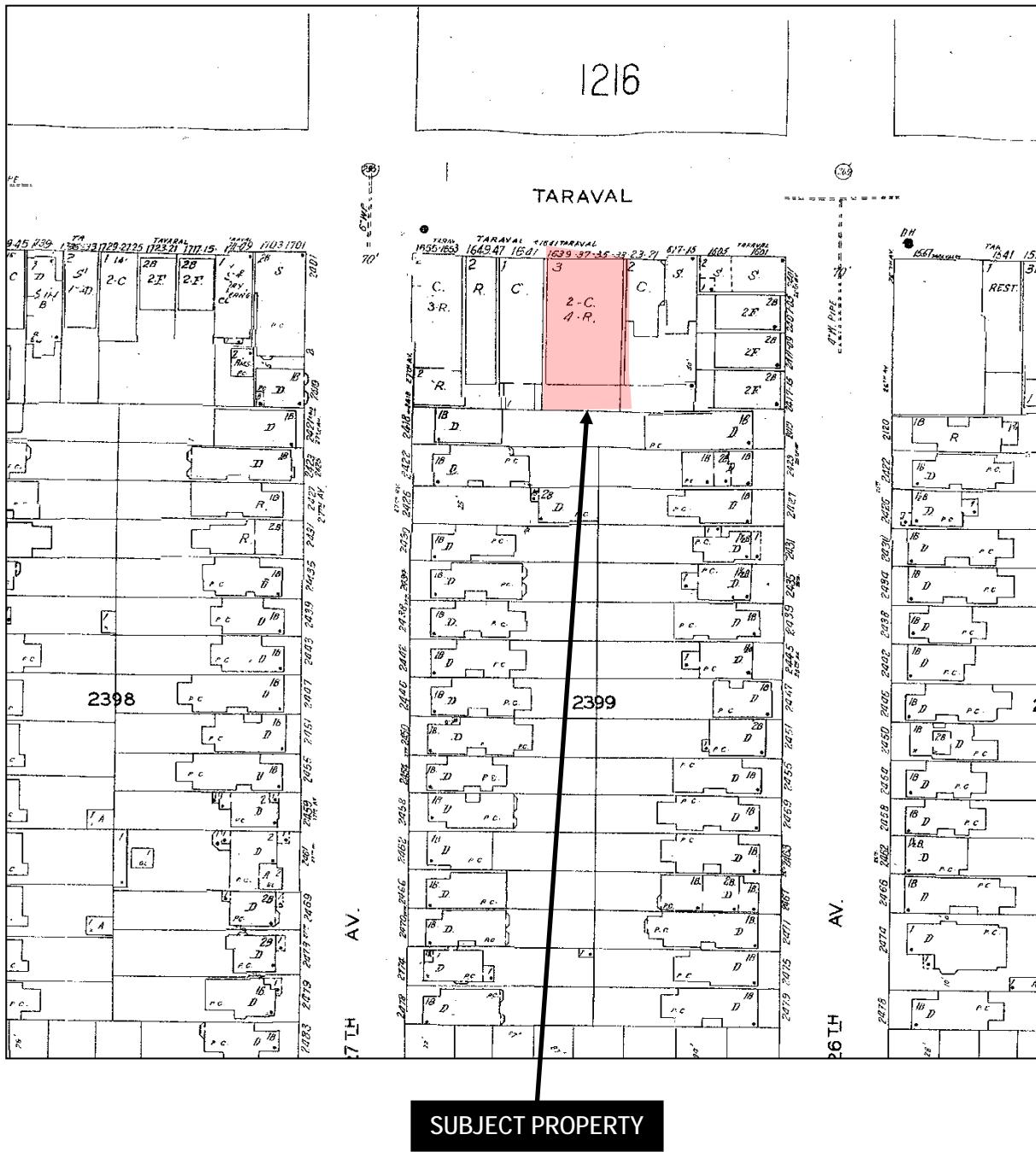
Case Number 2011.1146C
Sprint Macro WTS Facility
1633 Taraval Street

Parcel Map



Case Number 2011.1146C
Sprint Macro WTS Facility
1633 Taraval Street

Sanborn Map*



*The Sanborn Maps in San Francisco have not been updated since 1998, and this map may not accurately reflect existing conditions.



Case Number 2011.1146C
Sprint Macro WTS Facility
1633 Taraval Street

1633 Taraval St.
2399/041
2011.1146C

Site Photos and Context Photos



1600 Block Taraval Street – south side (looking at the site)



1600 Block Taraval Street – north side (looking across the street from the site)

1633 Taraval St.
2399/041
2011.1146C

Site Photos and Context Photos



View of 1600 Block Taraval Street – south side - east of the subject site



View of 1600 Block Taraval Street – north side of Taraval - view across the street from subject site

1633 Taraval St.
2399/041
2011.1146C

Site Photos and Context Photos



View of 1600 Block Taraval Street – north side of Taraval - view across the street from subject site

Existing



Proposed



view from Taraval Street looking southwest at site

Existing

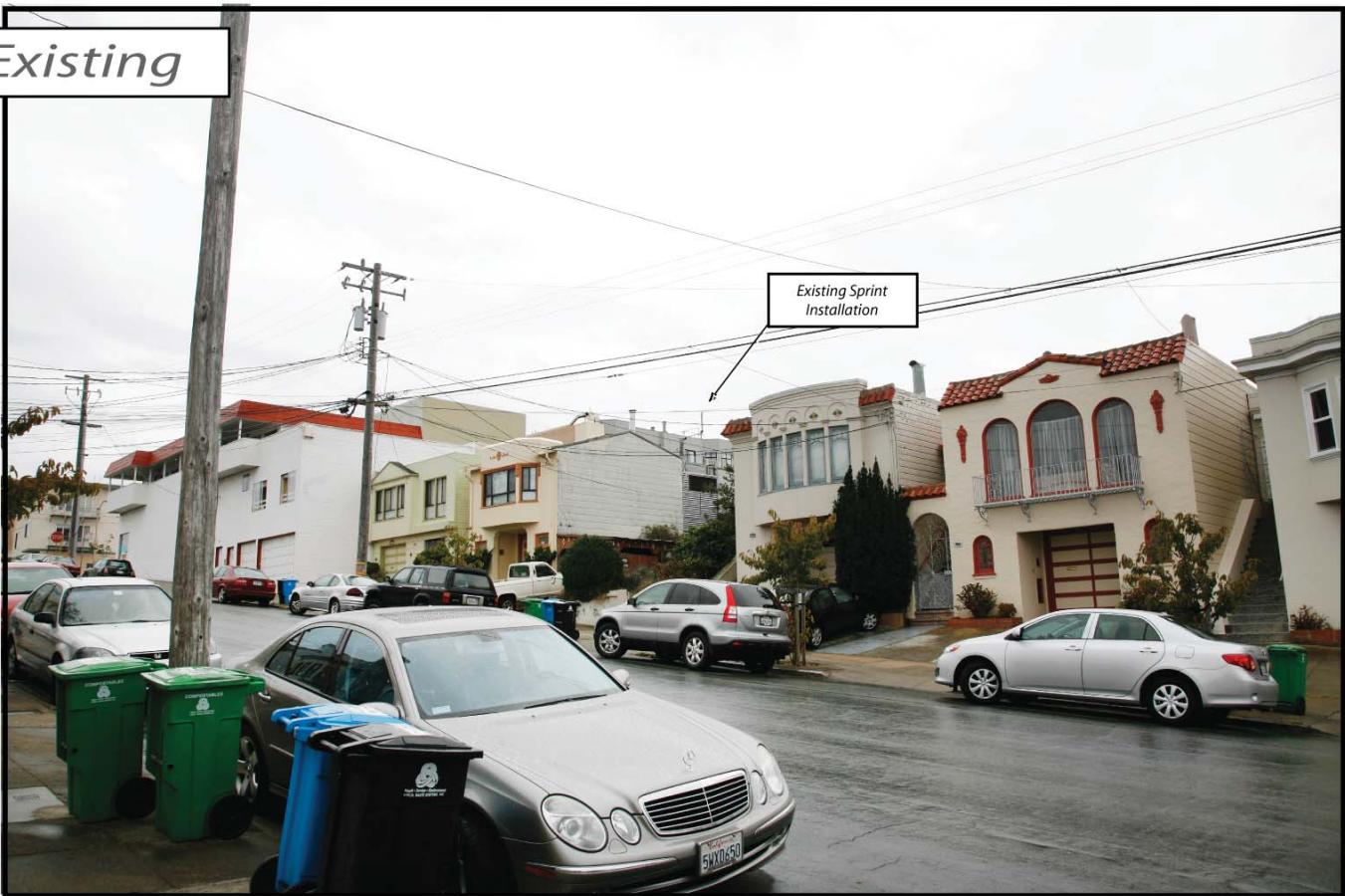


Proposed

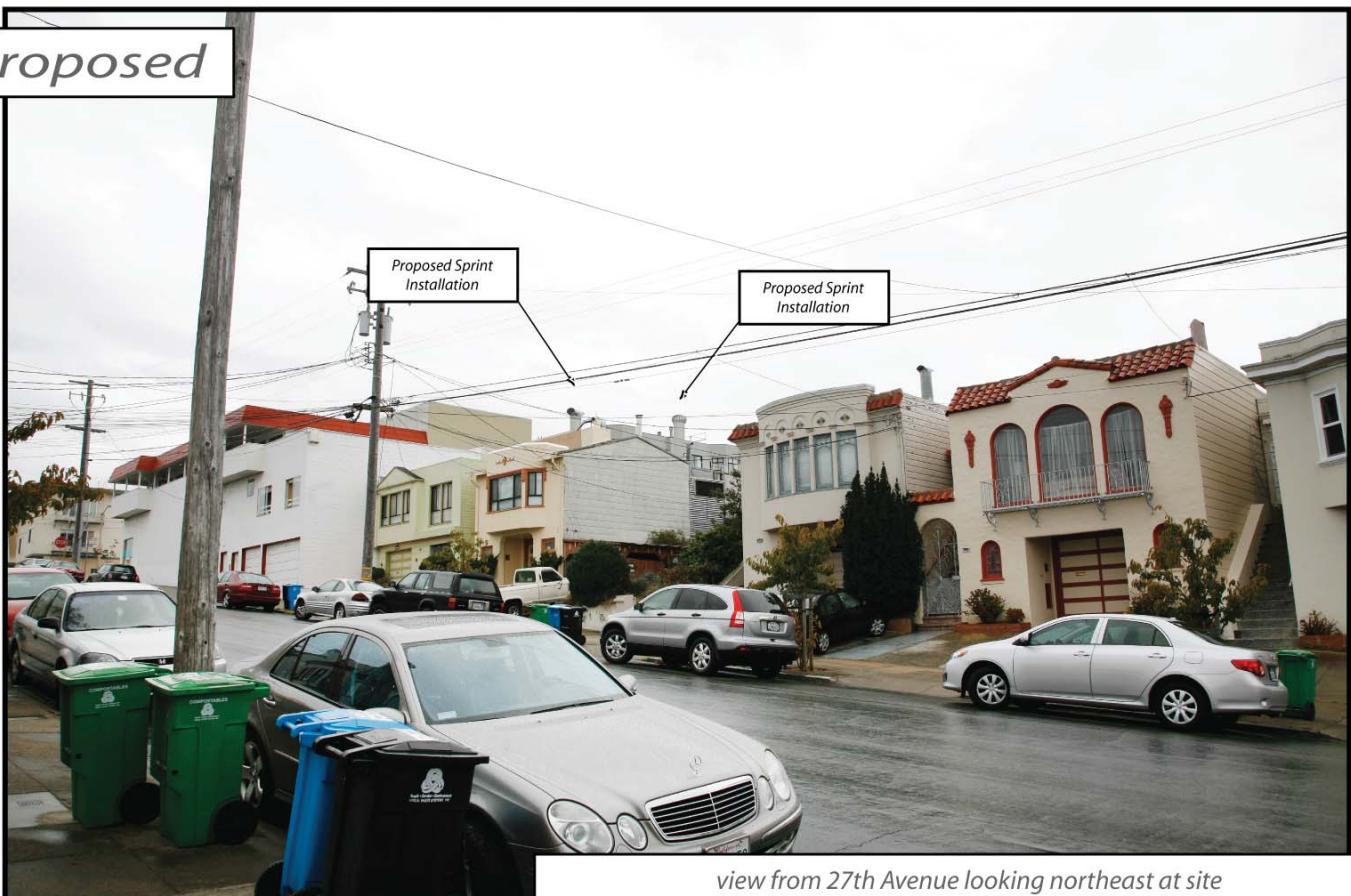


view from Taraval Street looking southeast at site

Existing



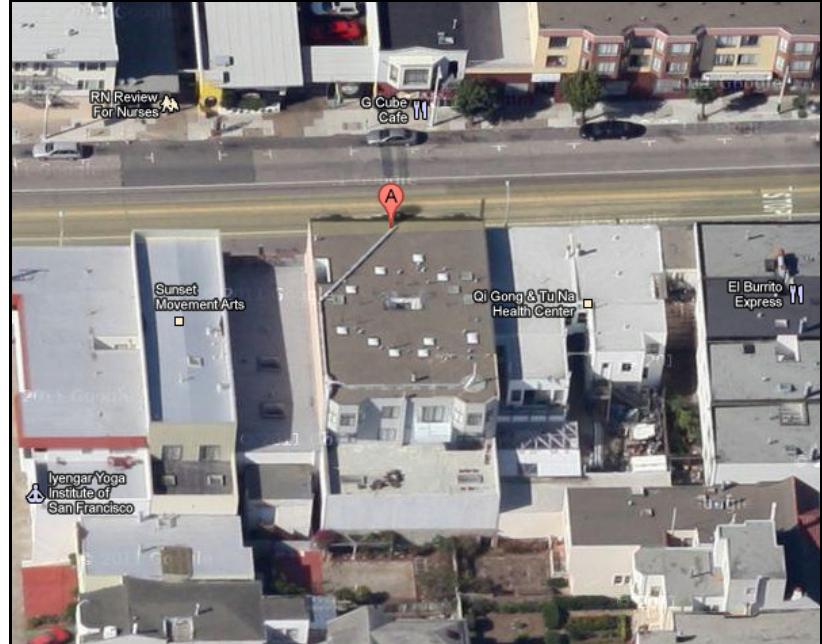
Proposed



view from 27th Avenue looking northeast at site

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. SF33XC684D
Basic West Insurance
1633 Taraval Street
San Francisco, California 94116
San Francisco County
37.742455; -122.483765 NAD83
Site Type: Rooftop

EBI Project No. 62111882
October 28, 2013



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 SF33XC684D located at 1633 Taraval Street in San Francisco, California to determine RF-EME exposure levels from 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.

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.

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

This project involves the removal of two (2) existing Sprint antennas and replacement with three (3) new Sprint wireless telecommunication antennas on a rooftop located at 1633 Taraval Street in San Francisco, California. There are three Sectors (A, B and C) proposed at the site, with one (1) antenna that may be installed per sector.

During a prior survey, no spatially averaged power density readings above 0.001386667 mW/cm², which is 0.0520% of the FCC's occupational MPE (0.2600% of the general public MPE) were encountered on any ground surface.

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

There are no other Wireless Telecommunication Service (WTS) sites observed within 100 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 two (2) existing Sprint antennas and replacement with three (3) new Sprint wireless telecommunication antennas on a rooftop located at 1633 Taraval Street in San Francisco, California. There are three Sectors (A, B and C) proposed 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 ranges. The Sector A antennas will be oriented 0° from true north. The Sector B antennas will be oriented 120° from true north. The Sector C antennas will be oriented 255° from true north. The bottom of the Sector A antenna will be approximately 0.42 feet above the main roof level. The bottoms of the Sector B and C antennas will be approximately 4.75 feet above the main roof level.

According to a prior site survey and plans provided by Sprint, no additional carriers had antennas on the rooftop located at 1633 Taraval Street in San Francisco, California.

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 (1) transmitter operating at this frequency. Additionally, for modeling purposes it was assumed to be 20 Watts per transmitter and six (6) transmitters operating at the 1900 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 350 Watts. The ERP for the 1900 MHz transmitters combined on site is 4,595 Watts.

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 pipe-mounted to proposed poles and concealed within proposed radomes, and operating in the directions, frequencies, and heights mentioned in section 4.0 above. The surrounding area consists primarily of urban development, mostly residential.

8.0 ESTIMATED AMBIENT RADIO FREQUENCY FIELDS FOR THE PROPOSED SITE

Based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 11 feet of Sprint's proposed Sector A 800/1900 MHz antenna 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's proposed Sector A 800/1900 MHz antenna at the main roof level. Based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 6 feet of Sprint's proposed Sector B and C 800/1900 MHz 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 1 foot of Sprint's proposed Sector B and C 800/1900 MHz antennas at the main roof level. At the nearest walking/working surfaces to the proposed Sprint antennas, the maximum power density is 11.08 mW/cm², which is 2,077.50 percent of the FCC's general public limit (415.50 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 0.063466667 mW/cm², which is 11.90 percent of the FCC's general public limit (2.38 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 predictive modeling at the antenna face, 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 Sector A, B and C 800/1900 MHz antennas within 12 feet and a general public exceedance within 5 feet. These exceedances are into free space, however there are walking working/surface on this site that are predicted to be impacted.

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. It is recommended that additional signage be installed for the new antennas making people aware of the antennas locations. Also workers elevated above the roof level/ ground level should be made aware of the antennas locations. There are fields in front of the proposed Sprint antennas and therefore barriers are recommended.

Additionally, there are areas where workers elevated above the 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.

According to a prior report, explanatory "Warning" signs had been posted at both the roof access ladder and at each antenna location.

Additionally, access to this site is accomplished via a caged roof access ladder. Access to the facility is monitored and as such, the general public is unable 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 (cm^2). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm^2) and an uncontrolled MPE of 1 mW/cm^2 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.

Table I: Limits for Maximum Permissible Exposure (MPE)

(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/cm ²)	Averaging Time [E] ² , [H] ² , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6

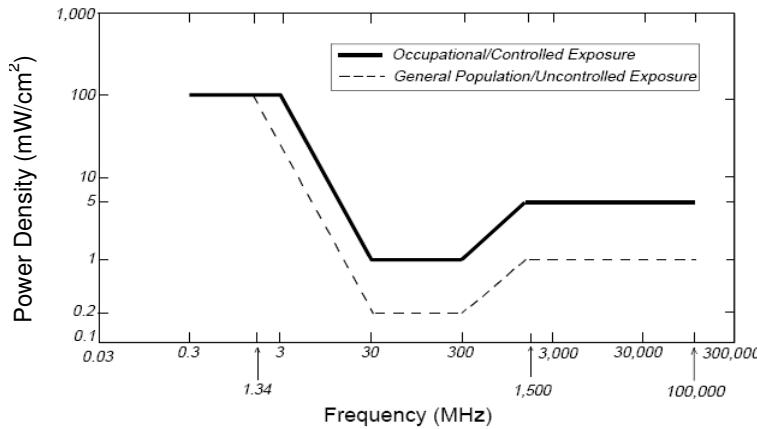
(B) Limits for General Public/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time [E] ² , [H] ² , or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



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 ²	1.00 mW/cm ²
Cellular Telephone	870 MHz	2.90 mW/cm ²	0.58 mW/cm ²
Specialized Mobile Radio	855 MHz	2.85 mW/cm ²	0.57 mW/cm ²

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm ²	0.20 mW/cm ²

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: 1) 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 and 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.

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 and provided 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 1633 Taraval Street in San Francisco, California.

EBI has conducted theoretical modeling combined with prior onsite 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 11 feet of Sprint's proposed Sector A and 6 feet of Sprint's proposed Sector B and C 800/1900 MHz 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's proposed Sector A and 1 foot of Sprint's proposed Sector B and C 800/1900 MHz antennas at the main roof level.

Additionally, based on the FCC criteria, there are no measured areas on any accessible ground-level walking/working surfaces related to the existing site conditions that exceed the FCC's occupational and general public exposure limits at this site.

Signage is recommended 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

1633 Taraval St. Site
2399/041
2011.1146C

EMF Report

Reviewed and Approved by:



A handwritten signature in black ink that reads "H. Stockinger".

Herbert J. Stockinger, PE
Senior Engineer

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.

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

Map, Settings, Antenna, and Symbol Data Table .. Exported from workbook -> RoofView 4.15.xls
Done on 10/28/2013 at 5:28:24 PM.
Use this format to prepare other data sets for the RoofView workbook file.
You may use as many rows in this TOP header as you wish.
The critical point are the cells in COLUMN ONE that read 'Start...' (eg. StartMapDefinition)
If used, these (4) headers are required to be spelled exactly, as one word (eg. StartMapDefinition)
The very next row will be considered the start of that data block.
The first row of the data block can be a header (as shown below), but this is optional.
When building a text file for import, Add the Map info first, then the Antenna data, followed by the symbol data.
All rows above the first marker line 'Start...' will be ignored, no matter how many there are.
This area is for you use for documentation.
End of help comments.

You can place as much text here as you wish as long as you don't place it below the Start Map Definition row below the blue line.
You may insert more rows using the Insert menu.
Should you need additional lines to document your project, simply insert additional rows by highlighting the row number adjacent to the blue line below and then clicking on the Insert menu and selecting rows.

StartMapDefinition

Roof Max \Roof Max	Map Max \Map Max	Y Offset	X Offset	Number of envelope
200	200	210	210	0
				0
				1 \$K\$21:\$HB\$K\$21:\$HB\$220

List Of Areas
\$K\$21:\$HB

StartSettingsData

Standard	Method	Uptime	Scale	Facts	Low Thr	Low Color	Mid Thr	Mid Color	Hi Thr	Hi Color	Over Color	Ap Ht	Mult Ap Ht	Method
4	2	1	1	100	1	500	4	5000	2	3	1.5	1		

StartAntennaData		It is advisable to provide an ID (ant 1) for all antennas																		
ID	Name	(MHz)	Trans Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
SPT A1	Sprint	800	20	1	8 1/2 LDF		0.5		17.05415 RFS	APXVFRR1:	31	71	0.42	Panel	4	10.5	72;0	ON•		
SPT A1	Sprint	1900	20	6	8 1/2 LDF		0.5		102.3249 RFS	APXVFRR1:	31	71	0.42	Panel	4	13.9	65;0	ON•		
SPT B1	Sprint	800	20	1	8 1/2 LDF		0.5		17.05415 RFS	APXVFRR1:	51	17	4.75	Panel	4	10.5	72;120	ON•		
SPT B1	Sprint	1900	20	6	8 1/2 LDF		0.5		102.3249 RFS	APXVFRR1:	51	17	4.75	Panel	4	13.9	65;120	ON•		
SPT C1	Sprint	800	20	1	8 1/2 LDF		0.5		17.05415 RFS	APXVFRR1:	19	17	4.75	Panel	4	10.5	72;255	ON•		
SPT C1	Sprint	1900	20	6	8 1/2 LDF		0.5		102.3249 RFS	APXVFRR1:	19	17	4.75	Panel	4	13.9	65;255	ON•		

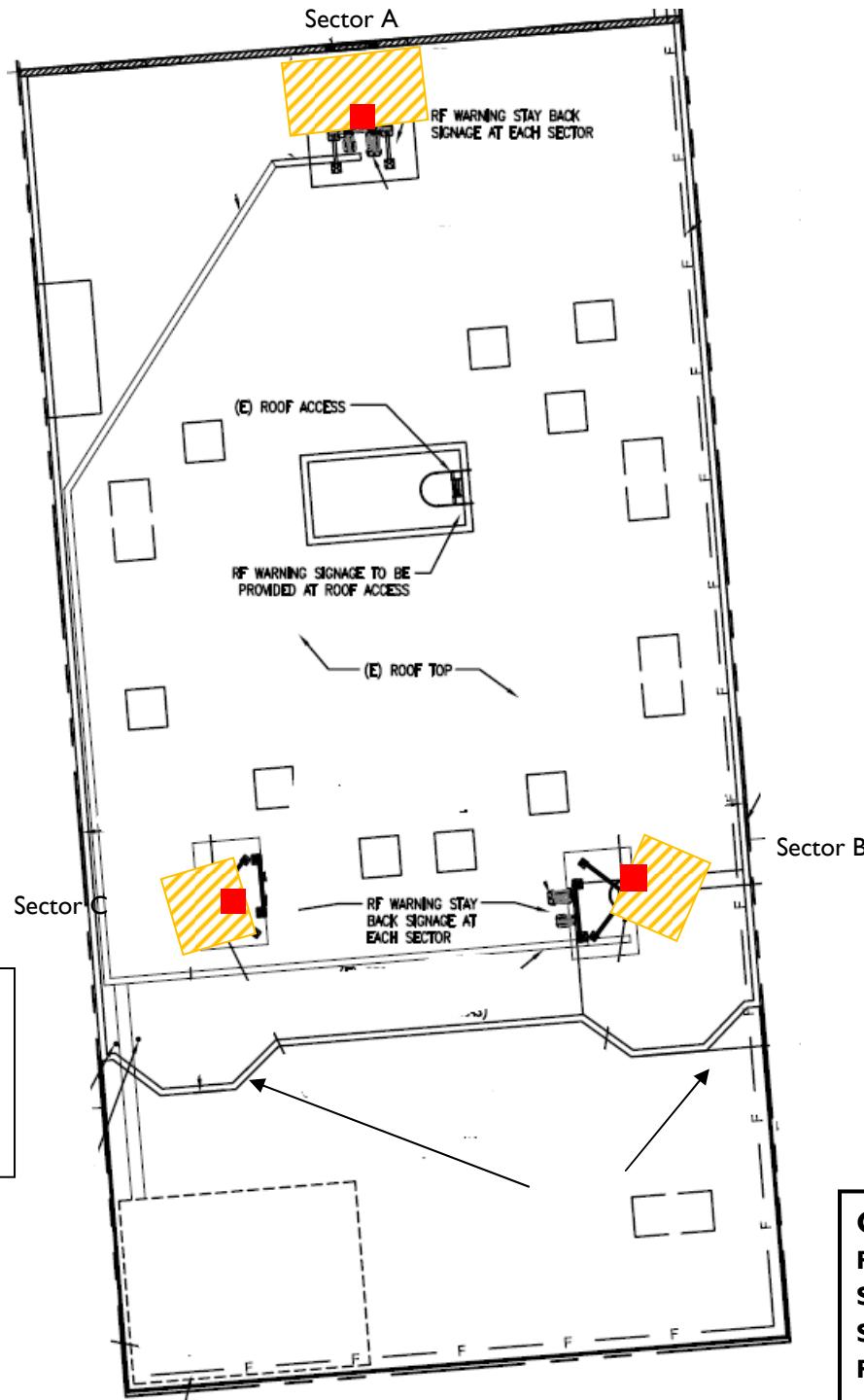
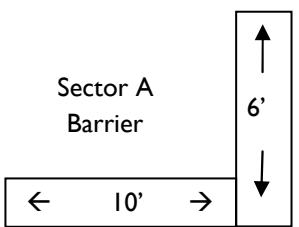
StartSymbolData

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

Sprint Antennas



Recommended Soft Barrier

Compliance Plan

Facility Operator: Sprint

Site Name: Basic West Insurance

Sprint Site Number: Site No. SF33XC684D

Report Date: October 28, 2013



City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION

Edwin M. Lee, Mayor
Barbara A. Garcia, MPA, Director of Health
Rajiv Bhatia, MD, MPH, Director of EH

Review of Cellular Antenna Site Proposals

Project Sponsor : Sprint **Planner:** Omar Masry
RF Engineer Consultant: EBI Consulting **Phone Number:** (707) 208-6410
Project Address/Location: 1633 Taraval St
Site ID: 693 **SiteNo.:** SF33xc684D

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

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

1. The location of all existing antennas and facilities. Existing RF levels. (WTS-FSG, Section 11, 2b)

Existing Antennas No Existing Antennas: 2

2. The location of all approved (but not installed) antennas and facilities. Expected RF levels from the approved antennas. (WTS-FSG Section 11, 2b)

Yes No

3. The number and types of WTS within 100 feet of the proposed site and provide estimates of cumulative EMR emissions at the proposed site. (WTS-FSG, Section 10.5.2)

Yes No

4. Location (and number) of the Applicant's antennas and back-up facilities per building and number and location of other telecommunication facilities on the property (WTS-FSG, Section 10.4.1a)

5. Power rating (maximum and expected operating power) for all existing and proposed backup equipment subject to the application (WTS-FSG, Section 10.4.1c)

Maximum Power Rating: 140 watts.

6. The total number of watts per installation and the total number of watts for all installations on the building (roof or side) (WTS-FSG, Section 10.5.1).

Maximum Effective Radiant: 1648 watts.

7. Preferred method of attachment of proposed antenna (roof, wall mounted, monopole) with plot or roof plan. Show directionality of antennas. Indicate height above roof level. Discuss nearby inhabited buildings (particularly in direction of antennas) (WTS-FSG, Section 10.41d)

8. Report estimated ambient radio frequency fields for the proposed site (identify the three-dimensional perimeter where the FCC standards are exceeded.) (WTS-FSG, Section 10.5) State FCC standard utilized and power density exposure level (i.e. 1986 NCRP, 200 $\mu\text{w}/\text{cm}^2$)

Maximum RF Exposure: 0.0634 mW/cm^2 Maximum RF Exposure Percent: 11.9

9. Signage at the facility identifying all WTS equipment and safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards. (WTS-FSG, Section 10.9.2). Discuss signage for those who speak languages other than English.

Public_Exclusion_Area

Public Exclusion In Feet: 12

Occupational_Exclusion_Area

Occupational Exclusion In Feet: 6

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:

(The 5/22/13 Report was amended 10/28/13) There are 2 antennas operated by Sprint installed on the roof top of the building at 1633 Taraval Street. Existing RF levels at ground level were less than 1% of the FCC public exposure limit. There were observed no other antennas within 100 feet of this site. Sprint proposes to remove the existing antennas and install 3 new antennas. The antennas will be mounted at a height of about 31 feet above the ground. The estimated ambient RF field from the proposed Sprint transmitters at ground level is calculated to be a maximum of 0.0634 mW/sq cm., which is 11.9 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 12 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Worker should not have access to within 6 feet of the front of the antennas while they are in operation. Barriers or striping should be placed on the rooftop between the A sector antennas and the edge of the roof and the 6 foot area in front of Sector B & C antennas.

- 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)

Signed:



Dated: 11/1/2013

Patrick Fosdahl

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

Necessity of Proposed Site for Network Operations

The proposed modification of an existing Sprint facility would replace the existing technology to LTE (Long Term Evolution) service, which provides improved performance by increasing data speed and reducing latency. 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.

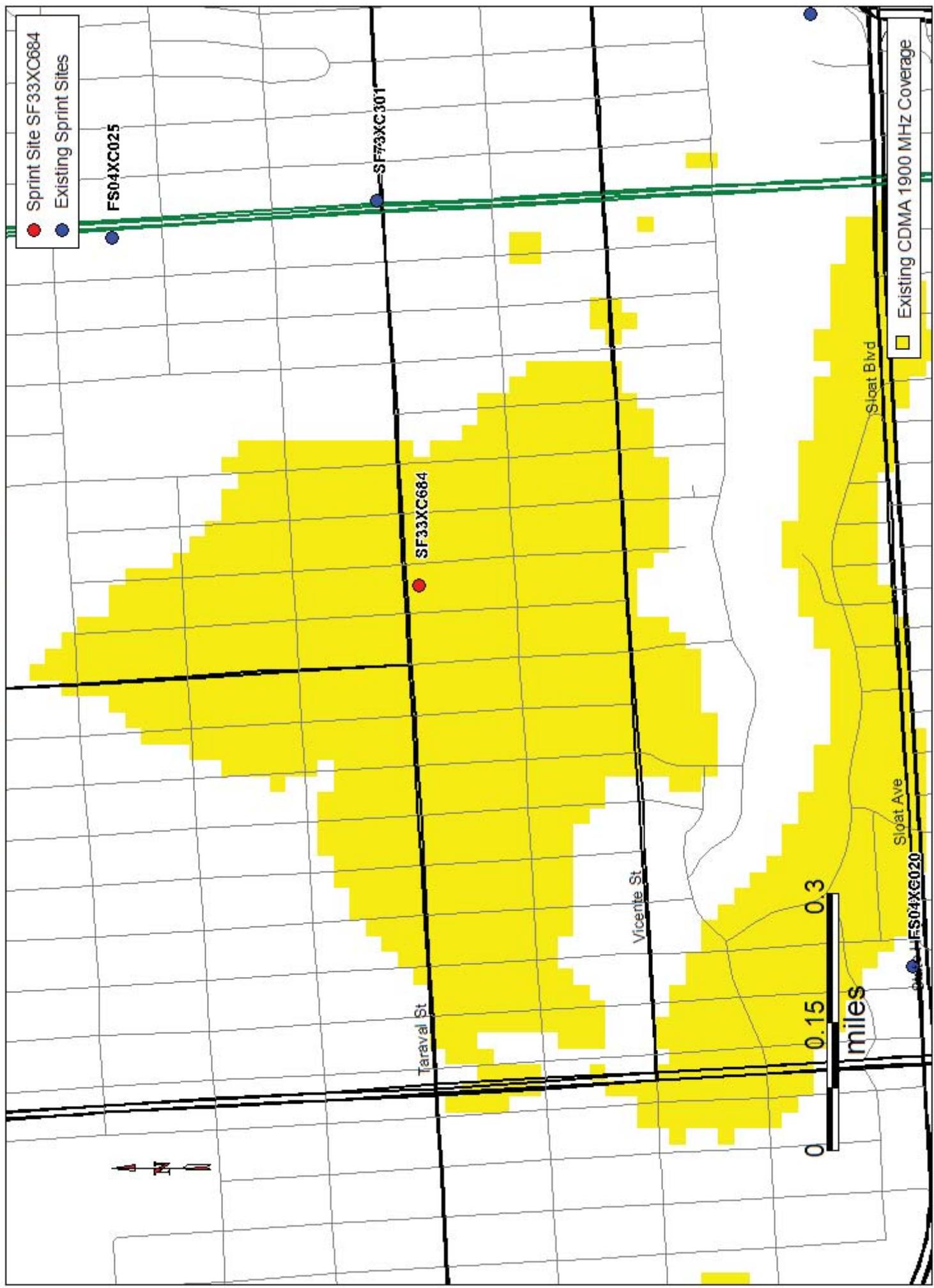
Description of Service Area

The proposed facility is a necessary component of Sprint Wireless Network. The addition of 800/1900MHz and 1.6GHz antennas will provide 4G LTE service to the area surrounding the site roughly bounded by Rivera St. to the north, 19th Ave to the east, Vicente St. to the south and 30th Ave to the east.

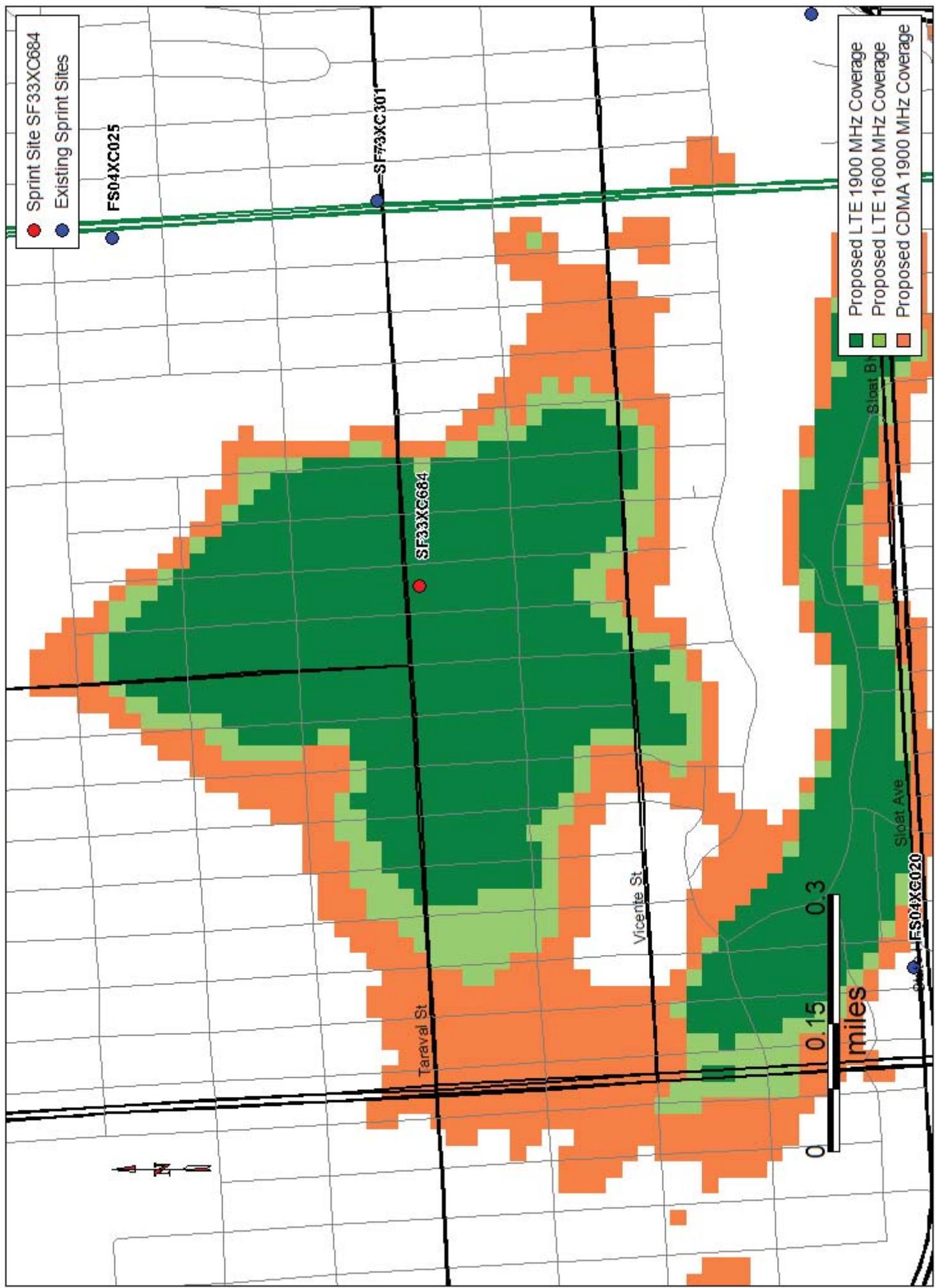
Distance between Sites

SF33XC683 - 2543 Noriega St - 0.93 Mi
FS04XC025 - 2145 19TH Ave - 0.46 Mi
FS04XC040 - 470 West Portal Avenue - 0.72 Mi
SF13XC809 - 3251 20th Ave - 1.01 Mi
FS04XC020 - 1740 SLOAT BLVD - 0.83 Mi
FS04XC021 - 3595 TARAVAL STREET - 1.29 Mi

Existing SF33XC684 coverage



Proposed SF33XC684 coverage



**Community Outreach Meeting Summary
1633 Taraval St (Sprint Site ID#: SF33XC684)
December 2, 2013
5:00 pm**

Taraval Police Station Meeting Room, 2345 24th Ave., San Francisco

Present at the meeting:

Maria Miller, Project Manager, agent for Sprint

David Oliver, independent engineer, preparer of the RF report, EBI Consulting

2 members of the public (see sign-in sheet)

Meeting started at 5 pm. Two community residents were in attendance.

Maria Miller presented information about the design of the facility, provided coverage maps, drawings and photo simulations.

David Oliver responded to questions about the RF safety of the site. Copies of the RF report by EBI were provided.

Discussion regarding the meeting notice verbiage and tentative hearing date in January 2014.

Discussion regarding AT&T's approved new built across the street from Sprint's site.

Meeting ended at 5:30 pm.

COMMUNITY OUTREACH MEETING SIGN-IN SHEET

RE: Sprint Wireless Facility Modification at 1633 Taraval (Sprint Site ID# SF33XC684)

	NAME	ADDRESS	PHONE
1	CÉZANNE TOCCINI	2379 - 26 th AVE. SF CA 94116	415 - 564 - 5388
2	JON TOCCINI	2381 - 26 th AVE S.F. CA. 94116	415 - 722 - 0092
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			

**COMMUNITY OUTREACH MEETING
ON A MODIFICATION OF AN EXISTING SPRINT WIRELESS FACILITY
PROPOSED IN YOUR NEIGHBORHOOD**

TO: NEIGHBORS WITHIN 300 FEET OF 1633 TARAVAL ST., SAN FRANCISCO, CA

Meeting Information

Date: Monday, December 2, 2013
Time: 5:00 p.m.
Where: Taraval Police Station
Meeting Room
2345 24th Ave.
San Francisco, CA 94116

Applicant

Sprint
149 Natoma St., 3rd floor
San Francisco, CA 94105

Sprint Site Information

Address: 1633 Taraval Street
San Francisco, CA 94116
APN: 2399-041
Zoning: NCD

Contact Information

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

Dear Neighbors,

Sprint has applied for a zoning approval to upgrade existing antennas on the roof of the building located at 1633 Taraval St. The proposed modification would replace the existing outdated technology to 4G LTE service, which provides improved performance by increasing data speed and reducing latency. 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 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 Monday, December 2nd at 5:00 p.m. at the Taraval Police Station meeting room if you would like to learn more about the project. This project will be scheduled for Planning Commission review after our neighborhood meeting. Architectural plans and photographic 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.



Wireless Application Review

Sprint SF33XC684-D
Basic West Insurance
1633 Taraval Street
San Francisco, CA 94116

December 5, 2012



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	5

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 692 24th Avenue 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: SF33XC684 – Basic West Insurance
Owner: GE Ming Lui, Anne Wai, Patsi Wing
Site Description: Rooftop Wireless Facility
Address: 1633 Taraval Street, San Francisco, CA 94116
Ground Elevation: 288 feet AMSL
Latitude: 37.74255 N
Longitude: -122.48376 W

3.0 Project Overview

Sprint is applying to modify an existing rooftop wireless facility located at 1633 Taraval 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 RFS APXVFRR13X-C-A20 antennas, 1 per sector. The three antennas, which have a length of 48 inches and are 11.8 inches in width, will be installed with concealment enclosures around the B and C sectors for aesthetic concerns. Additionally, a stealth, RF transparent parapet wall will replace the existing parapet wall in front of the sector A antenna for concealment purposes. The enclosures around the sector B and C antennas, as well as the stealth parapet wall will be constructed with RF permeable material which introduces minimal attenuation to the signal broadcast from the facility. The Sector A antenna will be mounted with an antenna centerline of 32.75 feet above the ground level. The Sector B and C antennas will be mounted with an antenna centerline of 37 feet above the ground level. The existing rooftop is 30.25 feet in height above ground level. The overall height of the proposed sector A antenna is 34.83 feet above ground level. The overall height of the proposed sector B and C enclosures is 39.83 feet above ground level

Additionally, Sprint is looking to remove the existing radio cabinets located in the basement of the building and replace with 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 bringing 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 at 1900 and 1600 MHz (CDMA and LTE). 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 and 1600 MHz frequency bands as these will be the weaker coverage footprints 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.

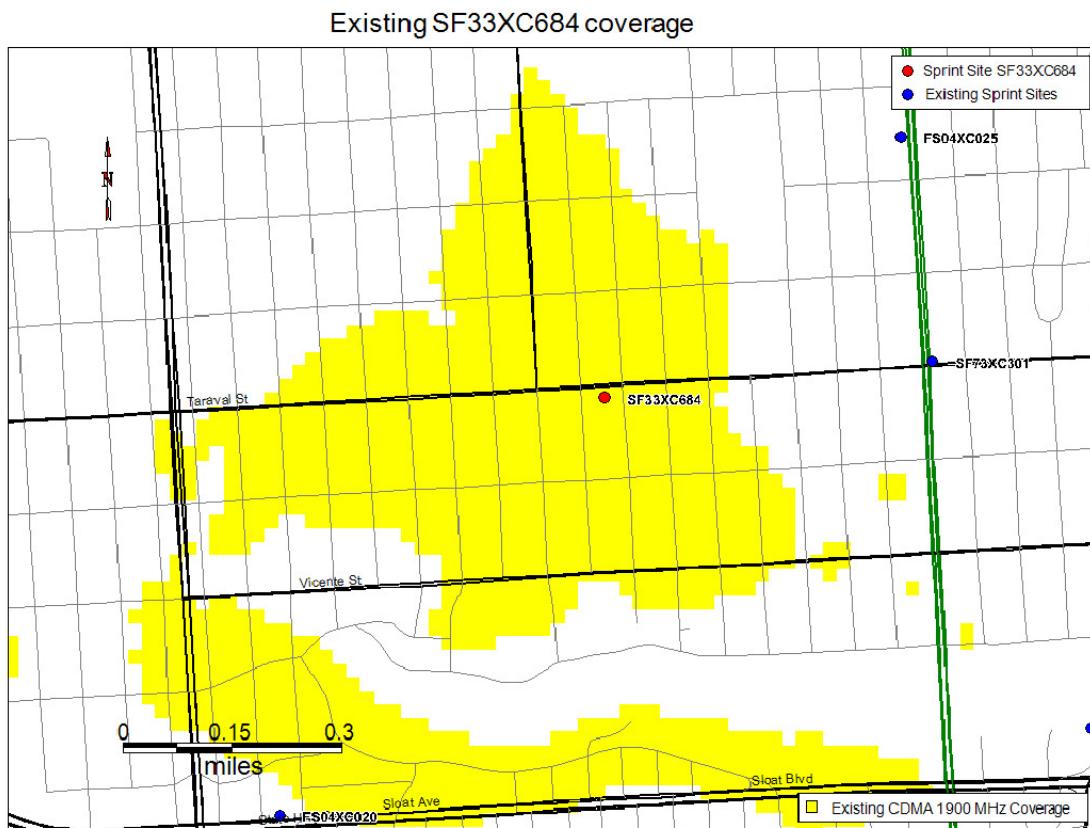


Exhibit 1: Existing Sprint 1900 MHz CDMA coverage

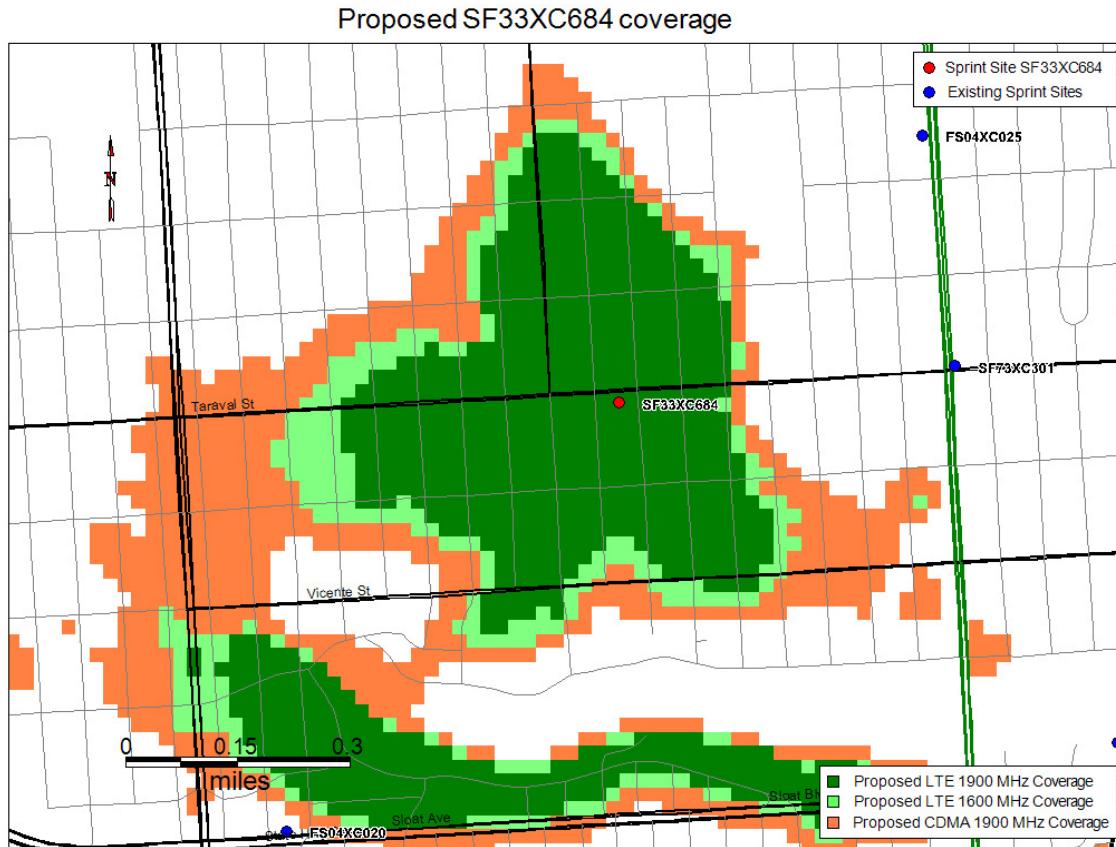


Exhibit 2: Proposed Sprint 1900 & 1600 MHz CDMA / LTE coverage

Anticipated coverage from the proposed upgraded installation is what would be expected from a facility located on a 30 foot rooftop in this geographic area. Anticipated coverage for the 1900 MHz CDMA footprint is shown as extending north approximately 0.4 miles to approximately Quintara Street, East approximately 0.2 miles to the area around the 24th Avenue area, South approximately 0.3 miles to the Vicente Street area and west approximately 0.5 miles to just before hitting the Sunset Boulevard corridor area.

Coverage from the proposed 1900 MHz and 1600 MHz LTE radios is slightly less than the 1900 MHz CDMA footprint and show up as the dark and light green footprints inside the orange footprint representing the 1900 MHz CDMA footprint in Exhibit 2 above.

One point to note is that Sprint will not be deploying 1600 MHz at this facility in the near future. It is simply shown as part of the coverage analysis because Sprint does hold some 1600 MHz licenses in the area.

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.

The area surrounding the site is comprised of very densely spaced residential dwellings and 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 1633 Taraval Street in San Francisco, California by EBI Consulting on October 28, 2013. The study analyzed emissions compliance for this site based upon FCC standards set forth in Bulletin OET65.

The report states that the emissions produced by the existing Sprint facility are at 11.9% of the FCC allowable limit for public exposure at the street level. This is well within the allowable limits.

Sprint has received DPH approval for this proposed facility upgrade on November 1, 2013. This approval reiterated that the proposed facility would not exceed the FCC's allowable limit for general public exposure to radio frequency emissions at the street level and that the site is in compliance with these federal regulations.

One point to note is that Sprint will not be deploying 1600 MHz at this facility in the near future. It is simply shown as part of the coverage analysis because Sprint does hold some 1600 MHz licenses in the area. As such, these channels were not considered as part of the emissions analysis for this site.

Since this rooftop is a controlled area, meaning the general public does not have access to the area, no mitigation techniques are needed. Although the site is in compliance, the report does recommend warning signage and barriers on the rooftop to alert workers on the roof that within 4 feet of the Sprint sector A and 1 foot in front of the Sprint sector B and C antennas there may be areas that exceed the FCC's occupational limits. These references are for the sole purpose of identifying these areas to occupational personnel that may be working on the rooftop as the general public will not have access to this area. Additionally, Signage should be posted at the rooftop access point and at locations near the antenna enclosures that warn of the presence of RF energy that may exceed the FCC's general public or occupational limits in certain areas.

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

6.0 Conclusion

EBI Consulting was tasked with reviewing the Sprint application for proposed site upgrades to their existing facility at 1633 Taraval 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 remove some of the larger equipment cabinets located in the basement of the building. 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 and behind a stealth parapet wall 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. Sprint has received DPH approval for this proposed facility upgrade on November 1, 2013. This approval reiterated that the proposed facility would not exceed the FCC's allowable limit for general public exposure to radio frequency emissions at the street level and that the site is in compliance with these federal regulations.

Based upon our analysis of the Sprint proposed upgrades to their facility at 1633 Taraval 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

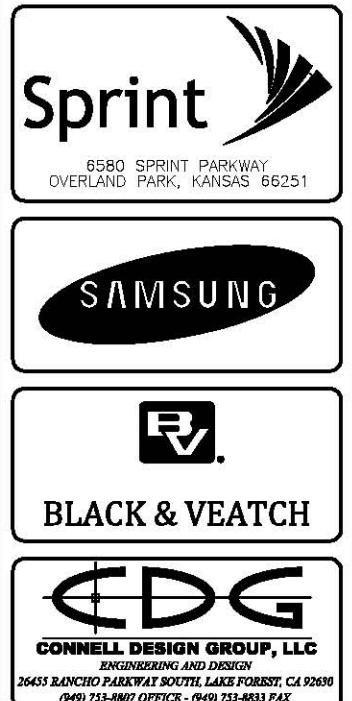


Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803



SITE NAME: BASIC WEST INSURANCE
SITE NUMBER: SF33XC684D
SITE ADDRESS: 1633 TARAVAL
SAN FRANCISCO, CA 94116
SITE TYPE: GROUND EQUIPMENT
ROOF TOP
PROJECT: NETWORK VISIONS MM
MARKET: SAN FRANCISCO SOUTH BAY



SITE INFORMATION		AREA MAP	APPLICABLE CODES	DRAWING INDEX																														
SITE ADDRESS: 1633 TARAVAL SAN FRANCISCO, CA 94116	APN: 2399-041	PROPERTY OWNER: GE MING LUI, ANNE WAI, PATSI WING 1633-1637 TARAVAL STREET, SAN FRANCISCO, CA 94116	EQUIPMENT SUPPLIER: SAMSUNG TELECOMMUNICATIONS AMERICA (STA) 1301 EAST LOOKOUT DRIVE RICHARDSON, TX 75082-4124 (972) 761-7000	CONSULTANT: BLACK & VEATCH CORPORATION 2999 OAK ROAD, SUITE 490 WALNUT CREEK, CA 94597 PHONE: (925) 949-5916	ZONING MANAGER: MODUS, INC. 115 SANSOME STREET, 14TH FLOOR SAN FRANCISCO, CA 94104 CONTACT: MARIA MILLER PH: (415) 450-5533	LEASING MANAGER: MODUS, INC. 115 SANSOME STREET, 14th FLOOR SAN FRANCISCO, CA 94104 CONTACT: SUSAN KEE PH: (209) 609-0860	POWER COMPANY: AT&T PG&E	LATITUDE (NAD83): 37° 44' 33.63" N (37.742675)	LONGITUDE (NAD83): 122° 29' 1.57" W (-122.483769)	<p>DRIVING DIRECTIONS FROM NEAREST AIRPORT</p> <p>FROM SAN FRANCISCO INTERNATIONAL AIRPORT</p> <ul style="list-style-type: none"> TAKE RAMP RIGHT FOR I-80 WEST TOWARD SAN BRUNO TAKE RAMP RIGHT FOR I-80 NORTH TOWARD SAN FRANCISCO KEEP LEFT ONTO CA-1 NORTH / CARRILLO HWY TURN RIGHT ONTO SANTIAGO ST, AND THEN IMMEDIATELY TURN RIGHT ONTO 18TH AVE TURN RIGHT ONTO TARAVAL ST ARRIVE AT 1633 TARAVAL ST, SAN FRANCISCO, CA 94116-2376 	<p>ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:</p> <p>2010 CALIFORNIA BUILDING CODE 2010 CALIFORNIA MECHANICAL CODE 2010 CALIFORNIA PLUMBING CODE 2010 CALIFORNIA ELECTRICAL CODE</p> <p>IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL</p>	PROJECT DESCRIPTION <p>PERFORM SITE MODIFICATIONS TO AN EXISTING WIRELESS COMMUNICATIONS FACILITY, INCLUDING:</p> <ul style="list-style-type: none"> THE REMOVAL OF (1) PANEL ANTENNA AND (1) ACCELERATOR ANTENNA THE INSTALLATION OF (3) PANEL ANTENNAS THE INSTALLATION OF NEW RF TRANS. ANTENNA SCREENING AT ONE SECTOR ANTENNA THE INSTALLATION OF (6) RRUS (2 PER SECTOR) THE REPLACEMENT OF (2) EQUIPMENT CABINETS THE REMOVAL OF (1) EQUIPMENT CABINET THE REPLACEMENT OF (1) GPS ANTENNA THE INSTALLATION OF (1) GPS ANTENNA ANTENNA TRANSMISSION LINES FROM EQUIPMENT CABINETS TO ANTENNAS—PAINTED TO MATCH AS APPLICABLE PER PLANS EXISTING 200AMP POWER SERVICE TO REMAIN 	PROJECT NO: DRAWN BY: CHECKED BY: <table border="1"> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>0</td> <td>10/24/13</td> <td>ISSUED FOR ZONING APPROVAL</td> </tr> <tr> <td>REV</td> <td>DATE</td> <td>DESCRIPTION</td> </tr> </table> <p>IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.</p> <p>BASIC WEST INSURANCE SF33XC684D 1633 TARAVAL STREET SAN FRANCISCO, CA 94116</p> <p>SHEET TITLE TITLE SHEET SHEET NUMBER T-1</p>																0	10/24/13	ISSUED FOR ZONING APPROVAL	REV	DATE	DESCRIPTION
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REV	DATE	DESCRIPTION																																



6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251



BLACK & VEATCH



CONNELL DESIGN GROUP, LLC
ENGINEERING AND DESIGN

26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630

(949) 753-8807 OFFICE - (949) 753-8833 FAX

PROJECT NO:
DRAWN BY:
CHECKED BY:

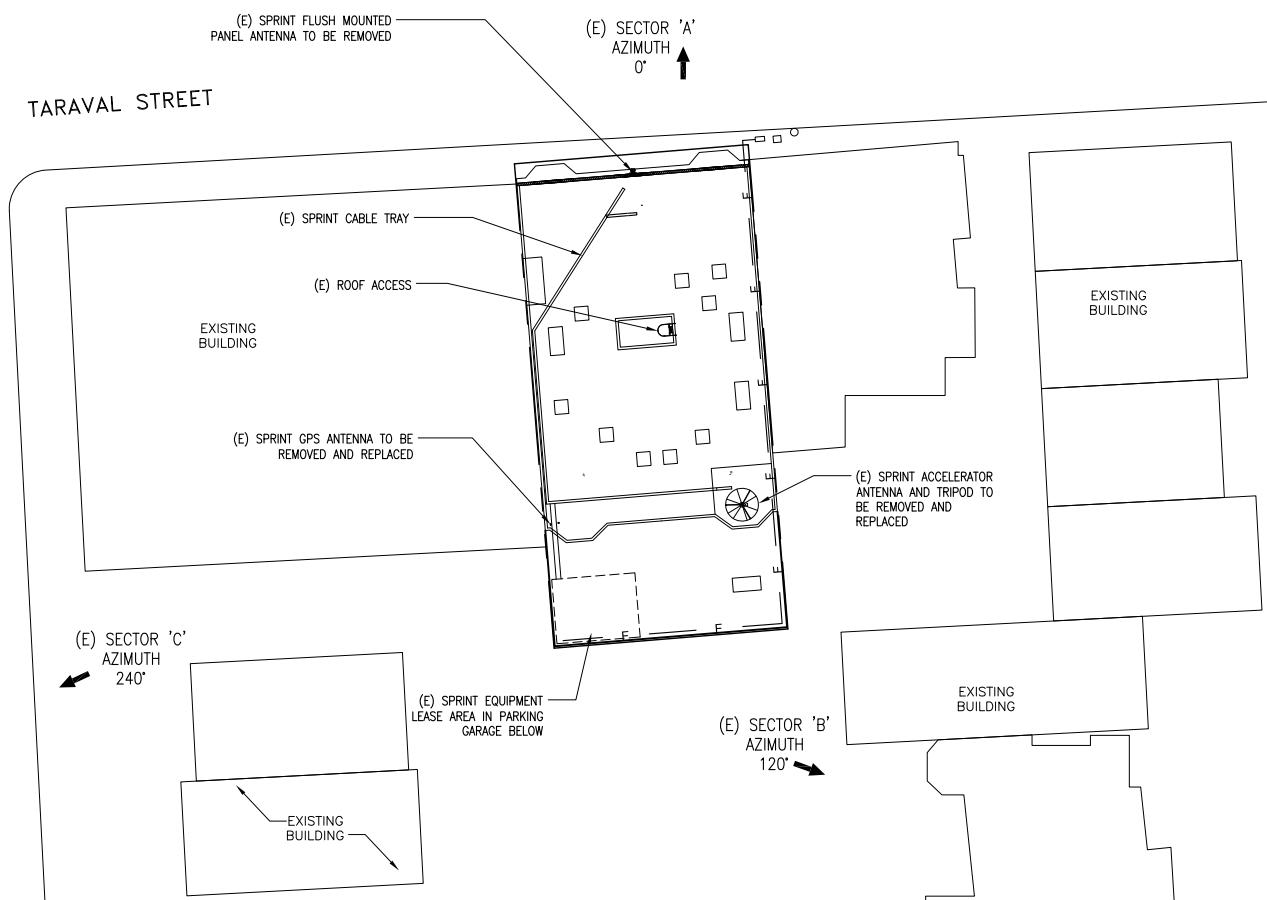
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REV	DATE	DESCRIPTION

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SF33XC684D
1633 TARAVEL STREET
SAN FRANCISCO, CA 94116

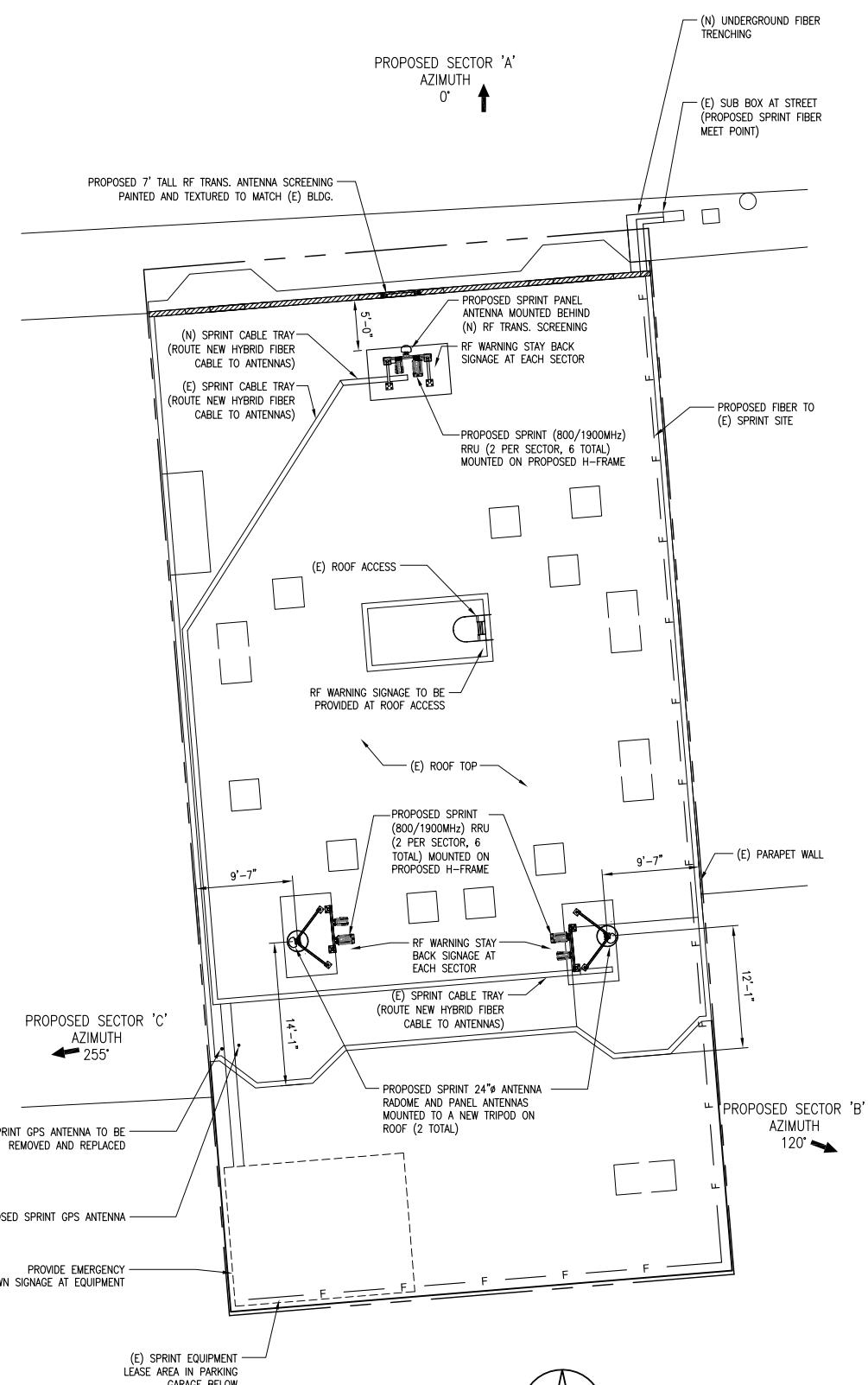
SHEET TITLE
**SITE PLAN / PROPOSED
ROOF PLAN**

SHEET NUMBER
A-1



OVERALL SITE PLAN

20' 15' 10' 5' 0 20' 40'
1'=20'-0"



PROPOSED ROOF PLAN

8' 6' 4' 2' 0 8' 16'
1/8'=1'-0"

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG



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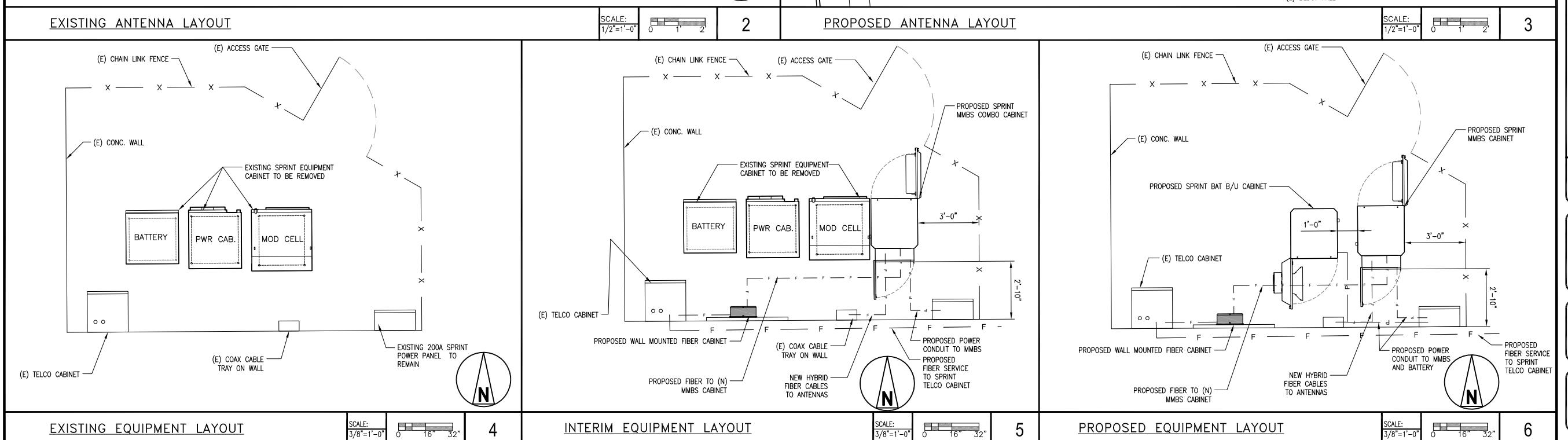
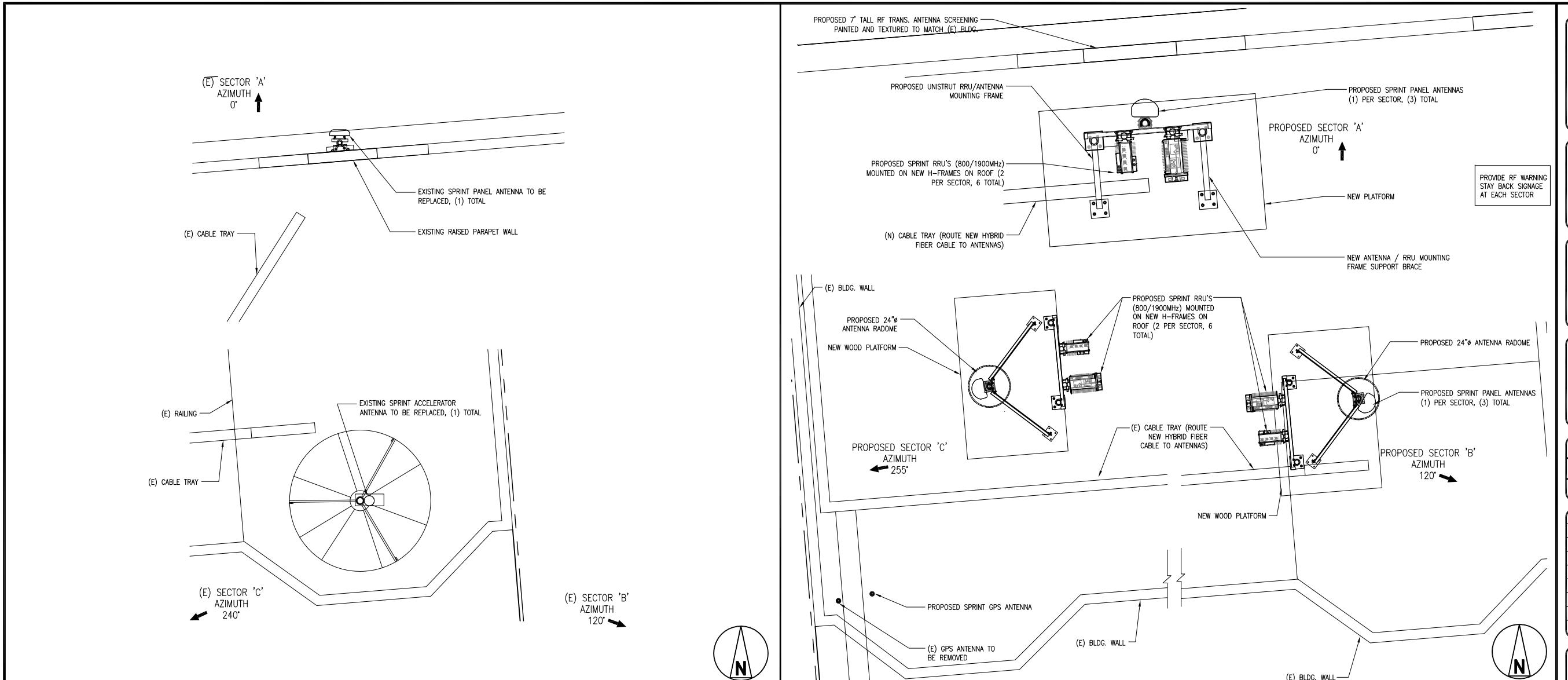
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EQUIPMENT AND ANTENNA LAYOUTS

SHEET NUMBER

A-2





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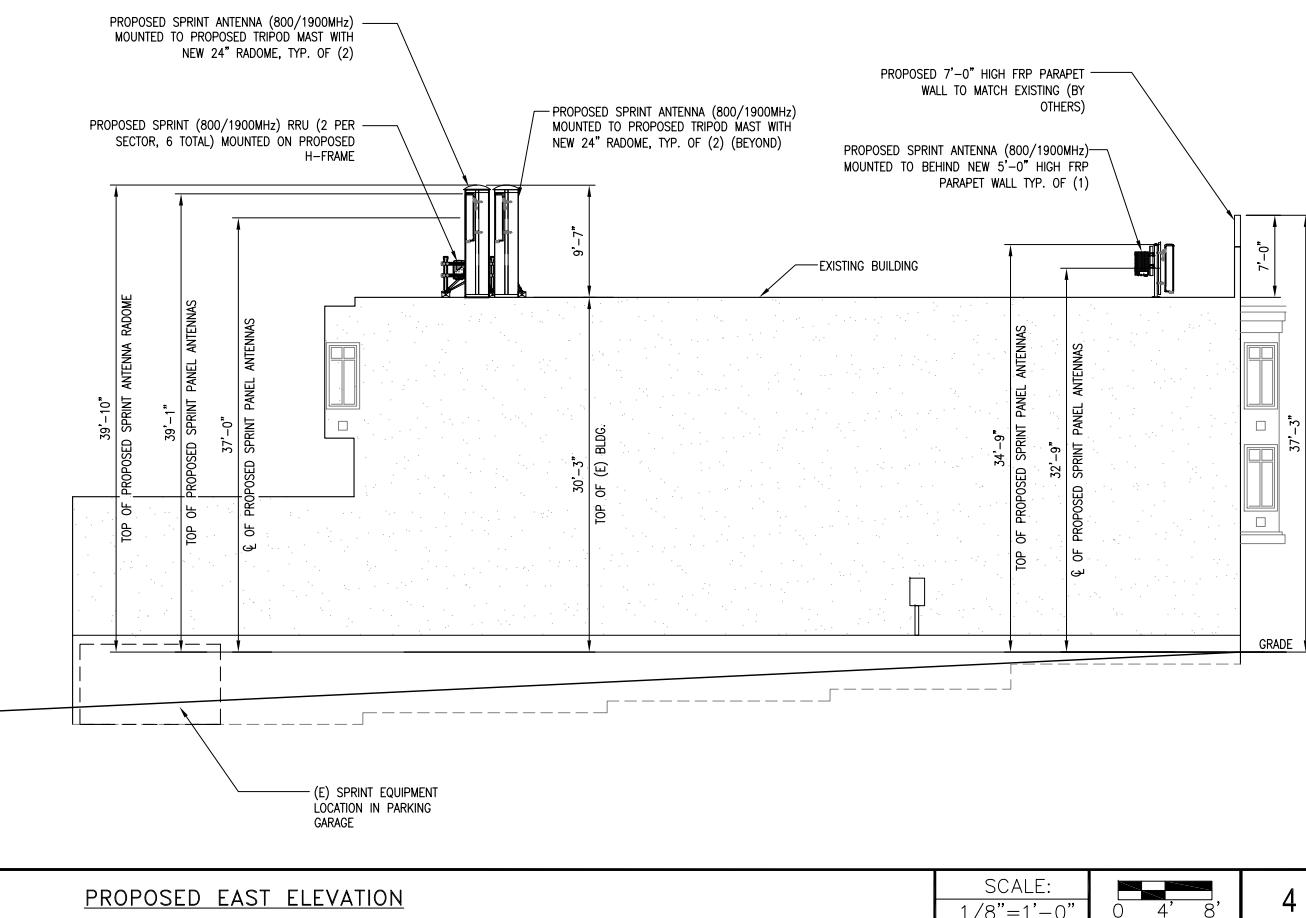
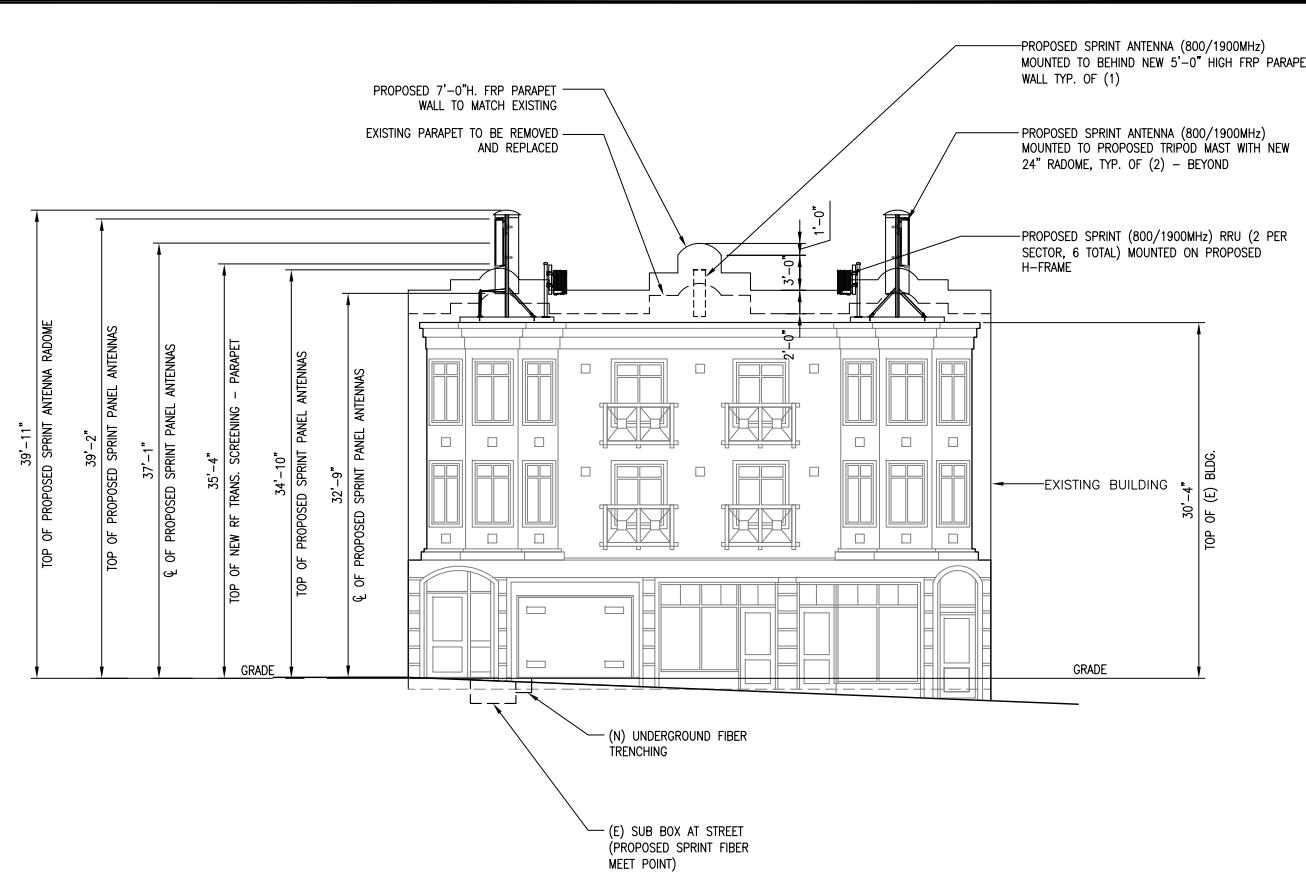
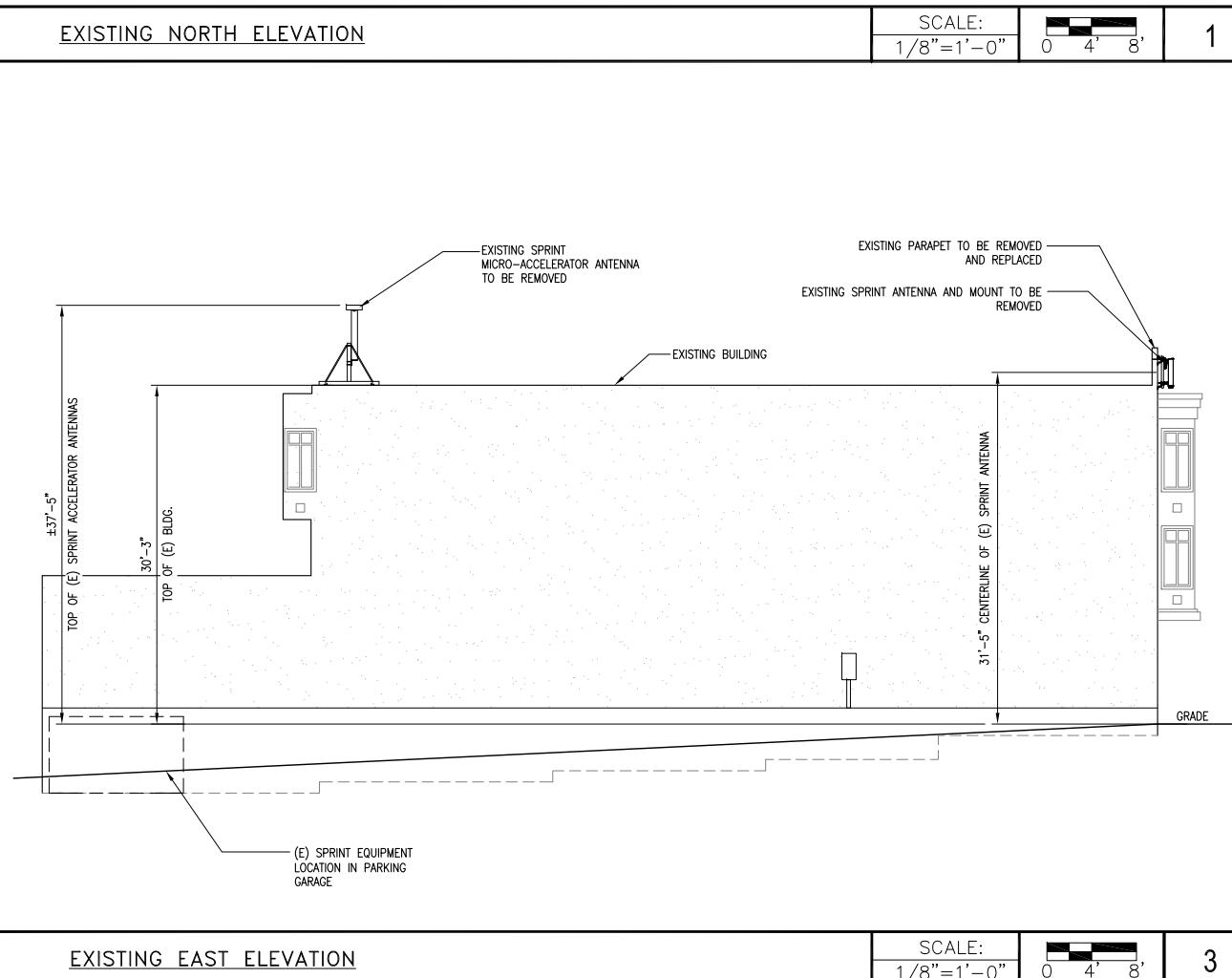
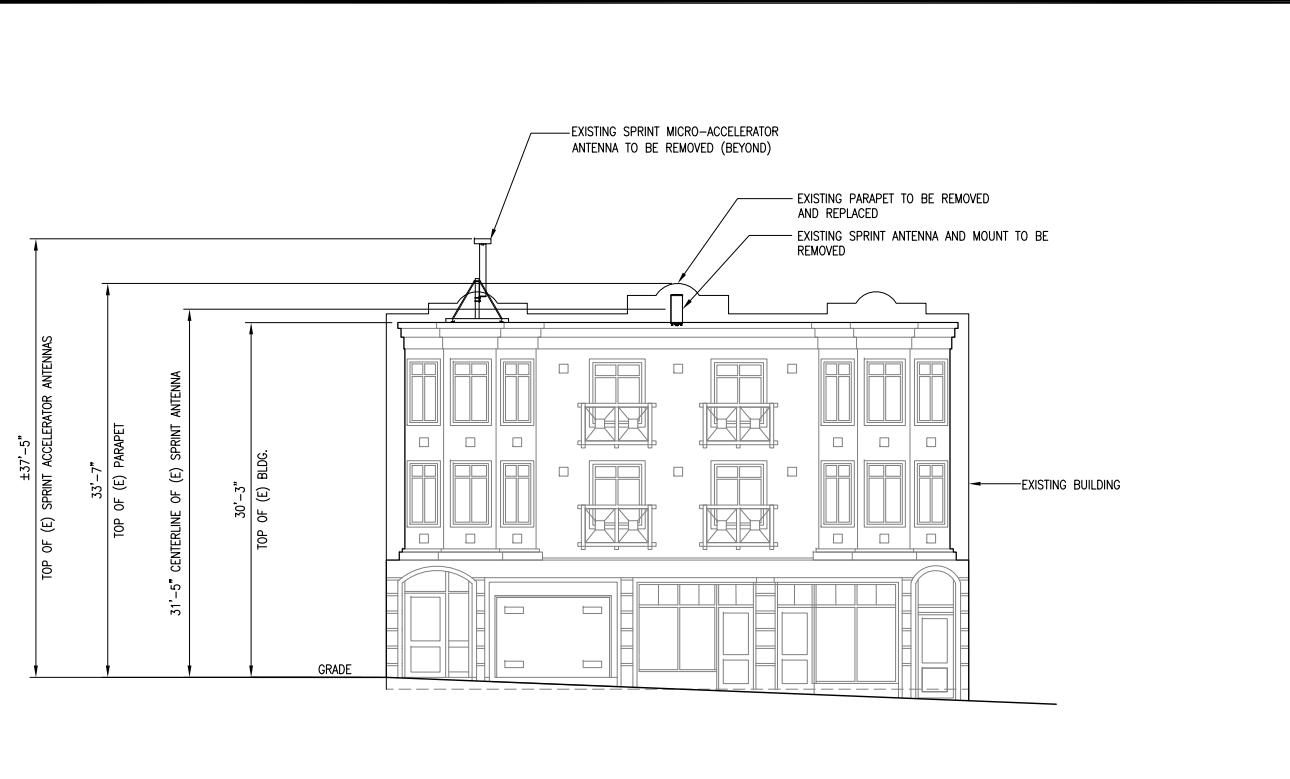
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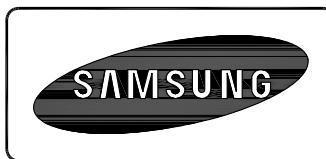
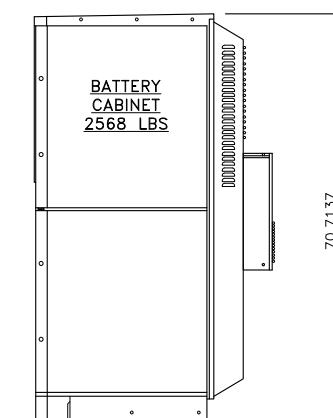
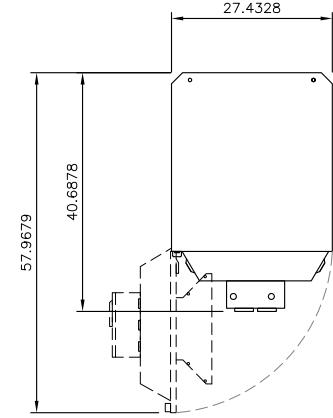
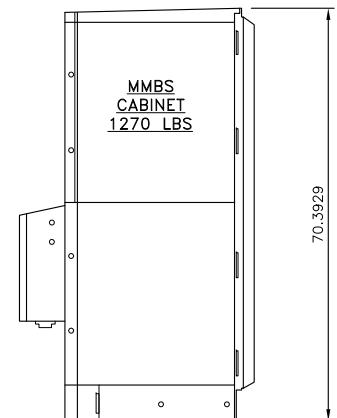
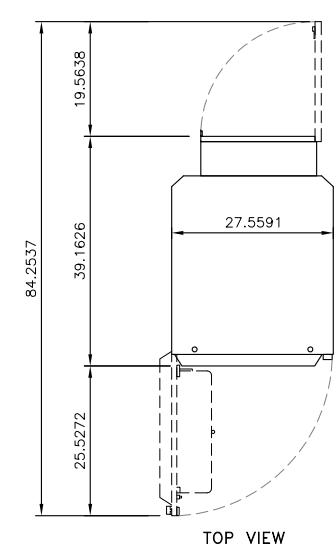
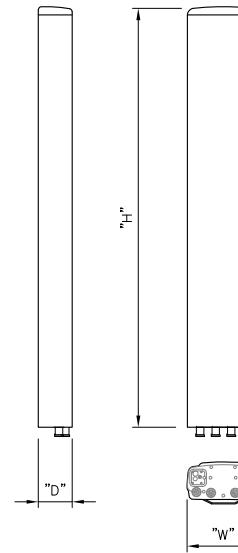
SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-3



PROPOSED ANTENNA

MANUFACTURER: RFS
MODEL: APXVFRR13X-C-I20
RADOME COLOR: LIGHT GRAY
DIMENSIONS, HxWxD: (48"x11.8"x7.9")
WEIGHT, WITH PRE-MOUNTED BRACKETS: 19.5 lbs



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PROJECT NO:
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0 10/24/13 ISSUED FOR ZONING APPROVAL
REV DATE DESCRIPTION

PROPOSED ANTENNA SPECIFICATIONS

NO SCALE

1

MMBS SPECIFICATIONS

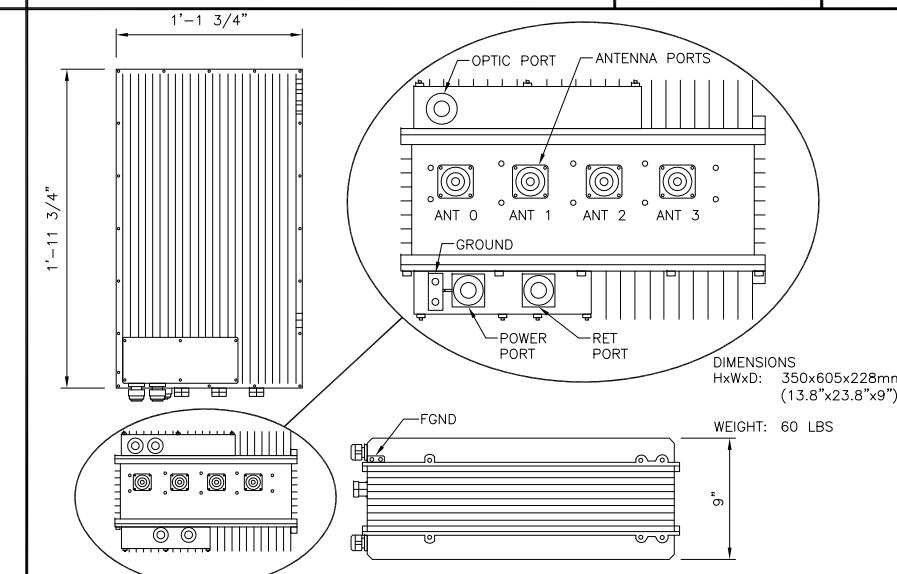
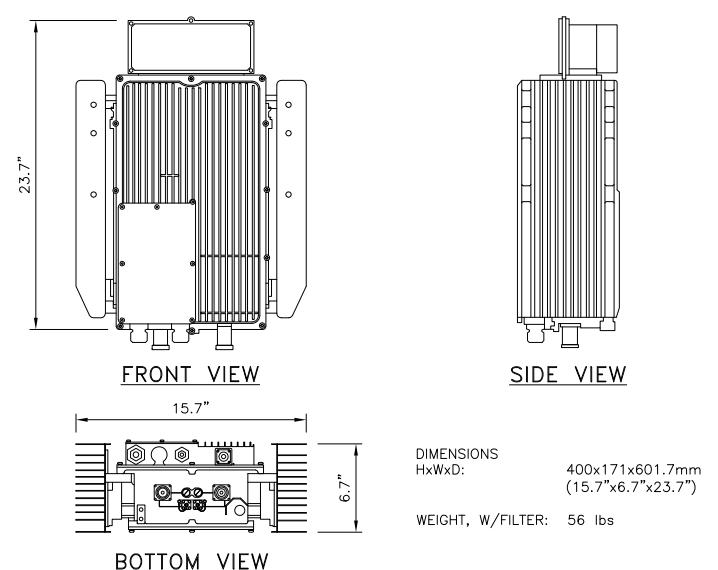
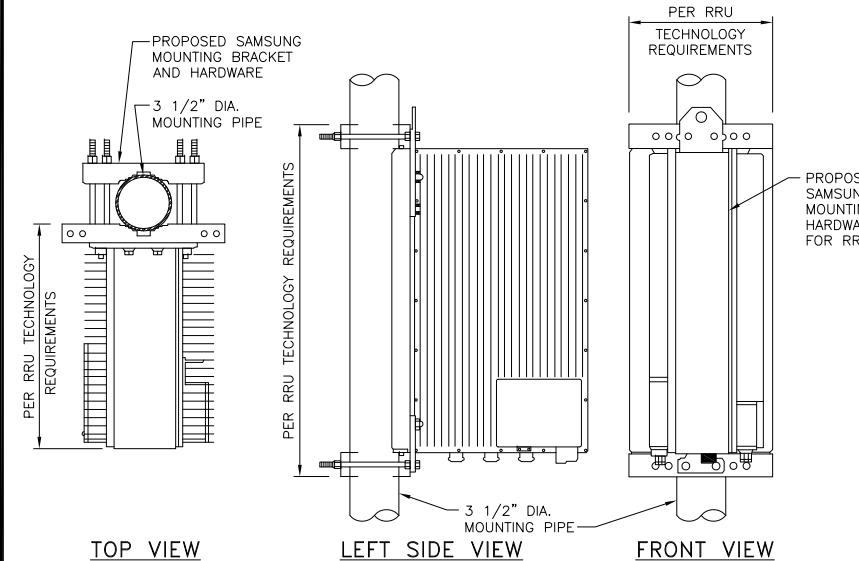
NO SCALE

2

BAT BU CABINET SPECIFICATIONS

NO SCALE

3



1900 MHz RRU POLE MOUNT INSTALLATION DETAIL

NO SCALE

4

800 MHz RRU BOTTOM VIEW

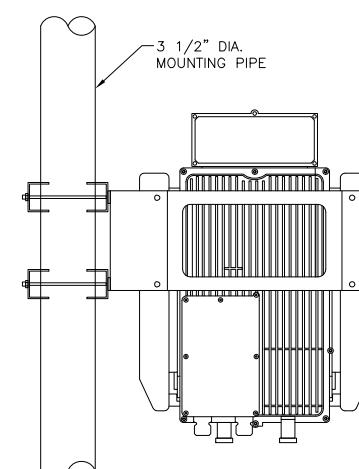
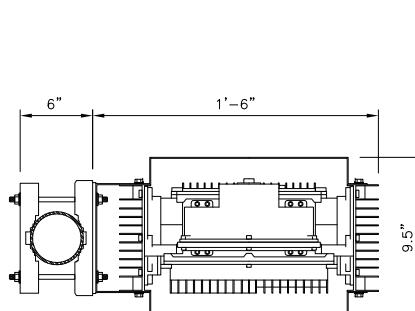
NO SCALE

5

1900 MHz RRU MECHANICAL SPECIFICATIONS

NO SCALE

6



TOP VIEW

FRONT VIEW

800 MHz RRU POLE MOUNT INSTALLATION DETAIL

NO SCALE

7

CABLE TRAY DETAIL

NO SCALE

8

GPS MINIMUM SKY VIEW REQUIREMENTS

NO SCALE

9

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EQUIPMENT DETAILS

SHEET NUMBER
A-4