



SAN FRANCISCO PLANNING DEPARTMENT

Executive Summary Conditional Use Authorization

HEARING DATE: OCTOBER 17, 2013

Date: October 10, 2013
Case No.: **2012.1515C**
Project Address: **888 Brannan Street**
Current Zoning: UMU (Urban Mixed-Use)
Showplace Square Special Sign District
68-X Height and Bulk District
Block/Lot: 3780/006
Project Sponsor: T-Mobile represented by
Alex Morin Lewis Loweven & Associates
1428 Grant Street
Berkeley, CA 94703
Staff Contact: Omar Masry – (415) 575-9116
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PROJECT DESCRIPTION

The proposal is to install a macro wireless telecommunication services (“WTS”) facility consisting of up to six (6) panel antennas mounted to three existing rooftop penthouses, and equipment on the roof of the subject building, as part of T-Mobile’s telecommunications network. Based on the zoning and land use, the antennas are proposed on a Location Preference 2 Site (Preferred Location, Co-Location) according to the WTS Siting Guidelines.

The site features existing macro WTS facilities for Clearwire (CU No. 2010.0211C), and a Nextel (CU No. 1997.458C). In the event the Project is approved, and the facility is constructed, the applicant would remove an existing T-Mobile micro WTS facility consisting of a single panel antenna (Building Permit No. 2009.11.02.0331).

The proposed antennas would be mounted to facades of rooftop penthouses in three locations (sectors), with two panel antennas per sector. Sector “A” would be located at the northeast corner of the building along the Brannan Street frontage. Sector “B” would be located at a building corner adjacent to the Brannan and 8th Street intersection, and Sector “C” would be located at the northwest corner of the building along the 8th Street frontage. The existing single panel antenna and electronic equipment would be removed from the vicinity of Sector “A,” and electronic equipment necessary to operate the macro WTS facility would be located on the roof corner adjacent to Sector B. Equipment would be screened from view from adjacent public rights-of-way by an existing parapet wall.

Antennas would be mounted to the wall surface and painted to match, with small “FRP wings,” resembling blinders and attached to each side of the antenna. The FRP wings are panels composed of fibre-reinforced plastic, and are intended to ensure the rear of the antennas, antenna cabling, and

mounting brackets are not visible from view along adjacent public-rights-of-way. The actual antennas would measure approximately 56" high by 12" wide by 8" thick.

SITE DESCRIPTION AND PRESENT USE

The subject building is located on Assessor's Block 3780, Lot 006 at the northwest corner of Brannan and 8th Streets on the block surrounded by Brannan, 7th, Bryant, and 8th Streets in San Francisco's Showplace Square neighborhood. The site is within an UMU (Urban Mixed-Use) Zoning District, and 68-X Height and Bulk District. The Project Site contains a four-story, approximately 61-foot tall, commercial building, which includes commercial space (The Gift Center and Jewelry Mart) and offices.

SURROUNDING PROPERTIES AND NEIGHBORHOOD

The Project site falls within the Showplace Square plan area, but is in an area that may also be considered the southern edge of the South of Market neighborhood. The small area of surrounding UMU zoning is a transitional area between the PDR districts to the south and the Mixed Use districts to the west, north, and east. The immediate area consists of similar, large, industrial/commercial buildings. Interstate I-80 runs along the west elevation of the building, and the Concourse Exhibition Center is located across the street at the corner of 8th and Brannan Streets.

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	September 27, 2013	September 25, 2013	22 days
Posted Notice	20 days	September 27, 2013	September 26, 2013	21 days
Mailed Notice	20 days	September 27, 2013	September 26, 2013	21 days

PUBLIC COMMENT

As of October 10, 2013, the Department has not received comments regarding the proposed Project. The Project Sponsor held a Community Outreach Meeting for the proposed project at 6:00 p.m. on June 5, 2013, at CounterPULSE, located at 1310 Mission Street. No community members attended the meeting.

ISSUES AND OTHER CONSIDERATIONS

- Health and safety aspects of all wireless projects are reviewed under the Department of Public Health and the Department of Building Inspections.
- An updated Five Year Plan with approximate longitudinal and latitudinal coordinates of proposed locations, including the subject site is on file with the Planning Department.

- All required public notifications were conducted in compliance with the City's code and policies.

REQUIRED COMMISSION ACTION

Pursuant to Section 843.93 of the Planning Code, Conditional Use authorization is required for a WTS facility in a UMU (Urban Mixed-Use) Zoning District.

BASIS FOR RECOMMENDATION

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

- The Project complies with the applicable requirements of the Planning Code.
- The Project is consistent with the objectives and policies of the General Plan.
- The Project is consistent with the 1996 WTS Facilities Siting Guidelines, Planning Commission Resolution No. 14182 and Resolutions No. 16539 and No. 18523 supplementing the 1996 WTS Guidelines.
- Health and safety aspects of all wireless projects are reviewed under the Department of Public Health and the Department of Building Inspections.
- The expected RF emissions fall well within the limits established by the FCC.
- The project site is considered a Location Preference 2 (Preferred Location, Co-Location) according to the Wireless Telecommunications Services (WTS) Siting Guidelines.
- Based on propagation maps provided by T-Mobile, the project would provide coverage in an area that currently experiences several gaps in coverage and capacity.
- Based on the analysis provided by T-Mobile, the project would provide additional capacity in an area that currently experiences insufficient service during periods of high data usage.
- Based on independent third-party evaluation, the maps, data, and conclusions about service coverage and capacity provided by T-Mobile are accurate.
- The scale of the antennas in relation to the building, their location (facade mounted to a rooftop penthouse, and located away from building edges), and the use of screening methods for antennas (such as "FRP wings" intended to reduce the visibility of elements such as mounting brackets and coaxial cabling serving each antenna), would ensure the proposed facility would not detract from the buildings architecture, nor appear out of character with the subject building, nor have a negative impact on surrounding views.
- The location of the antennas and electronic equipment will not impact aesthetics, parking, or the use of the building for office and commercial tenants.
- The proposed project has been reviewed by staff and found to be categorically exempt from further environmental review. The proposed changes to the subject building do not result in a significant impact on the resource. The proposed antenna project is categorically exempt from further environmental review pursuant to the Class 3 exemptions of California Environmental Quality Act.
- A Five Year Plan with approximate longitudinal and latitudinal coordinates of proposed locations, including the subject site, was submitted.
- All required public notifications were conducted in compliance with the City's code and policies.

RECOMMENDATION: Approval with Conditions

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

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



SAN FRANCISCO PLANNING DEPARTMENT

Planning Commission Motion No. XXXXX

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ADOPTING FINDINGS RELATING TO THE APPROVALS OF A CONDITIONAL USE AUTHORIZATION UNDER PLANNING CODE SECTIONS 303(c) AND 843.93 TO INSTALL A WIRELESS TELECOMMUNICATIONS SERVICES FACILITY CONSISTING OF UP TO SIX PANEL ANTENNAS LOCATED ON THREE ROOFTOP PENTHOUSES AND ELECTRONIC EQUIPMENT ON THE ROOF OF AN EXISTING COMMERCIAL BUILDING AS PART OF T-MOBILE'S WIRELESS TELECOMMUNICATIONS NETWORK WITHIN AN UMU (URBAN MIXED-USE) ZONING DISTRICT, SHOWPLACE SQUARE SPECIAL SIGN DISTRICT, AND 68-X HEIGHT AND BULK DISTRICT.

PREAMBLE

On December 12, 2012, T-Mobile (hereinafter "Project Sponsor"), submitted an application (hereinafter "Application"), for Conditional Use Authorization on the property at 888 Brannan Street, Lot 006 in Assessor's Block 3780, (hereinafter "Project Site") to install a wireless telecommunications services facility consisting of six (6) panel antennas located on the rooftop penthouses of the subject building, and equipment located on the roof, as part of T-Mobile's telecommunications network, within an UMU (Urban Mixed-Use) Zoning District, and 68-X Height and Bulk District.

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption (Section 15303 of the California Environmental Quality Act). The Planning Commission has reviewed and concurs with said determination. The categorical exemption and all pertinent documents may be found in the files of the Planning Department (hereinafter "Department"), as the custodian of records, at 1650 Mission Street, San Francisco.

On October 17, 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. 2012.1515C, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

FINDINGS

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

1. The above recitals are accurate and constitute findings of this Commission.
2. **Site Description and Present Use.** The subject building is located on Assessor's Block 3780, Lot 006 at the northwest corner of Brannan and 8th Streets on the block surrounded by Brannan, 7th, Bryant, and 8th Streets in San Francisco's Showplace Square neighborhood. The site is within an UMU (Urban Mixed-Use) Zoning District, and 68-X Height and Bulk District. The Project Site contains a four-story, approximately 61-foot tall, commercial building, which includes commercial space (The Gift Center and Jewelry Mart) and offices.
3. **Surrounding Properties and Neighborhood.** The Project site falls within the Showplace Square plan area, but is in an area that may also be considered the southern edge of the South of Market neighborhood. The small area of surrounding UMU zoning is a transitional area between the PDR districts to the south and the Mixed Use districts to the west, north, and east. The immediate area consists of similar, large, industrial/commercial buildings. Interstate I-80 runs along the west elevation of the building, and the Concourse Exhibition Center is located across the street at the corner of 8th and Brannan Streets.
4. **Project Description.** The proposal is to install a macro wireless telecommunication services ("WTS") facility consisting of up to six (6) panel antennas mounted to the walls of three existing rooftop penthouses, and equipment on the roof, of the subject building, as part of T-Mobile's telecommunications network.

The site features existing macro facilities for Clearwire (CU No. 2010.0211C), and a Nextel (CU No. 97.458C). In the event the Project is approved, and the facility is constructed, the applicant would remove an existing T-Mobile micro WTS facility consisting of panel antenna (Building Permit 2009.11.02.0331).

The proposed antennas would be mounted to facades of rooftop penthouses in three locations (sectors), with two panel antennas per sector. Sector "A" would be located at the northeast corner of the building along the Brannan Street frontage. Sector "B" would be located at a building corner adjacent to the Brannan and 8th Street intersection, and Sector "C" would be located at the northwest corner of the building along the 8th Street frontage. The existing single panel antenna and electronic equipment would be removed from the vicinity of Sector "A," and electronic equipment necessary to operate the macro WTS facility would be located on the roof corner adjacent to Sector B. Equipment would be screened from view from adjacent public rights-of-way by an existing parapet wall.

Antennas would be mounted to the wall surface and painted to match, with small "FRP wings," resembling blinders and attached to each side of the antenna. The FRP wings are panels composed of fibre-reinforced plastic and are intended to ensure the rear of the antennas, antenna cabling, and mounting brackets are not visible from view along adjacent public-rights-of-way. The actual antennas would measure approximately 56" high by 12" wide by 8" thick.

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

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

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

Section 8.1 of the WTS Siting Guidelines further stipulates that the Planning Commission will not approve WTS applications for Preference 5 or below Location Sites unless the

application describes (a) what publicly-used building, co-location site or other Preferred Location Sites are located within the geographic service area; (b) what good faith efforts and measures were taken to secure these more Preferred Locations, (c) explains why such efforts were unsuccessful; and (d) demonstrates that the location for the site is essential to meet demands in the geographic service area and the Applicant's citywide networks.

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

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

6. **Location Preference.** The *WTS Facilities Siting Guidelines* identify different types of zoning districts and building uses for the siting of wireless telecommunications facilities. Under the *Guidelines*, and based on the zoning and land use, the antennas are proposed on a Location Preference 2 Site (Preferred Location, Co-Location) according to the WTS Siting Guidelines.
7. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless facility is necessary to address coverage and capacity gaps, as the existing T-Mobile micro WTS facility (single panel antenna) is not able to provide sufficient coverage for voice services or meet network demands for 4G LTE (long term evolution) data services. The network would operate in the 1,950 – 2,100 Megahertz (MHZ) bands, which are regulated by the Federal Communications Commission (FCC) and must comply with the FCC-adopted health and safety standards for electromagnetic radiation and radio frequency radiation.
8. **Radiofrequency (RF) Emissions:** The Project Sponsor retained 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.
9. **Department of Public Health Review and Approval.** The proposed project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Existing RF levels at ground level were around 1% of the FCC public exposure limit. There are antennas for Clearwire and Sprint at this location. T-Mobile proposes to install up to six (6) panel antennas at the Project Site. The antennas will be mounted at a height of approximately 71 feet above the ground. The estimated ambient RF field from the proposed T-Mobile transmitters at ground level is calculated to be 0.0026 mW/sq. cm., which is 0.26% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 28 feet and does not reach any publicly

accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish, and Chinese. Workers should not have access to the area (6 feet) directly in front of the antenna while it is in operation.

10. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by T-Mobile to demonstrate need for coverage and capacity have been confirmed by Hammett & Edison, an engineering consultant and independent third party to accurately represent the carrier's present and post-installation conclusions.
11. **Maintenance Schedule.** The proposed facility would operate without on-site staff but with a two-person maintenance crew visiting the property approximately once a month and on an as-needed basis to service and monitor the facility.
12. **Community Outreach.** Per the *Guidelines*, the Project Sponsor held a Community Outreach Meeting for the proposed project. The applicant held a community meeting for the proposed project at 6:00 p.m. on June 5, 2013, at CounterPULSE, located at 1310 Mission Street. No community members attended the meeting.
13. **Five-year plan:** Per the *Guidelines*, the Project Sponsor submitted an updated five-year plan, as required, in October 2013.
14. **Public Comment.** As of October 10, 2013, the Department has received no comments regarding the proposed project.
15. **Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the Planning Code in the following manner:
 - A. **Use.** Per Planning Code Section 843.93, a Conditional Use authorization is required for the installation of Commercial Wireless Transmitting, Receiving or Relay Facility.
16. **Planning Code Section 303** establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use approval. On balance, the project does comply with said criteria in that:
 - A. The proposed new uses and building, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable, and compatible with, the neighborhood or the community.
 - i. *Desirable: San Francisco is a leader of the technological economy; it is important and desirable to the vitality of the City to have and maintain adequate telecommunications coverage and data capacity. This includes the installation and upgrading of systems to keep up with changing technology and increases in usage. It is desirable for the City to allow wireless facilities to be installed.*

The proposed project at 888 Brannan Street is generally desirable and compatible with the surrounding neighborhood because the Project will not conflict with the existing uses of the property and will be designed to be compatible with the surrounding nature of the vicinity. The placement of antennas and related support and protection features are so located, designed, and treated architecturally to minimize their visibility from public places, to avoid intrusion into public vistas, avoid disruption of the architectural design integrity of the Project site or adjacent buildings, insure harmony with the existing neighborhood character and promote public safety. The Project has been reviewed and determined to not cause the removal or alteration of any significant architectural features of the subject building.

- ii. *Necessary: In the case of wireless installations, there are two criteria that the Commission reviews: coverage and capacity.*

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

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

The proposed project at 888 Brannan Street is necessary in order to achieve sufficient street and in-building mobile phone coverage and data capacity. Recent drive tests in the subject area conducted by the T-Mobile Radio Frequency Engineering Team provide that the subject property is the most viable location, based on factors including quality of coverage and aesthetics.

- B. The proposed project will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity. There are no features of the project that could be detrimental to the health, safety or convenience of those residing or working the area, in that:
 - i. Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

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

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

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

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

- iii. The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

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

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

The proposed antennas, screening elements, and equipment will not affect landscaping, open space, parking, lighting or signage at the Project site or surrounding area.

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

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

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

The Project site is not located in a Neighborhood Commercial District. However, the Project is in conformity with the purpose of the Urban Mixed-Use District.

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

HOUSING ELEMENT

BALANCE HOUSING CONSTRUCTION AND COMMUNITY INFRASTRUCTURE

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

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

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

The Project will improve T-Mobile's coverage and capacity along the Interstate 80 and 8th Street, which is a primary commercial corridor in the South of Market neighborhood.

URBAN DESIGN

HUMAN NEEDS

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

POLICY 4.14 - Remove and obscure distracting and cluttering elements.

The antennas would be adequately sited and designed to reduce their visual impact, thereby minimizing the possibility of introducing new elements considered distracting or cluttering. The height and bulk of the proposed antennas would not appear distracting nor create a cluttered visual aesthetic for the subject building or surrounding neighborhood.

COMMERCE AND INDUSTRY ELEMENT

Objectives and Policies

OBJECTIVE 1:

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

Policy 1:

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

Policy 2:

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

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

OBJECTIVE 2:

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

Policy 1:

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

Policy 3:

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

The site is an integral part of T-Mobile's 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 T-Mobile telecommunications.

COMMUNITY SAFETY ELEMENT

Objectives and Policies

OBJECTIVE 3:

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

Policy 1:

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

Policy 2:

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

Policy 3:

Maintain and expand agreements for emergency assistance from other jurisdictions to ensure adequate aid in time of need.

Policy 4:

Establish and maintain an adequate Emergency Operations Center.

Policy 5:

Maintain and expand the city's fire prevention and fire-fighting capability.

Policy 6:

Establish a system of emergency access routes for both emergency operations and evacuation.

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

18. **Planning Code Section 101.1(b)** establishes eight priority-planning policies and requires review of permits for consistency with said policies. On balance, the project does comply with said policies in that:

- A. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses be enhanced.

No neighborhood-serving retail use would be displaced and the wireless communications network will enhance personal communication services.

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

No residential uses would be displaced or altered in any way by the granting of this authorization.

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

The Project would have no adverse impact on housing in the vicinity.

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

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

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

The Project would cause no displacement of industrial and service sector activity.

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

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

- G. That landmarks and historic buildings be preserved.

The subject site is not a landmark building, but is considered a known historic resource, which was developed in 1920. The placement and design of the antennas would not obscure or detract from character defining features of the building, or other potentially significant buildings or public views within the South of Market Neighborhood.

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

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

19. The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, as designed, the Project would

contribute to the character and stability of the neighborhood and would constitute a beneficial development.

20. The Commission hereby finds that approval of the 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 843.93 and 303 to install up to six (6) panel antennas on the rooftop, and associated equipment cabinets on the roof of the Project Site and as part of a wireless transmission network operated by T-Mobile on a Location Preference 2 (Preferred Location, Co-Location) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within an UMU (Urban Mixed-Use) Zoning District, Showplace Square Special Sign District, a 68-X Height and Bulk District, and subject to the conditions of approval attached hereto as **Exhibit A**; and in general conformance with the plans, dated August 29, 2013, and stamped "**Exhibit B**."

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

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **October 17, 2013**.

JONAS P. IONIN
Acting Commission Secretary

AYES

NAYS:

ABSENT:

ADOPTED: October 17, 2013

EXHIBIT A

AUTHORIZATION

This authorization is for a Conditional Use Authorization under Planning Code Sections 843.93 and 303 to install up to six (6) panel antennas on the rooftop, and associated equipment cabinets on the roof of the Project Site and as part of a wireless transmission network operated by T-Mobile on a Location Preference 2 (Preferred Location, Co-Location) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, within an UMU (Urban Mixed-Use) Zoning District, Showplace Square Special Sign District, a 68-X Height and Bulk District, and subject to the conditions of approval attached hereto as **Exhibit A**; and in general conformance with the plans, dated August 29, 2013, and stamped "**Exhibit B**."

RECORDATION OF CONDITIONS OF APPROVAL

Prior to the issuance of the building permit or commencement of use for the Project the Zoning Administrator shall approve and order the recordation of a Notice in the Official Records of the Recorder of the City and County of San Francisco for the subject property. This Notice shall state that the Project is subject to the conditions of approval contained herein and reviewed and approved by the Planning Commission on **October 17, 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 415-575-6378, www.sf-planning.org.

4. **Screening - WTS.** To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:
- a. Modify the placement of the facilities;
 - b. Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;
 - c. Install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95.2 1982, to notify persons that the facility could cause exposure to RF emissions;
 - d. Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.
 - e. To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:
 - f. Antennas and back up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual effects;
 - g. Rooftop installations shall be setback such that back up facilities are not viewed from the street;
 - h. Antennas attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and
 - i. Although co location of various companies' facilities may be desirable, a maximum number of antennas and back up facilities on the Project Site shall be established, on a case by case basis, such that "antennae farms" or similar visual intrusions for the site and area is not created.

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

MONITORING - AFTER ENTITLEMENT

5. **Enforcement.** Violation of any of the Planning Department conditions of approval contained in this Motion or of any other provisions of Planning Code applicable to this Project shall be subject to the enforcement procedures and administrative penalties set forth under Planning Code Section 176 or Section 176.1. The Planning Department may also refer the violation complaints to other city departments and agencies for appropriate enforcement action under their jurisdiction.

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

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

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

7. **Revocation due to Violation of Conditions.** Should implementation of this Project result in complaints from interested property owners, residents, or commercial lessees which are not resolved by the Project Sponsor and found to be in violation of the Planning Code and/or the specific Conditions of Approval for the Project as set forth in Exhibit A of this Motion, the Zoning Administrator shall refer such complaints to the Commission, after which it may hold a public hearing on the matter to consider revocation of this authorization.

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

8. **Implementation Costs - WTS.**

- a. The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.
- b. The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with implementation of the conditions of approval contained in this authorization, including costs incurred by this Department, the Department of Public Health, the Department of Technology, Office of the City Attorney, or any other appropriate City Department or agency. The Planning Department shall collect such costs on behalf of the City.
- c. The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility, which are assessed by the City pursuant to all applicable law.

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

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

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

10. **Project Implementation Report - WTS.** The Project Sponsor shall prepare and submit to the Zoning Administrator a Project Implementation Report. The Project Implementation Report shall:

- a. Identify the three dimensional perimeter closest to the facility at which adopted FCC standards for human exposure to RF emissions in uncontrolled areas are satisfied;
- b. Document testing that demonstrates that the facility will not cause any potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.
- c. The Project Implementation Report shall compare test results for each test point with applicable FCC standards. Testing shall be conducted in compliance with FCC

regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday weekday with the subject equipment measured while operating at maximum power.

- d. **Testing, Monitoring, and Preparation.** The Project Implementation Report shall be prepared by a certified professional engineer or other technical expert approved by the Department. At the sole option of the Department, the Department (or its agents) may monitor the performance of testing required for preparation of the Project Implementation Report. The cost of such monitoring shall be borne by the Project Sponsor pursuant to the condition related to the payment of the City's reasonable costs.
 - i. **Notification and Testing.** The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 4.
 - ii. **Approval.** The Zoning Administrator shall request that the Certification of Final Completion for operation of the facility not be issued by the Department of Building Inspection until such time that the Project Implementation Report is approved by the Department for compliance with these conditions.

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

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

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

12. **Installation - WTS.** Within 10 days of the installation and operation of the facilities, the Project Sponsor shall confirm in writing to the Zoning Administrator that the facilities are being maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.

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

13. **Periodic Safety Monitoring - WTS.** The Project Sponsor shall submit to the Zoning Administrator 10 days after installation of the facilities, and every two years thereafter, a certification attested to by a licensed engineer expert in the field of EMR/RF emissions, that

the facilities are and have been operated within the then current applicable FCC standards for RF/EMF emissions.

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

OPERATION

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

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

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

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

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

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

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

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

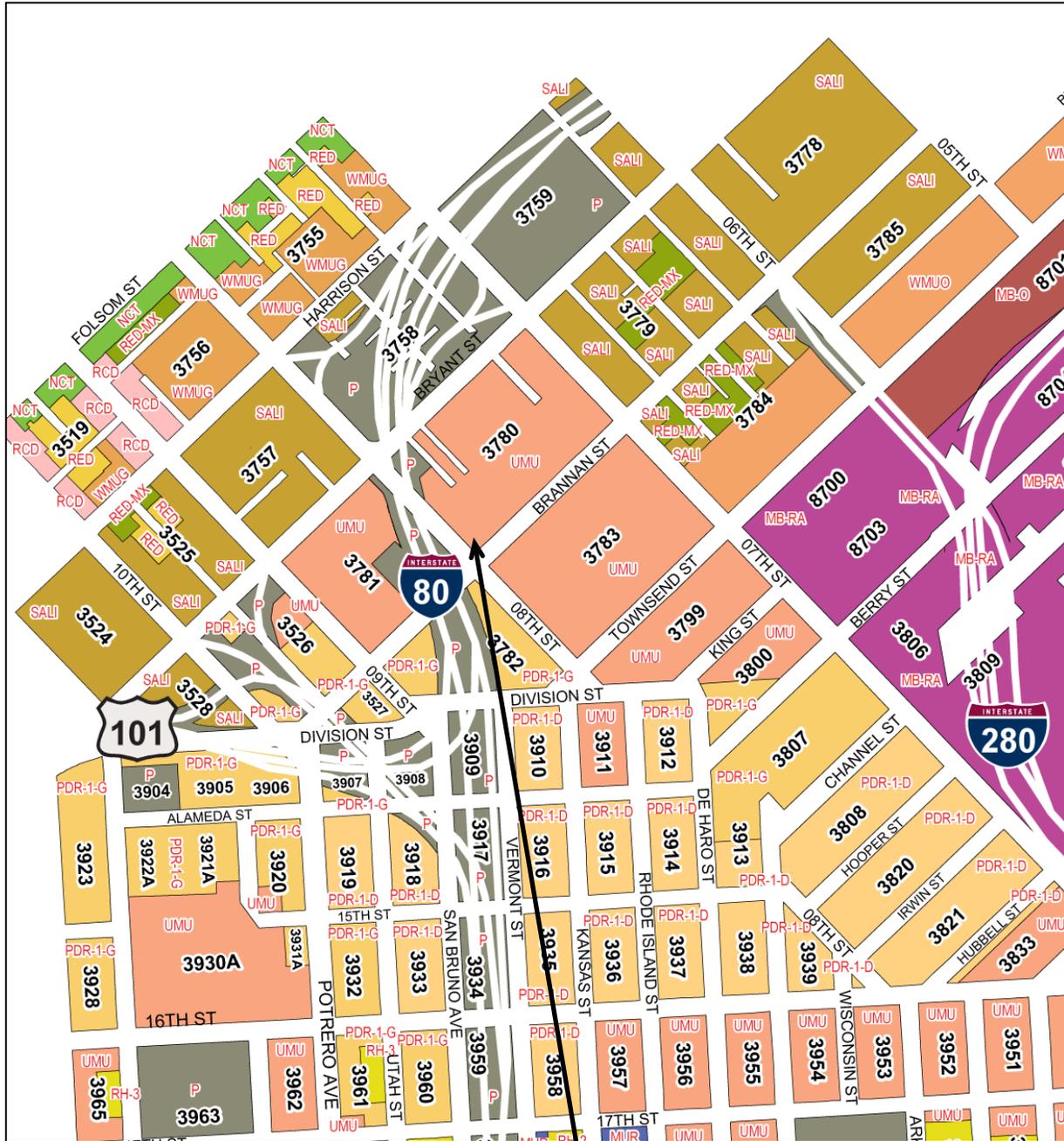
18. **Transfer of Operation – WTS.** Any carrier/provider authorized by the Zoning Administrator or by the Planning Commission to operate a specific WTS installation may assign the operation of the facility to another carrier licensed by the FCC for that radio frequency provided that such transfer is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

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

19. **Compatibility with City Emergency Services – WTS.** The facility shall not be operated or caused to transmit on or adjacent to any radio frequencies licensed to the City for emergency telecommunication services such that the City's emergency telecommunications system experiences interference, unless prior approval for such has been granted in writing by the City.

For information about compliance, contact the Department of Technology, 415-581-4000, <http://sfgov3.org/index.aspx?page=1421>

Zoning Map

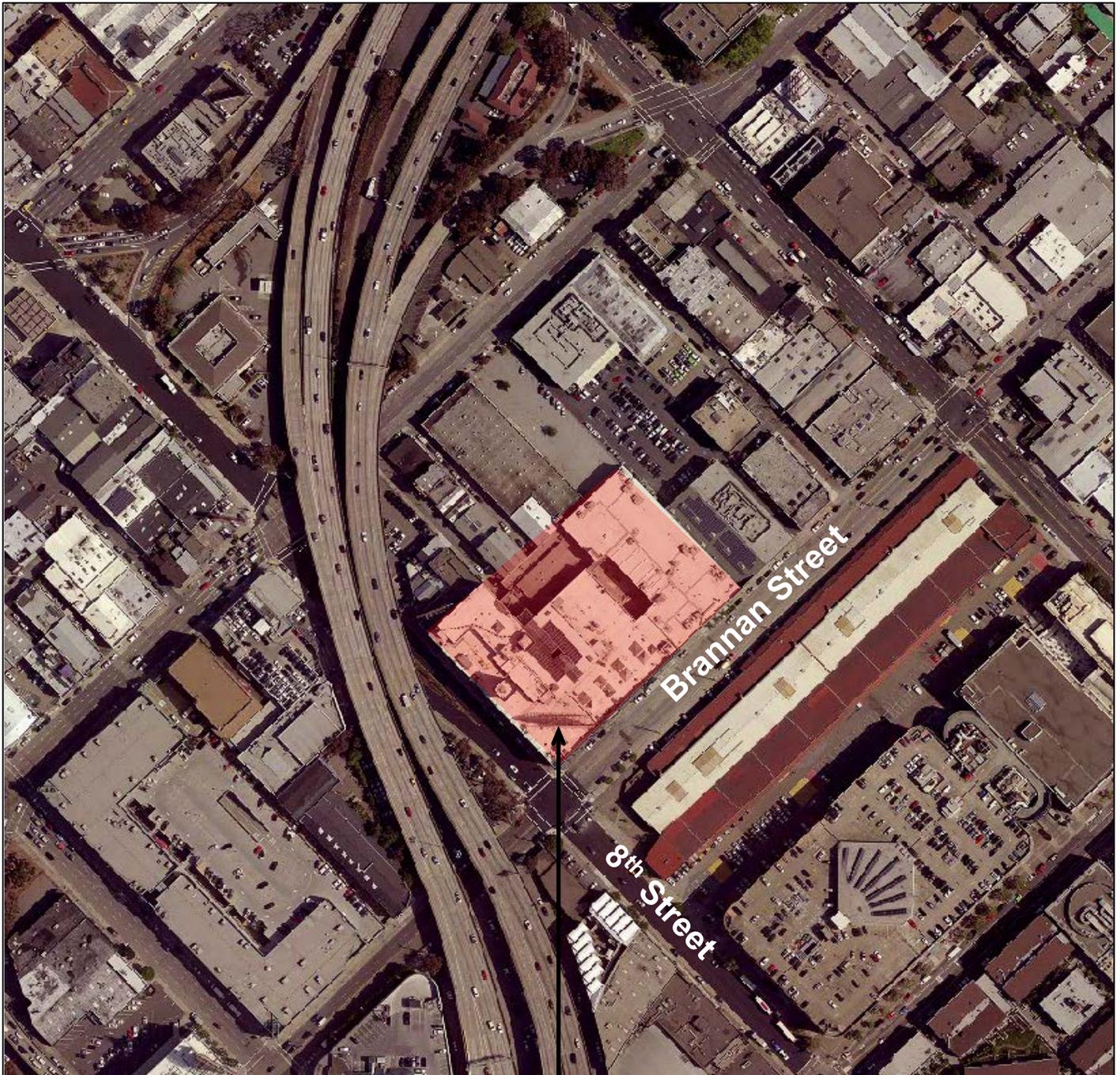


SUBJECT PROPERTY



Case Number 2012.1515C
T-Mobile Macro WTS Facility
888 Brannan Street

Aerial Photo



SUBJECT PROPERTY



Case Number 2012.1515C
T-Mobile Macro WTS Facility
888 Brannan Street

Parcel Map

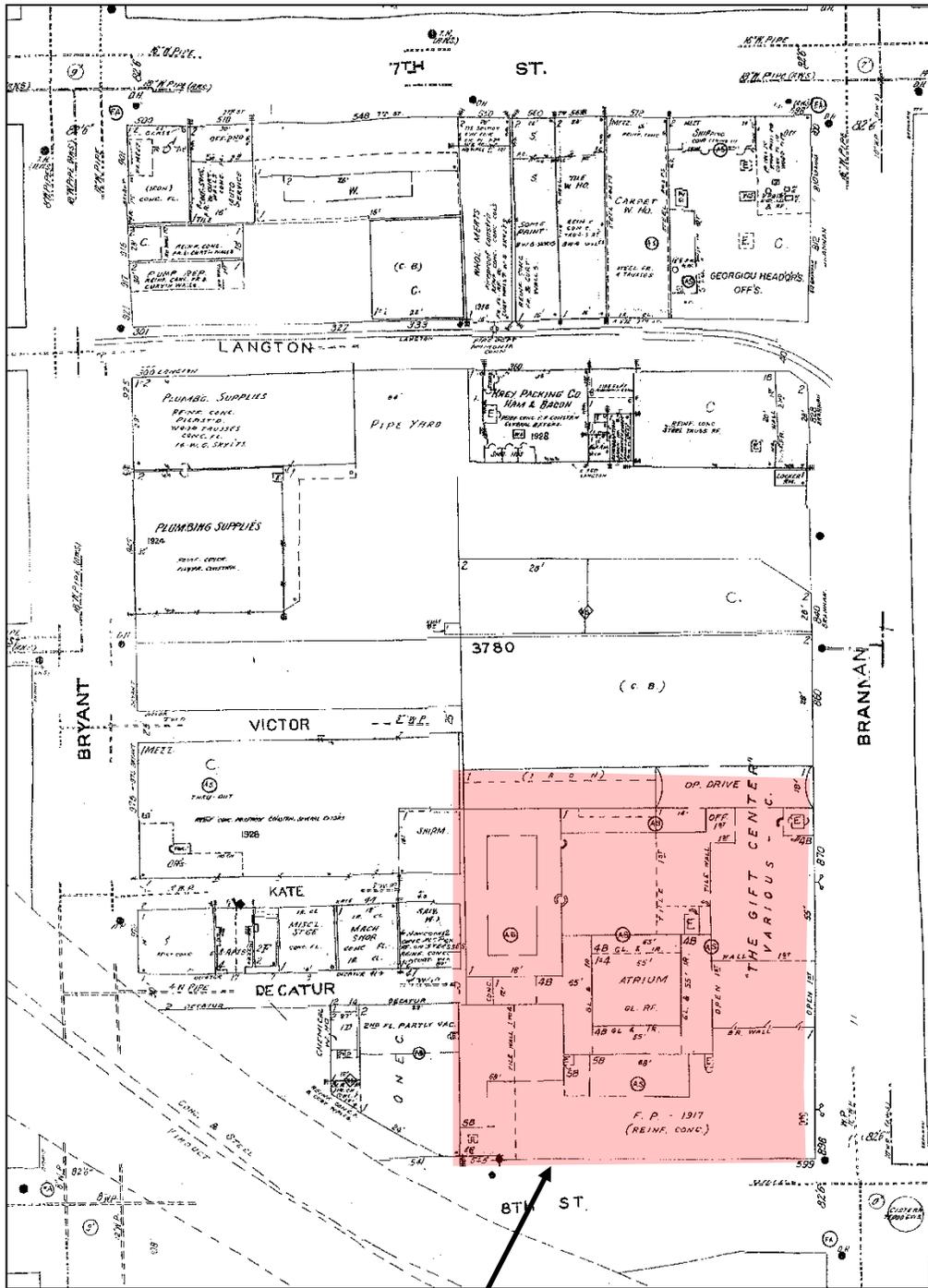


SUBJECT PROPERTY



Case Number 2012.1515C
T-Mobile Macro WTS Facility
888 Brannan Street

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.





Address **8th Street**

Address is approximate





Address **8th Street**

Address is approximate





Address **8th Street**

Address is approximate





Address **8th Street**

Address is approximate



Existing



close up view

Proposed



close up view

view from Bryant Street looking east at site

Existing

Existing T-Mobile Installation



Proposed

Proposed T-Mobile Installation



view from Brannan Street looking west at site

Existing



Proposed



view from 8th Street looking north at site

T-Mobile SF13084 Gift Center & Jewelry Mart
888 Brannan Street, San Francisco, CA

**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by T-Mobile West LLC, a personal wireless telecommunications carrier, to evaluate proposed modifications to its existing base station (Site No. SF13084A) located at 888 Brannan Street in San Francisco, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Background

The San Francisco Department of Public Health has adopted a 10-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable limits set by the FCC for exposures of unlimited duration are:

<u>Wireless Service</u>	<u>Frequency Band</u>	<u>Occupational Limit</u>	<u>Public Limit</u>
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

The site was visited by Mr. Dhruva Dandekar, a qualified engineer employed by Hammett & Edison, Inc., during normal business hours on August 8, 2012, a non-holiday weekday, and reference has been made to information provided by T-Mobile, including zoning drawings by Streamline Engineering and Design, Inc., dated June 26, 2012.

Checklist

1. The location of all existing antennas and facilities at site. Existing RF levels.

T-Mobile had installed one directional panel antenna within a view screen enclosure on the side of the penthouse above the east corner of the four-story commercial building located at 888 Brannan Street. Existing RF levels for a person at ground near the site were less than 1% of the most restrictive public exposure limit. The measurement equipment used was a Wandel & Goltermann Type EMR-300 Radiation Meter with Type 18 Isotropic Electric Field Probe (Serial No. F-0034). The meter and probe were under current calibration by the manufacturer. Similar antennas for use by Clearwire and Sprint Nextel had been observed on two penthouses above the upper roof of the same building.



**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

2. The location of all approved (but not installed) antennas and facilities. Expected RF levels from approved antennas.

No other WTS facilities are reported to be approved for this site but not installed.

3. The number and types of WTS within 100 feet of proposed site and estimates of additive EMR emissions at proposed site.

There were no other WTS facilities observed within 100 feet of the site.

4. Location (and number) of Applicant's antennas and back-up facilities per building and location (and number) of other WTS at site.

T-Mobile proposes to remove its existing antenna and to install six Ericsson Model AIR21 directional panel antennas on the sides of the three penthouses above the west, south, and east corners of the lower roof. The antennas would be mounted with up to 3° downtilt at effective heights of at least 71 feet above ground, 10 feet above the roof, and would be oriented in pairs toward 55°T, 140°T, and 270°T.

5. Power rating (maximum and expected operating power) for all existing and proposed backup equipment subject to application.

The expected operating power of the T-Mobile transmitters is reflected in the resulting effective radiated power given in Item 6 below; the transmitters may operate at a power below their maximum rating. The power ratings of the other carriers' transmitters are not known.

6. Total number of watts per installation and total number of watts for all installations at site.

The maximum effective radiated power proposed by T-Mobile in any direction is 4,640 watts, representing simultaneous operation at 2,460 watts for AWS and 2,180 watts for PCS. The numbers of watts for the other carriers' operations are not known, though their contribution to RF exposure levels are reflected in the measurements reported in Item 1 above.

7. Plot or roof plan showing method of attachment of antennas, directionality of antennas, and height above roof level. Discuss nearby inhabited buildings.

The drawings show the proposed antennas to be installed as described in Item 4 above. There were noted no buildings of similar height nearby.

8. Estimated ambient RF levels for proposed site and identify three-dimensional perimeter where exposure standards are exceeded.

For a person anywhere at ground, the maximum RF exposure level due to the proposed T-Mobile operation by itself is calculated to be 0.0026 mW/cm², which is 0.26% of the applicable public exposure limit. Ambient RF levels at the site are therefore estimated to be below 1.3% of the limit. The three-dimensional perimeter of RF levels equal to the public exposure limit is calculated to extend



**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

up to 28 feet out from the antenna faces and to much lesser distances above, below, and to the sides; this does not reach the roof of the building or any publicly accessible areas.

9. Describe proposed signage at site.

Due to their mounting locations, the T-Mobile antennas would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 6 feet directly in front of the antennas themselves, such as might occur during maintenance work above the lower roof, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs* at the roof access door and at the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines. Similar measures should already be in place for the other carriers at the site; applicable keep-back distances for those carriers have not been determined as part of this study.

10. Statement of authorship.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2013. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

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



**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of the T-Mobile West LLC base station located at 888 Brannan Street in San Francisco, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Posting explanatory signs is recommended to establish compliance with occupational exposure limitations.

August 13, 2012



William F. Hammett
William F. Hammett, P.E.

707/996-5200



Review of Cellular Antenna Site Proposals

Project Sponsor : T-Mobile **Planner:** Michelle Stahlhut
RF Engineer Consultant: Hammett and Edison **Phone Number:** (707) 996-5200
Project Address/Location: 888 Brannan St
Site ID: 1030 **SiteNo.:** SF13084A

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: 14
- 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: 4640 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: 4640 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 μw/cm²)
 Maximum RF Exposure: 0.0026 mW/cm² Maximum RF Exposure Percent: 0.26
- 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: 28
 Occupational_Exclusion_Area Occupational Exclusion In Feet: 6

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 is 1 antenna operated by T-Mobile installed on the roof top of the building at 888 Brannan Street. Existing RF levels at ground level were around 1% of the FCC public exposure limit. There were observed similar antennas operated by Clearwire and Sprint at this location. T-Mobile proposes to remove the 1 antenna and install 6 new antennas. The antennas will be mounted at a height of 71 feet above the ground. The estimated ambient RF field from the proposed T-Mobile transmitters at ground level is calculated to be 0.0026 mW/sq cm., which is 0.26 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 28 feet and does not reach the rooftop or any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Worker should not have access to within 6 feet of the front of the antennas while they are in operation.

 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: 9/7/2012

Patrick Fosdahl

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

T-Mobile/Lewis Loeven and Associates
T-Mobile site #SF13084

Application for a Conditional Use Permit at
888 Brannan
San Francisco, CA 94107
APN: 3780-006 & 3780-007A

T-Mobile/Lewis Loeven and Associates

T-Mobile site #SF13084

Project Summary

APN: 3780-006 & 3780-007A
Site Address: 888 Brannan Street
T-Mobile Site No. SF13084

Zoning General Plan Designation

The site is currently zoned UMU (Urban Mixed Use) and consists of approximately 31,588 square feet. The subject parcel is owned by Buchannan Street Associates.

Project Descriptions & Visual Resources

The proposed project consists of removing existing accessory use site (1 panel antenna and 3 equipment cabinets). It will be replaced by six antennas, in groups of two on the roof. 1 outdoor equipment cabinet and associated equipment will be installed on the roof (Please see attached Site Plans and Photo Simulations.)

T-Mobile submits that the proposed facility will enhance the existing wireless phone coverage in the area and will increase much needed capacity. The site will also allow for the integration of new safety and consumer-oriented services into the surrounding community.

Site Selection Analysis

Wireless systems are expanded or introduced in a given area to improve service to customers. There are several reasons to upgrade an existing facility. It may extend the coverage to new areas, increase the capacity of the system within the current service area, or improve quality. Some wireless facilities accomplish all three improvements.

This location was also selected because of its position relative to existing sites, providing favorable site geometry for federally mandated E911 location accuracy requirements and efficient frequency reuse. Since 40 percent of 911 calls are from mobile phones, effective site geometry within the overall network is needed to achieve accurate location information of mobile users, through triangulation with active wireless facilities.

Coverage

Coverage can be defined as having a certain minimum level of signal strength in a particular area. T-Mobile's target is to provide -76dBm of signal strength to our customers' areas across the network. This level of service guarantees reliable signal strength inside buildings to provide excellent voice quality in residential neighborhoods and commercial areas. In today's competitive marketplace, T-Mobile requires high quality coverage to be competitive and to fulfill our responsibilities under our FCC license, and comply with CPUC mandates

Capacity

T-Mobile/Lewis Loeven and Associates

T-Mobile site #SF13084

Capacity is the number of calls that can be handled by a particular wireless facility. When we make phone calls, our mobile phones communicate with a nearby antenna site that can handle a limited number of calls. It then connects to land based phone lines. When a particular site is handling a sufficient number of calls, the available RF channels assigned to that site are at maximum capacity. When this occurs, the wireless phone user will hear a busy signal on his or her phone. For T-Mobile's specific GSM technology, typical sites with 6 antennas can handle a maximum of approximately 150 calls at any given time. The call traffic at the facility is continually monitored and analyzed so that overloading of sites is prevented. The objective for a capacity site is to handle increased call volume rather than expand a coverage area.

Alternative Site Analysis

It was determined that the best way to improve capacity and coverage at this location was to modify and expand an existing T-Mobile site rather than build a new one.

Safety and Compliance

The proposed wireless communications facility will not create any nuisance or be detrimental to the health, safety or general welfare, of persons residing or working in the neighborhood. T-Mobile technology does not interfere with any other forms of private or public communications systems, operating under FCC regulations

After construction of the facility, the site will be serviced once a month, during a routine scheduled maintenance window by a service technician. The site is unmanned and is a self-monitored facility. There will be no impact on parking or traffic in the area.

Conclusion

T-Mobile has identified this location for a proposed wireless telecomm facility for several reasons. The property provides an excellent location from which wireless coverage can be enhanced in the Soma district. The site has been designed to make virtually no visual deviation from the existing look of the subject building.

Community Benefits

Since its inception, wireless communications have provided services to communities far beyond mere convenience. Many businesses and Public Safety Agencies rely on these services in order to conduct important civic and commercial duties on a daily basis. Schools rely on an ability to reach parents quickly. Commercial Wireless companies have been at the forefront of critical communications services in recent events, such as earthquakes and fires in California. Traffic issues, weather and community events, are a few of the many services now available over these same communications devices. Wireless communications are an integral part of our national telecommunications infrastructure, and each community deserves the benefit of the best and most competitive service available.

T-Mobile/Loeven and Associates

T-Mobile site #SF13084

In accordance with Federal Communications Commission (FCC) Order 94-102, T-Mobile USA has launched a project to implement enhanced 9-1-1 services (Wireless E9-1-1) for its customers throughout California. Phase I of the project specified that the telephone number and receiving cell site or sector of the 9-1-1 caller be delivered to the 911 dispatch. Phase II adds a more precise location by triangulating on the location, (usually with 50-100 meter accuracy or better) in the form of latitude/longitude coordinates, to the Phase I information.

Many already view wireless phones as a lifeline. Each day more than 200,000 9-1-1 calls are made on cell phones, which is one third of all emergency calls that are placed.

T-Mobile Company Information

Based in Bellevue, Washington, the U.S. operations of T-Mobile International AG & Co. K.G., consists of T-Mobile USA, Inc. (formerly VoiceStream Wireless) and Powertel, Inc. (together "T-Mobile"). T-Mobile is one of the fastest growing nationwide wireless service providers, offering all digital voice, messaging and high-speed wireless data services to more than 16.3 million customers in the United States. A cornerstone of T-Mobile's strong consumer appeal has been its Get More® business strategy to provide customers with the best overall value in their wireless service so they can enjoy the benefits of mobile communications to Get More From Life®. T-Mobile has more than 24,000 employees across the country dedicated to delivering on its Get More® promise to provide customers with more minutes, more features and more service. The T-Mobile global brand name made its debut in the United States in July 2002, choosing California and Nevada as the first markets in the country to launch its wireless voice and data services. Here in the Bay Area, T-Mobile has purchased and taken control of the former PacBell Wireless/ Cingular System on January 5, 2005.

T-Mobile holds license in the California Market as follows: 1950.2-1964.8, 1965.2-1969.8 MHz and 1870.2-1884.8, 1885.2-1889.8 MHz.

1 Conditional Use Application

Type of Application to be Submitted:	Conditional Use
---	------------------------

1. Owner/Applicant Information

Property Owner's Name: Buchanan Street Associates
Address: 888 Brannan Street
Telephone: NA

Applicant's Name: T-Mobile- Alex Morin
Address: 1428 Grant Street, Berkeley, CA 94703
Telephone: (530) 219-8903

Contact Name: Alex Morin
Address: 1428 Grant Street, Berkeley, CA 94703
Telephone: (530) 219-8903

T-Mobile/Lewis Loeven and Associates
T-Mobile site #SF13084

2. Location and Classification

Street Address of Project: 888 Brannan
Cross Streets: 8th Street
Assessor's Block/Lot: 3780-006 & 3780-007A
Lot Dimensions: variable Lot Area (SqFt): 31,588
Zoning District: UMU Height/Bulk District: 68-X

3. Project Description

Change of Use Change of Hours New Construction
 Alterations Demolition Other

Describe what is to be done: **The proposal is remove the existing accessory use micro site and replace with 6 antennas, 1 equipment cabinet and associated equipment.**

Project Estimated Cost: \$80,000
Additions to Building: Rear Front Height Side Yard

Present or Previous Use: **Office**
Proposed Use: No change in use
Building Permit Application No. n/a Date Filed: n/a

4. Action(s) Requested (include Planning Code Sections authorizing action)

Conditional Use authorization pursuant to Section of the Planning Code Section 209.6 (c)



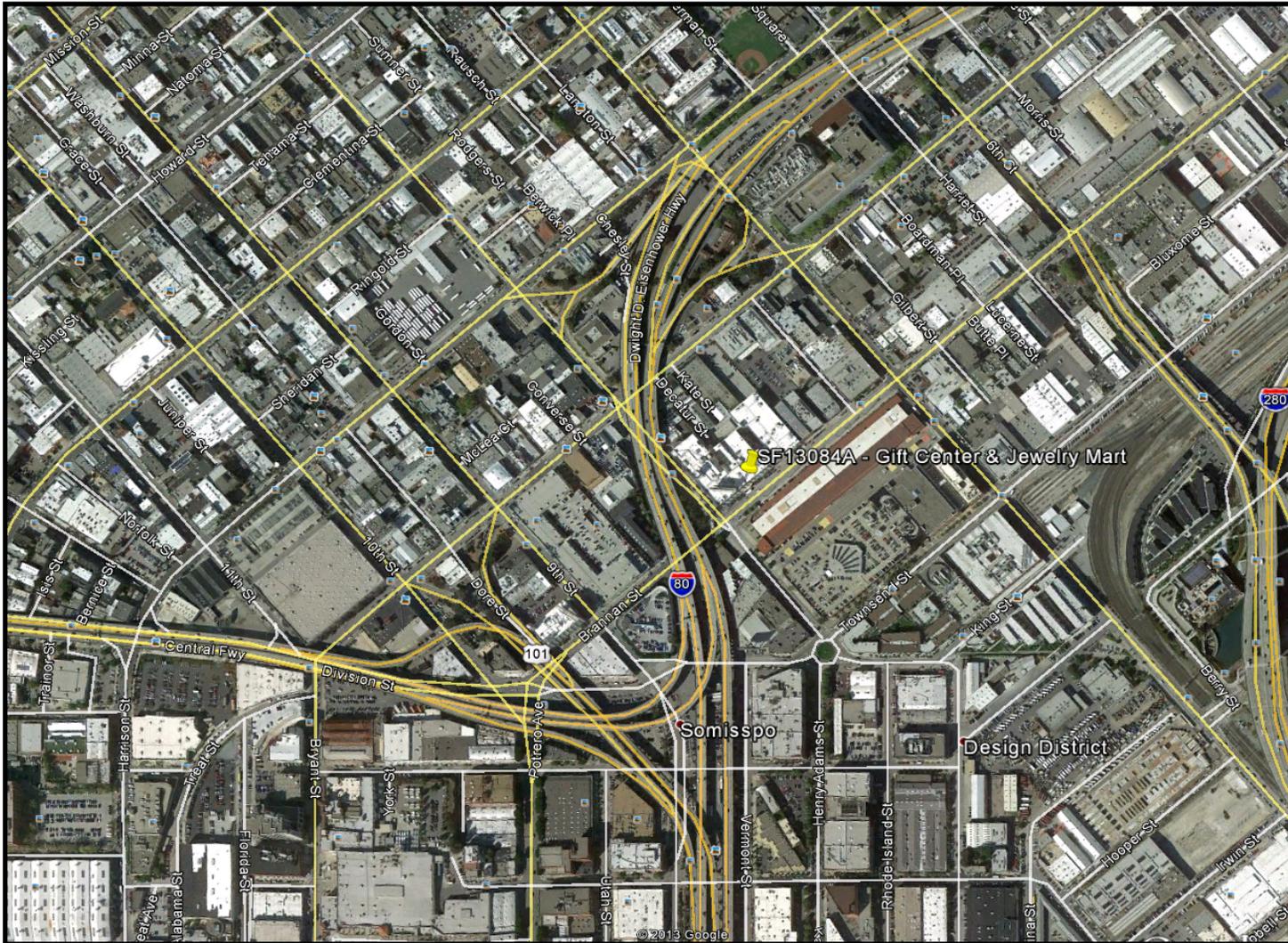
LTE Coverage Maps

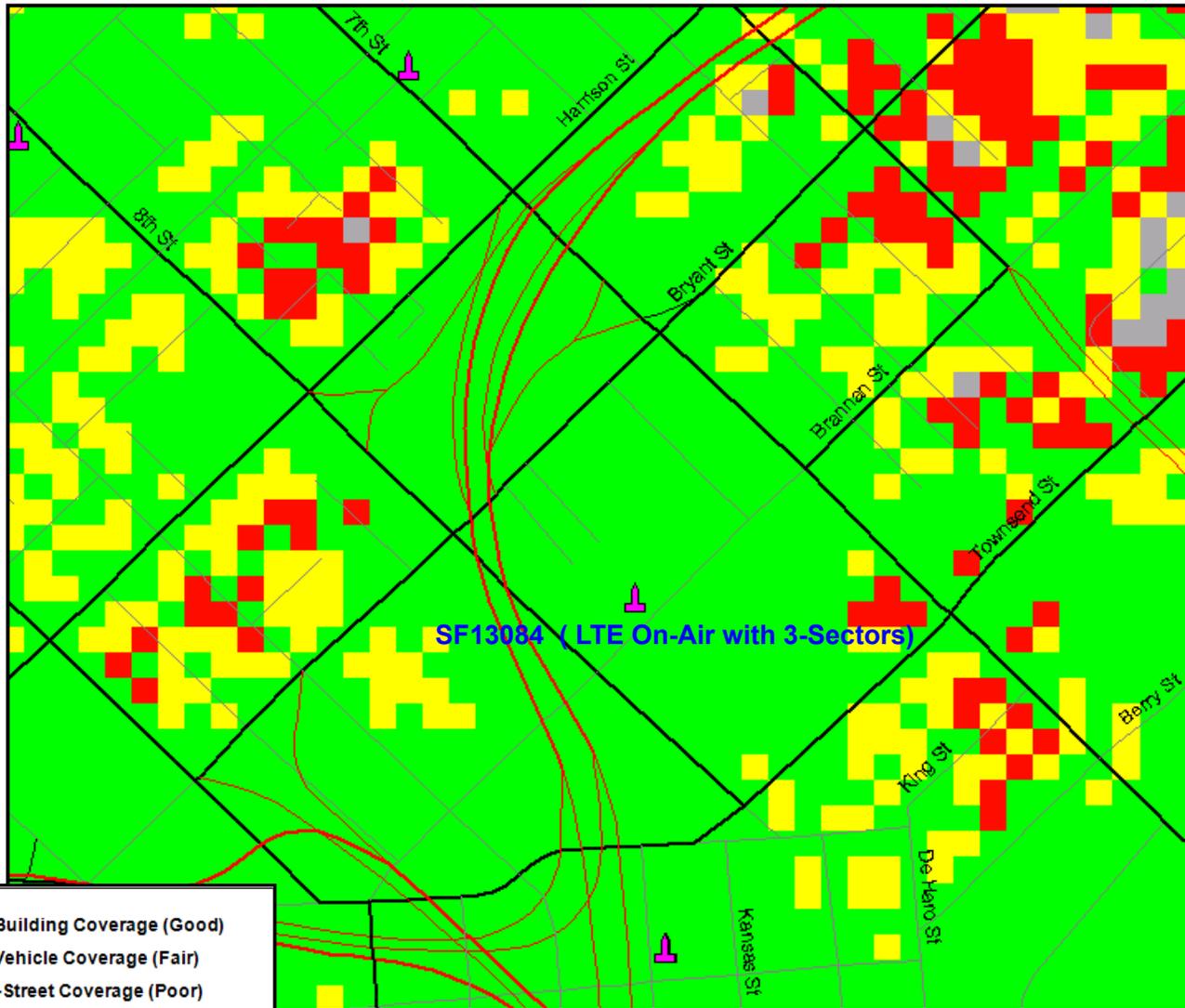
SF13084A

Gift Center & Jewelry Mart

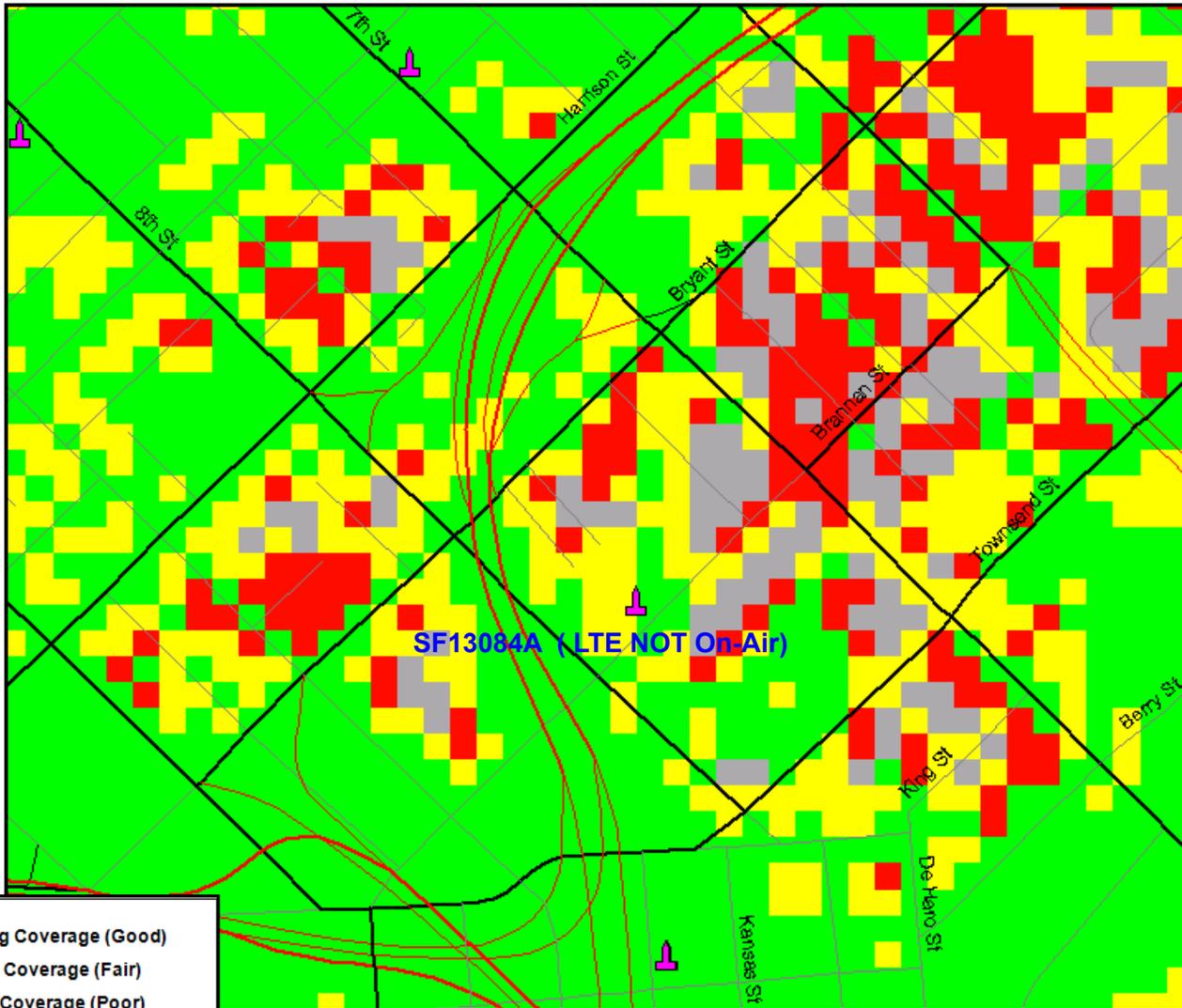
888 Brannan St.

San Francisco, CA 94107





	In-Building Coverage (Good)
	In-Vehicle Coverage (Fair)
	On-Street Coverage (Poor)
	No LTE Coverage



	In-Building Coverage (Good)
	In-Vehicle Coverage (Fair)
	On-Street Coverage (Poor)
	No LTE Coverage

Summary of discussion from the Pre-Application Meeting

Meeting Date: 6/5/13
Meeting Time: 6pm
Meeting Address: _____
Project Address: 1201 Mission
888 Brannan
Property Owner Name: Andrew Fox
Project Sponsor/Representative: T Mobile

Please summarize the questions/comments and your response from the Pre-Application meeting in the space below. Please state if/how the project has been modified in response to any concerns.

Question/Concern #1 by (name of concerned neighbor/neighborhood group): NA - No
one attended

Project Sponsor Response: _____

Question/Concern #2: _____

Project Sponsor Response: _____

Question/Concern #3: _____

Project Sponsor Response: _____

Question/Concern #4: _____

Project Sponsor Response: _____

Pre-Application Meeting Sign-in Sheet

Meeting Date: 6/5/13
 Meeting Time: 6pm
 Meeting Address: 1301 Mission
 Project Address: 888 Brannan
 Property Owner Name: Andrew Fox
 Project Sponsor/Representative: T. Madice

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS
1.	NA	No attendees			<input type="checkbox"/>
2.					<input type="checkbox"/>
3.					<input type="checkbox"/>
4.					<input type="checkbox"/>
5.					<input type="checkbox"/>
6.					<input type="checkbox"/>
7.					<input type="checkbox"/>
8.					<input type="checkbox"/>
9.					<input type="checkbox"/>
10.					<input type="checkbox"/>
11.					<input type="checkbox"/>
12.					<input type="checkbox"/>
13.					<input type="checkbox"/>
14.					<input type="checkbox"/>
15.					<input type="checkbox"/>
16.					<input type="checkbox"/>
17.					<input type="checkbox"/>
18.					<input type="checkbox"/>

NOTICE OF NEIGHBORHOOD MEETING

To: Neighborhood Groups, Neighbors & Owners within 500' radius of
888 Brannan Sreet

Meeting Information

Date: **Wednesday, June 5**
Time: 6:00 p.m.
Where: 1301 Mission Street, San Francisco
94103

Site Information

Address: 888 Brannan Street
Block/Lot 3780-006
Zoning: UMU

Applicant

T-Mobile

Contact Information

Alex Morin
530.219.8903

T-Mobile is proposing to modify an existing wireless telecommunications facility. The proposed modification includes replacing one antenna and adding five more. Three equipment cabinets on the rooftop will be removed and replaced with a single cabinet. The antennas and equipment cabinet are located on the rooftop and will be screened from view. You are invited to attend an informational community meeting located at the 1301 Mission Street to learn more about the project.

If you have any questions regarding the proposal and are unable to attend the meeting, please contact the Alex Morin at 530.219.8903. Please contact Omar Masry, project planner with the San Francisco Department of City Planning at (415) 575.9116 if you have any questions regarding the planning process.

NOTE: If you require an interpreter to be present at the meeting, please contact our office at (530) 219.8903 no later than 5:00pm on Friday, May 31, 2013 and we will make every effort to provide you with an interpreter.

NOTIFICACIÓN DE REUNIÓN DE VECINDARIO

Para: Grupos del vecindario, vecinos y propietarios dentro de un radio de 500' de
888 Brannan Sreet

Información de la reunión

Fecha: **Miércoles 5 de junio**
Hora: 6:00 p.m.
Dónde: 1301 Mission Street, San Francisco
94103

Información del lugar

Dirección: 888 Brannan Sreet
Cuadra/Lote 3780-006
Zonificación: UMU

Solicitante

T-Mobile

Información de contacto

Alex Morin
530.219.8903

T-Mobile propone modificar una instalación de telecomunicaciones inalámbricas existente. La modificación propuesta incluye el reemplazo de una antena y el agregado de cinco antenas más. Se quitarán tres gabinetes de equipamiento de la azotea y se reemplazarán por un solo gabinete. Las antenas y el gabinete de equipamiento se colocarán en la azotea y estarán ocultos de la vista. Se lo invita a asistir a una reunión informativa de la comunidad que se realizará en 1301 Mission Street para tener más información sobre el proyecto.

Si tiene alguna duda en relación a la propuesta y no puede asistir a la reunión, por favor contacte a Alex Morin al 530.219.8903. Por favor, contacte a Omar Masry, planificador de proyecto, en el Departamento de Planificación de la Ciudad de San Francisco al (415) 575.9116 si tiene alguna pregunta relacionada con el proceso de planificación.

NOTA: Si necesita que un intérprete esté presente en la reunión, por favor, contáctese a nuestra oficina al (530) 219.8903 antes del viernes 31 de mayo de 2013 a las 5:00 p.m., y haremos todos lo posible para proporcionarle un intérprete.

社區資訊通報會通知

致： Brannan街888號(888 Brannan Sreet) 周圍五百英尺內的居民組織、居民和業主

會議資訊

日期： 6月5日星期三
時間： 下午 6:00
地點： 1301 Mission Street, San Francisco
94103

設施地點資訊

地址： Brannan街888號(888 Brannan
Sreet)
街區/地塊：3780-006
分區：UMU

申請公司

T-Mobile

聯繫資訊

Alex Morin
530.219.8903

T-Mobile 公司計畫修繕現有一座無線通訊設施。計畫中的修繕工程包括更換現有的一个天線並且增加五個天線。屋頂上的三個設備櫃子將會被拆除並且更換成為一個櫃子。這些天線和設備櫃子將被安裝在屋頂，不會被公眾看見。我們誠邀您參加在 1301 Mission Street 召開的社區資訊通報會，以便您瞭解有關本專案的更多資訊。

如果您對該計畫有任何疑問，但是無法出席這次會議，請撥打電話(530) 219-8903找 Alex Morin。如果您對規劃流程有何疑問，請聯絡三藩市規劃局的 Omar Masry，電話是 (415) 575-9116。

注意：如果您需要一名翻譯陪同您出席會議，請在2013年5月31日週五下午5點之前致電 (530) 219-8903 與本辦公室聯繫，我們將盡力為您配備一名翻譯。

Affidavit of Conducting a Pre-Application Meeting, Sign-in Sheet and Issues/Responses submittal

I, Alex Morin, do hereby declare as follows:

1. I have conducted a Pre-Application Meeting for the proposed new construction or alteration prior to submitting any entitlement (Building Permit, Variance, Conditional Use, etc.) in accordance with Planning Commission Pre-Application Policy.
2. The meeting was conducted at 1301 Mission (location/address) on 6/5/13 (date) from 6-7 pm (time).
3. I have included the mailing list, meeting initiation, sign-in sheet, issue/response summary, and reduced plans with the entitlement Application. I understand that I am responsible for the accuracy of this information and that erroneous information may lead to suspension or revocation of the permit.
4. I have prepared these materials in good faith and to the best of my ability.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

EXECUTED ON THIS DAY, 6/5/13, 20 IN SAN FRANCISCO.

[Signature]
Signature

Alex Morin
Name (type or print)

agent
Relationship to Project (e.g. Owner, Agent)
(if Agent, give business name & profession)

888 Brannan
Project Address



HAMMETT & EDISON, INC.
 CONSULTING ENGINEERS
 BROADCAST & WIRELESS

WILLIAM F. HAMMETT, P.E.
 DANE E. ERICKSEN, P.E.
 STANLEY SALEK, P.E.
 ROBERT P. SMITH, JR.
 RAJAT MATHUR, P.E.
 ANDREA L. BRIGHT, P.E.
 KENT A. SWISHER
 NEIL J. OLIJ

ROBERT L. HAMMETT, P.E.
 1920-2002
 EDWARD EDISON, P.E.
 1920-2009

BY E-MAIL ALEX.MORIN@YMAIL.COM

September 13, 2013

Mr. Alex Morin
 Cortel LLC
 1075 45th Street
 Emeryville, California 94608-3327

Dear Alex:

As you requested, we have conducted the review required by the City of San Francisco of the coverage maps that T-Mobile West LLC will submit as part of its application package for proposed modifications to its base station located at 888 Brannan Street (Site No. SF13084A). This is to fulfill the submittal requirements for Planning Department review.

Executive Summary

We concur with the maps, data, and conclusions provided by T-Mobile. The maps provided to show the before and after conditions adequately represent the carrier's present and post-installation coverage.

T-Mobile had installed one directional panel antenna within a view screen enclosure on the side of the penthouse above the east corner of the four-story commercial building located at 888 Brannan Street. T-Mobile proposes to remove its existing antenna and to install six Ericsson Model AIR21 directional panel antennas on the sides of the three penthouses above the west, south, and east corners of the lower roof. The antennas would be mounted with up to 3° downtilt at effective heights of at least 71 feet above ground, 10 feet above the roof, and would be oriented in pairs toward 55°T, 140°T, and 270°T. The maximum effective radiated power proposed by T-Mobile in any direction is 4,640 watts, representing simultaneous operation at 2,460 watts for AWS (2100 MHz) and 2,180 watts for PCS (1950 MHz).

T-Mobile provided for review a pair of coverage maps, attached for reference. The maps show T-Mobile's existing and proposed 4G LTE (2100 MHz) coverage in the area. Both maps show four levels of coverage, which T-Mobile colors and defines as follows:

- Green In-building coverage (good)
- Yellow In-vehicle coverage (fair)
- Red On-street coverage (poor)
- Grey No LTE coverage

Mr. Alex Morin, page 2
September 13, 2013

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

As a second step, we conducted our own test to measure the actual T-Mobile LTE signal strength in the vicinity of the proposed site. Our fieldwork was conducted on September 9, 2013, between 11 AM and 3 PM. The measurements were conducted using the engineering mode on a T-Mobile handset to determine the signal strength along a measurement route selected to cover all the streets within the map area that T-Mobile had indicated would receive improved service.

Based on the measurement data, we conclude that the 4G LTE (2100 MHz) T-Mobile coverage map showing the service area without the proposed installation represents an area of deficiency in the carrier's present coverage. The map submitted to show the coverage following the proposed modifications to the base station was prepared on the same basis as the map of existing conditions and so is expected to illustrate the improvements in coverage.

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

Sincerely yours,



William F. Hammett, P.E.

lc

Enclosures

cc: Mr. Kevin Flaherty (w/encls) – BY E-MAIL FRANCIS.FLAHERTY1@T-MOBILE.COM
Mr. Justin Clayden (w/encls) – BY E-MAIL JUSTIN.CLAYDEN1@T-MOBILE.COM
Mr. Bill Daugherty (w/encls) – BY E-MAIL BILL.DAUGHERTY@T-MOBILE.COM
Mr. Brad Chapman (w/encls) – BY E-MAIL BRAD.CHAPMAN@T-MOBILE.COM

T-MOBILE WEST CORPORATION



1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

GIFT CENTER & JEWELRY MART

SF13084A

GIFT CENTER & JEWELRY MART

SF13084A
888 BRANNAN ST
SAN FRANCISCO, CA 94103

ISSUE STATUS

Δ	DATE	DESCRIPTION	BY
	06/26/12	ZD 100%	C.C.
	08/03/12	CLIENT REV	K.P.
	08/16/12	CLIENT REV	K.P.
	06/19/13	CLIENT REV	J.S.
	08/29/13	CD 90%	H.H.
	-	-	-

DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 08/29/13

PROJECT DESCRIPTION

A MODIFICATION TO AN (E) UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF REMOVING & REPLACING AN (E) T-MOBILE ANTENNA & (3) (E) T-MOBILE EQUIPMENT CABINETS W/ A (N) 6102 BTS CABINET, (N) 100AMP PPC W/ (N) GEN PLUG, (N) TRANSFORMER & (6) (N) ANTENNAS W/ (N) FRP BLINDERS PAINTED TO MATCH (E) BUILDING. ALSO ADDING (2) (N) CABLE TRAYS, (8) (N) RUNS OF COAX, (3) (N) HYBRID CABLES (3x6 CONFIGURATION), & (2) (N) RRUW'S.

VICINITY MAP



CODE COMPLIANCE

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

- 2010 CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25)
- 2010 CALIFORNIA BUILDING CODE
- 2010 CALIFORNIA ELECTRICAL CODE
- 2010 CALIFORNIA MECHANICAL CODE
- 2010 CALIFORNIA PLUMBING CODE
- 2010 CITY OF SAN FRANCISCO FIRE CODE
- LOCAL BUILDING CODES
- CITY/COUNTY ORDINANCES
- ANSI/EIA-TIA-222-G

ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE TITLE 24 PART 2, SECTION 1134B.2.1, EXCEPTION 4

PROJECT INFORMATION

SITE NAME: GIFT CENTER & JEWELRY MART SITE #: SF13084A
 COUNTY: SAN FRANCISCO JURISDICTION: CITY OF SAN FRANCISCO
 BLOCK/LOT: 3780-006 & 3780-007A POWER: PG&E
 SITE ADDRESS: 888 BRANNAN ST TELEPHONE: AT&T
 SAN FRANCISCO, CA 94103
 CURRENT ZONING: UMU-URBAN MIXED USE
 CONSTRUCTION TYPE: IV SPRINKLERS
 OCCUPANCY TYPE: U, (UNMANNED COMMUNICATION FACILITY)
 PROPERTY OWNER: BUCHANNAN STREET ASSOCIATES LP
 888 BRANNAN ST
 SAN FRANCISCO, CA 94107
 APPLICANT: T-MOBILE WEST CORPORATION
 1855 GATEWAY BLVD 9TH FLOOR
 CONCORD, CA 94520-3200
 ATTN: BRAD CHAPMAN
 LEASING CONTACT: ATTN: ALEX MORIN
 (530) 219-8903
 ZONING CONTACT: ATTN: ALEX MORIN
 (530) 219-8903
 CONSTRUCTION CONTACT: ATTN: RON MAX
 (707) 363-6379
 LATITUDE: N 37° 46' 17.29" NAD 83
 LONGITUDE: W 122° 24' 18.79" NAD 83
 AMSL: ±9'

DRIVING DIRECTIONS

- FROM: 1855 GATEWAY BLVD, CONCORD, CA 94520-3200
 TO: 888 BRANNAN ST, SAN FRANCISCO, CA 94103
- START OUT GOING SOUTHEAST ON GATEWAY BLVD. 0.0 MI
 - TURN SLIGHT RIGHT ONTO CLAYTON RD. 0.3 MI
 - MERGE ONTO CA-242 S. 1.0 MI
 - MERGE ONTO I-680 S VIA THE EXIT ON THE LEFT TOWARD OAKLAND/SAN JOSE. 3.5 MI
 - MERGE ONTO CA-24 W TOWARD OAKLAND/LAFAYETTE. 13.6 MI
 - MERGE ONTO I-580 W TOWARD SAN FRANCISCO. 1.5 MI
 - MERGE ONTO I-80 W VIA THE EXIT ON THE LEFT TOWARD SAN FRANCISCO (PORTIONS TOLL). 7.9 MI
 - TAKE EXIT 1C TOWARD NINTH ST/CIVIC CENTER. 0.1 MI
 - TURN SLIGHT LEFT TO TAKE THE EIGHTH ST RAMP. 0.0 MI
 - TURN SLIGHT LEFT ONTO 8TH ST. 0.2 MI
 - TURN LEFT ONTO BRANNAN ST. 0.0 MI

END AT: 888 BRANNAN ST, SAN FRANCISCO, CA 94103
 ESTIMATED TIME: 34 MINUTES ESTIMATED DISTANCE: 28.20 MILES

SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE	-
T-2	FIRE DEPARTMENT CHECKLIST	-
T-3	EMF REPORT	-
T-4	SIGNAGE DETAILS	-
T-5	BATTERY INFO	-
A-1	SITE PLAN	-
A-2	EQUIPMENT PLANS, ELECTRICAL ROOM PLAN & DETAILS	-
A-3	ANTENNA PLANS & DETAILS	-
A-4	ELEVATION	-
A-5	DETAILS	-
E-1	ELECTRICAL PLAN	-
E-2	GROUNDING PLAN & DETAIL	-

APPROVAL

RF
LEASING
ZONING
CONSTRUCTION
T-MOBILE

Streamline Engineering
and Design, Inc.

8445 Sierra College Blvd, Suite E, Granite Bay, CA 95746
 Contact: Kevin Sorensen Phone: 916-660-1930
 E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

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T-MOBILE WEST CORPORATION

T-Mobile

1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
TITLE

SHEET NUMBER:
T-1

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 1 OF 2

2.06 PERMIT APPLICATION CHECKLIST FOR CELLULAR ANTENNA SITES AND ALL EQUIPMENT SERVING THE CELLULAR ANTENNA SITE

This checklist shall be printed on a drawing sheet and submitted as part of the plans submitted with any building permit application creating or modifying cellular antenna sites regardless of RF emission quantities. This checklist is designed to assist designers, installers, plan reviewers, and field inspectors. This checklist shall be prepared by the design professional and shall be stamped and wet-signed.

This document is not all-inclusive of all requirements for cellular antenna sites and it is the responsibility of the designer to research the applicable codes. Documents referenced for this bulletin are as follows:

- FCC OET Bulletin 56 - Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields (August 1999)
- FCC OET Bulletin 65 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Ed. 97-01:August 1997)
- FCC - A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance (June 2, 2000)
- 2010 California Building Code (2010 CBC)
- 2010 California Fire Code (2010 CFC)
- 2010 California Mechanical Code (2010 CMC)
- 2010 San Francisco Fire Code (2010 SFFC)
- 2010 NFPA 13 Automatic Sprinkler Systems
- 2010 NFPA 72 National Fire Alarm Code

- COMPLETE
SEE T-1
1. Provide a description of work on the plans.
- COMPLETE
SEE A-1 THRU A-5
2. Plans shall include plan views and elevations showing all equipment locations and cable runs.
- COMPLETE
SEE A-2
3. Plans shall include antenna cut-sheets and equipment list on a drawing sheet.
- COMPLETE
SEE T-3
4. Include a copy of the signed and stamped RF report on a drawing sheet as a reference to identify the exclusion area required to prevent occupational exposures in excess of the FCC guidelines (47CFR1.1310 and FCC OET Bulletin 65 edition 97-01).
- COMPLETE
SEE T-3
5. The RF report shall indicate whether or not the site under review is a part of a multiple transmitter site and shall show compliance with FCC 47CFR1.1307(b)(3), as amended, all transmitters shall not exceed 5% of the power density exposure limit.
- COMPLETE
SEE A-1
6. Drawings shall reflect the striped/exclusion areas per the above RF Report with a minimum radius being 1 foot.

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 2 OF 2

- COMPLETE
SEE T-3
7. Plans shall include a quantitative three dimensional image of the RF levels from each antenna located near an egress point (e.g. penthouse stair, fire escape, roof walking paths, skylights, etc.)
- COMPLETE
SEE T-4
8. "Notice to Workers" warning signage as applicable per the above RF Report shall be permanently mounted at the stairwell side of the roof-access door (ANSI C95.2-1982(Reference [3])--yellow or more durable color for outdoor longevity).
- COMPLETE
SEE A-3
9. Camouflaged antennas shall have 4inch x 4inch signage permanently mounted to the exterior of the RF screen as provided below. The sign shall be weatherproof with contrasting background color and shall contain the yellow triangle around the antenna symbol (see ANSI C95.2-1982(Reference [3]))--yellow or more durable color for outdoor longevity). Signage locations(s) and detail of the sign shall be included on the plans.
- COMPLETE
10. Cables/wiring shall not be allowed in exit enclosures, smoke-proof towers, elevator shafts, or in front of dry standpipes. 2010 CFC 1022.4 and 509.2
- COMPLETE
11. Antennas shall not be mounted closer than the exclusion zone plus 4 feet for installations near fire escapes, stair penthouse doors, exterior standpipe outlets, skylights, or other fire department operations considerations.
- COMPLETE
12. There is no guarantee that the fire department will not shutdown the power to the site in an emergency situation although in order to reduce the site operator's possible loss of service the following information may be provided at the equipment room entrance:

Provide emergency shutdown procedure signage. The sign shall include the following:

* Emergency 24 hour/7 day a week NOC / field technician telephone number for RF shutdown.
* Cell site identification number.
* Map to location of electrical main-electrical main shall be clearly identified with a permanent red label and white lettering.
* Map to location of battery cabinets and breakers-cabinets and breakers shall be clearly identified with a permanent red label and white lettering.
* Any other relevant information or procedures as required for the individual cellular site.
* The sign shall be clearly labeled in a phenolic label with a white background and black lettering. The title block shall be a red background and 1" high white lettering. Multiple signs may need to be installed based upon the cellular site configuration.
* The actual breaker(s) shall be a phenolic label (red background and white lettering) with lettering not less than 1/8" high.
* A copy of the signage shall be included on a drawing sheet.

Prepared by: Mr. Kevin R. Sorensen, SE
(Please include professional title and stamp)

Firm Name: STREAMLINE ENGINEERING & DESIGN, INC.
Address: 8445 SIERRA COLLEGE BLVD, SUITE E
GRANITE BAY, CA 95746
Phone Number: 1-916-660-1930

For further information see the FCC website: <http://www.fcc.gov/oet/rfsafety> or contact the
San Francisco Fire Department
1660 Mission Street, 4th Floor
San Francisco, CA 94103z
(415) 558-6187

GIFT CENTER & JEWELRY MART

SF13084A
888 BRANNAN ST
SAN FRANCISCO, CA 94103

ISSUE STATUS

Δ	DATE	DESCRIPTION	
	06/26/12	ZD 100%	C.C.
	08/03/12	CLIENT REV	K.P.
	08/16/12	CLIENT REV	K.P.
	06/19/13	CLIENT REV	J.S.
	08/29/13	CD 90%	H.H.
	-	-	-

DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 08/29/13



8445 Sierra College Blvd, Suite E, Granite Bay, CA 95746
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineengineering.com Fax: 916-660-1941

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T-MOBILE WEST CORPORATION
T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
FIRE DEPARTMENT CHECKLIST
SHEET NUMBER:
T-2

**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by T-Mobile West LLC, a personal wireless telecommunications carrier, to evaluate proposed modifications to its existing base station (Site No. SF13084A) located at 888 Brannan Street in San Francisco, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Background

The San Francisco Department of Public Health has adopted a 10-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable limits set by the FCC for exposures of unlimited duration are:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5,000-80,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30-300	1.00	0.20

The site was visited by Mr. Dhruva Dandekar, a qualified engineer employed by Hammett & Edison, Inc., during normal business hours on August 8, 2012, a non-holiday weekday, and reference has been made to information provided by T-Mobile, including zoning drawings by Streamline Engineering and Design, Inc., dated June 26, 2012.

Checklist

1. The location of all existing antennas and facilities at site. Existing RF levels.
T-Mobile had installed one directional panel antenna within a view screen enclosure on the side of the penthouse above the east corner of the four-story commercial building located at 888 Brannan Street. Existing RF levels for a person at ground near the site were less than 1% of the most restrictive public exposure limit. The measurement equipment used was a Wandel & Goltermann Type EMR-300 Radiation Meter with Type 18 Isotropic Electric Field Probe (Serial No. F-0034). The meter and probe were under current calibration by the manufacturer. Similar antennas for use by Clearwire and Sprint Nextel had been observed on two penthouses above the upper roof of the same building.

**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

up to 28 feet out from the antenna faces and to much lesser distances above, below, and to the sides; this does not reach the roof of the building or any publicly accessible areas.

9. Describe proposed signage at site.
Due to their mounting locations, the T-Mobile antennas would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 6 feet directly in front of the antennas themselves, such as might occur during maintenance work above the lower roof, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs* at the roof access door and at the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines. Similar measures should already be in place for the other carriers at the site; applicable keep-back distances for those carriers have not been determined as part of this study.

10. Statement of authorship.
The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2013. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

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

**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

2. The location of all approved (but not installed) antennas and facilities. Expected RF levels from approved antennas.

No other WTS facilities are reported to be approved for this site but not installed.

3. The number and types of WTS within 100 feet of proposed site and estimates of additive EMR emissions at proposed site.

There were no other WTS facilities observed within 100 feet of the site.

4. Location (and number) of Applicant's antennas and back-up facilities per building and location (and number) of other WTS at site.

T-Mobile proposes to remove its existing antenna and to install six Ericsson Model AIR21 directional panel antennas on the sides of the three penthouses above the west, south, and east corners of the lower roof. The antennas would be mounted with up to 3° downtilt at effective heights of at least 71 feet above ground, 10 feet above the roof, and would be oriented in pairs toward 55°T, 140°T, and 270°T.

5. Power rating (maximum and expected operating power) for all existing and proposed backup equipment subject to application.

The expected operating power of the T-Mobile transmitters is reflected in the resulting effective radiated power given in Item 6 below; the transmitters may operate at a power below their maximum rating. The power ratings of the other carriers' transmitters are not known.

6. Total number of watts per installation and total number of watts for all installations at site.

The maximum effective radiated power proposed by T-Mobile in any direction is 4,640 watts, representing simultaneous operation at 2,460 watts for AWS and 2,180 watts for PCS. The numbers of watts for the other carriers' operations are not known, though their contribution to RF exposure levels are reflected in the measurements reported in Item 1 above.

7. Plot or roof plan showing method of attachment of antennas, directionality of antennas, and height above roof level. Discuss nearby inhabited buildings.

The drawings show the proposed antennas to be installed as described in Item 4 above. There were noted no buildings of similar height nearby.

8. Estimated ambient RF levels for proposed site and identify three-dimensional perimeter where exposure standards are exceeded.

For a person anywhere at ground, the maximum RF exposure level due to the proposed T-Mobile operation by itself is calculated to be 0.0026 mW/cm², which is 0.26% of the applicable public exposure limit. Ambient RF levels at the site are therefore estimated to be below 1.3% of the limit. The three-dimensional perimeter of RF levels equal to the public exposure limit is calculated to extend

**T-Mobile West LLC • Base Station No. SF13084A
888 Brannan Street • San Francisco, California**

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of the T-Mobile West LLC base station located at 888 Brannan Street in San Francisco, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Posting explanatory signs is recommended to establish compliance with occupational exposure limitations.



William F. Hammett
William F. Hammett, P.E.
707/996-5200

August 13, 2012

**GIFT CENTER
& JEWELRY
MART**

SF13084A
888 BRANNAN ST
SAN FRANCISCO, CA 94103

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	-	-	-

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 08/29/13

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T-MOBILE WEST CORPORATION
T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
EMF REPORT

SHEET NUMBER:
T-3

SIGNAGE AND STRIPING INFORMATION

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



NOTICE TO WORKERS

RADIO FREQUENCY ANTENNAS ON THIS ROOF. PLEASE EXERCISE CAUTION AROUND ANTENNAS AND OBEY POSTED SIGNS AND/OR MARKINGS. FOR ACCESS TO RESTRICTED AREAS OR FOR FURTHER INFORMATION, PLEASE CALL 1-888-662-4662 (SITE NUMBER: SF13084)

IN ACCORDANCE WITH FCC RULES 47 CFR 1.1310

AVISO A TRABAJADORES

EXISTEN ANTENAS DE RADIOFRECUENCIA EN ESTE TECHO. POR FAVOR USE PRECAUCION ALREDEDOR DE LAS ANTENAS Y OBEDEZCA A LAS ZONAS RESTRINGIDAS O PARA OBTENER MAS INFORMACION, LLAME AL TELEFONO 1-888-662-4662 (NUMERO DE SITIO: SF13084)

DE ACUERDO A LAS REGLAS DE FCC 47 CFR 1.1310

工作人員注意

此屋宇房頂有射頻天線裝置
在天線範圍四周務請小心,並遵照各已張貼之指示及/或標識行事
如需進入禁區範圍或索取更多資料
請致電1-888-662-4662 此站區號:(SF13084)

依據FCC條例第47 CFR1.1310 款執行

NOTES:

1. WARNING SIGN TO BE MOUNTED AT ANTENNA LOCATIONS.
2. SIGN SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS.
3. SIGNAGE SHALL BE CLEARLY LABELED IN A PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING, AND SHALL BE READABLE FROM AT LEAST (15) FEET FROM THE SIGN.
4. PROPOSED 12"x20" PLASTIC SIGN

1 MULTI-LANGUAGE SIGN

NOTICE



Radio frequency fields beyond this point may exceed the FCC general public exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

In accordance with Federal Communications Commission rules on radio frequency emissions 47 CFR 1.1307(b)

SITE NO. SF13084

2 TYPICAL CAUTION SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED AT ANTENNA LOCATIONS.



NOTICE



GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS

- All personnel should have electromagnetic energy (EME) awareness training.
- All personnel entering this site must be authorized. Obey all posted signs.
- Assume all antennas are active. Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 3 feet clearance from all antennas. Do not stop in front of antennas. Use personal RF monitors while working near antennas.
- Never operate transmitters without shields during normal operation.
- Do not operate base station antennas in equipment rooms.

3 TYPICAL CAUTION SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED TO THE STAIRWELL SIDE OF THE ROOF ACCESS

EMERGENCY SHUT DOWN

FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE.

- 1) CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NO.

CONTACT PHONE NUMBER: 1-888-662-4662
SITE IDENTIFICATION NUMBER: SF13084

- 2) DISCONNECT POWER AT MAIN SERVICE DISCONNECT:

(CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (5) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS)

- 3) DISCONNECT BACK-UP POWER AT BATTERY DISCONNECT:

(CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (5) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS)

SIGN SHALL BE A PHENOLIC LABEL WITH WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.

4 TYPICAL DISCONNECT SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED AT THE FOLLOWING LOCATIONS:

- 1) CELL SITE EQUIPMENT ROOM DOOR
- 2) BATTERY LOCATION WITHIN PROXIMITY OF BATTERY DISCONNECT
- 3) FCC (FIRE CONTROL CENTER) ROOM WITHIN PROXIMITY OF THE FIRE ALARM PANEL
- 4) BUILDING'S MAIN ELECTRICAL ROOM WITHIN PROXIMITY OF THE MAIN SHUTOFF
- 5) THE CELL SITE MAIN ELECTRICAL DISCONNECT

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DRAWN BY: C. CODY

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T-MOBILE WEST CORPORATION



1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:

SIGNAGE DETAILS

SHEET NUMBER:

T-4

SITE ENVIRONMENTAL INFORMATION

BATTERY TYPE:	NSB100FT		
NUMBER OF BTS UNITS W/BATTERIES:	1		
NUMBER OF BATTERIES PER SITE:	8		
MATERIAL:	ELECTROLYTE	VOLUME: 1.2 GALLONS	SITE TOTAL: 4.8 GALLONS
MATERIAL:	ACID	VOLUME: 0.4 GALLONS	SITE TOTAL: 1.6 GALLONS
MATERIAL:	LEAD	WEIGHT: 34.5 LBS	SITE TOTAL: 138 LBS
MATERIAL:	LEAD OXIDE	WEIGHT: 17.7 LBS	SITE TOTAL: 70.8 LBS

NOTE: A SEPARATE PERMIT SHALL BE REQUIRED FROM S.F.F.D. IF BATTERY ELECTROLYTE EXCEEDS 50 GALLONS

MATERIAL SAFETY DATA SHEET LEAD ACID BATTERY



I. PRODUCT IDENTIFICATION:

A. Chemical/Trade Name (per on label): Lead Acid Battery

B. Chemical Family/Classification: Electrical Storage Battery

C. Manufacturer's Name & Address: NorthStar Battery Co. LLC
4000 Continental Way
Springfield, MO 65803

D. Contact: U.S. - NSB Safety and Health Department
Phone: (417) 575-8219
Fax: (417) 575-8250
Aust. NorthStar Battery Pty Ltd
Phone: 02 9588 1998

E. Emergency Information: Chemtrec (US, Canada & Mexico)
Phone: (800) 424-9300
Chemtrec (Outside US, Canada & Mexico)
Phone: +1 (703) 527-3887 (call collect)

F. Non-Hazardous Classification
Per US DOT, Northstar Battery Company products, submitted and tested by Wyle Labs, have been deemed to meet all requirements as specified in 49CFR§ 173.159 (d) for exception as hazardous material classification.

II. HAZARDOUS INGREDIENTS/IDENTITY INFORMATION:

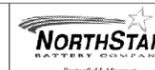
NORTH AMERICAN INFORMATION:			Air Exposure Limits (ug/m ³)		
Materials	Approx % by Wt.*	CAS Number	OSHA	AGGH (TLV)	NIOSH
Lead	50	7439-92-1	50	150	100
Lead Oxide	20	1309-60-0	50	150	100
Electrolyte (Sulfuric Acid) 1.400 sp	17	7664-93-9	1	1	1

*Please reference Appendix 1 (SES-544-16) for detailed product data.

Chemical or Material	Australian Dangerous Goods Classification	Hazardous Substance Classification as per NOHSC Australia	Australian Poison Schedule Classification
Non-Spillable Lead Acid Battery	Exempt under A67 (NATA Identification Guide) and Class 238 of the Australian Dangerous Goods Code, Appendix 3.	Exempt	Schedule 6: Agricultural, Domestic and Industrial Substances

Note: Product contains toxic chemicals that are subject to the reporting requirements of Section 302 and 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

MATERIAL SAFETY DATA SHEET LEAD ACID BATTERY



III. PHYSICAL DATA:

Material is solid at normal temperatures.

A. Electrolyte:

- Specific Gravity: 1.250 – 1.350 kg/dm³
- Boiling Point: 110°C (230°F)
- % Volatiles By Weight: Not Applicable
- Solubility in Water: 100%
- Melting Point: 327°C (621°F)
- Vapor Density: Not Determined

B. Appearance and Odor:

- Electrolyte is a clear liquid with an acidic odor.

IV. HEALTH HAZARD INFORMATION:

Under normal operating conditions, because the battery is "non-spillable", the internal material will not be hazardous to your health. Only internally exposed material during production or case breakage or extreme heat (fire) may be hazardous to your health.

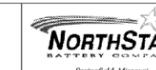
A. Routes of Entry:

- Inhalation: Acid mist from formation process may cause respiratory irritation.
- Skin Contact: Acid may cause irritation, burns and/or ulceration.
- Skin Absorption Not a significant route of entry.
- Eye Contact: Acid may cause severe irritation, burns, cornea damage and/or blindness.
- Ingestion: Acid may cause irritation of mouth, throat, esophagus and stomach.

B. Signs and Symptoms of Over Exposure:

- Acute Effects: Over exposure to lead may lead to loss of appetite, constipation, sleeplessness and fatigue. Over exposure to acid may lead to skin irritation, corneal damage of the eyes and upper respiratory system.
- Chronic Effects: Lead and its components may cause damage to kidneys and nervous system. Acid and its components may cause lung damage and pulmonary conditions.
- Potential to Cause Cancer: The International Agency for Research on Cancer has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, a substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery. Inorganic acid mist is not generated under normal use of this product. Misuse of the product, such as overcharging, may however result in the generation of sulfuric acid mist.

MATERIAL SAFETY DATA SHEET LEAD ACID BATTERY



C. Emergency and First Aid Procedures:

- Inhalation: Remove from exposure, move to fresh air, and apply oxygen if breathing is difficult. Consult physician immediately.
- Skin: Wash with plenty of soap and water for at least 15 minutes. Remove any contaminated clothing. Consult physician if skin irritation appears.
- Eyes: Flush with plenty of water immediately for at least 15 minutes, lifting lower and upper eyelids occasionally. Consult a physician immediately.
- Ingestion: Do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Consult a physician immediately.

D. HANDLING AND STORAGE:

- Safe Storage: Store in a cool, dry place in closed containers. Keep away from ignition sources and high temperatures.
 - Contact NorthStar Battery Company (417-675-8200) for shelf life information.
- Handling: Avoid skin or eye contact. Avoid breathing vapors. Do not use near sources of ignition.

V. CARCINOGENICITY: See section IV, Part B "Signs and Symptoms of Over Exposure" MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: See section IV, Part B "Signs and Symptoms of Over Exposure"

VI. FIRE AND EXPLOSION HAZARD DATA:

A. Flash Point: Hydrogen = 259°C

B. Auto Ignition Temperature: Hydrogen = 580°C

C. Extinguishing Media: Dry chemical, foam, CO₂

D. Unusual Fire and Explosion Hazards: Hydrogen and oxygen gases are produced in the cells during normal battery operation (hydrogen is flammable and oxygen supports combustion). These gases enter the air through the vent caps. To avoid the chance of a fire or explosion, keep sparks and other sources of ignition away from the battery.

E. Firefighting PPE: Full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece

VII. REACTIVITY DATA:

A. Stability: Stable

B. Conditions to Avoid: Sparks and other sources of ignition.

C. Incompatibility: (materials to avoid)

- Lead/lead compounds: Potassium, carbides, sulfides, peroxides, phosphorus, sulfur.

Appendix 1

MATERIAL SAFETY DATA SHEET LEAD ACID BATTERY



2. Battery electrolyte (acid): Combustible materials, strong reducing agents, most metals, carbides, organic materials, chlorates, nitrates, picrates, and fulminates.

D. Hazardous Decomposition Products:

- Lead/lead compounds: Oxides of lead and sulfur.
- Battery electrolyte (acid): Hydrogen, sulfur dioxide, and sulfur trioxide.

E. Conditions to Avoid:

High temperature. Battery electrolyte (acid) will react with water to produce heat. Can react with oxidizing or reducing agents.

VIII. CONTROL MEASURES:

A. Engineering Controls:

Store lead/acid batteries with adequate ventilation. Room ventilation is required for batteries utilized for standby power generation. Never recharge batteries in an unventilated, enclosed space.

B. Work Practices:

Do not remove vent covers. Follow shipping and handling instructions which are applicable to the battery type. To avoid damage to terminals and seals, do not double-stack industrial batteries.

C. Personal Protective Equipment:

- Respiratory Protection: None required under normal handling conditions. During battery formation (high-rate charge condition), acid mist can be generated which may cause respiratory irritation. Also, if acid spillage occurs in a confined space, exposure may occur. If irritation occurs, wear a respirator suitable for protection against acid mist.
- Eyes and Face: Chemical splash goggles are preferred. Also acceptable are "visor-gogs" or a chemical face shield worn over safety glasses.
- Hands, Arms, Body: Vinyl coated, VC, gauntlet type gloves with rough finish are preferred.
- Other Special Clothing and Equipment: Safety shoes are recommended when handling batteries. All footwear must meet requirements of ANSI Z41.1-Rev. 1972.

IX. ACCIDENTAL RELEASE MEASURES:

A. Not applicable under normal conditions.

B. In case of damage resulting in breakage of the battery container, see VIII, Sec. C Personal Protective Equipment.

MATERIAL SAFETY DATA SHEET LEAD ACID BATTERY



X. PRECAUTIONS FOR SAFE HANDLING AND USE:

A. Hygiene Practices: Following contact with internal battery components, wash hands thoroughly before eating, drinking, or smoking.

B. Respiratory Protection: Wear safety glasses. Do not permit flames or sparks in the vicinity of battery(s). If battery electrolyte (acid) comes in contact with clothing, discard clothing.

C. Protective Measures:

- Remove combustible materials and all sources of ignition. Cover spills with soda ash (sodium carbonate) or quicklime (calcium oxide). Mix well. Make certain mixture is neutral, then collect residue and place in a drum or other suitable container. Dispose of as hazardous waste.
- Wear acid-resistant boots, chemical face shield, chemical splash goggles, and acid-resistant gloves. Do not release unneutralized acid.

D. Waste Disposal Method (*):

- Battery electrolyte (acid): Neutralize as above for a spill, collect residue, and place in a drum or suitable container. Dispose of as hazardous waste.
- Do not flush lead contaminated acid to sewer.
- In case of accidental spill, utilize personal protective equipment, i.e., face shield, rubber apron, rubber safety shoes.
- Batteries: Send to lead smelter for reclamation following applicable Federal, State and local regulations. Product can be recycled along with automotive (SLI) lead acid batteries.
- Battery may be returned, shipping pre-paid, to the manufacturer or any distributor for recycling. See 1.C for manufacturer's address or visit our web site @ www.northstarbattery.com.

*In accordance to Local, State and Federal regulations and laws.

E. Other Handling and Storage Precautions: None Required.

XI. ECOLOGICAL INFORMATION:

Lead and its compounds can pose a threat if released to the environment. See Waste Disposal Method in Section X, Part D.

MATERIAL SAFETY DATA SHEET LEAD ACID BATTERY



XII. NFPA HAZARD RATING: SULFURIC ACID:

Flammability (Red)	=	0
Health (Blue)	=	3
Reactivity (Yellow)	=	1

XIII. DEPARTMENT OF TRANSPORTATION AND INTERNATIONAL SHIPPING REGULATIONS:

Proper Shipping Name	UN2800 - Battery, wet, non-spillable (electric storage)
IATA	Batteries must be packed to protect against short circuits and firmly secured to skids or pallets. Packaging instruction 806 Not restricted per special provision A67.
US DOT	Northstar Battery Company products, submitted and tested by Wyle Labs, have been deemed to meet all requirements as specified in 49CFR§ 173.159 (d) for exception as hazardous material classification.
IMDG	Northstar Battery Company products, submitted and tested by Wyle Labs, have been deemed to meet all requirements as specified in special provision 238 for determination of "Non-Spillable" and are not subject to the provision of this Code.

XIV. SPECIAL REQUIREMENTS:

TLV

- Sulfuric Acid - Occupation Exposure Limit - AUSTRALIA TWA 1mg/m³, JAN1993
- Lead - Occupation Exposure Limit - AUSTRALIA TWA 0.15 mg/m³, 2002



NorthStar Battery Lead and Acid Weights per 12-Volt Module

Battery Type	Weight	Battery Type													
		NSB49	NSB70	NSB70	NSB90	NSB125	NSB10FT	NSB10FT	NSB10FT	NSB10FT	Tank	NSB10FT	NSB10FT	NSB10FT	NSB10FT
Electrolyte	kg	2.7	4.5	4.5	6.2	8.5	2.4	3.8	5.3	6.1	8.1	6.8	8.1	9.9	10.5
	lbs	5.9	9.9	9.9	13.8	18.6	5.3	8.3	11.6	13.4	20.0	14.9	17.8	21.6	23.2
Volume	liters	1.99	3.38	3.36	4.65	6.29	1.78	2.79	3.92	4.51	6.87	5.82	5.99	7.40	7.81
	gallons	0.53	0.90	0.90	1.24	1.68	0.47	0.75	1.05	1.20	1.83	1.54	1.60	1.96	2.08
Acid	kg	1.2	2.0	2.0	2.8	3.8	1.1	1.7	2.4	2.8	3.9	3.0	3.6	4.4	4.8
	lbs	2.6	4.3	4.4	6.2	8.4	2.4	3.7	5.2	6.1	8.6	6.7	8.0	9.7	10.5
Volume	liters	0.85	1.07	1.10	1.52	2.08	0.99	0.92	1.20	1.52	2.12	1.68	1.98	2.40	2.41
	gallons	0.17	0.29	0.29	0.41	0.55	0.16	0.25	0.34	0.41	0.56	0.44	0.53	0.64	0.70
Lead	kg	8.9	14.9	14.6	19.7	22.0	7.2	9.8	13.6	15.6	19.8	18.4	20.5	23.2	26.4
	lbs	19.7	32.9	32.2	43.5	48.4	15.8	21.7	30.0	34.5	41.5	40.8	45.1	51.1	58.7
Lead Oxide	kg	3.2	4.7	5.3	7.5	10.4	3.0	4.7	6.3	8.6	8.4	8.4	10.1	11.4	13.6
	lbs	7.0	10.4	11.7	16.5	23.0	6.5	10.3	13.9	17.7	18.6	18.6	22.2	25.2	29.9

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DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 08/29/13

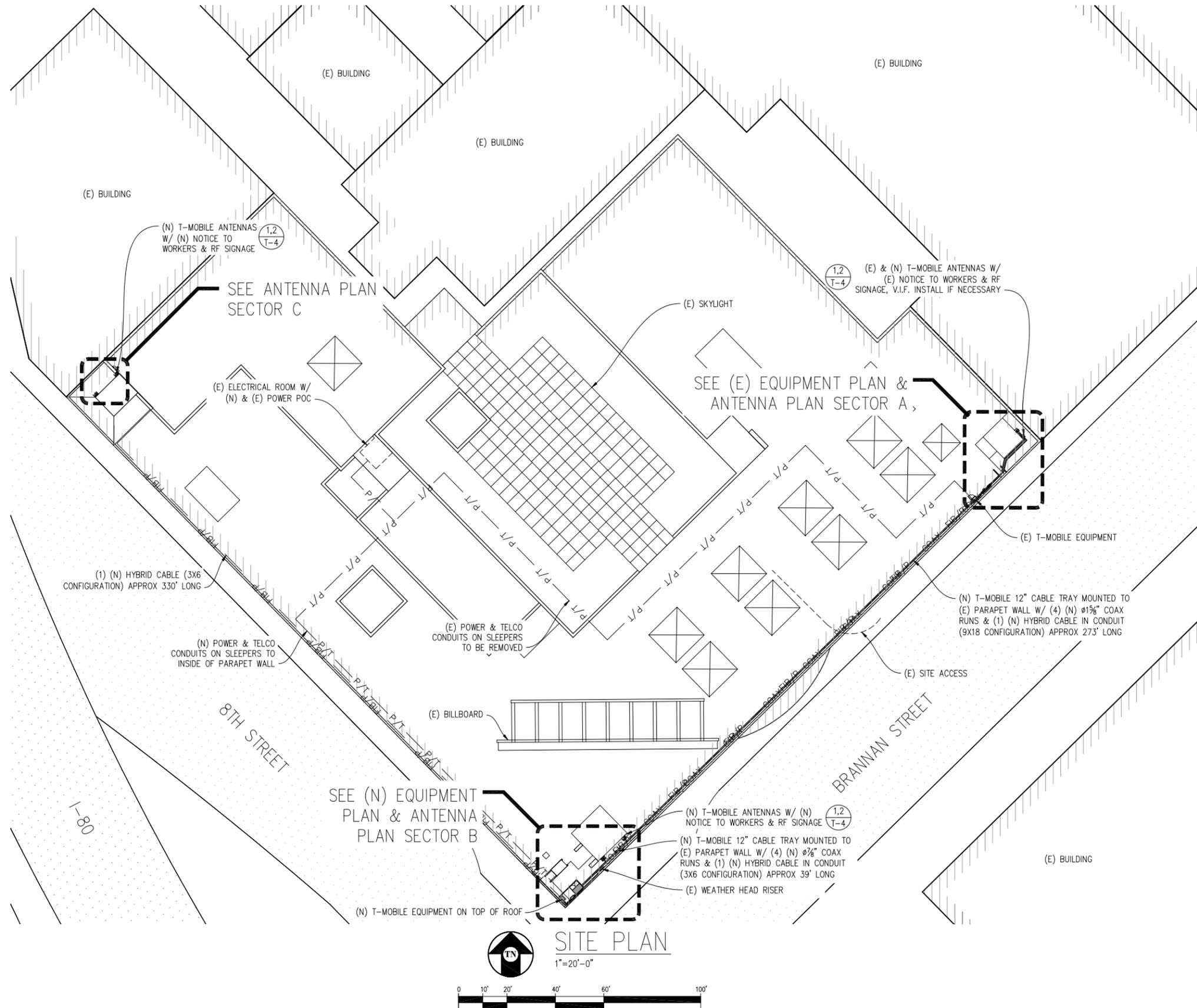


8445 Sierra College Blvd, Suite E, Granite Bay, CA 95746
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineengineering.com Fax: 916-660-1941

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PROJECT GENERAL NOTES

- THIS FACILITY IS AN UNOCCUPIED WIRELESS TELECOMMUNICATION FACILITY.
- PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRM THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PAY FOR PERMIT FEES, AND TO OBTAIN SAID PERMITS AND TO COORDINATE INSPECTIONS.
- THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- CALL BEFORE YOU DIG. CONTRACTOR IS REQUIRED TO CALL 811 (NATIONWIDE "CALL BEFORE YOU DIG" HOTLINE) AT LEAST 72 HOURS BEFORE DIGGING.
- ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONTRACTOR SHALL ALSO COORDINATE ALL PORTIONS OF THE WORK UNDER THE CONTRACT; INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION MANAGER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF THE PROJECT MANAGER.
- KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH. REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED, OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND ALL OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES.
- DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- THE CONTRACTOR SHALL PROVIDE A TOILET FACILITY DURING ALL PHASES OF CONSTRUCTION.
- SUFFICIENT MONUMENTATION WAS NOT RECOVERED TO ESTABLISH THE POSITION OF THE BOUNDARY LINES SHOWN HEREON. THE BOUNDARY REPRESENTED ON THIS MAP IS BASED ON COMPILED RECORD DATA AND BEST FIT ONTO EXISTING IMPROVEMENTS. IT IS POSSIBLE FOR THE LOCATION OF THE SUBJECT PROPERTY TO SHIFT FROM THE PLACEMENT SHOWN HEREON WITH ADDITIONAL FIELD WORK AND RESEARCH. THEREFORE ANY SPATIAL REFERENCE MADE OR SHOWN BETWEEN THE RELATIONSHIP OF THE BOUNDARY LINES SHOWN HEREON AND EXISTING GROUND FEATURES, EASEMENTS OR LEASE AREA IS INTENDED TO BE APPROXIMATE AND IS SUBJECT TO VERIFICATION BY RESOLVING THE POSITION OF THE BOUNDARY LINES.
- THE CONTRACTOR TO VERIFY THE LATEST/CURRENT RF DESIGN.
- WHERE APPLICABLE, CONTRACTOR SHALL PROVIDE SEPARATE PLANS, SPECIFICATIONS, FEES AND PERMITS FOR ANY REVISION TO ANY FIRE SPRINKLER AND/OR ALARM SYSTEM ON THE PREMISES AS MAY BE NEEDED TO COMPLETE THE WORK DEPICTED HEREIN, USING A C-10 LICENSED SUBCONTRACTOR FOR ALL SUCH WORK.



GIFT CENTER & JEWELRY MART

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	08/16/12	CLIENT REV	K.P.
	06/19/13	CLIENT REV	J.S.
	08/29/13	CD 90%	H.H.
	-	-	-

DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 08/29/13

Streamline Engineering
and Design, Inc.

8445 Sierra College Blvd, Suite E, Granite Bay, CA 95746
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

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T-MOBILE WEST CORPORATION
T-Mobile

1655 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
A-1

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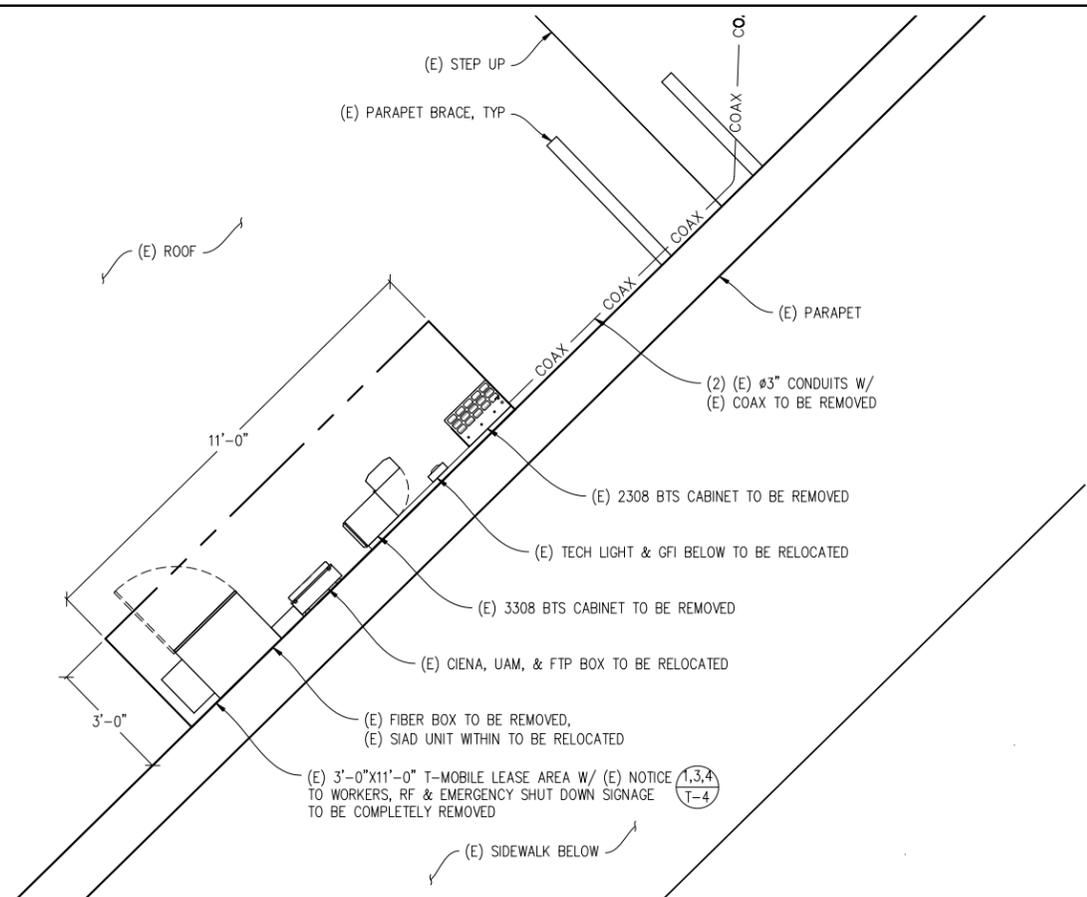
APPROVED BY: -

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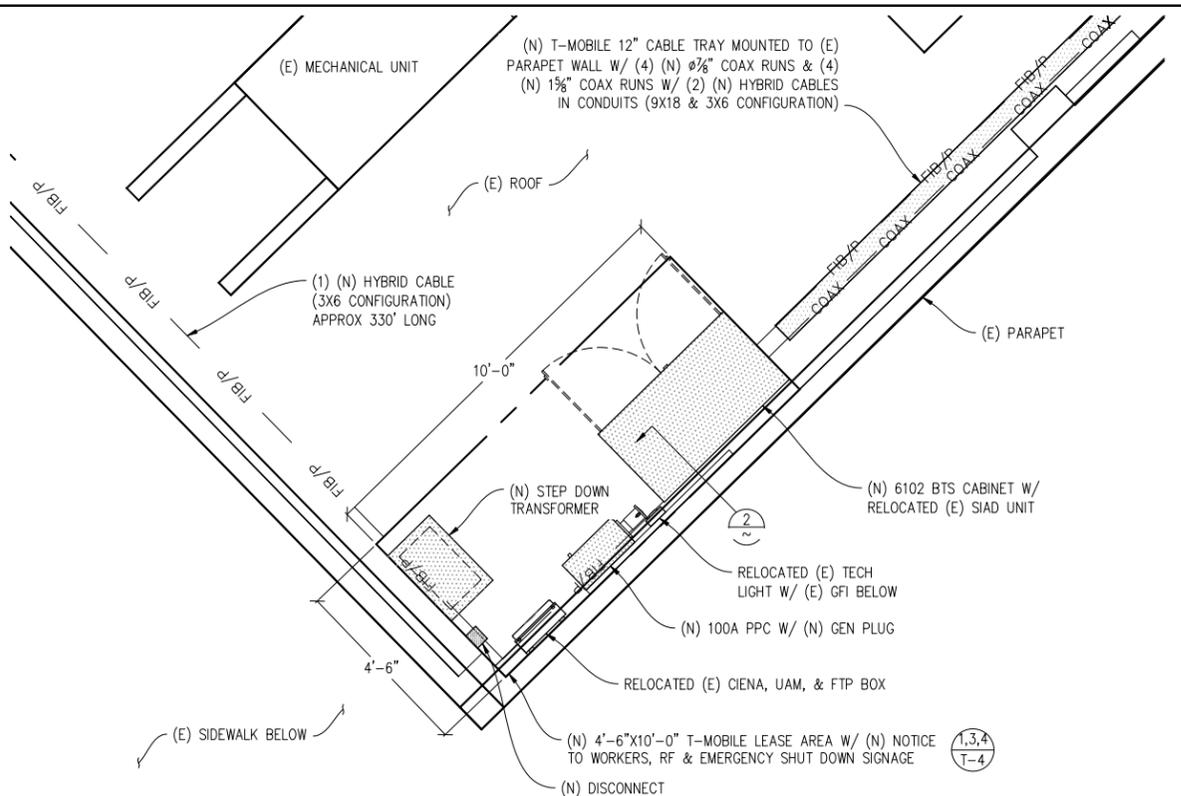
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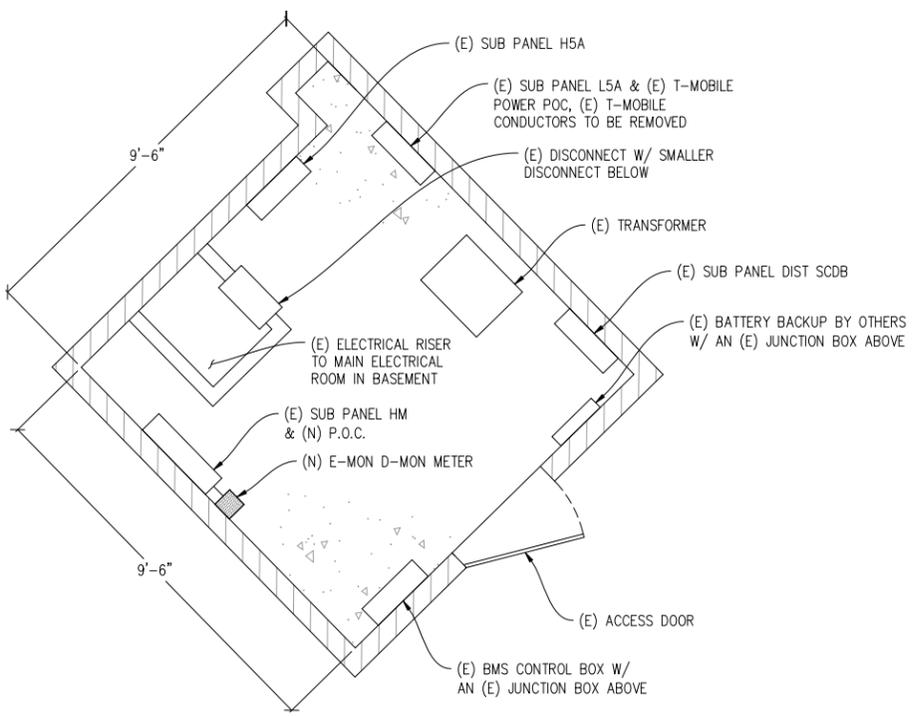
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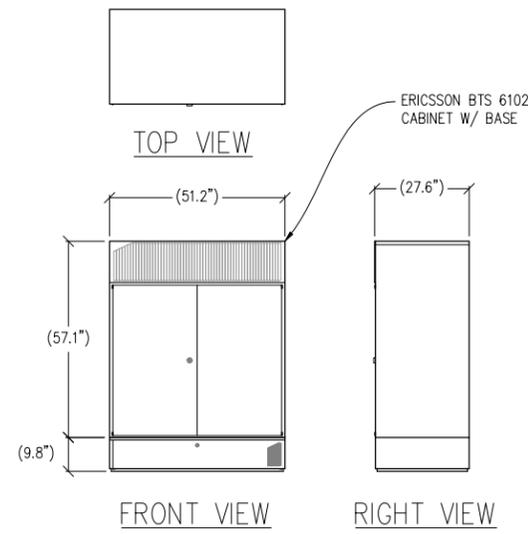
(E) EQUIPMENT PLAN
1/2"=1'-0"
NOTE: ENTIRE (E) T-MOBILE LEASE AREA TO BE REMOVED



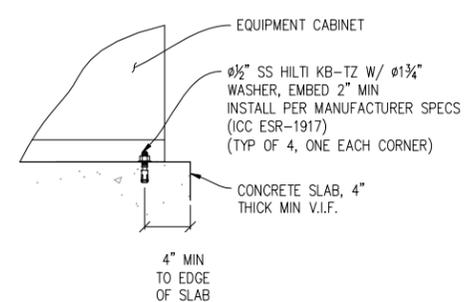
(N) EQUIPMENT PLAN
1/2"=1'-0"



5TH FLOOR ELECTRICAL ROOM PLAN
1/2"=1'-0"



1 BTS DETAIL
1/2"=1'-0" MAX WEIGHT: 1,500 LBS



2 CABINET TO CONC
1 1/2"=1'-0"

T-MOBILE WEST CORPORATION
T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

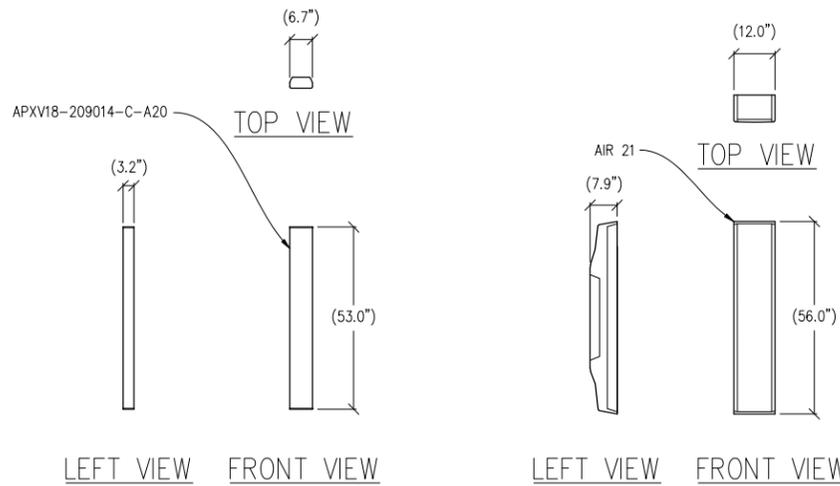
SHEET TITLE:
EQUIPMENT PLANS, ELECTRICAL
ROOM PLAN & DETAILS
SHEET NUMBER:
A-2

CONSTRUCTION NOTES

- EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS. IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS, NOTIFY ENGINEER OF RECORD PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND REVIEW EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED MAY BE GENERATED WITHOUT DELAY TO THE PROJECT.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
- THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2010 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2010 CBC, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.
- ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E).
- IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REMOVED, REPAIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTORS EXPENSE.
- ALL WEATHER PROOFING, INCLUDING BUT NOT LIMITED TO TORCH DOWN, CAULKING, Z-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REPAIRED REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.
- ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.

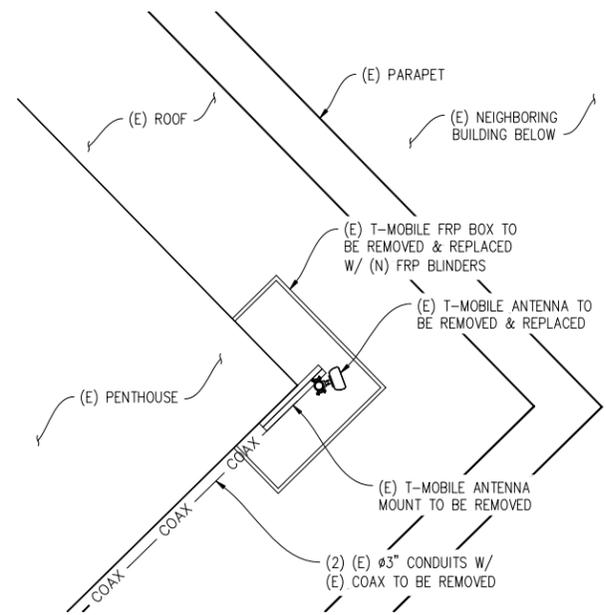
EXPANSION & EPOXY ANCHORS

- EXPANSION AND EPOXY ANCHORS SHALL BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE 2010 CALIFORNIA BUILDING CODE (CBC).
- ALL ANCHORS PROVIDED SHALL BE INCLUDED IN EVALUATION REPORTS OF THE INTERNATIONAL CODE COUNCIL (ICC), AND SHALL BE EVALUATED FOR 2006 IBC MINIMUM REQUIREMENTS. IN THE ICC REPORT
- CONCRETE EXPANSION ANCHORS SHALL BE KWIK BOLT TZ BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1917 OR APPROVED EQUIVALENT.
- CMU EXPANSION ANCHORS SHALL BE KWIK BOLT 3 BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1385 OR APPROVED EQUIVALENT. ANCHORS SHALL BE INSTALLED A MINIMUM OF 1 3/8" FROM ANY VERTICAL MORTAR JOINT TYPICAL. ANCHORS TO BE SPACED 8 INCHES ON CENTER MINIMUM AND LIMITED TO ONE ANCHOR PER CELL.
- CONCRETE & GROUT FILLED CMU ADHESIVE EPOXY ANCHORS SHALL BE HIT RE-500SD BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-2322 OR APPROVED EQUIVALENT.
- INSTALL EXPANSION AND EPOXY ANCHORS WITH SPECIAL INSPECTION IN ACCORDANCE WITH THE 2010 CBC, CHAPTER 17, AND ALL REQUIREMENTS OF THE MANUFACTURER, THE MANUFACTURER'S ICC APPROVAL AND THESE DRAWINGS.
- EXPANSION ANCHORS SHALL BE 304/316 STAINLESS STEEL U.O.N.. EPOXY ANCHOR THREADED ROD SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL U.O.N.
- LOCATE AND AVOID REINFORCEMENT AND OTHER EMBEDDED ITEMS WHEN INSTALLING ANCHORS, TYPICAL. SEE CONCRETE CORE DRILLING NOTES FOR ADDITIONAL INFORMATION.
- THE SPECIAL INSPECTOR MUST MAKE PERIODIC INSPECTIONS DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE AND DIMENSIONS, CONCRETE MEMBER THICKNESS, ANCHOR SPACING, EDGE DISTANCES, TIGHTENING TORQUE, HOLE DIAMETER, DEPTH AND CLEANLINESS, ANCHOR EMBEDMENT AND ADHERENCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE NOTE 10 BELOW FOR FREQUENCY OF INSPECTIONS.
- 50% OF ALL ANCHORS, INCLUDING ALTERNATE BOLTS IN A GROUP OF ANCHORS, SHALL BE INSPECTED PER NOTE 9 ABOVE AND TORQUE TESTED PER THE ICC REPORT TEST VALUES.

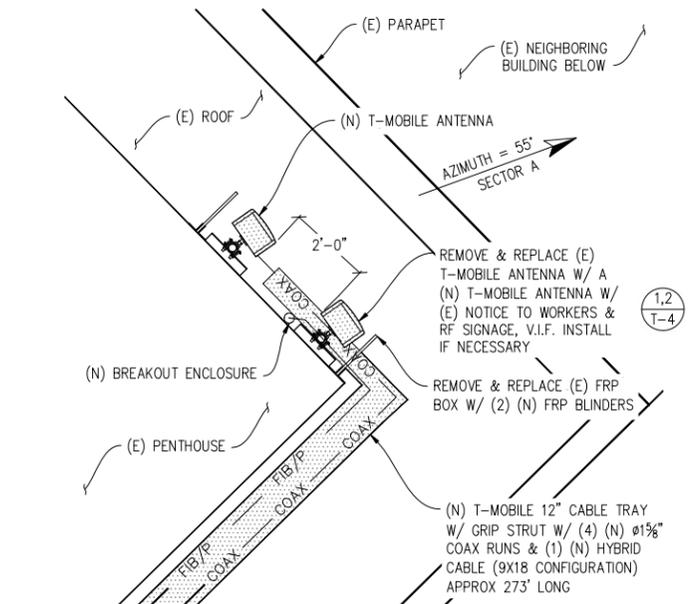


1 (E) ANTENNA DETAIL
1/2" = 1'-0"

2 (N) ANTENNA DETAIL
1/2" = 1'-0"

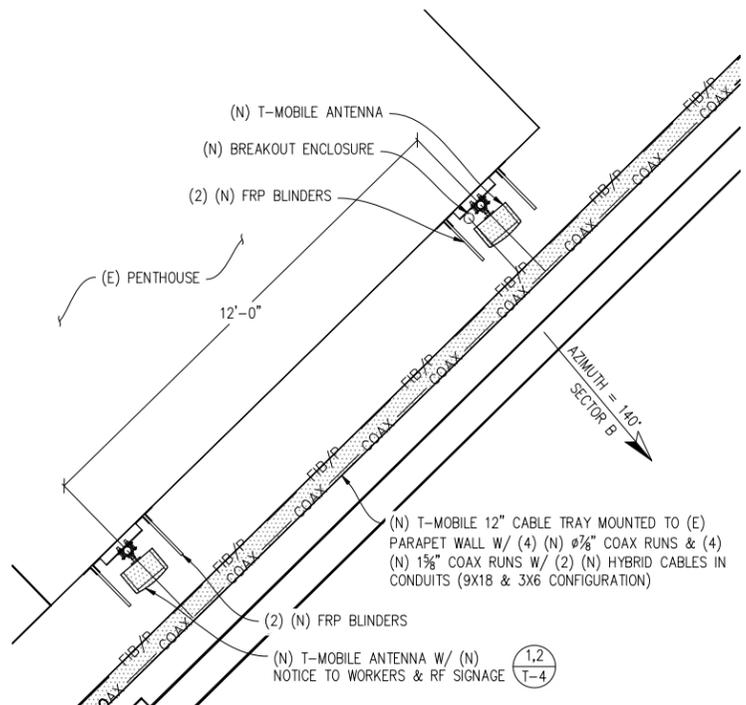


(E) ANTENNA PLAN SECTOR A
1/2" = 1'-0"



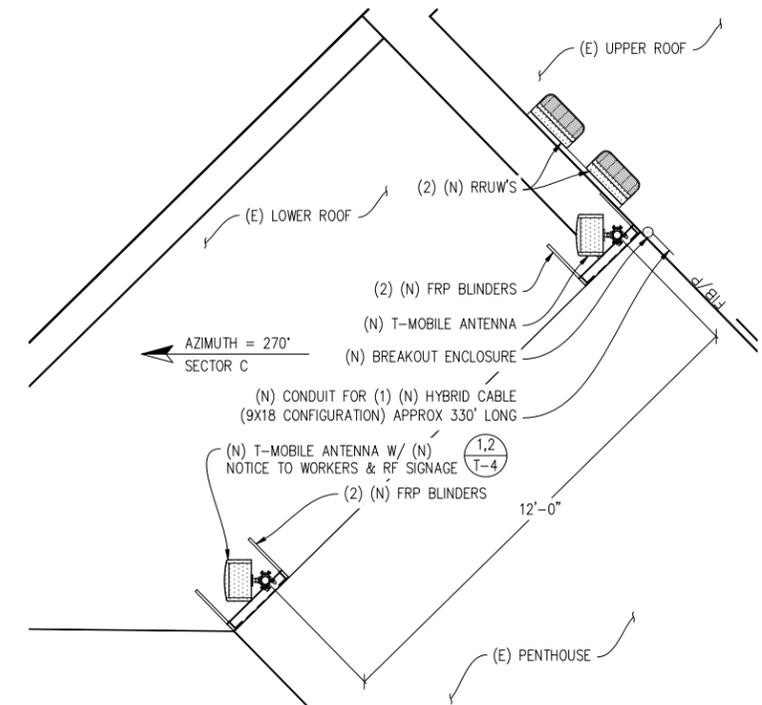
(N) ANTENNA PLAN SECTOR A
1/2" = 1'-0"

- NOTE:
- ALL (E) TMA'S TO REMAIN
 - PAINT ALL (N) ANTENNAS, (N) FRP BLINDERS, (N) CABLE TRAY, & EXPOSED COAX TO MATCH (E) BUILDING



(N) ANTENNA PLAN SECTOR B
1/2" = 1'-0"

- NOTE: PAINT ALL (N) ANTENNAS, (N) FRP BLINDERS, (N) CABLE TRAY, & EXPOSED COAX TO MATCH (E) BUILDING



(N) ANTENNA PLAN SECTOR C
1/2" = 1'-0"

- NOTE: PAINT ALL (N) ANTENNAS, (N) FRP BLINDERS, (N) CABLE TRAY, & EXPOSED COAX TO MATCH (E) BUILDING

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	08/16/12	CLIENT REV	K.P.
	06/19/13	CLIENT REV	J.S.
	08/29/13	CD 90%	H.H.
	-	-	-

DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 08/29/13

Streamline Engineering
and Design, Inc.

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Contact: Kevin Sorensen Phone: 916-660-1930
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SHEET TITLE:
ANTENNA PLANS & DETAILS

SHEET NUMBER:
A-3

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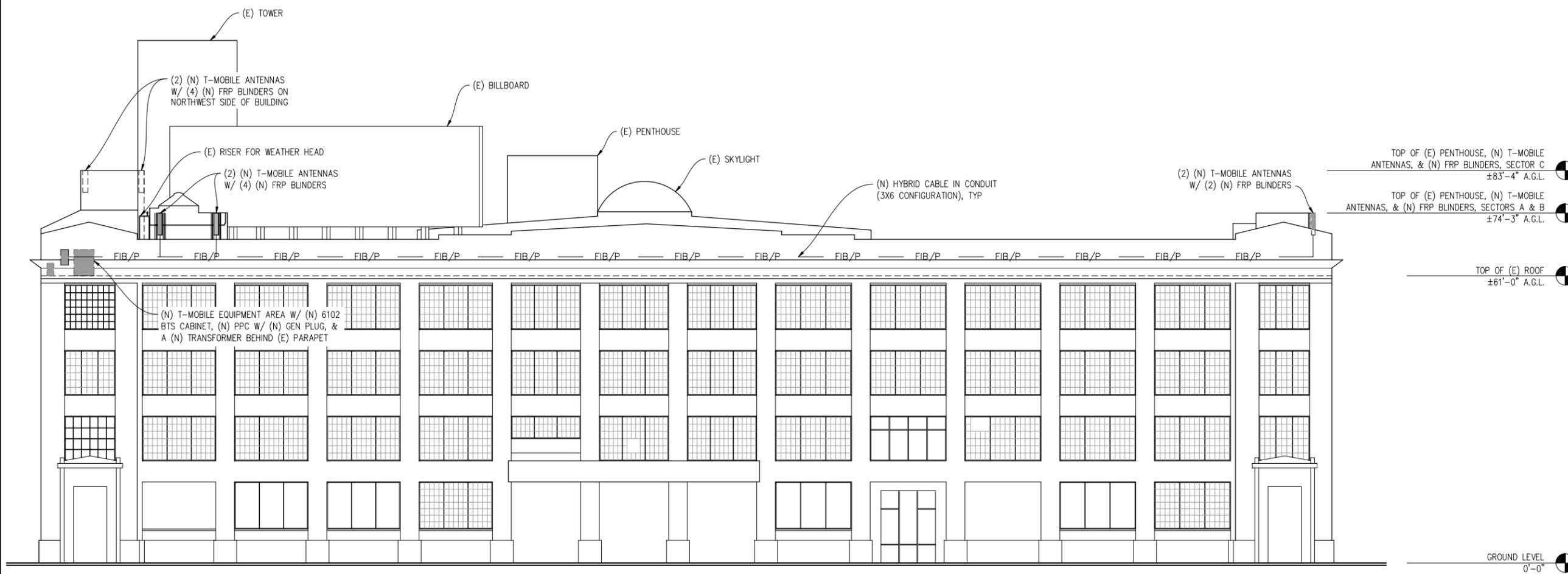
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SOUTHEAST ELEVATION

3/8" = 1'-0"

NOTE: PAINT ALL (N) ANTENNAS, (N) FRP BLINDERS, (N) CABLE TRAY, & EXPOSED COAX TO MATCH (E) BUILDING

T-MOBILE WEST CORPORATION

T-Mobile

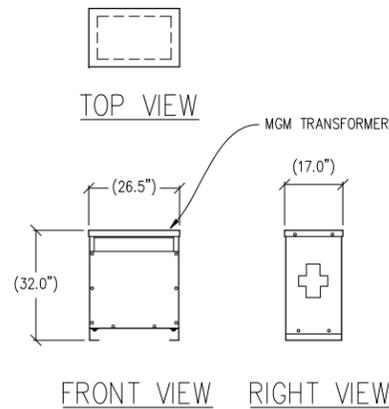
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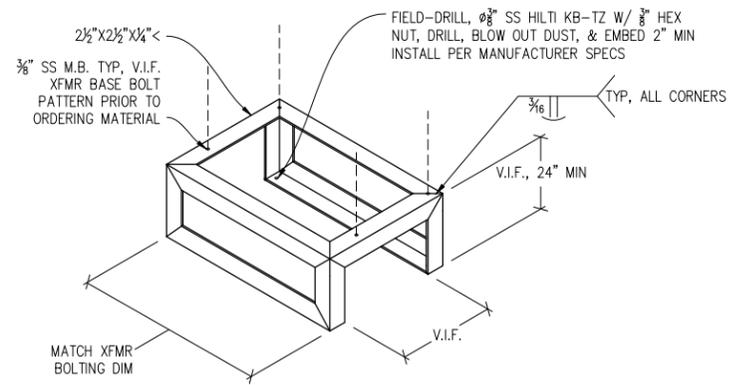
ELEVATION

SHEET NUMBER:

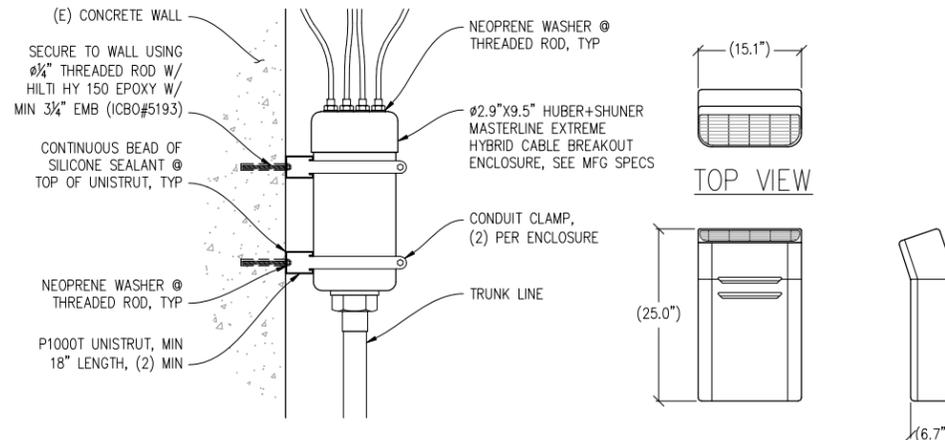
A-4



1 TRANSFORMER DETAIL
1/2"=1'-0"



2 TRANSFORMER MOUNT DETAIL
1"=1'-0"

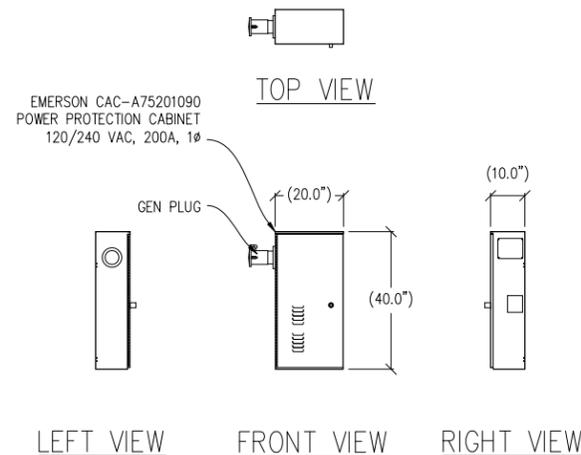


3 HYBRID CABLE ON CONCRETE WALL
NOT TO SCALE

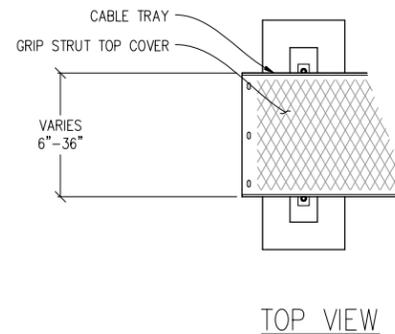
4 RRUW-01 DETAIL
1"=1'-0" WEIGHT = 55LBS
ERICSSON RRUW-01

CONCRETE CORE/DRILLING NOTES

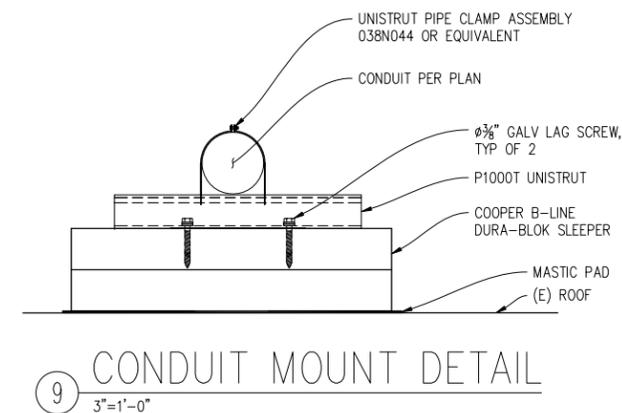
1. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED OR POST-TENSIONED REINFORCED CONCRETE (MILD REINFORCED), USE CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE (E) REINFORCING BARS. WHEN INSTALLING THEM INTO (E) PRE-STRESSED OR POST-TENSIONED CONCRETE LOCATE THE PRE-STRESSED OR POST-TENSIONED TENDONS BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, AT POINT OF PENETRATION, PRIOR TO INSTALLATION. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
2. WHEN CORING EXISTING REINFORCED CONCRETE OF ANY CONSTRUCTION TYPE (PRE-STRESSED, POST-TENSIONED OR MILD REINFORCED), LOCATE THE EXISTING REINFORCING BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, PRIOR TO CORING. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING ANY REINFORCING DURING CORING. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE CORE. THE MAXIMUM SIZE OF ANY CORE IS TO BE 6" DIAMETER AND THE MINIMUM SPACING BETWEEN CORES IS TO BE TWICE THE CORE DIAMETER (I.E. 12" SPACING FOR A 6" DIAMETER CORE).
3. INSPECTOR IS TO BE PRESENT DURING ALL CORE DRILLING OPERATIONS TO VERIFY THAT NO REINFORCING CABLES, TENDONS, OR REBAR HAVE BEEN CUT. (SEE NOTE 5 BELOW)
4. THE INSPECTOR SHALL SUBMIT A WRITTEN REPORT TO THE OWNER.
5. THE INSPECTIONS INDICATED IN NOTES 3 AND 4 ABOVE ARE NOT REQUIRED FOR A CONCRETE FILL OVER METAL DECK APPLICATION WHERE INDICATED ON THE CONSTRUCTION DRAWINGS.



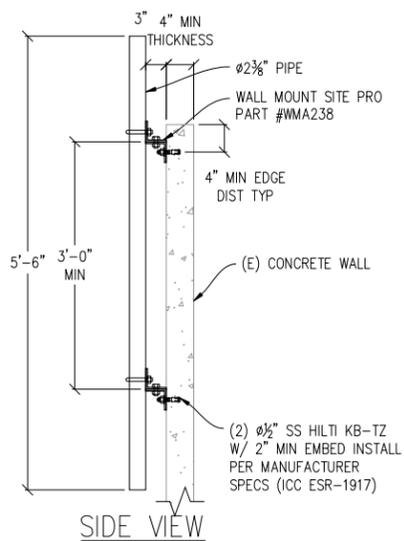
6 PPC CABINET DETAIL
1/2"=1'-0" MAX WEIGHT: 150 LBS



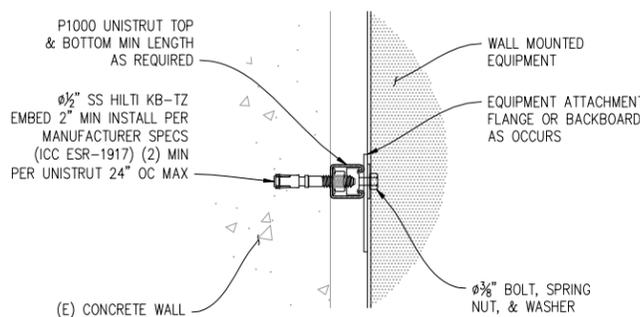
8 CABLE TRAY DETAIL
1"=1'-0"



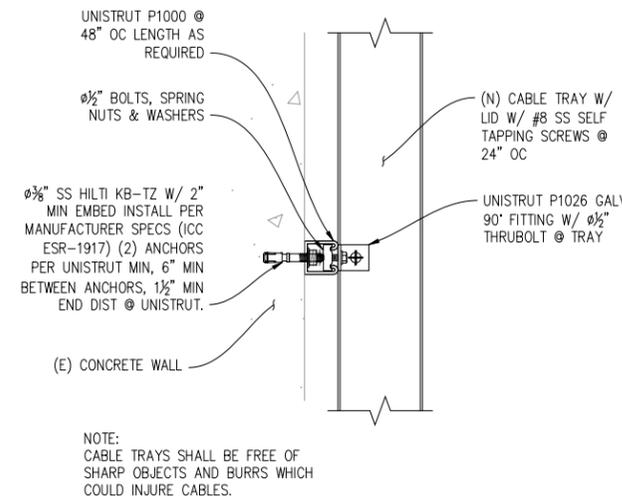
9 CONDUIT MOUNT DETAIL
3"=1'-0"



5 ANTENNA MOUNT DETAIL
1"=1'-0"



7 EQUIPMENT MOUNTING DETAIL
3"=1'-0"



10 CABLE TRAY TO CONC WALL
3"=1'-0"

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	08/29/13	CD 90%	H.H.
	-	-	-

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 08/29/13

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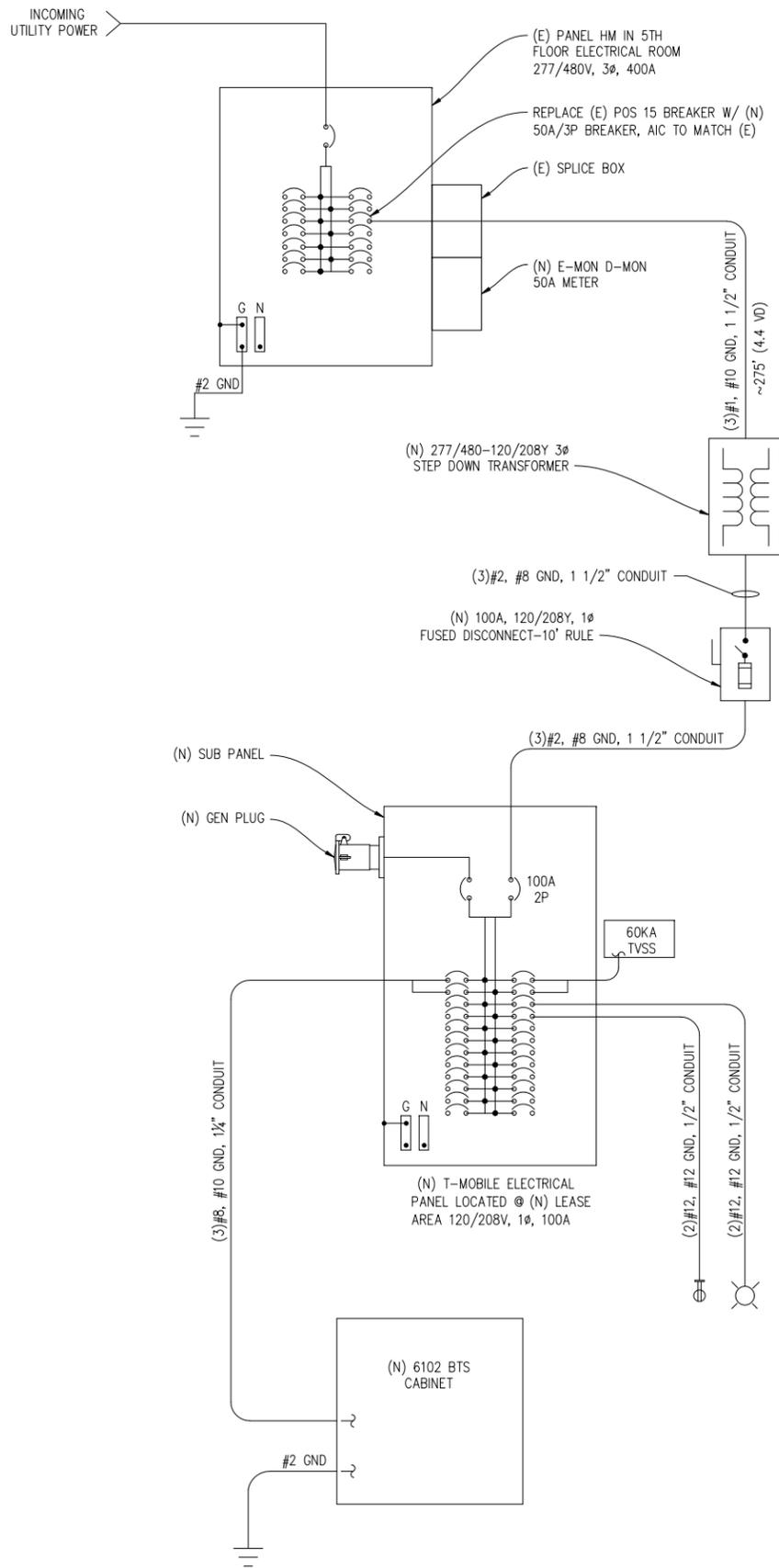
SHEET TITLE:
DETAILS
SHEET NUMBER:
A-5

ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL CONFORM TO THE CEC AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, CONDUCTORS, PULL BOXES, TRANSFORMER PADS, POLE RISERS, AND PERFORM ALL TRENCHING AND BACKFILLING REQUIRED IN THE PLANS.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER PLAN SPECIFICATIONS.
- ALL CIRCUIT BREAKERS, FUSES, AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTION RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED WITH A MINIMUM OF 10,000 A.I.C. OR AS REQUIRED.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
- ELECTRICAL WIRING SHALL BE COPPER #12 MIN WITH TYPE XHHW, THWN, OR THHN INSULATION.
- ALL OUTDOOR EQUIPMENT SHALL HAVE NEMA 3R ENCLOSURE.
- ALL BURIED WIRE SHALL RUN THROUGH SCHEDULE 40 PVC CONDUIT UNLESS OTHERWISE NOTED.
- A GROUND WIRE IS TO BE PULLED IN ALL CONDUITS.
- WHERE ELECTRICAL WIRING OCCURS OUTSIDE A STRUCTURE AND HAS THE POTENTIAL FOR EXPOSURE TO WEATHER, WIRING SHALL BE IN WATERTIGHT GALVANIZED RIGID STEEL OR FLEXIBLE CONDUIT.

ELECTRIC LEGEND

- (MI) MECHANICAL INTERLINK
- (M) METER
- (CB) CIRCUIT BREAKER
- (SG) SERVICE GROUND
- (WC) WIRED CONNECTION
- (TS) TIMER SWITCH, WATERPROOF
- (OL) OUTDOOR LIGHT
- (GFI) GFI OUTLET, WATERPROOF



SINGLE LINE DIAGRAM

(E) PANEL SCHEDULE

NAMEPLATE : HM		SC LEVEL : 10,000		VOLTS: 277V/480V, 3Ø	
LOCATION : INSIDE				BUS AMPS: 400A	
MOUNTING : WALL				MAIN CB: 400A	
ØA	ØB	ØC			
LOAD VA	LOAD VA	LOAD VA	LOAD DESCRIPTION	BKR AMP/POLE	CIRCUIT NO
0	0	0	SPARE	50/3	1 2 3 4 5 6
9600	9600	9600	ELEVATOR #1	100/3	7 8 9 10 11 12
0	0	0	SPARE	100/3	13 14 15 16 17 18
0	0	0	SPARE	20/1	19 20 21 22
0	0	0	SPARE	20/1	23 24 25 26 27 28
0	0	0	SPARE	20/1	29 30 31 32 33 34
0	0	0	SPARE	20/1	35 36 37 38 39 40
9600	9600	9600	PHASE TOTALS		41 42
TOTAL VA = 129600			TOTAL AMPS = 270		

NOTE: EXISTING LOADS HAVE NOT BEEN FIELD VERIFIED. THEY ARE APPROXIMATE BASED ON EXISTING CB SIZES. CONTACT THE ENGINEER IF THE LOADS DIFFER FROM THAT WHICH IS SHOWN ON THE PLANS

(N) PANEL SCHEDULE

NAMEPLATE : HM		SC LEVEL : 10,000		VOLTS: 277V/480V, 3Ø	
LOCATION : INSIDE				BUS AMPS: 400A	
MOUNTING : WALL				MAIN CB: 400A	
ØA	ØB	ØC			
LOAD VA	LOAD VA	LOAD VA	LOAD DESCRIPTION	BKR AMP/POLE	CIRCUIT NO
0	0	0	SPARE	50/3	1 2 3 4 5 6
9600	9600	9600	ELEVATOR #1	100/3	7 8 9 10 11 12
0	0	0	SPARE	100/3	13 14 15 16 17 18
0	0	0	SPARE	20/1	19 20 21 22
0	0	0	SPARE	20/1	23 24 25 26 27 28
0	0	0	SPARE	20/1	29 30 31 32 33 34
0	0	0	SPARE	20/1	35 36 37 38 39 40
9600	9600	9600	PHASE TOTALS		41 42
TOTAL VA = 129662			TOTAL AMPS = 270		

NOTE: EXISTING LOADS HAVE NOT BEEN FIELD VERIFIED. THEY ARE APPROXIMATE BASED ON EXISTING CB SIZES. CONTACT THE ENGINEER IF THE LOADS DIFFER FROM THAT WHICH IS SHOWN ON THE PLANS

(N) PANEL SCHEDULE

NAMEPLATE : PANEL A		SC LEVEL 10,000		VOLTS: 120V/208V, 1Ø	
LOCATION : OUTSIDE				BUSS AMPS: 100A	
MOUNTING : WALL				MAIN CB: 100A	
ØA	ØB				
LOAD VA	LOAD VA	LOAD DESCRIPTION	BKR AMP/POLE	CIRCUIT NO	LOAD DESCRIPTION
2957	2957	(N) 6102 BTS CABINET	50/2	1 2 3 4	(N) SURGE ARRESTOR
		BLANK	-	5 6	300
		" "	-	7 8	180
		" "	-	9 10	BLANK
		" "	-	11 12	" "
		" "	-	13 14	" "
		" "	-	15 16	" "
		" "	-	17 18	" "
		" "	-	19 20	" "
		" "	-	21 22	" "
		" "	-	23 24	" "
2957	2957	PHASE TOTALS			330
TOTAL VA = 6454		TOTAL AMPS = 31			

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SHEET TITLE:
ELECTRICAL PLAN

SHEET NUMBER:
E-1

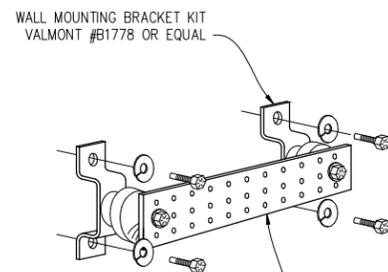
GROUNDING NOTES

- GROUNDING SHALL COMPLY WITH NEC ART. 250.
- USE #2 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- EXPOSED GROUNDING CONNECTIONS SHALL BE MADE WITH BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR EXOTHERMIC WELDS AS SPECIFIED IN THE PLANS.
- CONNECTIONS TO EQUIPMENT SHALL BE MADE USING STAINLESS STEEL HARDWARE.
- APPLY BUTYL & ELECTRICAL TAPE OVER COLD SHRINK AT ALL LOCATIONS FOR WEATHER PROOFING OVER COAX GROUND KITS.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS WITH STAR WASHERS AND NO-OX OR EQUIVALENT PLACED BETWEEN CONNECTOR AND GROUND BAR.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLES. ALWAYS MAKE A 12" RADIUS BEND, HOWEVER, #6 WIRE CAN BE BENT AT A 6" RADIUS WHEN NECESSARY.
- THE SYSTEM GROUND RESISTANCE MUST BE 10 OHMS OR LESS. TO ACHIEVE THIS LEVEL OF RESISTANCE THE CONTRACTOR SHALL PURSUE ONE OF THE FOLLOWING FOUR OPTIONS:
 - CONNECT TO EXISTING GROUNDING SYSTEMS
 - CONNECT TO BUILDING STEEL COLUMNS
 - INSTALL A NEW GROUNDING SYSTEM

UPON COMPLETION OF THE GROUNDING INSTALLATION THE CONTRACTOR SHALL EMPLOY AN OWNER APPROVED 3RD PARTY TO CONDUCT A "FALL OF POTENTIAL" TEST AND SUBMIT A REPORT OF SUCH TEST FOR APPROVAL TO EITHER THE OWNER OR CONSTRUCTION MANAGER.

GROUND LEGEND

- MECHANICAL CONNECTION
- ▼ EXOTHERMIC CADWELD
- ⊕ TYP. CADWELD INSPECTION WELL
- ⊕ TYP $\frac{5}{8}$ " DIA. X 10'-0" LONG COPPER CLAD GROUND ROD @ 10' O.C. MAX & 18" MIN BELOW FINISH GRADE
- ⤴ GATE GROUNDING STRAP
- ⊖ TYP #2 TINNED BCW UNDERGROUND GND RING @ 18" MIN BELOW FINISH GRADE
- SGI— GROUND WIRE #2 STRANDED GREEN INSULATED WIRE

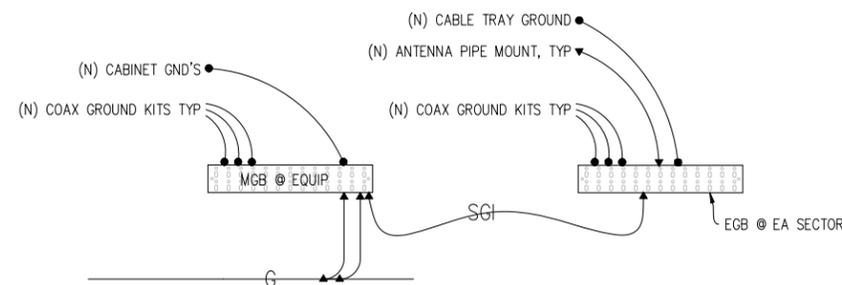


WALL MOUNTING BRACKET KIT
VALMONT #B1778 OR EQUAL

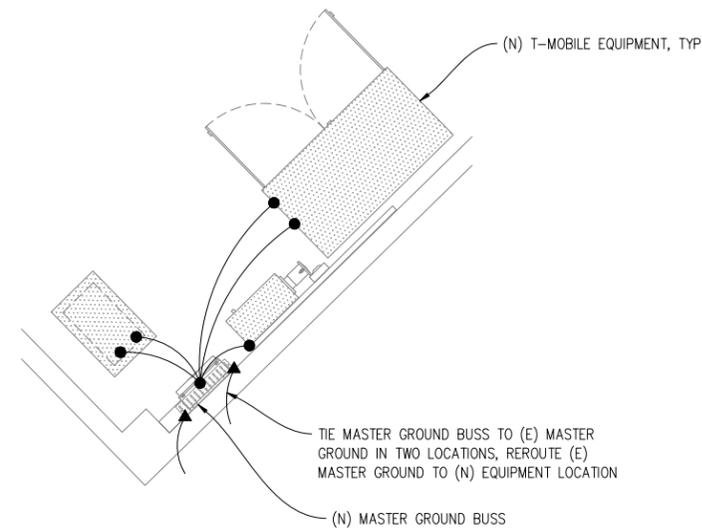
COPPER GROUND BUSS $\frac{1}{2}$ "x4"x24"
VALMONT #B2988 OR EQUAL. HOLE CENTERS TO
MATCH NEMA DOUBLE LUG CONFIGURATION.
(ACTUAL GROUND BUSS SIZES WILL VARY
BASED ON THE NUMBER OF GROUND CONNECTIONS)

1 GROUND BUSS DETAIL

NOT TO SCALE



GROUND BUSS CONNECTION DIAGRAM



GROUNDING PLAN

$\frac{1}{2}$ "=1'-0"

GIFT CENTER & JEWELRY MART

SF13084A
888 BRANNAN ST
SAN FRANCISCO, CA 94103

ISSUE STATUS

Δ	DATE	DESCRIPTION	
	06/26/12	ZD 100%	C.C.
	08/03/12	CLIENT REV	K.P.
	08/16/12	CLIENT REV	K.P.
	06/19/13	CLIENT REV	J.S.
	08/29/13	CD 90%	H.H.
	-	-	-

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 08/29/13

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T-MOBILE WEST CORPORATION
T-Mobile

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SHEET TITLE:

GROUNDING PLAN
& DETAIL

SHEET NUMBER:

E-2