SAN FRANCISCO
PLANNING DEPARTMENT

Executive Summary
Conditional Use Authorization
HEARING DATE: AUGUST 1, 2013

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

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Information:
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Date:	July 25, 2013
Case No.:	**2011.0730C**
Project Address:	**750 Phelps Street**
Current Zoning:	P (Public) 65-J Height and Bulk District
Block/Lot:	5280/001
Project Sponsor:	Sprint, represented by Maria Miller Modus, Inc. 115 Sansome Street, 4th Floor San Francisco, CA 94104
Staff Contact:	Omar Masry – (415) 575-9116 Omar.Masry@sfgov.org

PROJECT DESCRIPTION

The proposal is to allow modification of an existing Sprint wireless telecommunication services ("WTS") facility. The modification proposes the removal of six roof-mounted existing antennas, and two of four equipment cabinets used to run the facilities, which are located on the ground floor. The proposed configuration would feature three panel antennas and a microwave dish mounted at four locations on the uppermost portion of the building facade.

The proposed antennas would measure approximately 72" high by 12" wide by 6" thick, and the microwave dish would measure approximately one (1) foot in diameter. The proposed antennas and microwave dish would be placed at four separate locations on the facade of the building (three facing west towards Phelps Street and one antenna facing east towards the Project site), with the top of each antenna flush with the top of the adjacent parapet at approximately 51 feet above grade, and the dish mounted at 46 feet above grade.

The site features an existing Sprint macro WTS facility (Case No. 1996.516C), which allowed up to nine roof-mounted panel antennas (six antennas ultimately installed), and additional existing WTS facilities (AT&T Mobility [Building Permit No. 9703450], MetroPCS [2001.0718C], and T-Mobile [2002.0441C]). Based on the location, a public structure (municipal wastewater treatment plant), the antennas are proposed on a Location Preference 1 Site (Publicly-used Structures).

SITE DESCRIPTION AND PRESENT USE

The Project Site is located on Assessor's Block 5280, Lot 001 at the Southeast Water Pollution Control Plant, and serves as one of two City wastewater treatment plants (hereinafter "plant"). The existing wireless facility is located on a three-story, 48-foot tall building along the western edge of the plant. The

building fronts northbound Quint Street, south of Jerrold Avenue. This site is within a P (Public) Zoning, and 65-J Height and Bulk Districts.

SURROUNDING PROPERTIES AND NEIGHBORHOOD

The subject building is surrounded by P zoned properties, which primarily serve the plant. The site is surrounded by plant buildings on three sides and Quint Street to the west. The surrounding area, lies within the Bayview Neighborhood and includes a mix of light and heavy industrial activities, as well as the Caltrain (Southern Pacific rail corridor) to the west. Residential neighborhoods, Zoned RH-2 (Residential House, Two Family), are to the east and south of the plant.

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	July 11, 2013	July 11, 2013	20 days
Posted Notice	20 days	July 11, 2013	July 11, 2013	20 days
Mailed Notice	20 days	July 11, 2013	July 11, 2013	20 days

PUBLIC COMMENT

As of July 25, 2013, the Department has not received any comments from the public regarding the proposed Project. The Project Sponsor held a community meeting at the Bayview Library Branch, at 15075 3rd Street, to discuss the project on July 18, 2013, and there were no attendees.

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 Sections 234.2 of the Planning Code, Conditional Use authorization is required for a WTS facility in a P 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 1, (Publicly-used Structures) according to the Wireless Telecommunications Services (WTS) Siting Guidelines.
- Based on propagation maps provided by Sprint, the project would provide enhanced 800 and 1900 Megahertz CDMA (voice and data) coverage in an area that currently experiences several gaps in coverage and capacity.
- Based on the analysis provided by Sprint, the project will 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 three proposed antennas and (one) microwave dish will be un-screened and painted to match the building facade. The installation of the proposed antennas and microwave dish would allow for the removal of existing roof mounted antennas, including those mounted on tripods with a maximum height of 68 feet above grade. The removal of such antennas, which are prominently visible above the (51-foot high) parapet, would result in an aesthetic improvement as it would reduce the overall visual impact of WTS facilities at the site.
- The antenna placement at 51 feet above ground would comply with the building height provisions (65-J Height and Bulk District) of the Planning Code. Furthermore, the proposed antennas would not create additional vertical massing, as they would not exceed the existing building height.
- The facility would continue to avoid intrusion into public vistas, avoid disruption of the architectural integrity of building and insure harmony with neighborhood character.
- 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:	**Approval with Conditions**

☒	Executive Summary	☒	Project sponsor submittal
☒	Draft Motion		Drawings: Proposed Project
☒	Zoning District Map	☒	Check for legibility
☐	Height & Bulk Map	☒	Photo Simulations
☒	Parcel Map	☒	Coverage Maps
☒	Sanborn Map	☒	RF Report
☒	Aerial Photo	☒	DPH Approval
☒	Context Photos	☒	Community Outreach Report
☒	Site Photos	☒	Independent Evaluation

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

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PLANNING DEPARTMENT

Subject to: (Select only if applicable)

☐ Affordable Housing (Sec. 415)
☐ Jobs Housing Linkage Program (Sec. 413)
☐ Downtown Park Fee (Sec. 412)
☐ First Source Hiring (Admin. Code)
☐ Child Care Requirement (Sec. 414)
☐ Other

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Planning Commission Motion No. XXXX

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Current Zoning:	"P "(Public)
	65-J Height and Bulk District
Block/Lot:	5280/001
Project Sponsor:	Sprint, represented by Maria Miller
	Modus, Inc.
	115 Sansome Street, 4th Floor
	San Francisco, CA 94104
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 234.2 TO MODIFY A WIRELESS TELECOMMUNICATIONS SERVICES FACILITY TO ALLOW THREE FACADE MOUNTED PANEL ANTENNAS AND ASSOCIATED EQUIPMENT LOCATED AT A THREE-STORY MUNICIPAL BUILDING AS PART OF SPRINT'S WIRELESS TELECOMMUNICATIONS NETWORK WITHIN A P (PUBLIC) ZONING DISTRICT, AND 65-J HEIGHT AND BULK DISTRICTS.

PREAMBLE

On July 14, 2011, Sprint (hereinafter "Project Sponsor"), submitted an application (hereinafter "Application"), for Conditional Use Authorization on the property at 750 Phelps Street, Lot 001 in Assessor's Block 5280, (hereinafter "Project Site") to modify a wireless telecommunications service facility (WTS). The modification proposes the removal of six roof-mounted existing antennas, and two of four equipment cabinets used to run the facility, which are located on the ground floor. The proposed configuration would feature three panel antennas and a microwave dish mounted at four locations to the uppermost portion of the building facade. The Project would provide enhanced 1900 Megahertz voice and data service, as part of Sprint's wireless telecommunications network within a P (Public) Zoning District, and 65-J Height and Bulk Districts.

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 August 1, 2013, 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. 2011.0730C, 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 Project Site is located on Assessor's Block 5280, Lot 001 at the Southeast Water Pollution Control Plant (hereinafter "plant"), and serves as one of two City wastewater treatment plants. The existing wireless facility is located on a three-story, 48-foot tall building along the western edge of the plant and abuts northbound Quint Street, south of Jerrold Avenue. This site is within a P (Public) Zoning, and 65-J Height and Bulk Districts.

3. **Surrounding Properties and Neighborhood**. The subject building is surrounded by P zoned properties, which primarily serve the plant, and site is surrounded by plant buildings on three sides and Quint Street to the west. The surrounding area, lies within the Bayview Neighborhood and includes a mix of light and heavy industrial and warehousing activities, as well as the Caltrain (Southern Pacific rail corridor) to the west.

4. **Project Description.** The Project proposes to modify the existing WTS facility through the removal of six roof-mounted existing antennas, and two of four equipment cabinets used to run the facility, which are located on the ground floor. The proposed configuration would feature three panel antennas and a microwave dish mounted at four locations to the uppermost portion of the building facade.

   The proposed antennas would measure approximately 72" high by 12" wide by 6" thick, and the microwave dish would measure approximately 12 inches in diameter. The proposed antennas and microwave dish would be placed at four separate locations on the facade of the building (three facing west towards Phelps Street and one antenna facing east towards the Project site),

with the top of each antenna flush with the top of the adjacent parapet, at approximately 51 feet above grade, and the dish mounted at 46 feet above grade.

The site features an existing Sprint macro WTS facility (Case No. 96.516C), which allowed up to nine roof-mounted panel antennas (six antennas ultimately installed), and additional existing macro WTS facilities (AT&T Mobility, MetroPCS, and T-Mobile).

1. **Past History and Actions.** The Planning Commission adopted the Wireless Telecommunications Services (WTS) Facilities Siting Guidelines ("Guidelines") for the installation of wireless telecommunications facilities in 1996. These Guidelines set forth the land use policies and practices that guide the installation and approval of wireless facilities throughout San Francisco. A large portion of the Guidelines was dedicated to establishing location preferences for these installations. The Board of Supervisors, in Resolution No. 635-96, provided input as to where wireless facilities should be located within San Francisco. The Guidelines were updated by the Commission in 2003 and again in 2012, requiring community outreach, notification, and detailed information about the facilities to be installed.

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

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

   Based on the location, a public structure (wastewater treatment plant), the antennas are proposed on a Location Preference 1 Site (Co-Location).

   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.

On August 1, 2013, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on the application for a Conditional Use authorization pursuant to Planning Code Sections 234.2 to modify a wireless telecommunications facility ultimately consisting of three facade-mounted antennas, plus one microwave dish, and related electronic equipment located on the third floor of the subject building.

2. **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*, the Project is a Location Preference Number 1 Site as the Project Site is located in at a publicly used structure (wastewater treatment plant).

3. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless network is designed to address network congestion issues and will ease congestion by offloading data traffic from the voice network onto the Wi-Fi network. The network will offload data by radio waves operating in the 800 and 1900 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.

4. **Radiofrequency (RF) Emissions:** The Project Sponsor retained Hammett & Edison, Inc., a radio engineering consulting firm, to prepare a report describing the expected RF emissions from the proposed facility. Pursuant to the *Guidelines*, the Department of Public Health reviewed the report and determined that the proposed facility complies with the standards set forth in the Guidelines.

5. **Department of Public Health Review and Approval.** The proposed project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Existing RF levels at ground level were less than 1% of the FCC public exposure limit. There are similar antennas operated by AT&T, MetroPCS, Sprint, and T-Mobile at this location. Sprint proposes to remove six antennas and install three new antennas and a microwave dish. The antennas will be mounted at a height of approximately 45 feet above the ground. The estimated ambient RF field from the proposed Sprint transmitters at ground level is calculated to be 0.027 mW/sq. cm., which is 5.2% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 15 feet into free space and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish, and Chinese. Workers should not have access to within five feet in front of the antenna while it is in operation.

6. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by Sprint to demonstrate need for coverage and capacity have been determined by Hammett & Edison, and engineering consultant and independent third party to accurately represent the carrier's present and post-installation conclusions.

7. **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.

8. **Community Outreach.** Per the *Guidelines*, the Project Sponsor held a community meeting at the Bayview Library Branch, at 15075 3rd Street, to discuss the project on July 18, 2013, and there were no attendees.

9. **Five-year plan:** Per the *Guidelines*, the Project Sponsor submitted an updated five-year plan, as required, in April 2013.

10. **Public Comment.** As of July 25, 2013, the Department has received no public comment on the proposed project.

11. **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 Sections 234.2, a Conditional Use authorization is required for the installation of Commercial Wireless Transmitting, Receiving or Relay Facility.

12. **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 750 Phelps 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. While the placement of antennas will be visible from adjacent public rights-of-way, they are so located, designed, and treated architecturally to minimize their visibility from public places, avoid intrusion into public vistas, avoid disruption of the architectural design integrity of buildings, and insure harmony with the existing neighborhood character and 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 750 Phelps Street is necessary in order to enhance voice and data capacity at an existing Sprint facility.

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 are visible from public rights-of-way; however their visual impact will be muted by painting the antennas to match the existing color band along the uppermost portion of the roof facade. Furthermore, the relatively narrow three-inch depth of the new antennas, and 22 inches in height, on a four story building, will ensure such antennas are not out of scale with the building.

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

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

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

The Project is consistent with the purpose of Public districts in that the intended use is located on an existing building, with existing antenna sites and the proposed antennas will not detract from the District's character.

13. **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's coverage and capacity in the surrounding Bayview neighborhood, including existing and potential residential areas.

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 Project design and location would be situated in a manner as to not appear cluttered or distracting. The panels will be painted to match the façade and flush mounted to the wall while remaining flush with the top of the parapet. The Project will also involve the removal of existing roof-mounted antennas, thereby reducing visibility of the facility from off-site view.

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 an enhanced 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.

14. **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 and is not considered a potential historic resource.

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.

15. 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.

16. The Commission hereby finds that approval of the Determination of Compliance authorization would promote the health, safety and welfare of the City.

DECISION

The Commission, after carefully balancing the competing public and private interests, and based upon the Recitals and Findings set forth above, in accordance with the standards specified in the Code, hereby approves the Conditional Use authorization under Planning Code Sections 234.2 and 303 to modify an existing WTS facility to ultimately feature up to three façade-mounted panel antennas, one façade-mounted 12-inch diameter microwave dish, and associated equipment cabinets at the Project Site, as part of a wireless transmission network operated by Sprint on a Location Preference 1 (Preferred Location – Publicly Used Structure) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within a P (Public) Zoning, and 65-J Height and Bulk Districts, and subject to the conditions of approval attached hereto as **Exhibit A**.

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

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **August 1, 2013**.

JONAS P. IONIN
Acting Commission Secretary

AYES
NAYS:

ABSENT:

ADOPTED: August 1, 2013

EXHIBIT A

AUTHORIZATION

This authorization is for a Conditional Use Authorization under Planning Code Sections 234.2 and 303, to modify a wireless telecommunications services facility ultimately consisting of up to three façade-mounted panel antennas, one façade mounted 12-inch diameter microwave dish, with related equipment in a third floor room, at a Location Preference 1 (Publicly Used Structure) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, as part of Sprint's wireless telecommunications network within an P (Public) Zoning District, and a 65-J Height and Bulk District. This authorization requires the removal of existing roof-mounted Sprint antennas prior to final of building permits to operate the ultimate facility configuration.

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 **August 1, 2013** 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 415-558-6378, 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

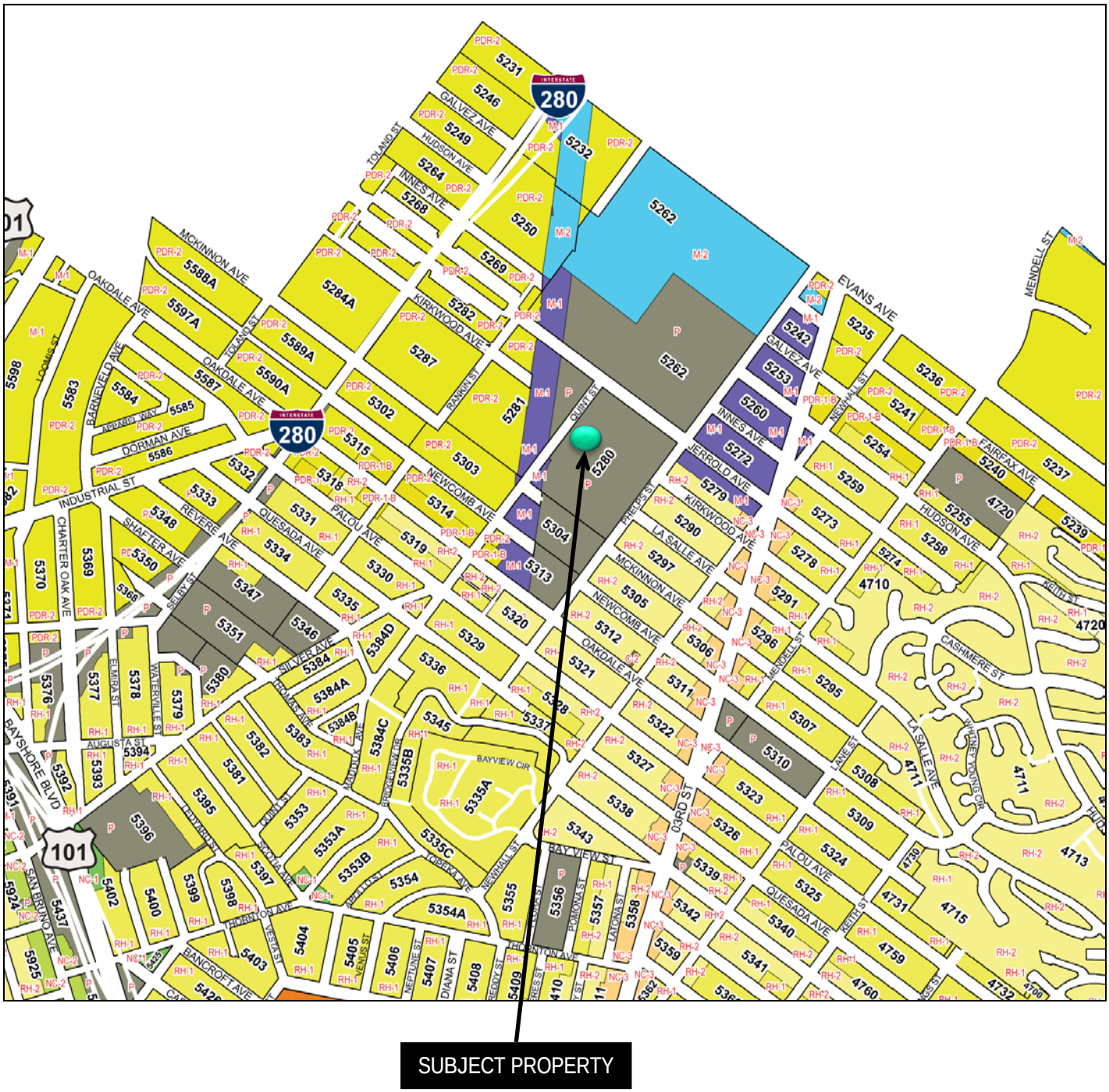
16. **Emissions Conditions – WTS**. It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for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



Case Number 2011.0730C
Sprint WTS Facility Modification
750 Phelps Street

SAN FRANCISCO
PLANNING DEPARTMENT

Aerial Photo

Case Number 2011.0730C
Sprint WTS Facility Modification
750 Phelps Street

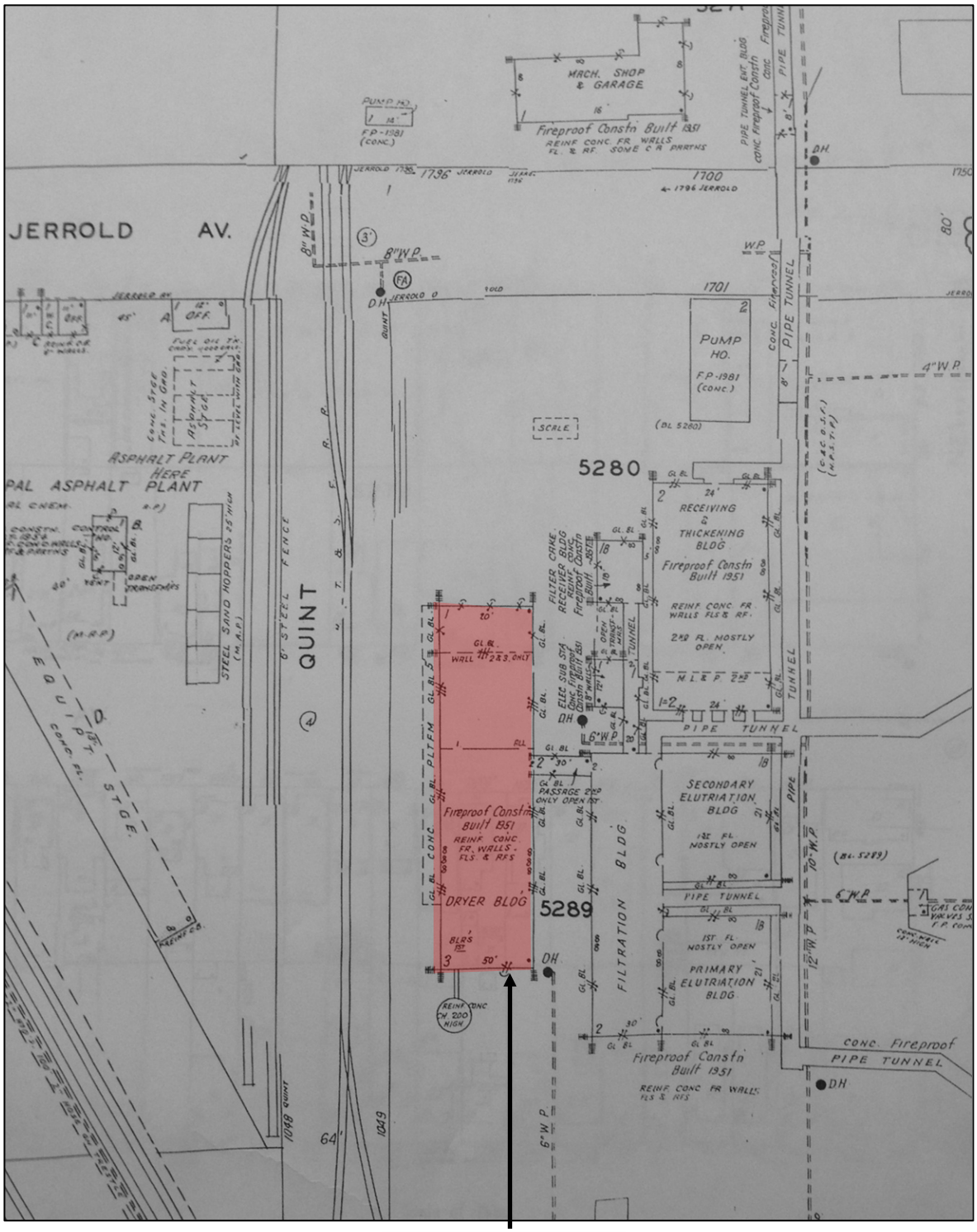
Parcel Map

SUBJECT PROPERTY

Case Number 2011.0730C
Sprint WTS Facility Modification
750 Phelps Street

SAN FRANCISCO
PLANNING DEPARTMENT

Sanborn Map*



SUBJECT PROPERTY

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

Case Number 2011.0730C
Sprint WTS Facility Modification
750 Phelps Street

750 Phelps Street
0503/030
2011.0730C

Site Photos and Context Photos

750 Phelps Street
0503/030
2011.0730C

Site Photos and Context Photos

750 Phelps (FS04XC014)

900 Block Quint St (between Jerrold Ave and Newcomb Ave) – **facing the site**

←Jerrold Ave
(North-East)

•permit building
(looking South-East)

750 Phelps Street
0503/030
2011.0730C

Site Photos and Context Photos

900 Block Quint St (between Jerrold Ave and Newcomb Ave) – **looking towards Jerrold Ave**

←Jerrold Ave
(North-East)

•permit building

750 Phelps Street
0503/030
2011.0730C

Site Photos and Context Photos

900 Block Quint St (between Jerrold Ave and Newcomb Ave) – **looking towards Newcomb St**

←Jerrold Ave (North-East)

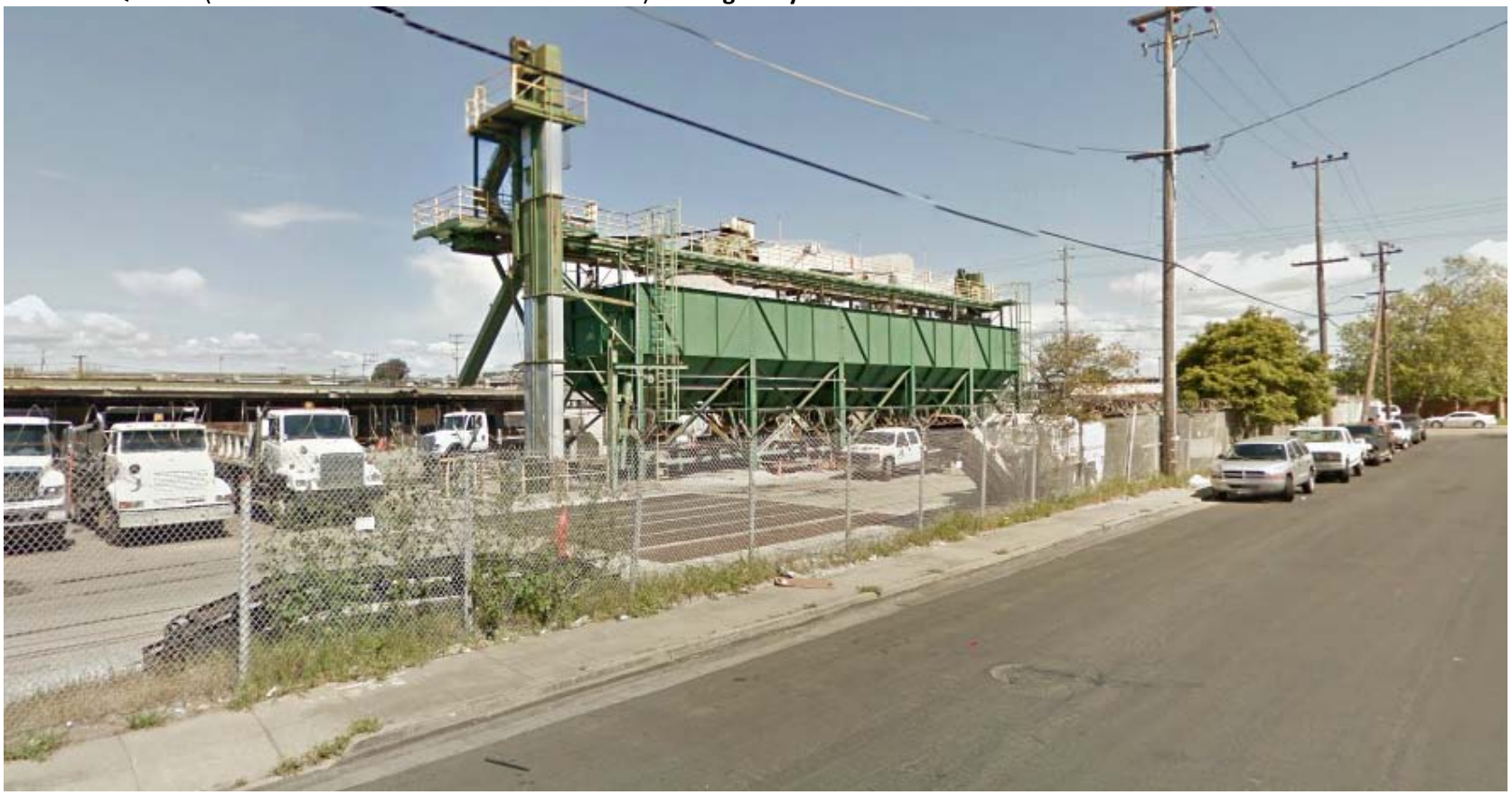
•permit building (North-East side of building)

→ Newcomb St (South-West)

750 Phelps Street
0503/030
2011.0730C

Site Photos and Context Photos

900 Block Quint St (between Jerrold Ave and Newcomb Ave)– **facing away from site towards Jerrold Ave**



←Newcomb St
(South-West)

→ Jerrold Ave
(North-East)

750 Phelps Street
0503/030
2011.0730C

Site Photos and Context Photos

900 Block Quint St (between Jerrold Ave and Newcomb Ave)– **facing away from site towards Newcomb St**

←Newcomb St
(South-West)

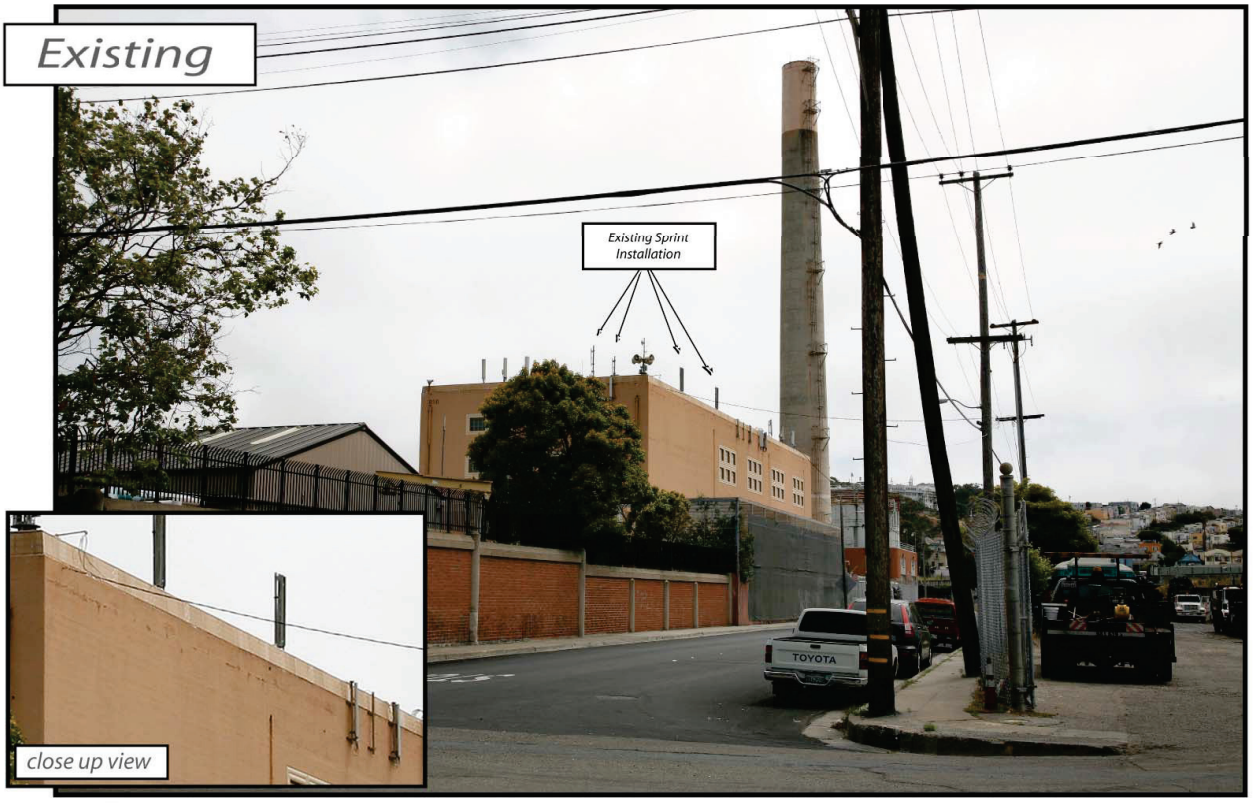
→ Jerrold Ave
(North-East)

750 Phelps Street

0503/030

2011.0730C

Photo Sims



view from Jerold Avenue looking south at site

Sprint

FS04xc014 Phelps Sewage Treatment
750 Phleps Street, San Francisco ,CA

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

750 Phelps Street

0503/030

2011.0730C

Photo Sims

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

view from Quint Street looking east at site

Sprint

FS04xc014 Phelps Sewage Treatment
750 Phleps Street, San Francisco ,CA

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

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

Site No. FS04XC014
Phelps Sewage Treatment
750 Phelps Street
San Francisco, California 94124
San Francisco County
37.740806; -122.390444 NAD83
rooftop

EBI Project No. 62127781
January 15, 2013

EBI CONSULTING
Creating Value for Your Business

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 FS04XC014 located at 750 Phelps Street in San Francisco, California to determine RF-EME exposure levels from existing and proposed Sprint wireless communications equipment at this site. As described in greater detail in Section 11.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME monitoring and modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

EBI field personnel visited this site on July 12, 2011 this report contains a detailed summary of the RF EME analysis for the site.

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

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

This project involves the removal of six (6) and replacement of three (3) Sprint wireless telecommunication antennas on a rooftop located at 750 Phelps Street in San Francisco, California. There are three Sectors (A, B, and C) proposed to be replaced at the site, with one (1) antenna that may be re-installed per sector. In addition, Sprint proposes the installation of one (1) microwave dish on the rooftop.

EBI conducted a site visit on July 12, 2011 at the time of the site visit T-Mobile, AT&T and MetroPCS in addition to the Sprint antennas were present on the rooftop located at 750 Phelps Street in San Francisco, California. Measurements were taken at the rooftop and ground to record existing RF-EME levels resulting from these antennas in addition to the existing Sprint antennas prior to the installation of Sprint's proposed equipment.

During the survey, no spatially averaged power density readings above 0.004581mW/cm^2, which is 0.4581% of the FCC's occupational MPE (2.2905% of the general public MPE) were encountered on any rooftop surface. In addition, no spatially averaged power density readings greater than 0.000507mW/cm^2, which is 0.2535% of the FCC's uncontrolled or general public MPE were encountered at ground level.

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

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

3.0 NUMBER AND TYPES OF WTS WITHIN 100 FEET OF THE PROPOSED SITE AND ESTIMATES OF CUMULATIVE EMR EMISSIONS AT THE PROPOSED SITE

With the exception of the antennas mentioned in Section 1.0, 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 six (6) and replacement of three (3) Sprint wireless telecommunication antennas on a rooftop located at 750 Phelps Street in San Francisco, California. There are three Sectors (A, B, and C) proposed to be replaced at the site, with one (1) antenna that may be re-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 320° from true north. The Sector B antennas will be oriented 135° from true north. The Sector C antennas will be oriented 230° from true north. The bottoms of the sector antennas will be 45 feet above ground level.

In addition to the antennas outlined above, Sprint proposes the installation of one (1) microwave dish on the rooftop. The microwave dish will be oriented 1.3° from true north. The dish will be 46 feet above ground level.

At the time of the site visit T-Mobile, AT&T and MetroPCS in addition to the Sprint antennas on the four story rooftop located at 750 Phelps Street in San Francisco, California. There were three (3) T-Mobile antennas, nine (9) AT&T antennas, and six (6) MetroPCS antennas located on the rooftop.

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 eight (8) 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 607 Watts. The ERP for the 1900 MHz transmitters combined on site is 8,441 Watts. The ERPs for other carriers on site was not provided.

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

Based on the information provided to EBI, the information indicates that the proposed antennas are to be pipe mounted to the rooftop. Operating in the directions, frequencies, and heights mentioned in section 4.0 above. The site has parking lots to the north, west, and south of the site. There are buildings to the northeast and east of the site, that appear to be other business buildings.

8.0 ESTIMATED AMBIENT RADIO FREQUENCY FIELDS FOR THE PROPOSED SITE

Based on worst-case predictive modeling, there are no predicted areas on any accessible ground-level walking/working surface related to the proposed Sprint antennas that exceed the FCC's occupational or general public exposure limits at this site. At the nearest walking/working surfaces to the proposed Sprint antennas, the maximum power density is 0.027733333 mW/cm^2, which is 5.20 percent of the FCC's general public limit (1.04 percent of the FCC's occupational limit). The composite exposure level from all other carriers existing on this site combined with Sprint's proposed antennas is 0.042666666 mW/cm^2, which is 8.00 percent of the FCC's general public limit (1.60 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna. 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 combined with the existing other carriers antennas on site is 0.027733333 mW/cm^2, which is 5.20 percent of the FCC's general public limit (1.04 percent of the FCC's occupational limit). The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix B.

Additionally, based on worst-case modeling at antenna face level there are modeled exceedances of the general public and occupational limits. It is predicted that there will be an occupational exceedance in front of the proposed Sprint antennas within 5 feet and a general public exceedance within 15 feet of the antenna faces. These exceedances are into free space. Based on worst-case predictive modeling, the worst-case emitted power density will not exceed the FCC's general public or occupational limit in front of Sprint's proposed antennas at the nearest walking/working surface to each antenna..

Microwave dish antennas are designed for point-to-point operations at the elevations of the installed equipment rather than ground level coverage. RoofView® is not suitable for modeling them. However, formulas for OET Bulletin 65 were used to calculate a worst-case prediction of the maximum power

density (MPE) at ground level and nearest walking surfaces for the Sprint microwave dish. Power density estimates used for the microwave dish proposed for installation at this site are included in Appendix B. At the nearest walking/working surfaces to the Sprint microwave dish, the maximum power density generated by the Sprint microwave dish is approximately 0.00186420 mW/cm2, which is 0.18642% percent of the FCC's general population limit (0.037% percent of the FCC's occupational limit).

There are no monitored areas on the ground that exceed the FCC's limits for general public or occupational exposure limits.

There are no modeled areas on the nearest walking/working surfaces that exceed the FCC's limits for general public or occupational exposure in front of the other carrier antennas.

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

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. Signage is already installed for the existing antennas. It is recommended that signage be installed for the new antennas making people aware of the antennas locations, once they are installed. Also workers elevated above the roof or ground level should be made aware of the antennas locations. There are no fields in front of the proposed antennas and therefore barriers are not recommended.

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

At the time of the site survey, it was noted that there was a white "Notice" sign located on the interior stairwell wall. There was also yellow "Caution" signs posted directly to the antenna mounts. There were white "Notice" signs posted to the edge of the building parapets, where there was façade mounted antennas. A blue "Notice" sign posted to the Sprint antennas. A green "Information" sign posted to the building façade and a yellow "Caution" sign posted to the building façade.

Additionally, access to this site is accomplished via a roof access door located on the main roof. Access to the facility is monitored and as such, the general public is able to access the rooftop.

10.0 STATEMENT ON WHO PRODUCED THIS REPORT AND QUALIFICATIONS

Please see the certifications attached in Appendix A below.

11.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

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

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

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

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

Table 1 and Figure 1 (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/cm2 for equipment operating in the 1900 MHz frequency ranges. For the Sprint equipment operating at 800 MHz, the FCC's occupational MPE is 2.66 mW/cm^2 and an uncontrolled MPE of 0.53 mW/cm^2. These limits are considered protective of these populations.

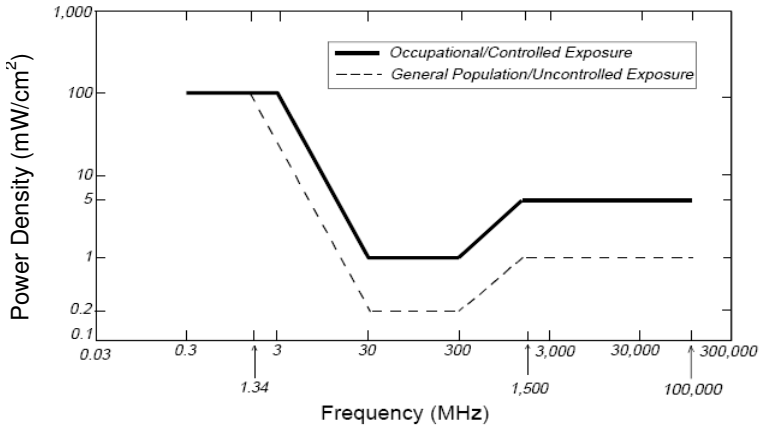
Table 1: Limits for Maximum Permissible Exposure (MPE)

(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

Table 1: 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)**
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
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 andprovided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made

13.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed Sprint telecommunications equipment at the site located at 750 Phelps Street in San Francisco, California.

EBI has conducted theoretical modeling combined with on site monitoring to estimate the worst-case power density from Sprint antennas and the other carriers' existing 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, there are no modeled exposures on any accessible ground-level walking/working surface related to proposed equipment in the area that exceed the FCC's occupational and general public exposure limits at this site. As such, the proposed Sprint project is in compliance with FCC rules and regulations.

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

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

Appendix A

Certifications

Reviewed and Approved by:

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.

Field Personnel Certification

I, Aniela Travers, 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 been trained in the proper use of the RF-EME measurement equipment, and have successfully completed EBI training in the policies and procedures for site survey protocols.
- All information collected during the site survey and contained in this report is true and accurate to the best of my knowledge and based on the data gathered.

Aniela Travers

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

StartMapDefinition

Roof Max X	Roof Max Y	Map Max X	Map Max Y	Y Offset	X Offset	Number of envelope			List Of Area
120	100	190	190	20	20	1	$AE$81:$D	$AE$81:$DZ$200	$AE$81:$D

StartSettingsData

Standard	Method	Uptime	Scale Factc	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	Freq (MHz)	Trans Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	X (ft)	Y (ft)	Z (ft)	Type	Aper (ft)	Gain dBd	BWdth Pt Dir	Uptime Profile	ON flag
SPT A1	800	800	20	1	15	1/2 LDF	0.5		17.82502	Powerwav	P65-16-XLF	29	136	45		6	12.7	66;280		ON•
SPT A1	1900	1900	20	2	15	1/2 LDF	0.5		35.65004	Powerwav	P65-16-XLF	29	136	45		6	15.1	63;280		ON•
SPT A1	1900	1900	20	6	15	1/2 LDF	0.5		106.9501	Powerwav	P65-16-XLF	29	136	45		6	15.1	63;280		ON•
SPT B1	800	800	20	1	15	1/2 LDF	0.5		17.82502	Powerwav	P65-16-XLF	85	75	45		6	12.7	66;95		ON•
SPT B1	1900	1900	20	2	15	1/2 LDF	0.5		35.65004	Powerwav	P65-16-XLF	85	75	45		6	15.1	63;95		ON•
SPT B1	1900	1900	20	6	15	1/2 LDF	0.5		106.9501	Powerwav	P65-16-XLF	85	75	45		6	15.1	63;95		ON•
SPT C1	800	800	20	1	15	1/2 LDF	0.5		17.82502	Powerwav	P65-16-XLF	32	13	45		6	12.7	66;190		ON•
SPT C1	1900	1900	20	2	15	1/2 LDF	0.5		35.65004	Powerwav	P65-16-XLF	32	13	45		6	15.1	63;190		ON•
SPT C1	1900	1900	20	6	15	1/2 LDF	0.5		106.9501	Powerwav	P65-16-XLF	32	13	45		6	15.1	63;190		ON•
TMO A1	T-Mobile	1900	20	1			3		10.02374			31	47	53.5		5	16	65;280		ON•
TMO A2	T-Mobile	1900	20	1			3		10.02374			31	57	53.5		5	16	65;280		ON•
TMO A3	T-Mobile	1900	20	1			3		10.02374			31	67	53.5		5	16	65;280		ON•
ATT A1	ATT	850	33	1			3		16.53918			29	97	45.75		4.5	12	65;280		ON•
ATT A2	ATT	850	34	1			3		17.04037			29	101	45.75		4.5	12	65;280		ON•
ATT A3	ATT	850	33	1			3		16.53918			29	105	45.75		4.5	12	65;280		ON•
ATT B1	ATT	850	33	1			3		16.53918			45	181	17.75		4.5	12	65;50		ON•
ATT B2	ATT	850	34	1			3		17.04037			49	181	17.75		4.5	12	65;50		ON•
ATT B3	ATT	850	33	1			3		16.53918			53	181	17.75		4.5	12	65;50		ON•
ATT C1	ATT	850	33	1			3		16.53918			84	21	45.75		4.5	12	65;190		ON•
ATT C2	ATT	850	34	1			3		17.04037			84	17	45.75		4.5	12	65;190		ON•
ATT C3	ATT	850	33	1			3		16.53918			84	13	45.75		4.5	12	65;190		ON•
MPCS A1	MetroPCS	1900	20	1			3		10.02374			29	73	45		6	16	85;280		ON•
MPCS A2	MetroPCS	1900	20	1			3		10.02374			29	73	45		6	16	85;280		ON•
MPCS B1	MetroPCS	1900	20	1			3		10.02374			35	183	17		6	16	85;50		ON•
MPCS B2	MetroPCS	1900	20	1			3		10.02374			41	183	17		6	16	85;50		ON•
MPCS C1	MetroPCS	1900	20	1			3		10.02374			85	147	45		6	16	85;190		ON•
MPCS C2	MetroPCS	1900	20	1			3		10.02374			85	147	45		6	16	85;190		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	

750 Phelps Street
0503/030
2011.0730C

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:** *Michelle Stahlhut*

RF Engineer Consultant: *EBI Consulting* **Phone Number:** *(800) 786-2346*

Project Address/Location: *750 Phelps St*

Site ID: *592* **SiteNo.:** *FS04XC014*

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.

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

☑ Existing Antennas No Existing Antennas: **24**

X 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**

X 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**

X 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)

X 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: **180** watts.

X 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: **3016** watts.

X 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)

X 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 $\mu w/cm^2$)

Maximum RF Exposure: **0.027** mW/cm^2. Maximum RF Exposure Percent: **5.2**

X 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: **15**

☑ Occupational_Exclusion_Area Occupational Exclusion In Feet: **5**

X 10. Statement on who produced this report and qualifications.

X **Approved**. Based on the information provided the following staff believes that the project proposal will comply with the current Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC standard 1986-NCRP **Approval of the subsequent Project Implementation Report is based on project sponsor completing recommendations by project consultant and DPH.**

Comments:

There are 6 antennas operated by Sprint installed on the roof top of the building at 750 Phelps Street. Existing RF levels at ground level were less than 1% of the FCC public exposure limit. There were observed similar antennas at this location operated by T-Mobile, Sprint, AT&T and MetroPCS. Sprint proposes to remove the existing antennas and install 3 new antennas. The antennas are mounted at a height of 45 feet above the ground. The estimated ambient RF field from the proposed Sprint transmitters combined with the other carriers at ground level is calculated to be 0.027 mW/sq cm., which is 5.2 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 15 feet into free space 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 5 feet of the front of the antennas while they are in operation.

___ **Not Approved**, additional information required.

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

1 Hours spent reviewing

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

Signed:  Dated: 1/16/2013

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

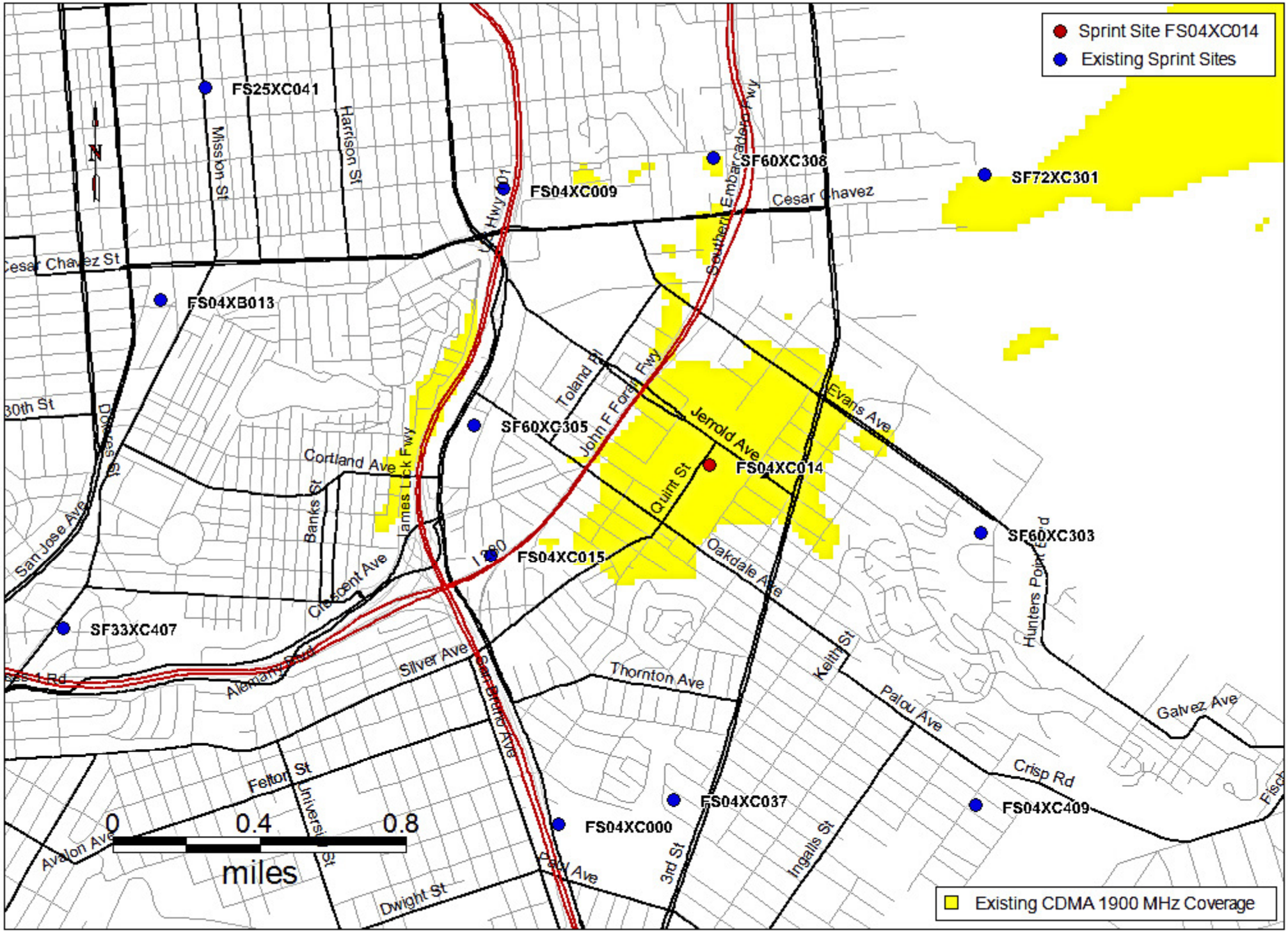
Necessity of Proposed Site for Network Operations

The proposed modification of an existing Sprint facility would replace the existing technology to 4G LTE (Fourth Generation 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.

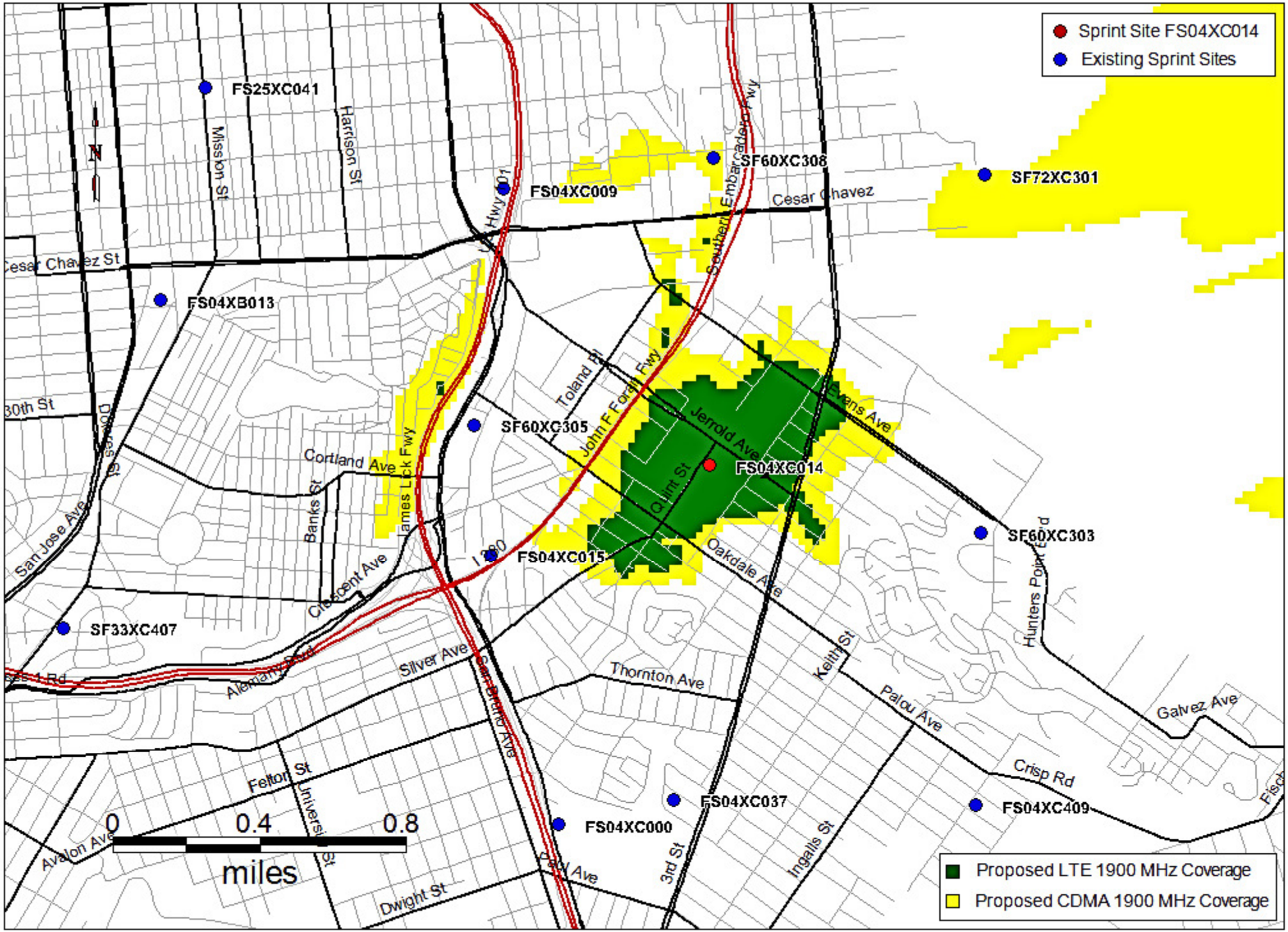
Description of Service Area

The proposed facility is a necessary component of Sprint Wireless Network, designed by Sprint's radio frequency (RF) engineers to provide coverage for the surrounding residential area, the adjacent section of the I-280 and the Evans Campus of the San Francisco City College, as demonstrated on the following coverage maps.

Existing FS04XC014 coverage



Proposed FS04XC014 coverage



Community Outreach Meeting
on a Modification of an Existing Sprint Wireless Facility Proposed in Your Neighborhood

To: Neighbors within 750 Phelps Street, San Francisco, CA

Meeting Information

Date: Thursday, July 18th, 2013
Time: 6:00 p.m.
Where: Bayview Library Branch*
15075 3rd Street
San Francisco, 94124

Applicant

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

Sprint Site Information

Address: 750 Phelps Street
San Francisco, CA 94124
APN: 5280-001
Zoning: P-Public

Contact Information

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

Sprint has applied for zoning approval to upgrade an existing cell site at the sewage treatment facility located at 750 Phelps Street. The proposed modification 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 improve service for Sprint customers with significantly faster data rates for both uploading and downloading.

You are invited to attend an informational community meeting on Thursday, July 18th at 6:00 p.m. at the Bayview Library Branch located at 15075 3rd Street 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.

***** This is not a Library Sponsored Program

MODUS INC. ♦ 149 NATOMA STREET, 3RD FLOOR ♦ SAN FRANCISCO, CA 94105

COMMUNITY OUTREACH MEETING AFFIDAVIT

I, Maria Miller, do hereby declare as follows:

1. I have conducted community outreach meeting for the proposed alteration of a wireless telecommunications facility at 750 Phelps Street.
2. The meeting was conducted at the Bayview Library branch located at 5075 3rd St, San Francisco, CA on July 18, 2013 from 6:00 pm to 6:40 pm.
3. I have included the mailing list, meeting notice, and sign-in sheet.

Executed July 19, 2013 in San Francisco, CA.

Signature

Maria Miller
Name

Project Manager, authorized agent for Sprint
Signature

Neighborhood Meeting Sign-In Sheet
July 18, 2013 at 6:00 PM

750 Phelps Street, San Francisco, CA
Sprint #FS04XC014- Phelps Sewage Treatment

NAME	ADDRESS	CONTACT INFORMATION

EBI Consulting
environmental | engineering | due diligence

Wireless Application Review

Sprint FS04XC014
Phelps Sewage Treatment
750 Phelps Street
San Francisco, CA 94124

May 14, 2013

Prepared By:
EBI Consulting
21 B Street
Burlington, MA 01803
(781) 418-2322
Engineer: Scott Heffernan

Table of Contents

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 750 Phelps Street in San Francisco, California. The scope of this analysis is to review material submitted to the San Francisco Planning Department. This material includes site plans, coverage maps and an emissions report prepared by EBI Consulting. An alternate site analysis was not a part of this analysis as this is an upgrade to an existing site.

2.0 Site Description

Site Name: **FS04XC014 – Phelps Sewage Treatment**
Owner: City of San Francisco
Site Description: Rooftop Wireless Facility
Address: 750 Phelps Street, San Francisco, CA 94124
Ground Elevation: 20 feet AMSL
Latitude: 37.740806 N
Longitude: -122.390444 W

3.0 Project Overview

Sprint is applying to modify an existing rooftop wireless facility located at 750 Phelps 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 6 existing panel antennas and replace with three Powerwave P65-16-XLPP-RR antennas, 1 per sector. The three antennas, which have a length of 72 inches and are 12 inches in width, will be installed on the building façade and will not extend above the top of the existing building parapet wall height. This includes the removal of two pole mounted antennas on the rooftop surface. The antennas will be mounted with an antenna centerline of 48 feet above the ground level. The existing rooftop is 48 feet in height above ground level with the parapet wall extending up to 51 feet above ground level. The bottoms of the proposed antennas will be 45 feet above the ground level.

Additionally, Sprint is looking to remove one existing CDMA radio cabinet located on the existing steel platform within their equipment area 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 bring the transmitted signal from radios located many feet from an antenna location and improves overall performance due to a typically reduced noise environment with the transmitters and receivers located immediately adjacent to the antennas. The RRH is typically fed by fiber optics for the transfer of data traffic from a control cabinet usually located with the remainder of a carrier's equipment.

Additionally, the project proposes the removal of two Battery Back Up cabinets (BBU) and one Power Equipment cabinet and replace with one MMBS equipment cabinet and one Battery Back Up (BBU) cabinet. The net result will yield two less cabinets overall compared to the current equipment configuration.

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 MHz . Sprint is proposing to install 1900 MHz and 800 MHz Remote Radio Heads at this site to provide service in both frequency bands. As is typical, the coverage plots presented are shown at the 1900 MHz frequency band as this will be the weaker coverage footprint under similar power settings. While 800 MHz may have the ability to provide a bit more robust footprint all things equal, the carrier can optimize the output and contain coverage as need be for uniformity between the two frequency bands or provide extended reach with the 800 MHz.

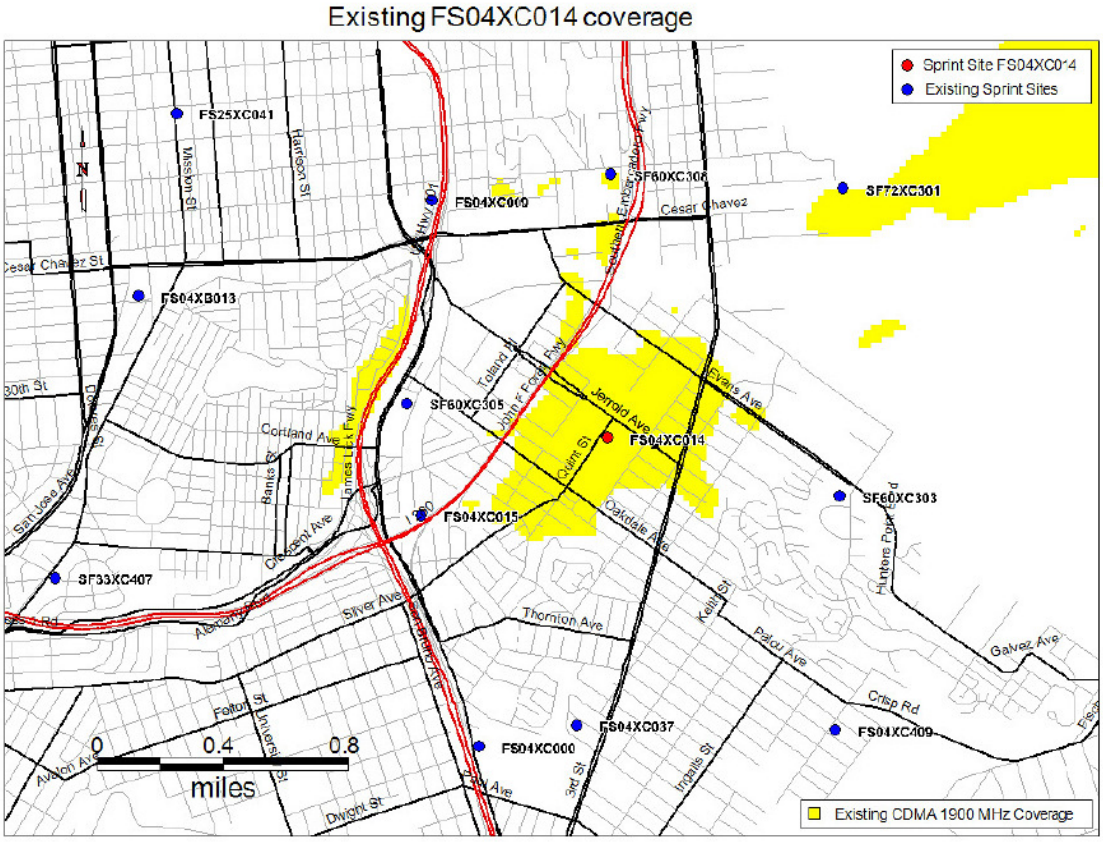


Exhibit 1:

Existing Sprint 1900 MHz CDMA coverage

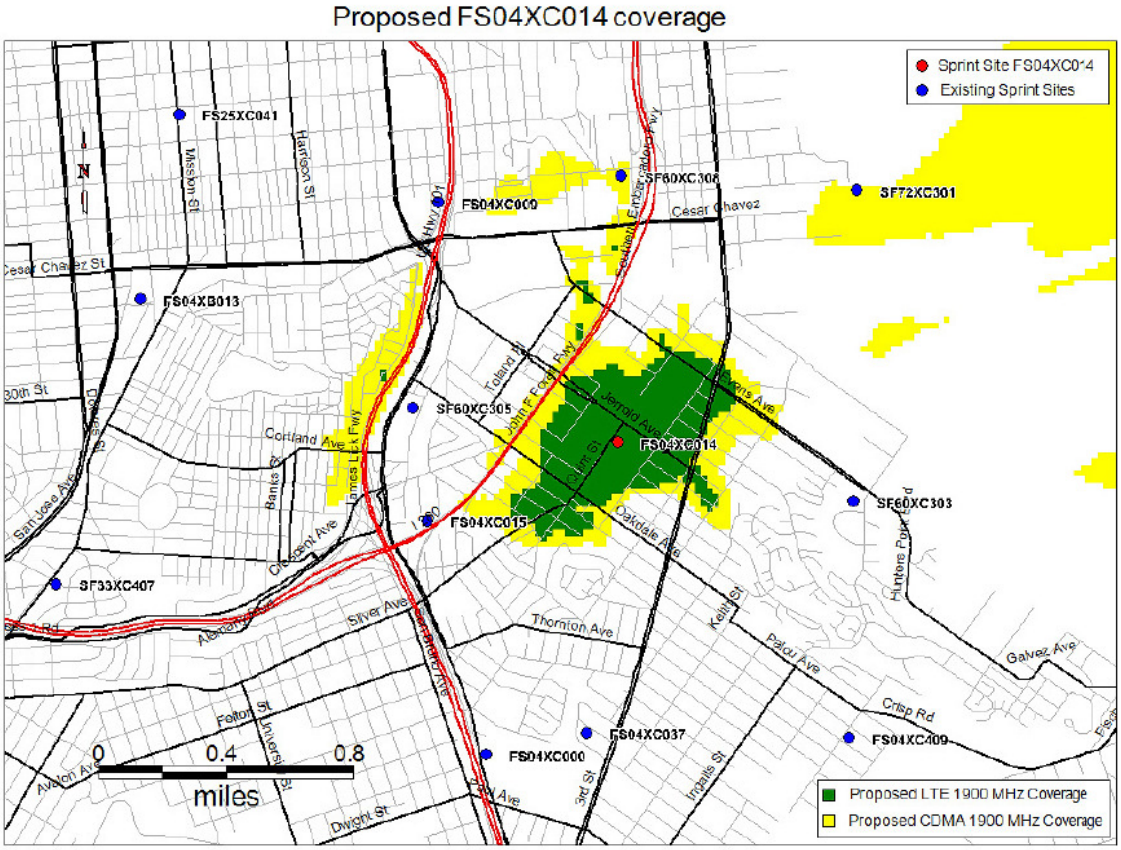


Exhibit 2:

Proposed Sprint 1900 MHz CDMA coverage

Anticipated coverage from the proposed upgraded installation is what would be expected from a 48 foot rooftop facility in this geographic area. Anticipated coverage for the 1900 MHz CDMA footprint is shown as extending northeast approximately 0.4 miles just past Evans Avenue, Southeast approximately 0.37 miles to the area just past 3rd Street, Southwest approximately 0.45 miles to the Silver Street/Thomas Street area and Northwest approximately 0.28 miles to the Interstate 280 area.

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

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

The area surrounding the site is comprised of very densely spaced industrial 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 750 Phelps Street in San Francisco, California by EBI Consulting on January 15, 2013. The study analyzed emissions compliance for this site based upon FCC standards set forth in Bulletin OET65.

The report states that the calculated emissions produced by the proposed Sprint facility will be at 5.2% of the FCC allowable limit for public exposure based upon worst case theoretical modeling on the rooftop walking surface. Furthermore, with the addition of the other existing carriers found at this facility, the largest calculated emissions value on site would be 8.0 % of the FCC allowable limit for public exposure based upon worst case theoretical modeling. This value is also located on the rooftop walking surface. This is well within the allowable limits.

Since this rooftop is a controlled area, meaning the general public does not have access to the area, no mitigation techniques are needed. Signage should be posted at the rooftop access point and at locations near the antenna mounting locations that warn of the presence of RF energy.

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 750 Phelps 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 at the site. These upgrades will ultimately allow Sprint to provide greater service levels and capacity to its customers without having to introduce a new facility. All upgrades proposed to be made to this site are fairly minor in nature and will be reducing their overall equipment footprint by reducing the number of equipment cabinets and antennas on site and ensuring that all antennas are installed on the building façade instead to on the rooftop itself.

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 recommendations.

Based upon our analysis of the Sprint proposed upgrades to their facility at 750 Phelps 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

Sprint

SITE NAME: PHELPS/SEWAGE TREATMENT

SITE NUMBER: FS04XC014-B
MARKET NAME: SF BAY
NETWORK VISION MM LAUNCH

SITE ADDRESS: 750 PHELPS STREET
SAN FRANCISCO, CA 94124
SAN FRANCISCO COUNTY

SITE TYPE: EQUIPMENT ON 3RD FLOOR
& ROOFTOP ANTENNAS

Conditional Use Authorization 2011.0730C

SITE INFORMATION

SITE ADDRESS:
750 PHELPS STREET
SAN FRANCISCO, CA 94124

PROPERTY OWNER:
CITY OF SAN FRANCISCO, SF PUBLIC UTILITIES COMMISSION
1145 MARKET STREET
SAN FRANCISCO, CA 94103

APPLICANT REPRESENTATIVE:
SPRINT C/O: MODUS, INC.
115 SANSOME STREET, 14TH FLOOR
SAN FRANCISCO, CA 94104
ZONING MANAGER: KYRA O'MALLEY
CONTACT: (530) 574-1517
LEASING MANGER: TINA SCHILLING
CONTACT: (916) 719-2417

CONSTRUCTION MANAGER:
SCOTT COWAN

EQUIPMENT SUPPLIER:
SAMSUNG TELECOMMUNICATIONS AMERICA (STA)
1301 EAST LOOKOUT DRIVE
RICHARDSON, TX 75082-4124
PHONE: (972) 761-7000

COUNTY:
SAN FRANCISCO

APN
5260-001

Conditional Use Authorization 2011.0730C

ZONING
P

HEIGHT & BULK
65-J

ELEVATION:
±68' A.M.S.L.

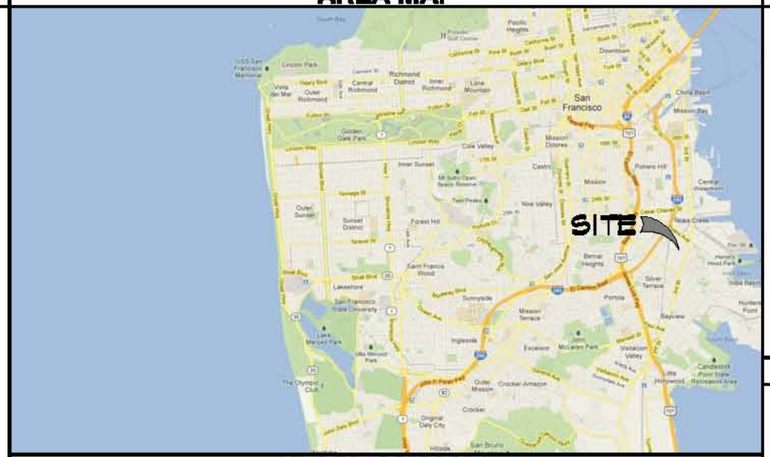
LATITUDE (NAD83):
37° 44' 24.15" N
37.740041

LONGITUDE (NAD83):
122° 23' 36.89" W
-122.39358

POWER COMPANY:
PG&E

TELCO COMPANY:
AT&T

AREA MAP



LOCATION MAP

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:
2010 CALIFORNIA BUILDING CODE
2010 CALIFORNIA MECHANICAL CODE
2010 CALIFORNIA PLUMBING CODE
2010 CALIFORNIA ELECTRICAL CODE
IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

DRAWING INDEX

PROJECT DESCRIPTION

THE PROJECT SHALL INCLUDE:

REMOVAL AND ADDITION OF EQUIPMENT WITHIN THE EXISTING EQUIPMENT AREA/LEASE AREA:

REMOVE (4) EXISTING SPRINT EQUIPMENT CABINETS
INSTALL (2) NEW SPRINT EQUIPMENT CABINETS

REMOVAL AND NEW INSTALLATION OF ANTENNAS AT EXISTING ROOFTOP:

REMOVE (6) EXISTING SPRINT PANEL ANTENNAS/MOUNTS
INSTALL (3) NEW SPRINT PANEL ANTENNAS ON NEW FLUSH MOUNTS
INSTALL (1) NEW MICROWAVE ANTENNA W/ (1) DRAGONWAVE-HORIZON COMPACT ODU (MW RADIO) CLIPPED TO THE BACK ON NEW FLUSH MOUNT

INSTALLATION OF ASSOCIATED EQUIPMENT/CABLING ON THE EXISTING BUILDING:

INSTALL (1) NEW GPS ANTENNA
INSTALL (6) NEW RRUS
INSTALL (3) NEW FILTERS ON RRUS
INSTALL NEW HYBRID CABLING WITHIN NEW CONDUITS FROM NEW EQUIPMENT TO THE ANTENNAS ALONG EXISTING ANTENNA CABLING PATH
ANTENNAS AND MICROWAVE DISH WILL BE PAINTED TO MATCH BUILDING SURFACE.

ENGINEER OF RECORD

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. STE 200
IRVINE, CA 92612
ENGINEER: WISSAM ZALZALI (P.E.# C71655)
PHONE: (949) 609-9559
PM: DEAN WALKER
PHONE: (714) 230-5714
www.zalzali.com

DRIVING DIRECTIONS FROM NEAREST AIRPORT

FROM SFO AIRPORT:

TAKE THE RAMP TO US-101 N. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR US-101 N/SAN FRANCISCO AND MERGE ONTO US-101 N. TAKE EXIT 432 TOWARD CESAR CHAVEZ ST/POTRERO AVE. MERGE ONTO BAYSHORE BLVD. TURN RIGHT ONTO JERROLD AVE. TURN LEFT ONTO PHELPS ST. SITE WILL BE ON THE LEFT.

#750 PHELPS ST, SAN FRANCISCO, CA 94124

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG

BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

PROJECT NO:	-
DRAWN BY:	OT
CHECKED BY:	DW

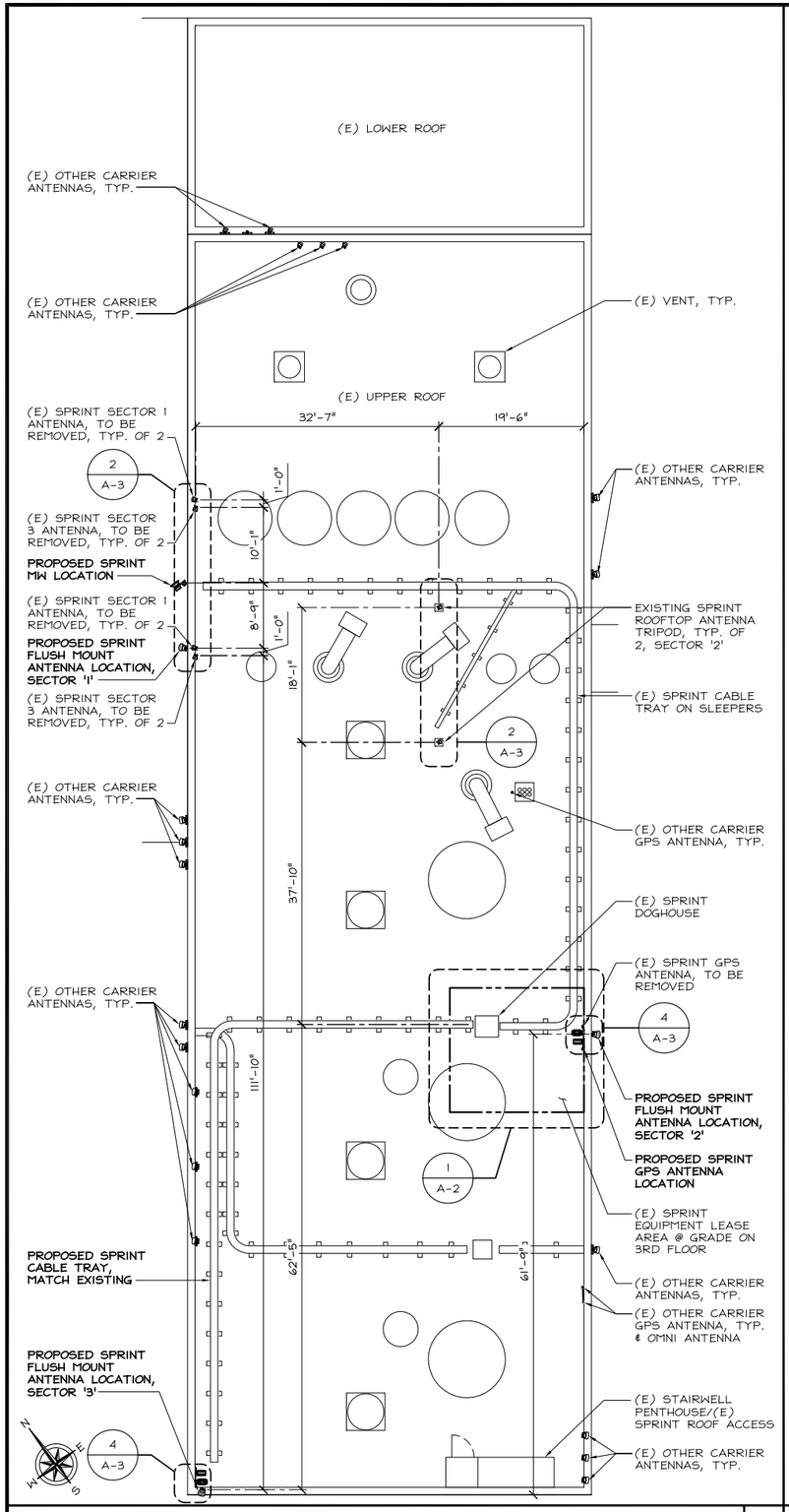
REV	DATE	DESCRIPTION
0	12/17/2012	100% ZD'S FOR ZAP
B	11/15/2012	100% ZD'S FOR REDLINE
A	09/27/2012	90% ZD'S FOR REDLINE

NOT TO BE USED FOR CONSTRUCTION

FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE
TITLE SHEET

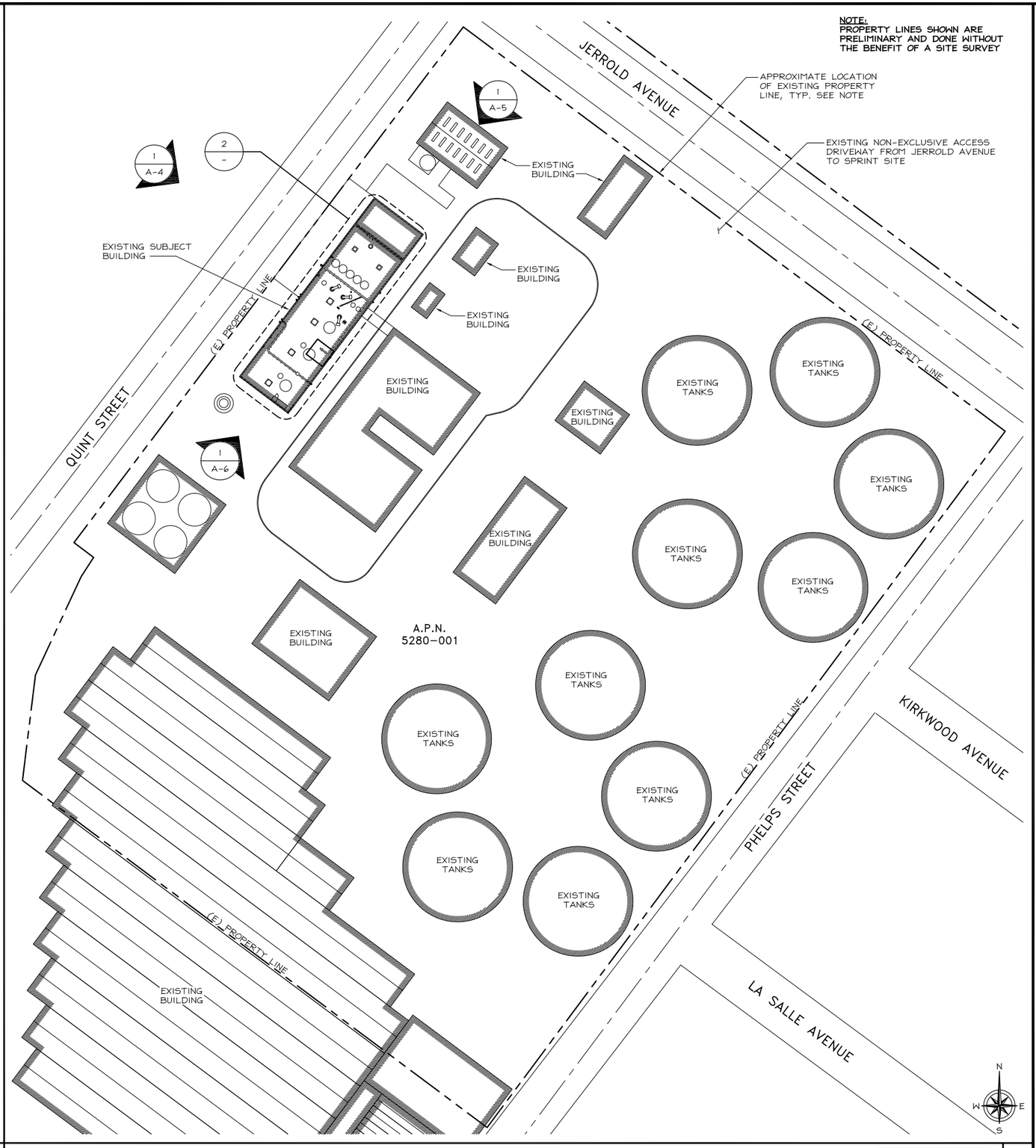
SHEET NUMBER
T-1



ENLARGED SITE PLAN

24"x36" SCALE: 1" = 10'-0"
11"x17" SCALE: 1" = 20'-0"
10' 5' 0" 10'

2



SITE PLAN

24"x36" SCALE: 1" = 50'-0"
11"x17" SCALE: 1" = 100'-0"
50' 25' 0" 50'

1

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

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ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

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NOT TO BE USED FOR CONSTRUCTION

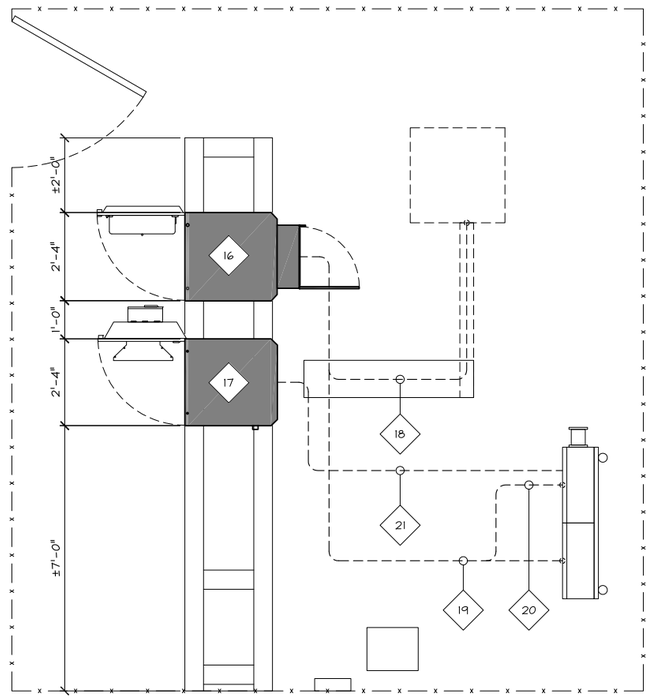
FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE
SITE PLAN &
ENLARGED SITE PLAN

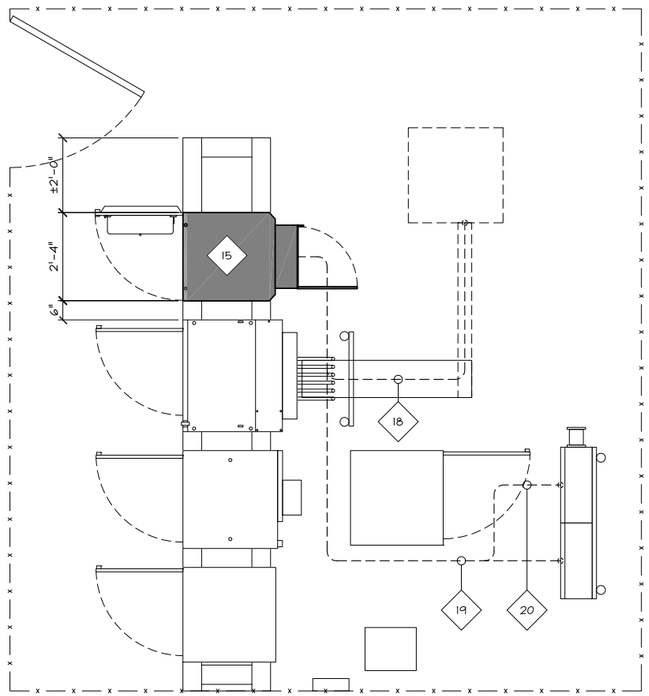
SHEET NUMBER
A-1

KEYNOTES:

1. EXISTING SPRINT 6'-0" HIGH CHAINLINK FENCE
2. EXISTING 4'-0" WIDE CHAINLINK FENCE ACCESS GATE
3. EXISTING COAX ROOFTOP ENTRY (ABOVE)
4. EXISTING VERTICAL CABLE TRAY
5. EXISTING CABLE TRAY
6. EXISTING SPRINT CABLE RISER, TO BE REMOVED
7. EXISTING 100A SPRINT PPC CABINET
8. EXISTING SPRINT TELCO CABINET
9. EXISTING TRANSFORMER
10. EXISTING MASTER GROUND BAR
11. EXISTING WIDE-FLANGE BEAM, TYP.
12. EXISTING SPRINT BATTERY EQUIPMENT CABINET, TYP. OF 2, TO BE REMOVED
13. EXISTING SPRINT POWER EQUIPMENT CABINET, TO BE REMOVED
14. EXISTING SPRINT CDMA EQUIPMENT CABINET, TO BE REMOVED
15. PROPOSED SPRINT COMBO MMBS EQUIPMENT CABINET MOUNTED ON EXISTING PLATFORM
16. PROPOSED SPRINT MMBS EQUIPMENT CABINET MOUNTED ON EXISTING PLATFORM
17. PROPOSED SPRINT BBU EQUIPMENT CABINET MOUNTED ON EXISTING PLATFORM
18. HYBRID ANTENNA CABLES WITHIN SEALTITE FLEX OR RGS CONDUITS ROUTED WITHIN EXISTING CABLE TRAY TO NEW ANTENNAS
19. PROPOSED (2) 2" SURFACE MOUNTED RGS CONDUITS W/ CAT 5 CABLE FROM TELCO CABINET TO MMBS MUDROOM (ROUTE VIF)
20. PROPOSED 2" SURFACE MOUNTED RGS CONDUITS W/ CAT 5 CABLE FROM BBU CABINET TO MMBS MUDROOM (ROUTE VIF)
21. PROPOSED (1) 3/4" SURFACE MOUNTED RGS CONDUIT W/ (2) #12 AWG + (1) #12 AWG GROUND FROM BBU CABINET TO PPC PANEL 'A'



PROPOSED



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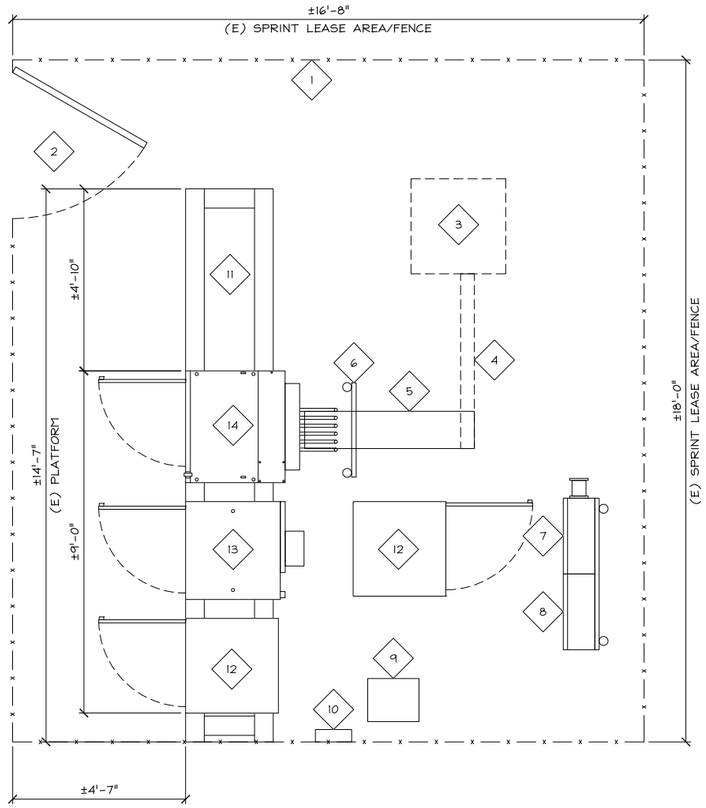

EXISTING

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG

BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

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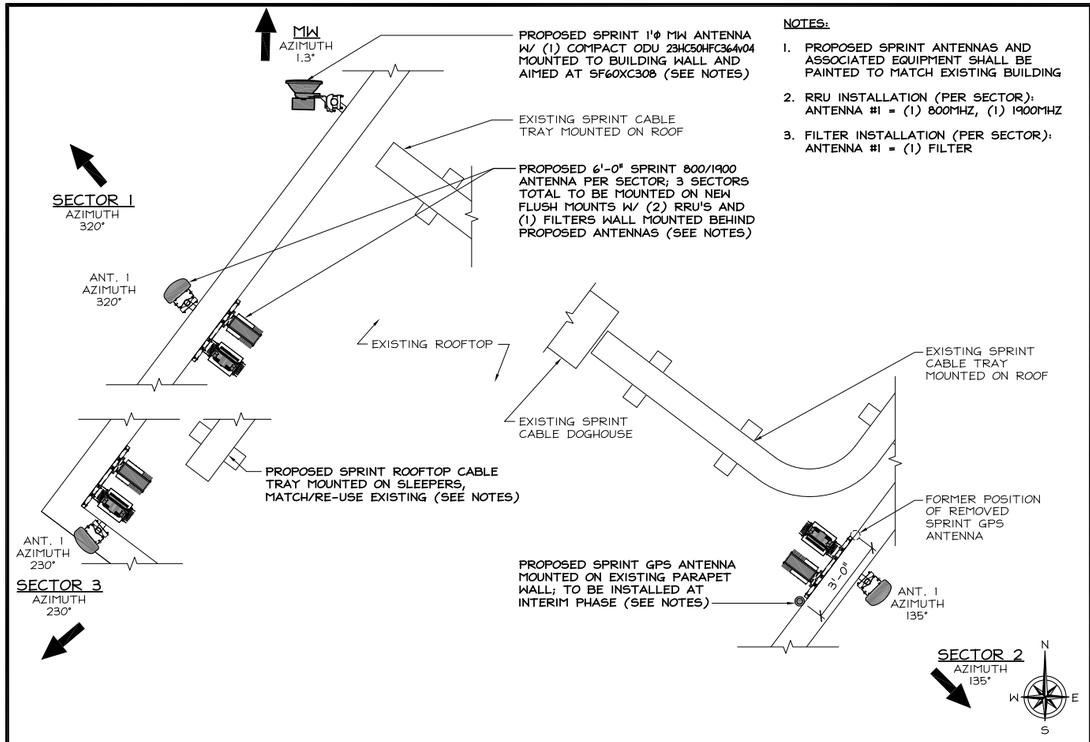
NOT TO BE USED FOR CONSTRUCTION

FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE
EQUIPMENT LAYOUT PLANS

SHEET NUMBER
A-2



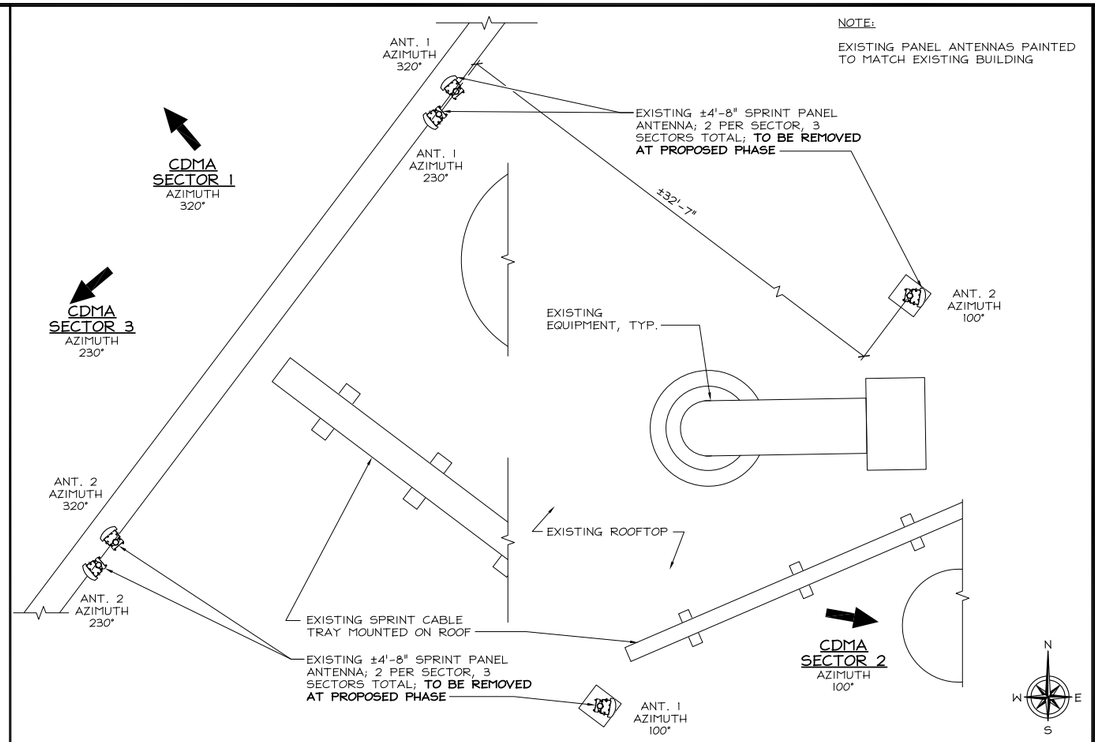
NOTES:

1. PROPOSED SPRINT ANTENNAS AND ASSOCIATED EQUIPMENT SHALL BE PAINTED TO MATCH EXISTING BUILDING
2. RRU INSTALLATION (PER SECTOR): ANTENNA #1 = (1) 800MHZ, (1) 1900MHZ
3. FILTER INSTALLATION (PER SECTOR): ANTENNA #1 = (1) FILTER

PROPOSED ANTENNA LAYOUT

24"x36" SCALE: 3/8" = 1'-0"
11"x17" SCALE: 3/16" = 1'-0"
2' 1' 0" 2'

4



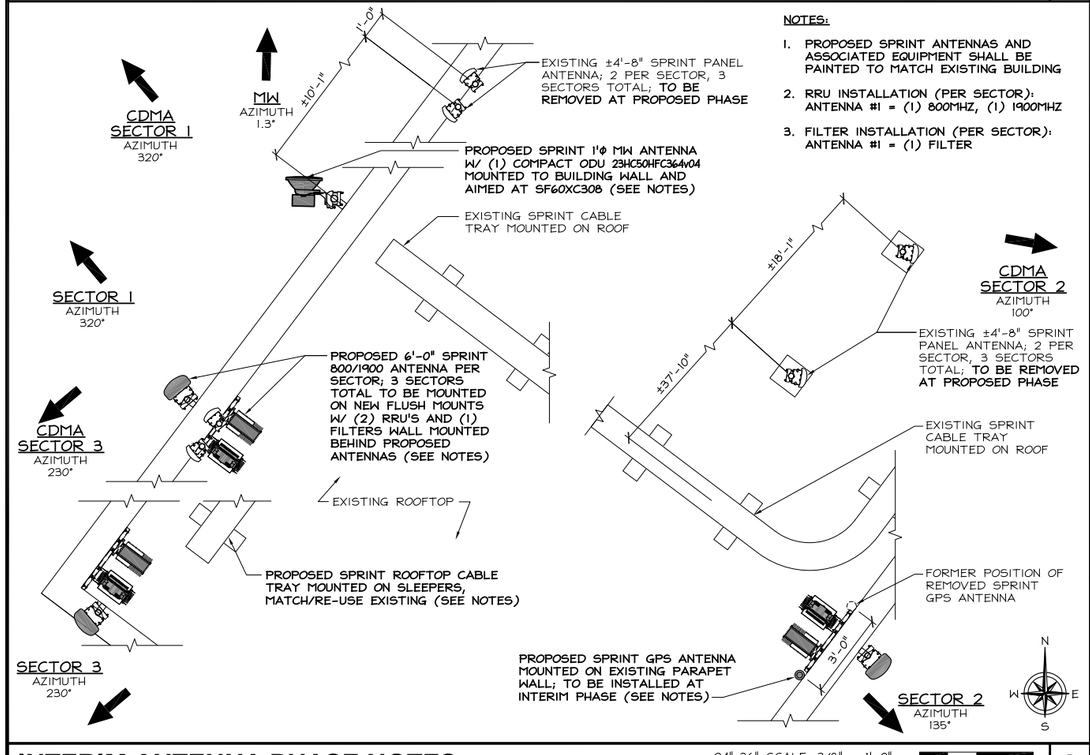
NOTE:

EXISTING PANEL ANTENNAS PAINTED TO MATCH EXISTING BUILDING

EXISTING ANTENNA LAYOUT

24"x36" SCALE: 3/8" = 1'-0"
11"x17" SCALE: 3/16" = 1'-0"
2' 1' 0" 2'

2



NOTES:

1. PROPOSED SPRINT ANTENNAS AND ASSOCIATED EQUIPMENT SHALL BE PAINTED TO MATCH EXISTING BUILDING
2. RRU INSTALLATION (PER SECTOR): ANTENNA #1 = (1) 800MHZ, (1) 1900MHZ
3. FILTER INSTALLATION (PER SECTOR): ANTENNA #1 = (1) FILTER

INTERIM ANTENNA PHASE NOTES

24"x36" SCALE: 3/8" = 1'-0"
11"x17" SCALE: 3/16" = 1'-0"
2' 1' 0" 2'

3

PROPOSED OPTIMAL ANTENNA AND TRANSMISSION CABLES REQUIREMENT (VERIFY WITH CURRENT EBTS)

	ANTENNA	PROPOSED TECHNOLOGY	ANTENNA MODEL		ANTENNA AZIMUTH		RAD CENTER	DOWN-TILT (RET*)	TRANSMISSION LINE		
			EXISTING	PROPOSED	EXISTING	PROPOSED			LENGTH	TYPE(S)	CONVEYANCE
SECTOR 1'	1	800/1900 MHz	API7-1900-090D-DT0	P65-16-XLPP-RR	320°	320°	48'-0"	(800/1900) 6 / 5	±200'	FIBER & +48VDC	RGS OR SEALTITE FLEX
	2	-	API7-1900-090D-DT0	-	320°	-	-	-	-	-	-
SECTOR 2'	1	800/1900 MHz	API7-1900-090D-DT0	P65-16-XLPP-RR	100°	135°	48'-0"	(800/1900) 6 / 5	±80'	FIBER & +48VDC	RGS OR SEALTITE FLEX
	2	-	API7-1900-090D-DT0	-	100°	-	-	-	-	-	-
SECTOR 3'	1	800/1900 MHz	API7-1900-090D-DT0	P65-16-XLPP-RR	230°	230°	48'-0"	(800/1900) 0 / 6	±150'	FIBER & +48VDC	RGS OR SEALTITE FLEX
	2	-	API7-1900-090D-DT0	-	230°	-	-	-	-	-	-
GPS	-	GPS L1	-	GPS-TMG-HR-26N	-	-	-	-	±85'	1/2" COAX	RGS OR SEALTITE FLEX
MW	DISH	PATH SF01298	-	ANDREW VHLPI-23 + (1) HORIZON COMPACT ODU (23HC50HFC364V04)	-	1.3°	46'-0"	-	±175'	SHLD. CAT5E	RGS OR SEALTITE FLEX

NOTES:

1. EXISTING ANTENNAS ARE CDMA UNLESS NOTED OTHERWISE.
2. DIMENSIONS OF EXISTING ANTENNAS SPACING OR PLATFORMS ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY PRIOR TO START OF CONSTRUCTION (SEE GENERAL NOTES, SHEETS GN-1 AND GN-2).
3. PROPOSED SPRINT ANTENNAS INCLUDE RESPECTIVE RRU'S WHICH SHALL BE MOUNTED ON THE PIPE BEHIND THE ANTENNA SIMILAR TO THAT SHOWN IN RRU MOUNTING DETAILS ON SHEET D-2.
4. FIELD VERIFY EXISTING AZIMUTH BEFORE SLIDING THE ANTENNA. PRIOR APPROVAL FROM SPRINT MUST BE OBTAINED BEFORE MOVING ANY ANTENNAS.

ANTENNA MOUNTING NOTES

1. APPROXIMATE LENGTH OF (1) ANTENNA CABLE RUN = APPROX. LENGTH OF LATERAL DISTANCE + ANTENNA MOUNTING HEIGHT + 20'
2. CONTRACTOR SHALL VERIFY THE DOWNTILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
3. CONTRACTOR TO CONFIRM ANTENNA CABLE COLOR CODING PRIOR TO CONSTRUCTION. (SEE SHEET RF-2)
4. COLOR BANDING SHALL BE 2" WIDE ON THE MAIN LINE (5 WRAP MIN.) SPACING TO BE 1" BETWEEN COLORS. COLOR BAND ON JUMPERS 1" WIDE WITH 1" SPACE START COLOR BANDS 2" BEYOND WEATHERPROOFING. START SECTOR COLOR NEXT TO END CONNECTOR. SEE SHEET RF-2 FOR HYBRID ANTENNA CABLE COLOR CODING.
5. COAX JUMPERS SHALL NOT EXCEED 15' IN LENGTH; CONFIRM SPECIFIC LENGTH PER SITE WITH CURRENT EBTS

ANTENNA SCHEDULE

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

1

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG

BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

PROJECT NO:	-
DRAWN BY:	OT
CHECKED BY:	DW

REV	DATE	DESCRIPTION
0	12/17/2012	100% ZD'S FOR ZAP
B	11/13/2012	100% ZD'S FOR REDLINE
A	09/27/2012	90% ZD'S FOR REDLINE

NOT TO BE USED FOR CONSTRUCTION

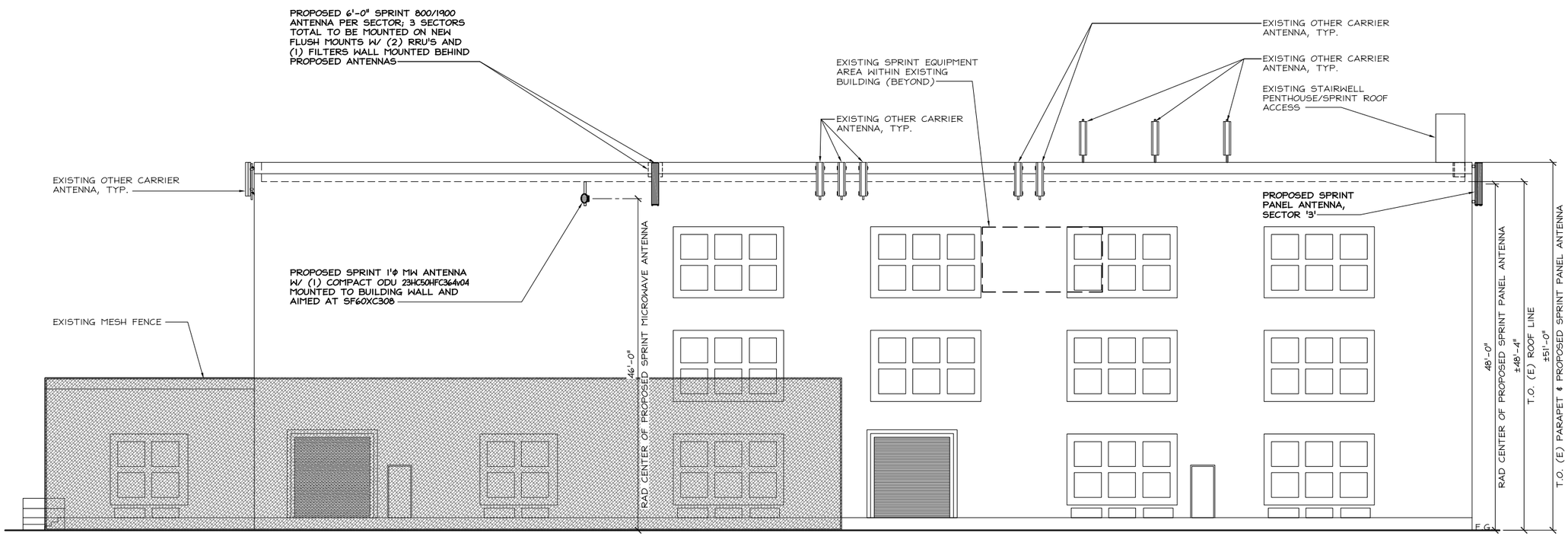
FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE

ANTENNA LAYOUT & SCHEDULE

SHEET NUMBER

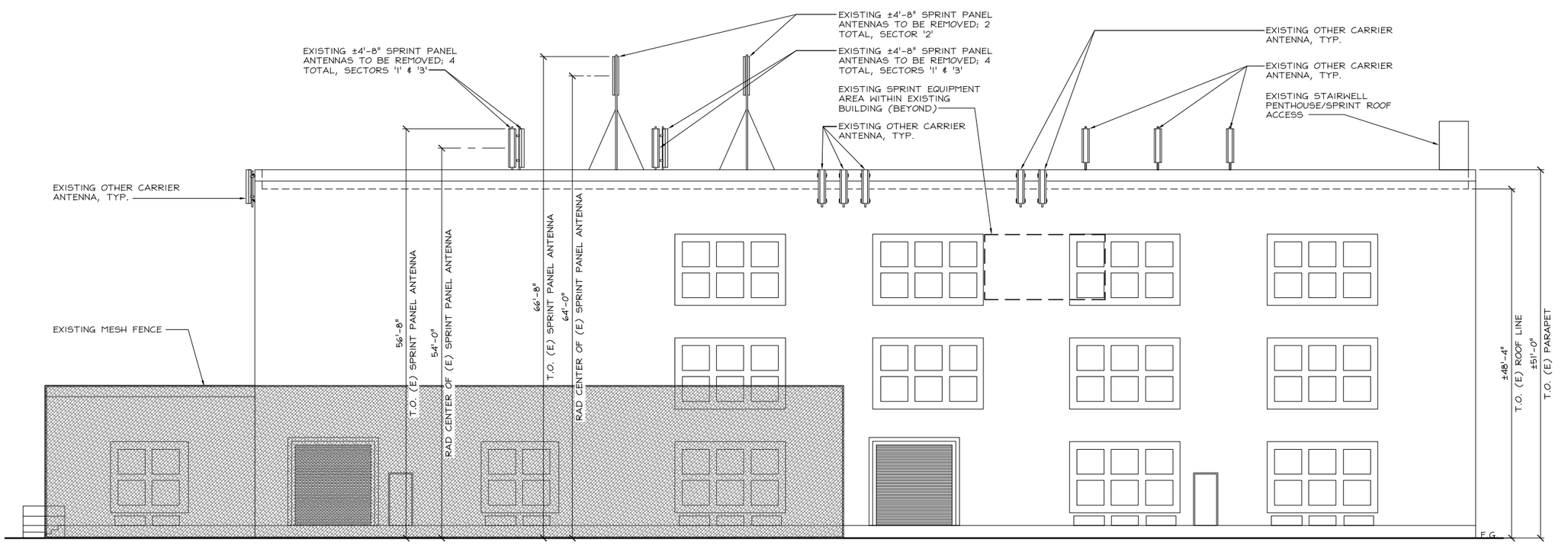
A-3



PROPOSED NORTHWEST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

2



EXISTING NORTHWEST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

1

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG

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ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
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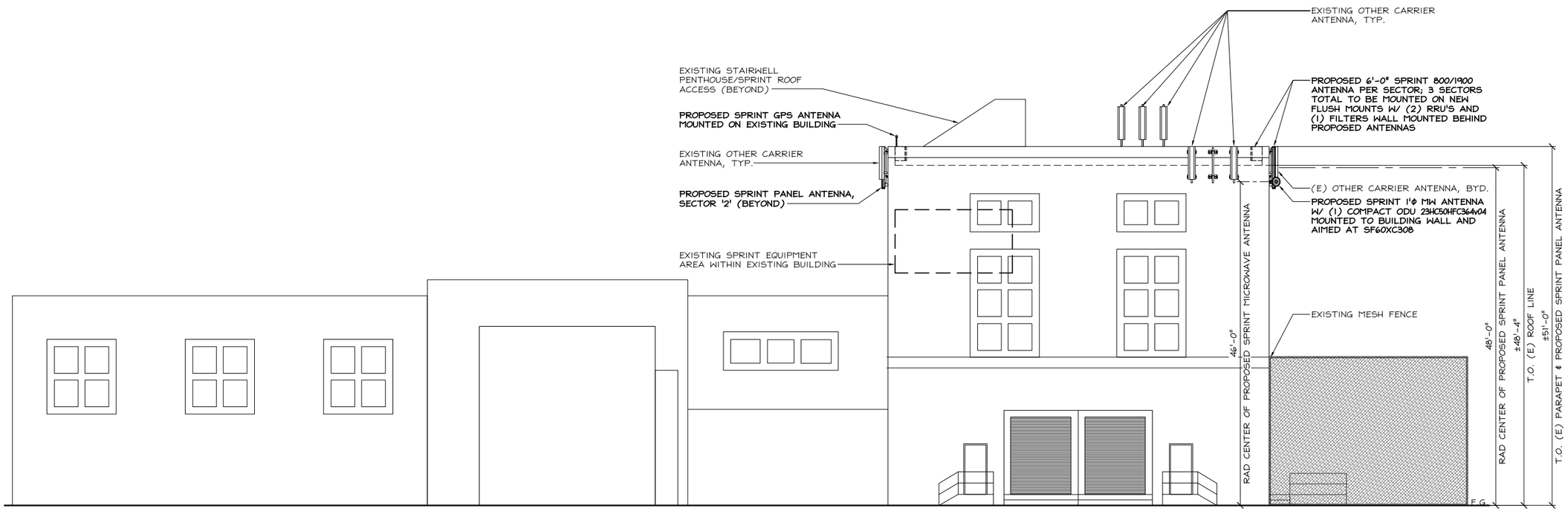
NOT TO BE USED FOR CONSTRUCTION

FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE
ELEVATIONS

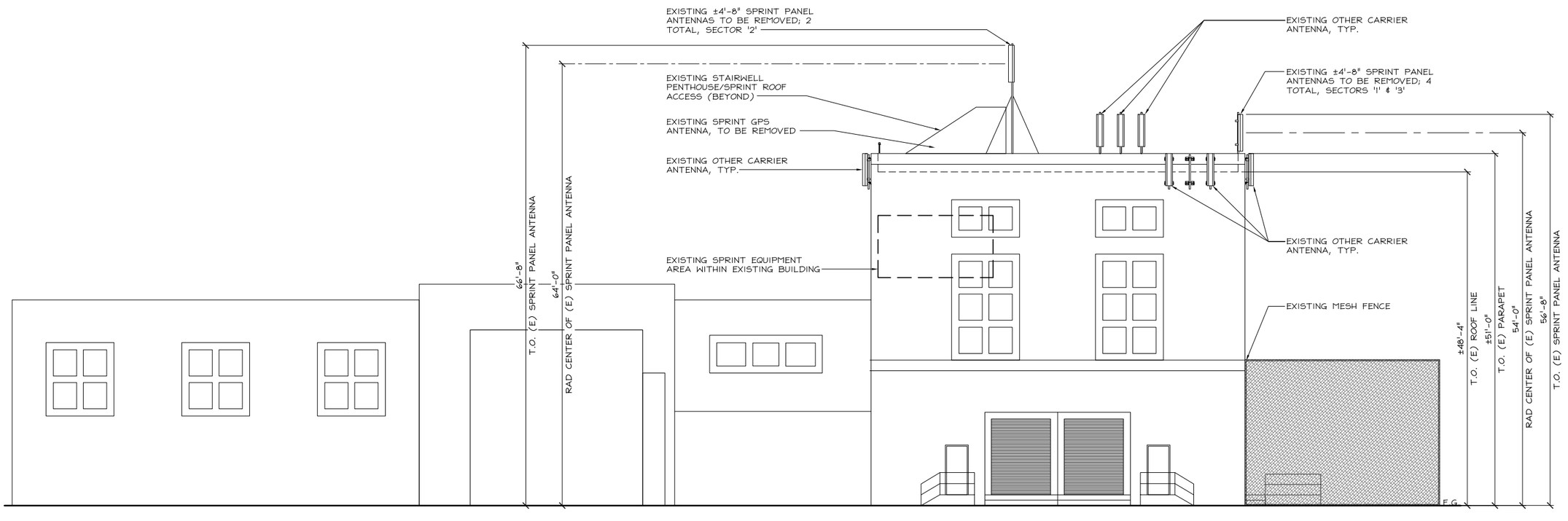
SHEET NUMBER
A-4



PROPOSED NORTHEAST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

2



EXISTING NORTHEAST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

1

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG

BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

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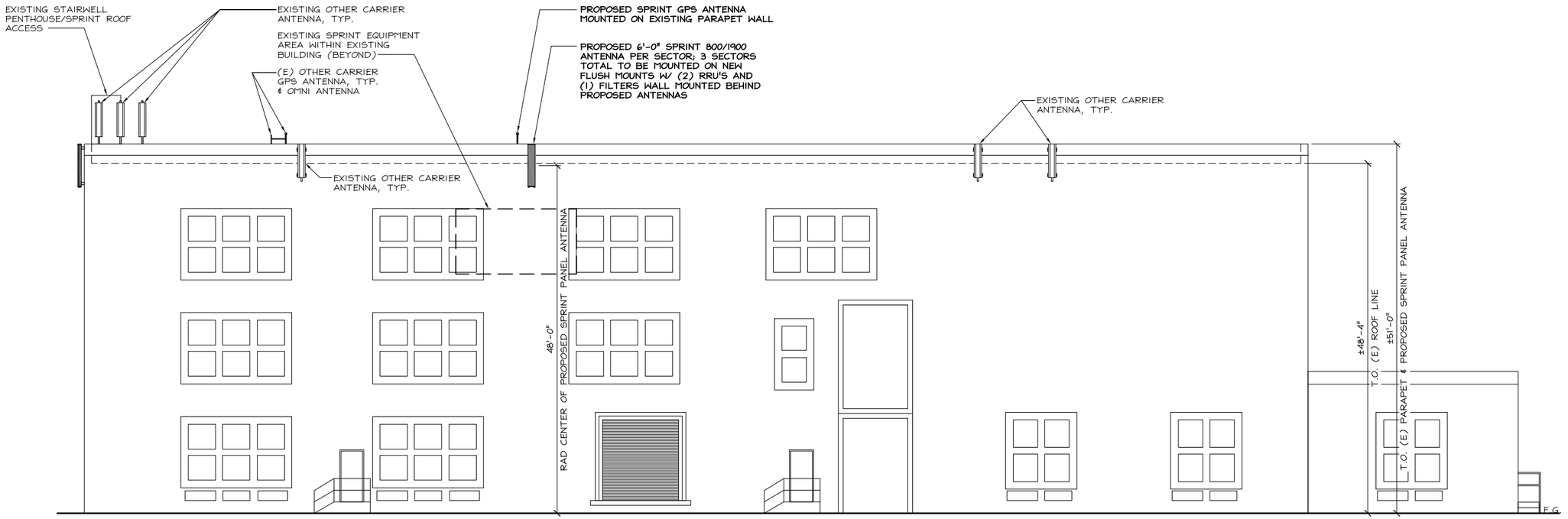
FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE
ELEVATIONS

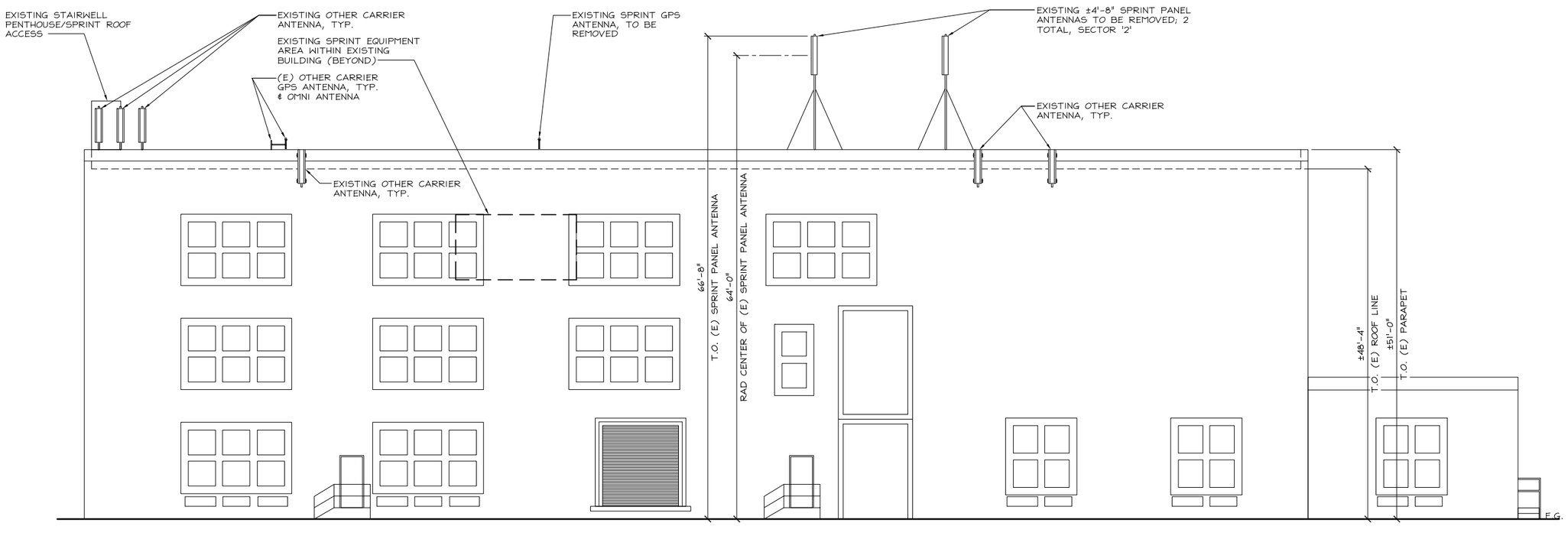
SHEET NUMBER
A-5



PROPOSED SOUTHWEST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

2



EXISTING SOUTHWEST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

1

Sprint
6580 SPRINT PARKWAY
OVERLAND PARK, KANSAS 66251

SAMSUNG

BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
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NOT TO BE USED FOR CONSTRUCTION

FS04XC014-B
PHELPS/SEWAGE TREATMENT
750 PHELPS STREET
SAN FRANCISCO, CA 94124

SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-6