



SAN FRANCISCO PLANNING DEPARTMENT

Executive Summary Conditional Use Authorization

HEARING DATE: 10/04/2018

Record No.: **2018-001707CUA**
Project Address: **400 BEALE STREET**
Zoning: RH DTR (Rincon Hill Downtown Residential) Zoning District
65-X Height and Bulk District
Block/Lot: 3766/012-259
Project Sponsor: Laura Meiner
Sure Site Consulting Group for Sirius XM
1500 Eckington PL NE
Washington, DC 20002
Property Owner: Jones Family 2000 Revocable Trust
88 King St #721
San Francisco, CA 94107
Staff Contact: Ashley Lindsay – (415) 575-9178
Ashley.Lindsay@sfgov.org
Recommendation: **Approval with Conditions**

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

Reception:
415.558.6378

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415.558.6409

Planning
Information:
415.558.6377

PROJECT DESCRIPTION

The Project includes installation of one (1) new panel antenna; one (1) new RX Dish; one (1) new GPS antenna; and one (1) new cabinet on steel platform. The proposed antenna will be painted to match the existing rooftop and penthouse.

REQUIRED COMMISSION ACTION

In order for the Project to proceed, the Commission must grant a Conditional Use Authorization pursuant to Sections 303(c) and 827 of the Planning Code for a new installation of a wireless telecommunications facility in the RH-DTR zoning district.

ISSUES AND OTHER CONSIDERATIONS

- **Public Comment & Outreach.** The Project Sponsor held a community meeting on November 16, 2017 at 7:30 PM at the Courtyard Marriott, 299 2nd Street, San Francisco, CA 94105. Two members of the community attended the meeting. As of October 1, 2018, the Department has received correspondence from 1 person regarding the proposed project. The resident primarily expressed concern as to whether the installation would block existing views of the bay from private views. Staff provided the resident with a copy of the plan set. Further correspondence has not been received by the Department.

BASIS FOR RECOMMENDATION

The Department finds that the Project is, on balance, consistent with the Wireless Telecommunications Services Facilities Siting Guidelines and the Objectives and Policies of the General Plan. The proposed facility would be minimally visible due to placement on the rooftop of the Project site. The proposal would not significantly detract from views of the subject building or from views of other surrounding buildings, nor would it detract from adjacent streetscapes, and vistas. The Department also finds the project to be necessary, desirable, and compatible with the surrounding neighborhood, and not to be detrimental to persons or adjacent properties in the vicinity.

ATTACHMENTS:

Draft Motion – Conditional Use Authorization
Exhibit A – Conditions of Approval
Exhibit B – Plans and Renderings
Exhibit C – Environmental Determination
Exhibit D – Maps and Context Photos
Exhibit E – Community Outreach Summary
Exhibit F – Radio Frequency Report
Exhibit G – Department of Public Health Approval
Exhibit H – Coverage Maps
Exhibit I – Independent Evaluation
Exhibit J – Alternatives Site Analysis



SAN FRANCISCO PLANNING DEPARTMENT

Planning Commission Draft Motion

HEARING DATE: OCTOBER 4, 2018

1650 Mission St.
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ADOPTING FINDINGS RELATING TO A CONDITIONAL USE AUTHORIZATION PURSUANT TO PLANNING CODE SECTION 303(c) AND 827, TO INSTALL A ROOFTOP SIRIUS XM FACILITY. SIRIUS XM PROPOSES TO INSTALL (1) NEW PANEL ANTENNA; INSTALL (1) NEW RX DISH; INSTALL (1) NEW GPS ANTENNA; AND INSTALL (1) NEW CABINET ON STEEL PLATFORM. THE PROPOSED ANTENNA WILL BE PAINTED TO MATCH EXISTING ROOFTOP AND PENTHOUSE. THE SUBJECT PROPERTY IS LOCATED WITHIN THE RH-DTR (RINCON HILL DOWNTOWN RESIDENTIAL MIXED-USE DISTRICT), AND 65-X HEIGHT AND BULK DISTRICTS., AND ADOPTING FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

PREAMBLE

On February 1, 2018, Laura Meiners of Sure Site Consulting Group for Sirius XM (hereinafter "Project Sponsor") filed Application No. 2018-001707CUA (hereinafter "Application") with the Planning Department (hereinafter "Department") for a Conditional Use Authorization to construct a new unmanned Sirius XM satellite radio facility (hereinafter "Project") at 400 Beale Street, Block 3766 Lots 012-259 (hereinafter "Project Site").

On October 4, 2018, the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Authorization Application No. 2018-001707CUA.

On September 19, 2018 the Project was determined to be exempt from the California Environmental Quality Act ("CEQA") as a Class 1 Categorical Exemption under CEQA as described in the determination contained in the Planning Department files for this Project.

The Planning Department Commission Secretary is the custodian of records; the File for Record No. 2018-001707CUA is located at 1650 Mission Street, Suite 400, San Francisco, California.

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

MOVED, that the Commission hereby authorizes the Conditional Use Authorization as requested in Application No. 2018-001707CUA, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

FINDINGS

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

1. The above recitals are accurate and constitute findings of this Commission.
2. **Project Description.** The Project includes installation of a rooftop Sirius XM facility. Sirius XM proposes to install (1) new panel antenna; install (1) new RX dish; install (1) new GPS antenna; and install (1) new cabinet on steel platform. The proposed antenna will be painted to match existing rooftop and penthouse.
3. **Site Description and Present Use.** The Project is located on an existing rooftop at 400 Beale Street. The Project Site's authorized use is for two hundred forty-five family dwelling and commercial at ground level. Currently, the existing buildings use is condominiums.
4. **Surrounding Properties and Neighborhood.** The Project Site is located within the RH DTR Zoning Districts in the South of Market Neighborhood. The immediate context is mixed in character with residential uses and supporting commercial and institutional uses. The immediate neighborhood includes the I-80 Freeway to the south, Harrison Street to the north, Emerald Park and seven story residential development to the west, and a series of commercial and residential developments to the east. Other zoning districts near the project site include M-1 (Light Industrial), SB-DTR (South Beach Downtown Residential) Zoning Districts.
5. **Public Outreach and Comments.** The Project Sponsor held a community meeting on November 16, 2017 at 7:30 PM at the Courtyard Marriott, 299 2nd Street, San Francisco, CA 94105. Two members of the community attended the meeting.

As of October 1, 2018, the Department has received correspondence from 1 person regarding the proposed project. The resident primarily expressed concern as to whether the installation would block existing views of the bay from private views. Staff provided the resident with a copy of the plan set. Further correspondence has not been received from the Department

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

Section 8.1 of the Guidelines outlines Location Preferences for wireless facilities. There are five primary areas 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.

7. **Location Preference.** The *WTS Facilities Siting Guidelines* identify different types of zoning districts and building uses for the siting of wireless telecommunications facilities. Based on the zoning and land use, the proposed WTS facility is at a Location Preference 5 Site (Mixed Use Buildings in High Density Districts) according to the *WTS Facilities Siting Guidelines*, making it a desired location.
8. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless network is designed to address coverage and capacity needs in the area. The network will operate in the 2330 Megahertz (MHZ) band, which is regulated by the Federal Communications Commission (FCC) and must comply with the FCC-adopted health and safety standards for electromagnetic radiation and radio frequency radiation.
9. **Radiofrequency (RF) Emissions:** The Project Sponsor retained EBI Consulting, a radio engineering consulting firm, to prepare a report describing the expected RF emissions from the proposed facility. Pursuant to the Guidelines, the Department of Public Health reviewed the report and determined that the proposed facility complies with the standards set forth in the Guidelines.
10. **Department of Public Health Review and Approval.** The Project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Radio-Frequency (RF) levels from the proposed Sirius XM transmitters at any nearby publicly accessible building or area would 0.8% of the FCC public exposure limit.

There are no existing antennas on the rooftop of the building at 400 Beale Street. Existing RF levels at ground were approximately well below the FCC public exposure limit. There were observed no other antennas within 100 feet of this site. Sirius XM proposes to install three (1) new antenna and two (2) dishes. The height to the top of the antenna is approximately 262.3 feet above the ground. The estimated RF field from the proposed Sirius XM transmitters at ground level is calculated to be 0.0037 mW/sq cm., which is 0.8% of the FCC public exposure limit. The three-dimensional perimeter of RF levels equal to the public exposure limit extends 10 feet, and the three-dimensional perimeter of RF level equal to the occupational exclusion limit extends 4 feet; both limits do not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 10 feet of the front of the antennas while they are in operation.

11. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by Sirius XM to demonstrate the need for outdoor and indoor coverage and capacity have been determined by Pier Four Enterprises LLC, an engineering consultant and independent third party, to accurately represent the carrier's present and post-installation conclusions.

12. **Maintenance Schedule.** The facility would operate without on-site staff but with a maintenance crew visiting the property to service and monitor the facility.
13. **Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the Planning Code in the following manner:

A. **Use.** Per Planning Code Section 827, a Conditional Use Authorization is required for a macro Wireless Telecommunications Services Facility.

14. **Conditional Use Findings.** Planning Code Section 303 establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use authorization. On balance, the project complies with said criteria in that:

A. The proposed new uses and building, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable, and compatible with, the neighborhood or the community.

The Project at 400 Beale 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 neighborhood. The overall location, setback from public streets, height and design of the proposed facility is situated to avoid intrusion into public vistas, and to insure harmony with the existing neighborhood character and promote public safety.

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

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

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

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

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

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

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

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

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

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

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

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

HOUSING ELEMENT

Objectives and Policies

OBJECTIVE 12:

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

Policy 12.3:

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

The Project will improve Sirius XM coverage and capacity within the South of Market neighborhood.

COMMERCE AND INDUSTRY ELEMENT

Objectives and Policies

OBJECTIVE 1:

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

Policy 1.1:

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

Policy 1.2:

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

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

OBJECTIVE 2:

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

Policy 2.1:

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

Policy 2.3:

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

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

OBJECTIVE 4:

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

Policy 4.1:

Maintain and enhance a favorable business climate in the City.

Policy 4.2:

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

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

VISITOR TRADE

OBJECTIVE 8:

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

Policy 8.3:

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

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:

ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER.

Policy 1.20

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

Policy 2.4

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

Policy 2.15

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

Policy 3.7:

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

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

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

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

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

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

No residential uses will be displaced 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 will have no adverse effect on housing in the vicinity.

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

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

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

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

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

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

- G. That landmarks and historic buildings be preserved.

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

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

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

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

DECISION

That based upon the Record, the submissions by the Applicant, the staff of the Department and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby **APPROVES Conditional Use Authorization Application No. 2018-001707CUA** subject to the following conditions attached hereto as "EXHIBIT A" in general conformance with plans on file, dated January 11, 2018, and stamped "EXHIBIT B", which is incorporated herein by reference as though fully set forth.

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. The effective date of this Motion shall be the date of this Motion if not appealed (after the 30-day period has expired) OR the date of the decision of the Board of Supervisors if appealed to the Board of Supervisors. For further information, please contact the Board of Supervisors at (415) 554-5184, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

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

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

I hereby certify that the Planning Commission ADOPTED the foregoing Motion on June 2, 2018.

Jonas P. Ionin
Commission Secretary

AYES:

NAYS:

ABSENT:

**Draft Motion
October 4, 2018**

**RECORD NO. 2018-001707CUA
400 Beale Street**

ADOPTED: October 4, 2018

EXHIBIT A

AUTHORIZATION

This authorization is for a conditional use to allow a Wireless Telecommunications Facility (d.b.a. **Sirius XM**) located at [400 Beale Street, Block 3766, and Lot 012-259] pursuant to Planning Code Section(s) **303 and 827** within the **Rincon Hill Downtown Residential Zoning** District and a **65-X** Height and Bulk District; in general conformance with plans, dated **January 11, 2018**, and stamped "EXHIBIT B" included in the docket for Record No. **2018-001707CUA** and subject to conditions of approval reviewed and approved by the Commission on **October 4, 2018** under Motion No **XXXXXX**. This authorization and the conditions contained herein run with the property and not with a particular Project Sponsor, business, or operator.

RECORDATION OF CONDITIONS OF APPROVAL

Prior to the issuance of the building permit or commencement of use for the Project the Zoning Administrator shall approve and order the recordation of a Notice in the Official Records of the Recorder of the City and County of San Francisco for the subject property. This Notice shall state that the project is subject to the conditions of approval contained herein and reviewed and approved by the Planning Commission on **October 4, 2018** under Motion No **XXXXXX**.

PRINTING OF CONDITIONS OF APPROVAL ON PLANS

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

SEVERABILITY

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

CHANGES AND MODIFICATIONS

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

Conditions of Approval, Compliance, Monitoring, and Reporting PERFORMANCE

1. **Validity.** The authorization and right vested by virtue of this action is valid for three (3) years from the effective date of the Motion. The Department of Building Inspection shall have issued a Building Permit or Site Permit to construct the project and/or commence the approved use within this three-year period.
For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org
2. **Expiration and Renewal.** Should a Building or Site Permit be sought after the three (3) year period has lapsed, the project sponsor must seek a renewal of this Authorization by filing an application for an amendment to the original Authorization or a new application for Authorization. Should the project sponsor decline to so file, and decline to withdraw the permit application, the Commission shall conduct a public hearing in order to consider the revocation of the Authorization. Should the Commission not revoke the Authorization following the closure of the public hearing, the Commission shall determine the extension of time for the continued validity of the Authorization.
For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org
3. **Diligent pursuit.** Once a site or Building Permit has been issued, construction must commence within the timeframe required by the Department of Building Inspection and be continued diligently to completion. Failure to do so shall be grounds for the Commission to consider revoking the approval if more than three (3) years have passed since this Authorization was approved.
For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org
4. **Extension.** All time limits in the preceding three paragraphs may be extended at the discretion of the Zoning Administrator where implementation of the project is delayed by a public agency, an appeal or a legal challenge and only by the length of time for which such public agency, appeal or challenge has caused delay.
For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org
5. **Conformity with Current Law.** No application for Building Permit, Site Permit, or other entitlement shall be approved unless it complies with all applicable provisions of City Codes in effect at the time of such approval.
For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

DESIGN – COMPLIANCE AT PLAN STAGE

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

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

7. **Rooftop Mechanical Equipment.** Pursuant to Planning Code 141, the Project Sponsor shall submit a roof plan to the Planning Department prior to Planning approval of the building permit application. Rooftop mechanical equipment, if any is proposed as part of the Project, is required to be screened so as not to be visible from any point at or below the roof level of the subject building.

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

8. **Plan Drawings - WTS.** Prior to the issuance of any building or electrical permits for the installation of the facilities, the Project Sponsor shall submit final scaled drawings for review and approval by the Planning Department ("Plan Drawings"). The Plan Drawings shall describe:

- A. **Structure and Siting.** Identify all facility related support and protection measures to be installed. This includes, but is not limited to, the location(s) and method(s) of placement, support, protection, screening, paint and/or other treatments of the antennas and other appurtenances to insure public safety, insure compatibility with urban design, architectural and historic preservation principles, and harmony with neighborhood character.
- B. **For the Project Site, regardless of the ownership of the existing facilities.** Identify the location of all existing antennas and facilities; and identify the location of all approved (but not installed) antennas and facilities.
- C. **Emissions.** Provide a report, subject to approval of the Zoning Administrator, that operation of the facilities in addition to ambient RF emission levels will not exceed adopted FCC standards with regard to human exposure in uncontrolled areas.

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

9. **Screening - WTS.** To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:

- A. Modify the placement of the facilities;
- B. Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;

- C. Install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95.2 1982, to notify persons that the facility could cause exposure to RF emissions;
- D. Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.
- E. To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:
- F. Antennas and back up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual effects;
- G. Rooftop installations shall be setback such that back up facilities are not viewed from the street;
- H. Antennae attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and
- I. Although co location of various companies' facilities may be desirable, a maximum number of antennas and back up facilities on the Project Site shall be established, on a case by case basis, such that "antennae farms" or similar visual intrusions for the site and area is not created.

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

10. **Future Site Modifications.** The Project Sponsor shall incorporate screening and minimize any negative visual impact that would result from any future facility modification after the original installation, given that the future facility modification includes the installation of additional antenna.

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

MONITORING - AFTER ENTITLEMENT

11. **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

12. **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

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

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

The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility, which are assessed by the City pursuant to all applicable law.

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

14. **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

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

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

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

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

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

17. **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

18. **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

19. **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

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

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

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

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

22. **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

23. **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

24. **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

25. **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>

EXHIBIT B

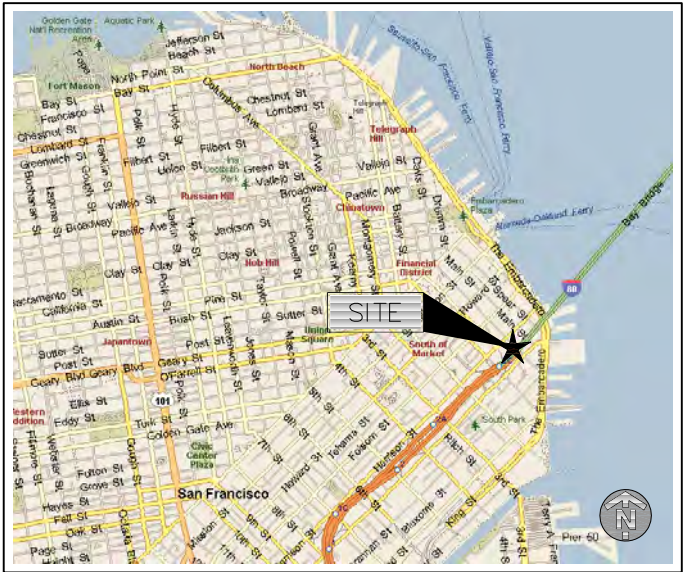
SHEET INDEX

NO.	DESCRIPTION
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T-2	GENERAL NOTES
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RF-1 ~ RF-3	RF COMPLIANCE REPORT
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C-2	ENLARGED PROPOSED EQUIPMENT LAYOUT
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DRIVING DIRECTIONS

DEPART SAN FRANCISCO INTERNATIONAL AIRPORT
TURN LEFT (WEST) ONTO LOCAL ROAD(S)
KEEP RIGHT ONTO RAMP
TAKE RAMP (LEFT) ONTO BAYSHORE FWY
TAKE RAMP (RIGHT) ONTO JOHN F FORAN FWY
TURN LEFT ONTO RAMP
ROAD NAME CHANGES TO KING ST
ROAD NAME CHANGES TO HERB CAEN WAY
TURN LEFT (WEST) ONTO BRYANT ST
TURN RIGHT (NORTH-WEST) ONTO BEALE ST
TURN LEFT (SOUTH) ONTO LOCAL ROAD(S)
ARRIVE 400 BEALE ST, SAN FRANCISCO, CA 94105

VICINITY MAP



SITE NAME _____

400 BEALE STREET

SITE I.D.

SFX502T

SITE ADDRESS

400 BEALE STREET
SAN FRANCISCO, CA 94105

STRUCTURE TYPE

ROOF TOP

PROJECT SUMMARY

<u>SITE NAME:</u>	400 BEALE STREET	
<u>SITE NO:</u>	SFX502T Site 1	
<u>SITE ADDRESS:</u>	400 BEALE STREET SAN FRANCISCO, CA 94105	
<u>COUNTY:</u>	SAN FRANCISCO	
<u>SITE COORDINATES</u>		
<u>LATITUDE:</u>	37.07037500*	(NAD 83)
<u>LONGITUDE:</u>	-122.39086388*	(NAD 83)
<u>GROUND ELEVATION:</u>	36'	(AMSL)
<u>JURISDICTION:</u>	SAN FRANCISCO	
<u>ZONING:</u>	RH-DTR HEIGHT/BULK DISTRICT: 65-X NEIGHBORHOOD: SOUTH OF MARKET (SOMA)	
<u>APPLICANT:</u>	SIRIUS XM 1500 ECKINGTON PL NE WASHINGTON, DC 20002 TEL: (202) 380-4157 FAX: (202) 380-4570	
<u>LANDLORD:</u>	INDIVIDUALLY OWNED CONDOS NICOLE MASS, MBA GENERAL MANAGER BRIDGEVIEW OWNERS ASSOCIATION 400 BEALE STREET, SUITE 112 SAN FRANCISCO, CA 94105 (415) 348-6095 (DIRECT) (800) 428-5588 (TOLL FREE) Nicole.Mass@fsresidential.com	

OCCUPANCY TYPE:
CONSTRUCTION TYPE:

2016	CALIFORNIA ADMINISTRATIVE CODE
2016	CALIFORNIA BUILDING CODE (IBC 2012)
2016	CALIFORNIA ELECTRICAL CODE (2011 NEC)
2016	CALIFORNIA MECHANICAL CODE (2012 UMC)
2016	CALIFORNIA ENERGY CODE
2016	CALIFORNIA FIRE CODE (2012 IFC)
2016	CALIFORNIA GREEN CODE
2016	CALIFORNIA REFERENCES STANDARDS CODE
	CITY/COUNTY ZONING ORDINANCES

CERTIFICATION STATEMENT

I HEREBY CERTIFY THAT THESE DRAWING WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.

APPROVALS

CONST.		DATE
RF		DATE
OPS		DATE
LANDLORD		DATE

DRAWING SCALED TO 11"x17"



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CLEVELAND, OH 44122
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FAX: (216) 593-0401

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[illegible]

SITE NAME

400 BEALE
STREET

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SITE ADDRESS
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SAN FRANCISCO, CA 94105

SHEET NAME

TITLE
SHEET

SHEET NUMBER

T-1

GENERAL CONSTRUCTION NOTES:

1. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL.
2. THESE PLANS ARE INTENDED TO BE USED TO DIRECT THE NEW LAYOUT. DRAWINGS SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. PLANS, ELEVATIONS AND DETAILS ARE INTENDED TO SHOW THE END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AND NOTIFY THE PROJECT MANAGER OF ANY DISCREPANCIES BEFORE STARTING ANY WORK.
4. ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE NOTED BY THE ENGINEER OF RECORD.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK PERFORMED AND MATERIALS INSTALLED TO BE IN STRICT CONFORMANCE, AS A MINIMUM STANDARD, WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION. ELECTRICAL SYSTEMS SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, AND ALL OTHER LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES, AND WITH LOCAL UTILITY COMPANY SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
6. THE CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, STUMPS, STONES, RUBBISH OR DEBRIS IN ACCORDANCE WITH ALL LOCAL AND ENVIRONMENTAL LAWS. NO MATERIALS OR EQUIPMENT SHALL BE PLACED ANYWHERE ON OR IN THE STRUCTURE WITHOUT MAKING ADEQUATE PROVISIONS TO PROTECT EXISTING PROPERTY. UPON COMPLETION, REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DURING CONSTRUCTION. REPAIR ALL EXISTING WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND WITH ADJACENT SURFACES.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.

WARRANTIES AND BONDS:

1. THE CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIALS USED IN THIS PROJECT FOR A MINIMUM PERIOD OF ONE (1) YEAR COMMENCING FROM THE DATE OF FINAL ACCEPTANCE BY THE CLIENT. THE CONTRACTOR IS NOT REQUIRED TO GUARANTEE MATERIAL SUPPLIED BY THE OWNER.
2. FINAL DATE OF ACCEPTANCE IS DEEMED AS THE DATE THAT ALL REQUIRED STATE AND FEDERAL APPROVAL HAVE BEEN OBTAINED INCLUDING, BUT NOT LIMITED TO:
A. FINAL INSPECTION-- D14
B. CERTIFICATE OF OCCUPANCY
3. ANY DEFICIENCIES THAT COME EVIDENT DURING THIS ONE (1) YEAR PERIOD SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

DELIVERY, STORAGE AND HANDLING:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROCEDURES AND SCHEDULING ASSOCIATED WITH HOISTING, STAGING, AND ERECTING OF MATERIALS AND EQUIPMENT TO AND/OR UPON THE SITE.
2. ALL ELEMENTS OF THE EXISTING SITE, I.E. STRUCTURES, SITE PLANTINGS, ETC. SHALL BE PROTECTED AS NECESSARY FROM SAID ACTIONS. THIS WORK MUST BE DONE IN A SAFE, SECURE NONDESTRUCTIVE MANNER FOR PROTECTING PERSONNEL AND PROPERTY.

SITE WORK GENERAL NOTES:

1. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL.
2. THESE PLANS ARE INTENDED TO BE USED TO DIRECT THE NEW LAYOUT. DRAWINGS SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. PLANS, ELEVATIONS AND DETAILS ARE INTENDED TO SHOW THE END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AND NOTIFY THE PROJECT MANAGER OF ANY DISCREPANCIES BEFORE STARTING ANY WORK.
4. ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE NOTED BY THE ENGINEER OF RECORD.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK PERFORMED AND MATERIALS INSTALLED TO BE IN STRICT CONFORMANCE, AS A MINIMUM STANDARD, WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION. ELECTRICAL SYSTEMS SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, AND ALL OTHER LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES, AND WITH LOCAL UTILITY COMPANY SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
6. THE CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, STUMPS, STONES, RUBBISH OR DEBRIS IN ACCORDANCE WITH ALL LOCAL AND ENVIRONMENTAL LAWS. NO MATERIALS OR EQUIPMENT SHALL BE PLACED ANYWHERE ON OR IN THE STRUCTURE WITHOUT MAKING ADEQUATE PROVISIONS TO PROTECT EXISTING PROPERTY. UPON COMPLETION, REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DURING CONSTRUCTION. REPAIR ALL EXISTING WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND WITH ADJACENT SURFACES.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
8. THE CONTRACTOR SHALL CALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
9. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWING AND STIPULATED IN THE SPECIFICATION PROJECT SUMMARY.
10. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
11. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER FLOW AWAY FROM THE EQUIPMENT SHELTER AND TOWER AREAS.
12. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
13. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
14. 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 DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING.
15. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE BUILDING OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED AND SEEDED.
16. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
17. ALL BACK FILL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AS DETERMINED BY ASTM STANDARD TEST PROCEDURES.

CONSTRUCTION SPECIFICATIONS:

1. THE CONTRACTOR SHALL VISIT THE SITE OF THE NEW WORK AND FULLY ACQUAINT THEMSELVES WITH THE CONDITIONS AS THEY EXIST IN ORDER THAT ANY RESTRICTIONS PERTAINING TO THE WORK ARE UNDERSTOOD. ALL AREAS AND DIMENSIONS ARE INDICATED ON THE DRAWINGS AS ACCURATELY AS POSSIBLE, BUT ALL CONDITIONS SHALL BE VERIFIED BY EACH CONTRACTOR AND/OR SUBCONTRACTOR AT THE SITE. THE FAILURE OF THE CONTRACTOR TO EXAMINE OR RECEIVE ANY FORM, INSTRUMENT OR DOCUMENT, OR TO VISIT THE SITE SHALL NOT RELIEVE THE CONTRACTOR FROM ANY OBLIGATION WITH RESPECT TO THEIR QUOTED PRICE. THE SUBMISSION OF A QUOTATION SHALL ACKNOWLEDGE THAT THE CONTRACTOR AND THEIR SUBCONTRACTORS HAVE FULLY EXAMINED THE SITE AND KNOW THE EXISTING CONDITIONS AND HAVE MADE PROVISIONS FOR OPERATING UNDER THE CONDITIONS AS THEY EXIST AT THE SITE AND HAVE INCLUDED ALL NECESSARY ITEMS.
2. THE GENERAL CONTRACTOR'S RESPONSIBILITIES SHALL INCLUDE, BUT NOT BE LIMITED TO, CONSTRUCTION OF THE EQUIPMENT FOUNDATION, INCLUDING ELECTRICAL SERVICE, TELEPHONE CONDUITS, GROUNDING SYSTEM AND COORDINATION WITH LOCAL UTILITY COMPANIES.
3. THE ANTENNA INSTALLERS RESPONSIBILITIES SHALL INCLUDE, BUT NOT BE LIMITED TO, CABLE TRAY INSTALLATION, ROUTING OF CABLES FROM RADIO EQUIPMENT TO ANTENNAS, ASSOCIATED HARDWARE FOR SECURING ANTENNA CABLES, ANTENNA MOUNTS, DETERMINING SUPPLIER OF ANTENNAS, GROUNDING OF ANTENNAS TO GROUNDING SYSTEM, INSTALLING ANTENNAS AND VERIFYING WITH RADIO FREQUENCY ENGINEERS, THE ALIGNMENT, LOCATION, AND PROPER ORIENTATION OF ANTENNAS.
4. THE CONTRACTORS SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE BUILDING LANDLORD IN ORDER TO AVOID CONFLICTS WITH CURRENT USE OF THE SITE.
5. THE OWNER MAY HAVE WORK PERFORMED UNDER SEPARATE CONTRACTS, CONCURRENTLY, WITH THE WORK OF THIS CONTRACT.
6. THE GENERAL CONTRACTOR SHALL PERMIT ACCESS TO THE PROJECT TO THESE CONTRACTORS TO PERFORM THEIR WORK.
7. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE LOCAL, COUNTY, STATE, AND FEDERAL CODES, LAWS AND REQUIREMENTS, INCLUDING OSHA.
8. THE CONTRACTOR SHALL APPLY AND PAY FOR THE CONSTRUCTION PERMIT, CERTIFICATE OF OCCUPANCY AND ALL OTHER REQUIRED PERMITS OR LICENSES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL INSPECTIONS.
9. CARE SHALL BE EXERCISED IN PROTECTING THE BUILDING OCCUPANTS DURING THE DEMOLITION AND CONSTRUCTION PERIODS OF THIS PROJECT. EVERY EFFORT SHALL BE MADE TO MAINTAIN A CLEAN OPERATION. DEBRIS SHALL NOT ACCUMULATE. ALL DEBRIS WILL BE DEPOSITED IN A SUITABLE CONTAINER ON A DAILY BASIS AND SHALL BE EMPTIED ON A REGULAR SCHEDULE. THE LOCATION OF THE CONTAINER SHALL BE COORDINATED WITH THE BUILDING MANAGER.
10. SAFETY PROCEDURES: ATTENTION IS DIRECTED TO FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH STANDARDS. THE CONSTRUCTION COMPANY AWARDED THIS PROJECT SHALL ENSURE ALL WORKING SURROUNDINGS AND CONDITIONS ARE SANITARY AND ARE NOT HAZARDOUS OR DANGEROUS TO THE HEALTH OR SAFETY OF THE WORK CREWS OR BUILDING OCCUPANTS. PRECAUTION SHALL BE EXERCISED AT ALL TIMES FOR THE PROTECTION OF PERSONS AND PROPERTY. IT IS MANDATORY THAT THE SAFETY PROVISIONS OF APPLICABLE LOCAL LAWS, OSHA REGULATIONS AND BUILDING AND CONSTRUCTION CODES, BE OBSERVED FOR ALL CONTRACTORS AND ANTENNA RIGGERS.
11. THE GENERAL CONTRACTOR MUST COORDINATE ALL ROOF RELATED WORK WITH THE LANDLORD'S PRE-APPROVED ROOFER. THE GENERAL CONTRACTOR MUST CONFIRM THE COMPATIBILITY OF ALL MATERIALS AND ENSURE THAT ALL EXISTING ROOF WARRANTIES, IF ANY, REMAIN IN EFFECT.



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TEL: 847-908-8400
www.FullertonEngineering.com

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APPROVED BY:		AR	
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	01/13/17	90% REVIEW	KC
	03/14/17	REVISION	KC
	03/28/17	REVISION	KC
	04/03/17	FINAL	KC
1	1/11/18	REVISED FINAL	PK
2	7/2/18	REVISED FINAL	DZ



SITE NAME

400 BEALE
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SITE I.D.

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SITE ADDRESS

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SAN FRANCISCO, CA 94105

SHEET NAME

GENERAL NOTES

SHEET NUMBER

T-2



SFX502T 400 BEALE STREET

400 BEALE STREET
SAN FRANCISCO, CA



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Small cell leaders.

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FOR REFERENCE ONLY

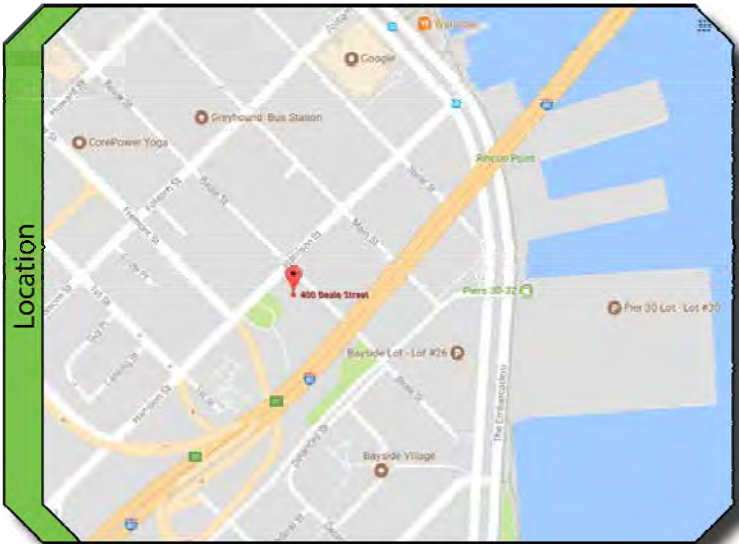
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SHEET NAME
PHOTO
SIMULATION

SHEET NUMBER
PS-1



August 14, 2017

Prepared by: ZLN



SFX502T 400 BEALE STREET

400 BEALE STREET
SAN FRANCISCO, CA



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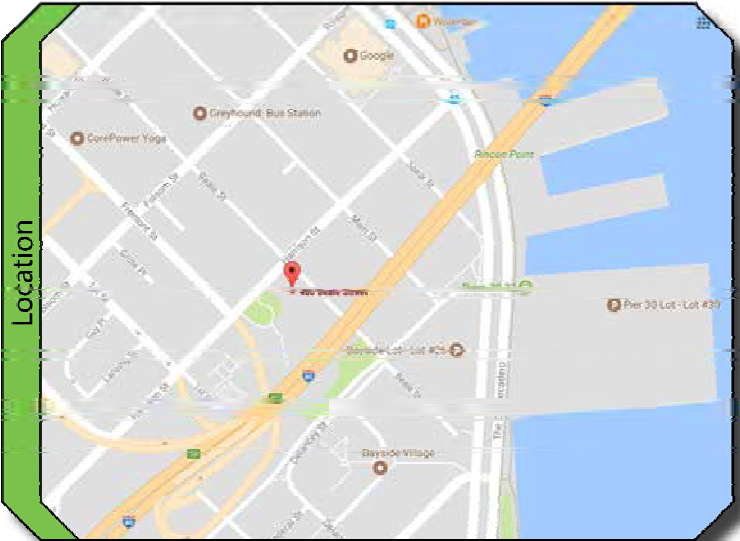
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2	7/2/18	REVISED FINAL	DZ

FOR REFERENCE ONLY

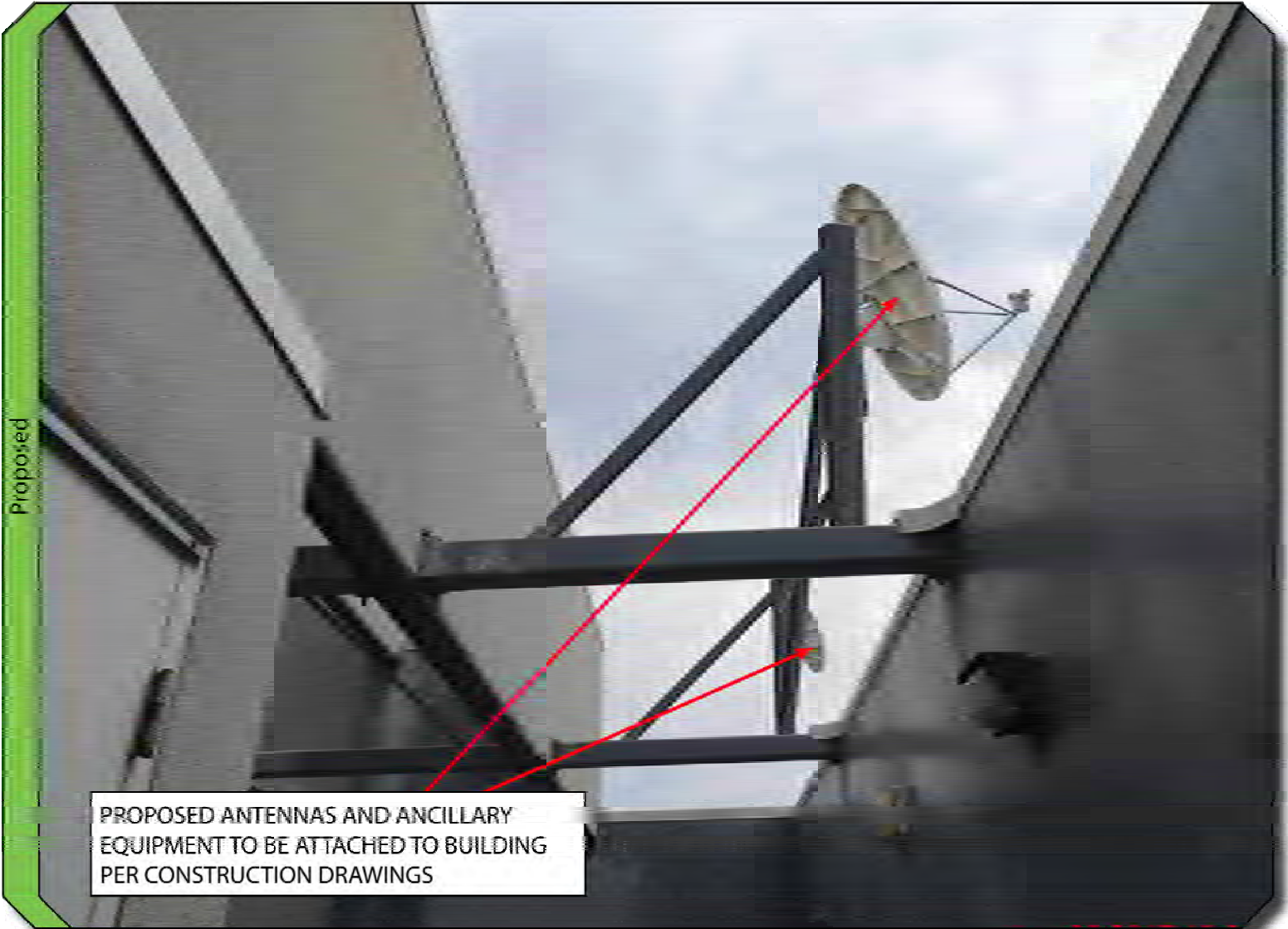
SITE NAME
400 BEALE STREET
SITE I.D.
SFX502T
SITE ADDRESS
400 BEALE STREET SAN FRANCISCO, CA 94105

SHEET NAME
PHOTO SIMULATION

SHEET NUMBER
PS-2



View 2 of 3



August 14, 2017

Prepared by: ZLN



SFX502T 400 BEALE STREET

400 BEALE STREET
SAN FRANCISCO, CA



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2	7/2/18	REVISED FINAL	DZ

FOR REFERENCE ONLY

SITE NAME

400 BEALE STREET

SITE I.D.

SFX502T

SITE ADDRESS

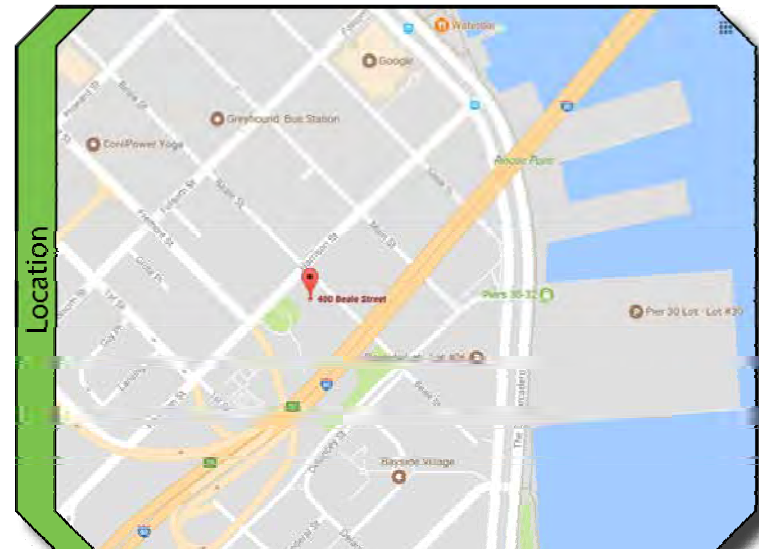
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SHEET NAME

PHOTO
SIMULATION

SHEET NUMBER

PS-3



View 3 of 3



PROPOSED ANTENNAS AND ANCILLARY
EQUIPMENT TO BE ATTACHED TO BUILDING
PER CONSTRUCTION DRAWINGS
(EQUIPMENT NOT VISIBLE)

August 14, 2017

Prepared by: ZLN

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

Sirius Proposed Facility

Site ID: SFX502 T
400 Beale Street
400 Beale Street, San Francisco, California 94105

September 5, 2017

EBI Project Number:
6217003368



Status:	The proposed site will be compliant with the installation of the mitigation measures described in Attachment I.
Remarks:	See signage plan for mitigation measures to be installed upon upgrade/installation of the site to comply with FCC and Sirius standards.



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1.0 Executive Summary

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Sirius to conduct radio frequency electromagnetic (RF-EME) modeling for Sirius Site SFX502 T located at 400 Beale Street in San Francisco, California to determine RF-EME exposure levels from proposed Sirius wireless communications equipment at this site. As described in detail in Appendix B of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields. This report contains a detailed summary of the RF EME analysis for the site.

This document addresses the compliance of Sirius's proposed transmitting facilities independently at the site.

The Maximum Emissions Value is 45.0000% of the FCC's general public limit (9.0000% of the FCC's occupational limit) at the main roof level. The proposed site will be in compliance with Federal regulations regarding (radio frequency) RF Emissions with the installation of signage in Attachment I.

Based on worst-case predictive modeling, there are no areas on the main roof that exceed the FCC MPE limits.

Signage is recommended at the site as presented in Attachment I. Posting of the signage brings the site into compliance with FCC rules and regulations.

2.0 MPE Calculations

Calculations were completed for the proposed Sirius Wireless antenna rooftop facility located at 400 Beale Street in San Francisco, California using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed a distance above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of in areas in the immediate vicinity of the antennas.

For this report, EBI utilized antenna and power data provided by Sirius and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65. All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration.

The assumptions used in the modeling are based upon information provided by Sirius in the supplied drawings and known configuration values information gathered from other sources to approximate each additional carrier's contribution.

There are no collocated carriers on the rooftop.

The data for all Sirius antennas used in this analysis is shown in Section 3.0. Actual antenna gains for each antenna were used per manufacturer's specifications. All calculations were done with respect to uncontrolled and general public threshold limits.

3.0 Sirius Antenna Inventory

Sector	Antenna Number	Antenna Make	Antenna Model	Height (ft) Above Nearest Walking Surface	Azimuth (°)	Technology	Frequency Band	Power Per Channel (W)	Number of Channels	ERP (W)
Sirius Panel	1	Ti-Tek	TA-2304-2-DAB-L	12.8	40	Sirius	2330 MHz	200	2	2168
Sirius Panel	2	Prodelln	1183	13	145	Sirius	Rx only	Rx only	Rx only	N/A
Sirius Panel	3	Ti-Tek	TA-2324-LHCP	13	129	Sirius	Rx only	Rx only	Rx only	N/A

Sirius Site Inventory and Power Values

4.0 Summary and Conclusions

All calculations performed for this analysis yielded results that were within the allowable limits for exposure to RF Emissions. Based on predictive modeling, there are no modeled exposures on any accessible main roof level-level walking/working surface related to Sirius's equipment in the area that exceed the FCC's occupational and/or general public exposure limits at this site. Installation of mitigation measures will bring the proposed site into compliance.

The anticipated maximum contribution from each sector of the proposed Sirius facility is 45.0000% of the allowable FCC established general public limit (9.0000% of the FCC occupational limit). This was determined through calculations along a radial from each sector taking full power values into account as well as actual vertical plane antenna gain values per the manufacturers supplied specifications for gain.

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards. For this facility, the composite values calculated were within the allowable 100% threshold standard per the federal government.

EBI's modeling indicates that there are no areas on the walking/working surfaces at the rooftop level in front of the Sirius antennas that may exceed the FCC standards for general population and/or occupational exposure. To reduce the risk of exposure and/or injury, EBI recommends that access to the rooftop or areas associated with the active antenna installation be restricted and secured where possible. In order to alert any workers potentially accessing the site, a blue Notice sign and a yellow Guidelines sign are recommended for installation at the access to the rooftop as depicted on the Signage Plan – Attachment I.



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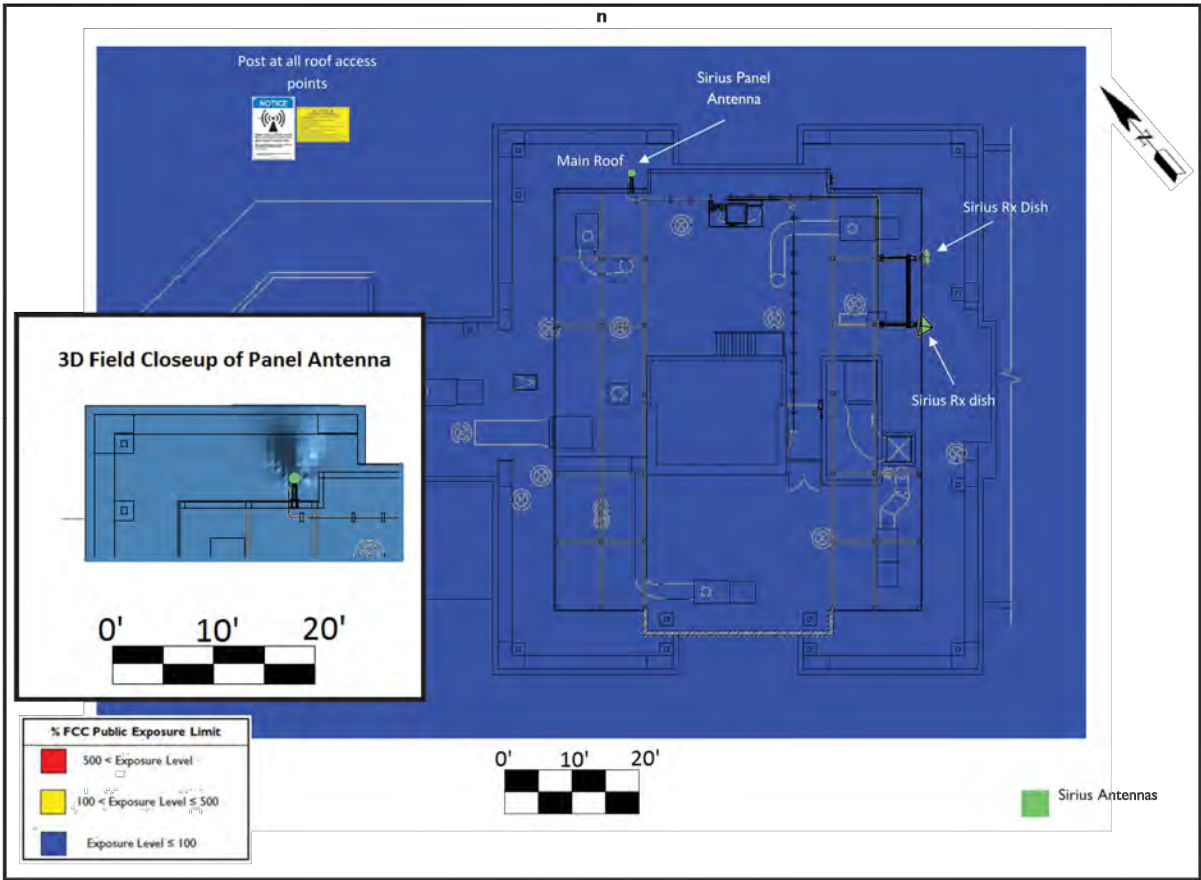
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RF – EME
COMPLIANCE
REPORT

SHEET NUMBER

RF – 1



Sign	Sign Count	Description	Posting Instructions
	1	Blue Notice Sign Used to notify individuals they are entering an area where the power density emitted from transmitting antennas may exceed the FCC's MPE limit for the general public or occupational exposures.	Securely post at all access points to the site in a manner conspicuous to all individuals entering thereon.
	1	Guidelines Informational sign used to notify workers that there are active antennas installed and provide guidelines for working in RF environments.	Securely post at all access points to the site in a manner conspicuous to all individuals entering thereon.
	N/A	Yellow Caution Sign Used to notify individuals that they are entering a hot spot where either the general public or occupational FCC's MPE limit is or could be exceeded.	Not Required.
	N/A	Red Warning Sign Used to notify individuals that they are entering a hot zone where either the general public or occupational FCC's MPE limit has been exceeded.	Not Required.
Notes:		The proposed site will be compliant with the installation of the mitigation measures. The actual number of access points may vary based on documentation provided and/or if a survey was conducted. Recommended signage locations are based on Sirius's guidance for the worst-case scenario in each sector. The actual signage installation is dependent on accessibility of the facility and antennas. Locations deemed inaccessible due to OSHA safety standards (proximity to unprotected roof edge or slope, etc.) will be compliant upon installation of recommended signage at the closest accessible point.	

Appendix A: Certifications

RF-EME Compliance Report
EBI Project No. 6117003346

Site No: SFX502T
400 Beale Street, San Francisco, California

Reviewed and Approved by:



Witnessed: 24 Aug 2017

Michael McGuire
Electrical Engineer

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

Preparer Certification

I, Christopher Ilgenfritz, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.





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RF-EME
COMPLIANCE
REPORT

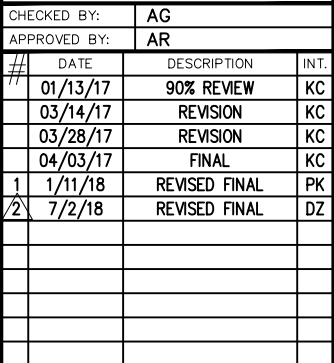
SHEET NUMBER

RF-2

EBI Consulting ♦ 21 B Street ♦ Burlington, MA 01803 ♦ 1.800.786.2346

12 EBI Consulting ♦ 21 B Street ♦ Burlington, MA 01803 ♦ 1.800.786.2346

13 EBI Consulting ♦ 21 B Street ♦ Burlington, MA 01803 ♦ 1.800.786.2346

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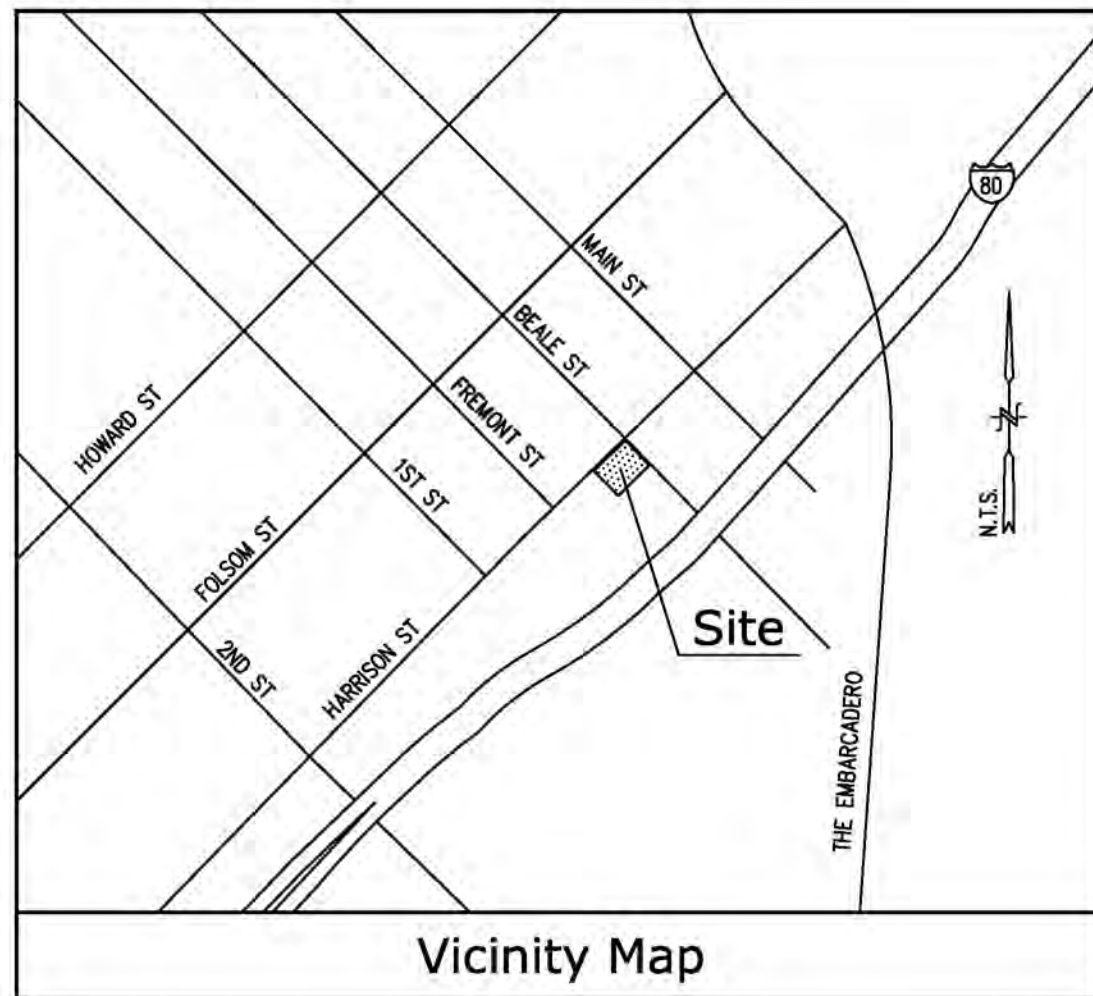
21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

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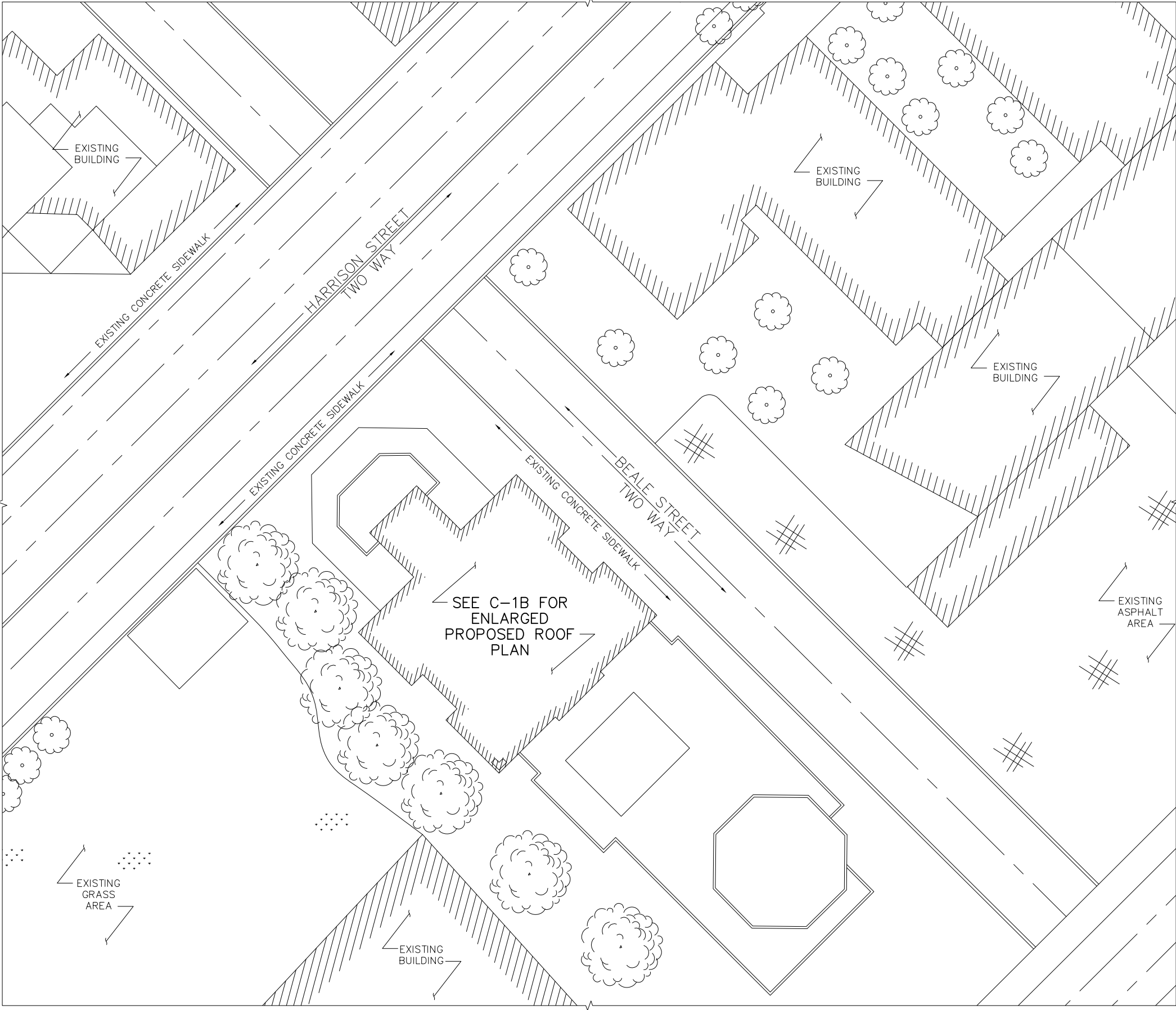
RF-3



1

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
AGL	ABOVE GRADE LEVEL
AMSL	ABOVE MEAN SEA LEVEL
APPROX	APPROXIMATE
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BTS	BASE TRANSMISSION STATION
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CND	CONDUIT
DWG	DRAWING
FT	FOOT(FEET)
EGB	EQUIPMENT GROUND BAR
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ELEV	ELEVATION
EQUIP	EQUIPMENT
EXISTING	EXISTING
EXT	EXTERIOR
FND	FOUNDATION
GA	GAUGE
GALV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
LTE	LONG TERM EVOLUTION
MAX	MAXIMUM
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
NTS	NOT TO SCALE
O.C.	ON CENTER
OE/OT	OVERHEAD ELECTRIC/TELCO
RGS	RIGID GALVANIZED STEEL
IN	INCH(ES)
INT	INTERIOR
LB. (#)	POUND(S)
RRU	REMOTE RADIO UNIT
SF	SQUARE FOOT
STL	STEEL
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UT	UNDERGROUND TELCO
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
W/	WITH
XFMR	TRANSFORMER
<	CENTERLINE
>	PLATE

SYMBOLS	
<	CENTERLINE
	REVISION
	WORK POINT
	UTILITY POLE
	BRICK
	COMPRESSED STONE
	CONCRETE
	EARTH
	GRAVEL
	MASONRY
	STEEL
	CENTERLINE
	PROPERTY LINE
	LEASE LINE
	EASEMENT LINE
	CHAIN LINK FENCE
	WOOD FENCE
	BELOW GRADE ELECTRIC
	BELOW GRADE TELEPHONE
	OVERHEAD ELECTRIC/TELEPHONE
	SECTION REFERENCE



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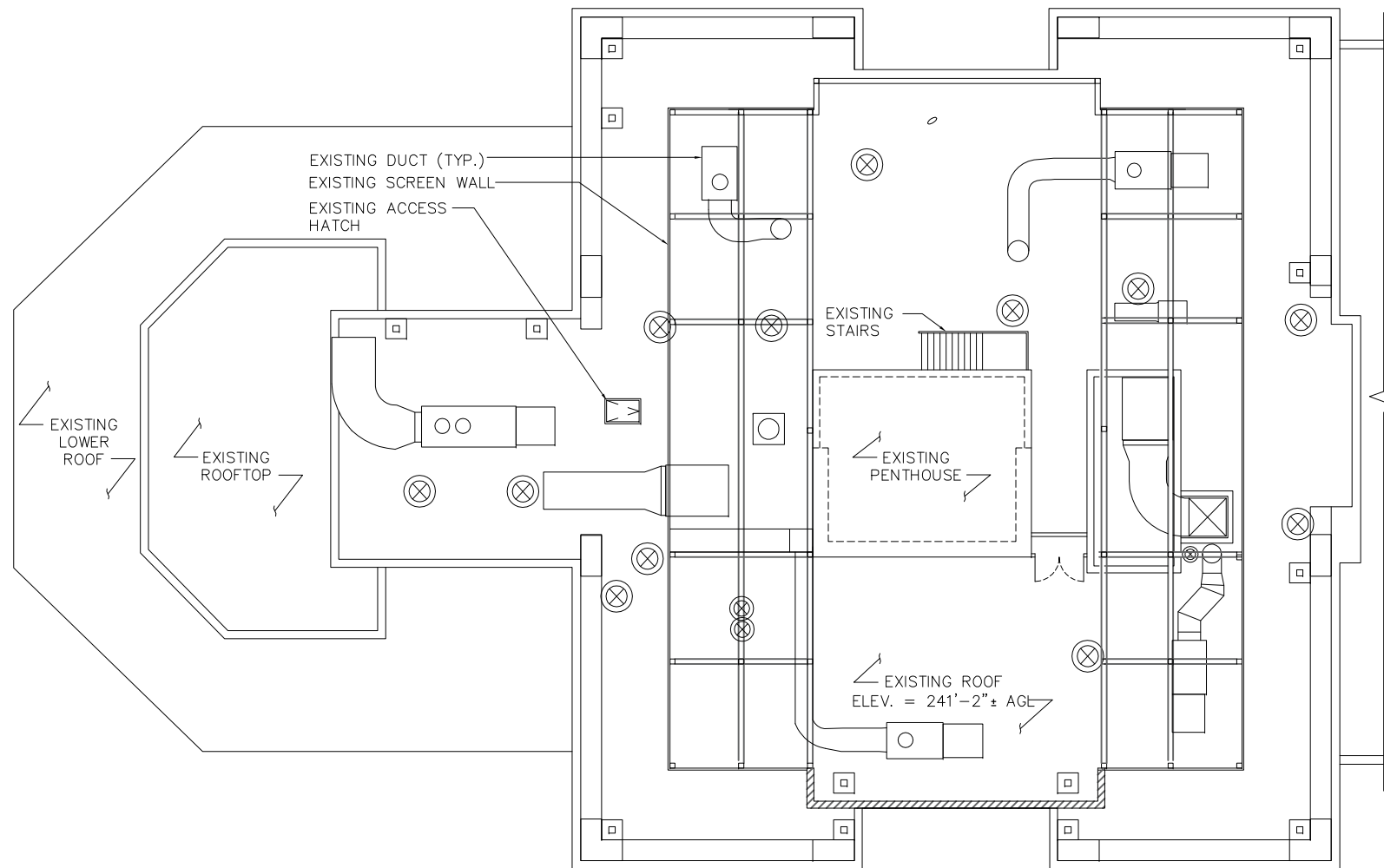


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SFX502T
SITE ADDRESS
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SHEET NAME
ROOF PLAN
SHEET NUMBER
C-1



SCALE: 1" = 40'-0" 1

ROOF PLAN



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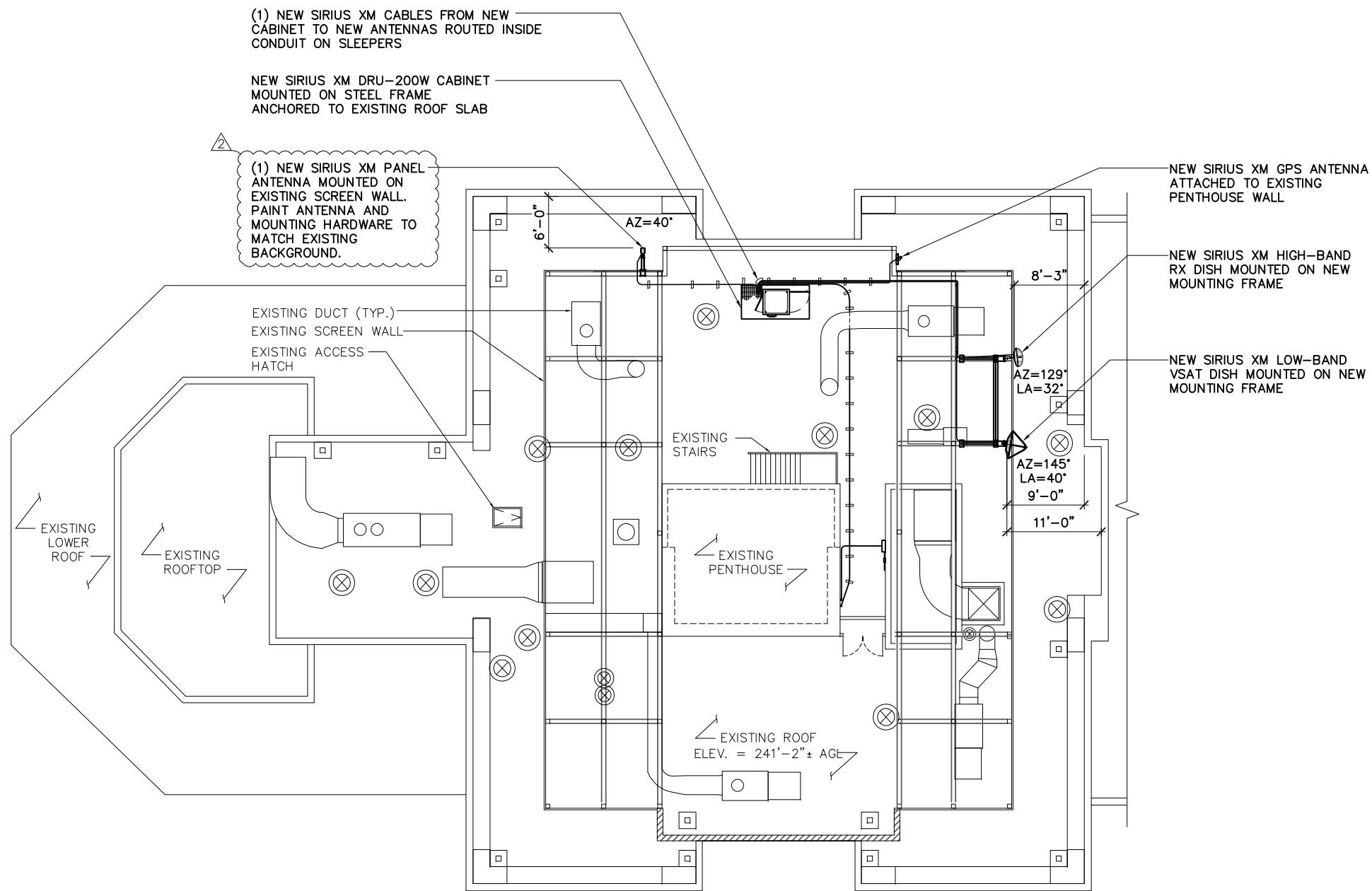
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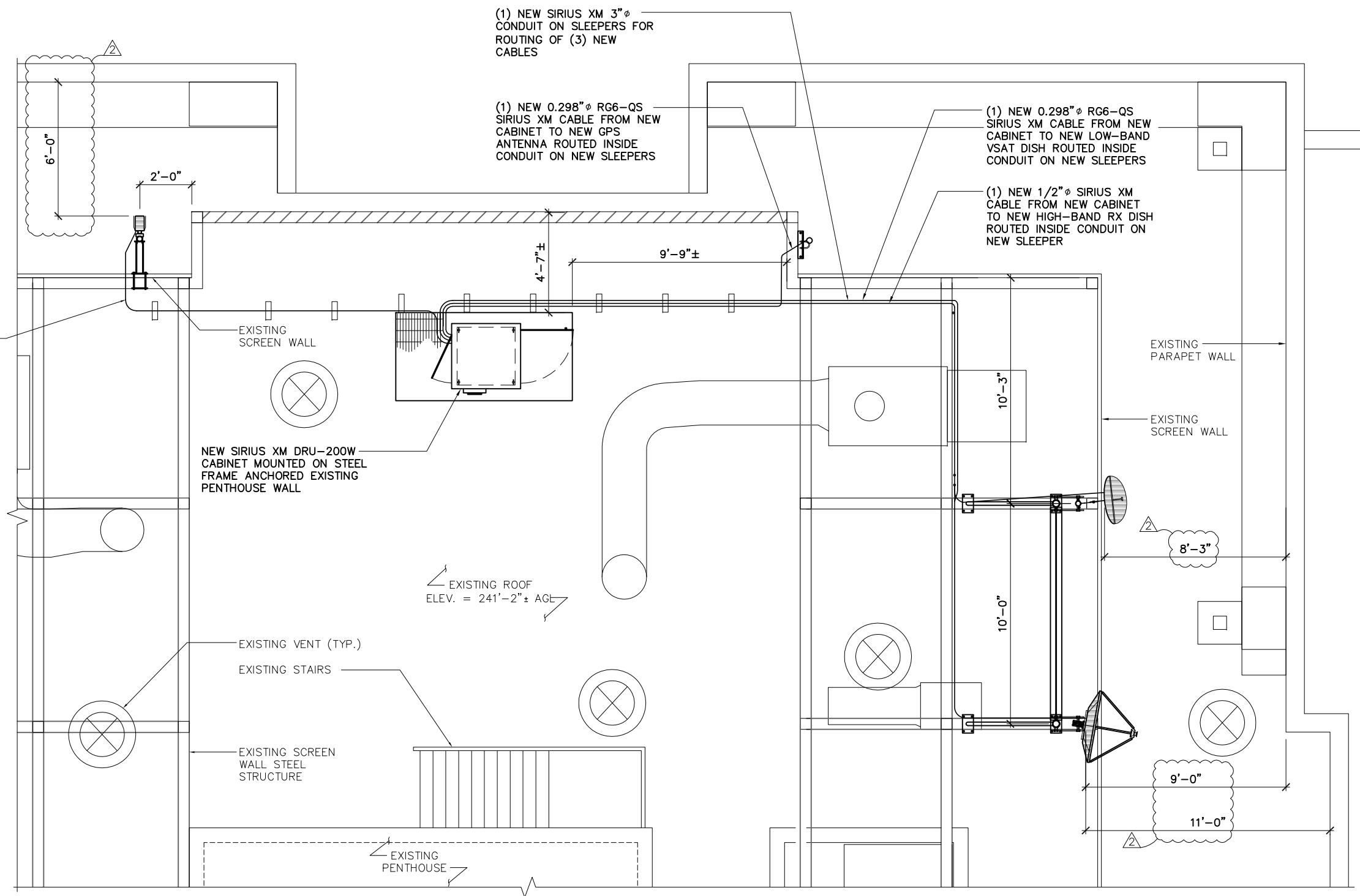
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SHEET NAME
ENLARGED PROPOSED ROOF PLAN

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EQUIPMENT LAYOUT

SHEET NUMBER

C-2

ENLARGED PROPOSED EQUIPMENT LAYOUT

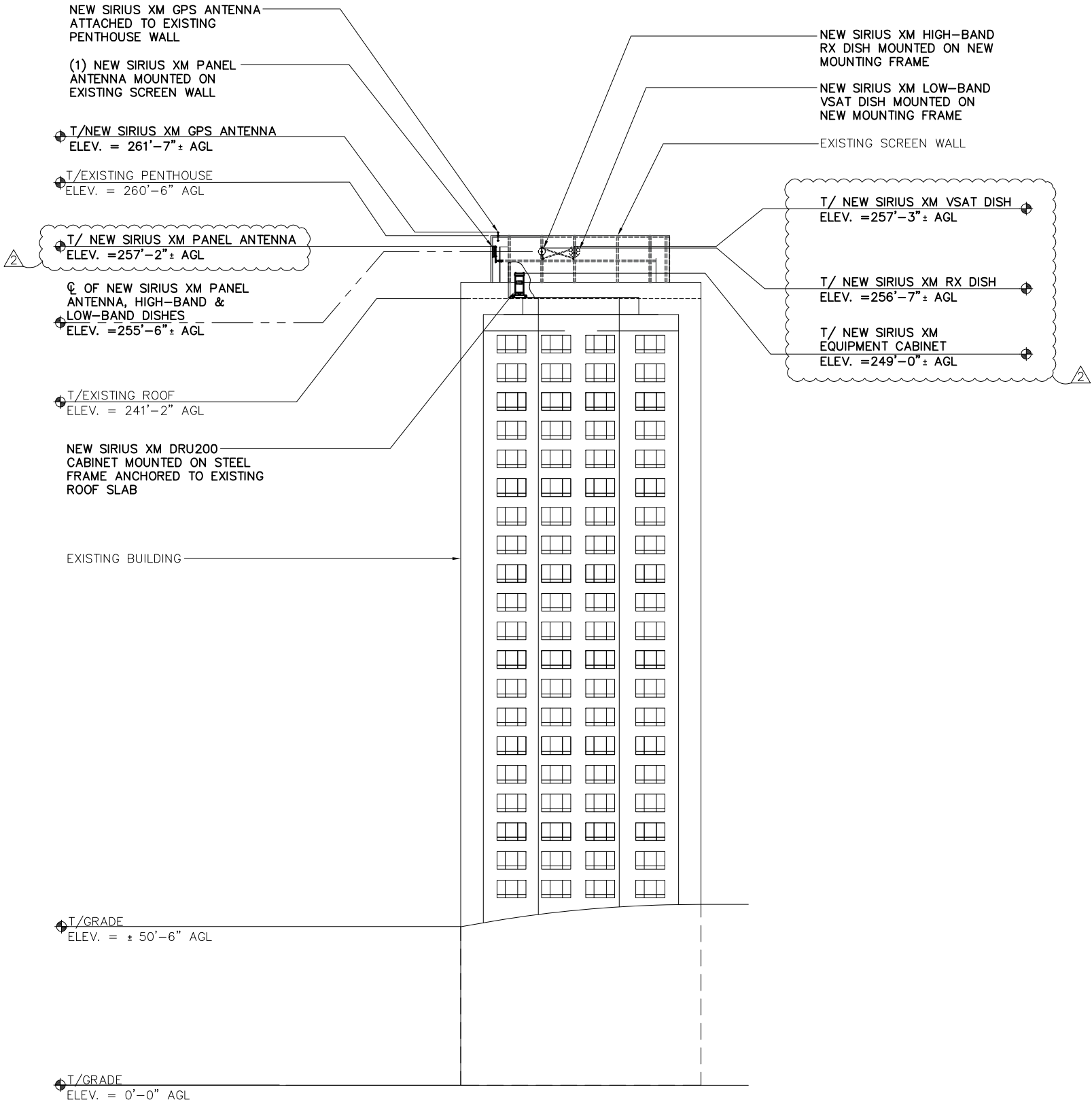
SCALE: 3/16" = 1'-0"

1

FEC# 2015.0042.0025

ANTENNA NOTES:
1. THE SIZE, HEIGHT, AND DIRECTION OF THE ANTENNA SHALL BE ADJUSTED TO MEET SYSTEM REQUIREMENTS.
2. CONTRACTOR SHALL VERIFY HEIGHT OF ANTENNA WITH SIRIUS XM REPRESENTATIVE.
3. ALL ANTENNA AZIMUTH TO BE FROM TRUE NORTH.

STRUCTURAL NOTES:
STRUCTURAL CALCULATION PREPARED BY FULLERTON ENGINEERING CONSULTANTS. CONTRACTOR TO COORDINATE WITH SIRIUS XM REPRESENTATIVE TO OBTAIN A COPY.



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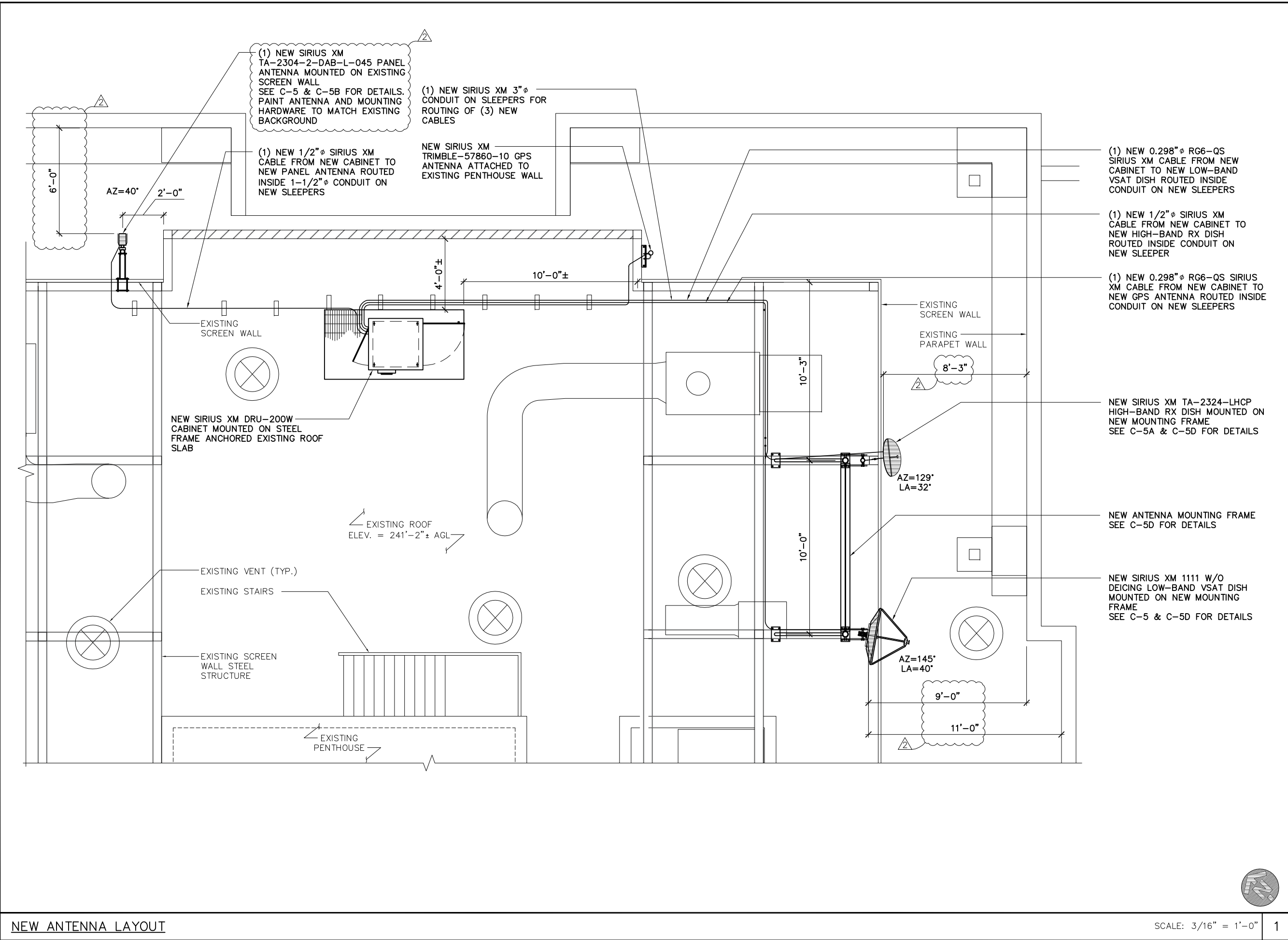
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SHEET NUMBER

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ANTENNA LAYOUT

SHEET NUMBER

C-4

NEW ANTENNA LAYOUT

SCALE: 3/16" = 1'-0" 1

FREQUENCY RANGE	2320-2345 MHz
ANTENNA WITH CLAMPS	8 lb

MANUFACTURER:	PRODELIN CORP
MODEL#:	1111
WEIGHT:	±40 LBS

NOTES:

1. THE ELEVATION AND LOCATION OF THE GPS ANTENNA SHALL BE IN ACCORDANCE WITH THE FINAL RF REPORT.
2. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A 0.5" STD. GALV. STEEL OR STAINLESS STEEL PIPE WITH 3/4"~ PIPE THREAD AT ANTENNA MOUNT.
3. CONTRACTOR TO VERIFY THAT GPS MOUNT IS INSTALLED AND PLUMBED CORRECTLY
4. DO NOT SWEEP TEST GPS ANTENNA.



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ANTENNA SPEC	SCALE: N.T.S.	1	VSAT SPEC	SCALE: N.T.S.	2	GPS SPEC	SCALE: N.T.S.	3				
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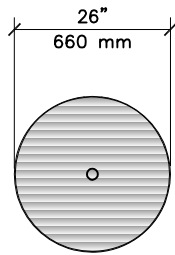
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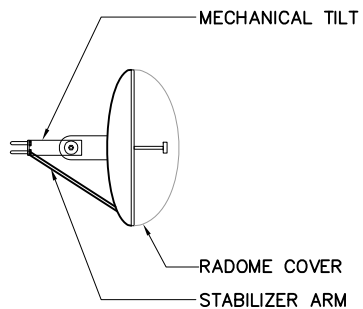
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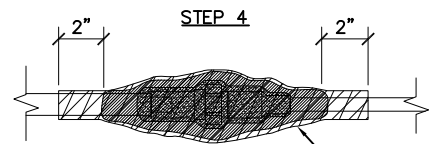
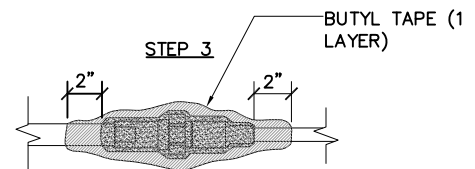
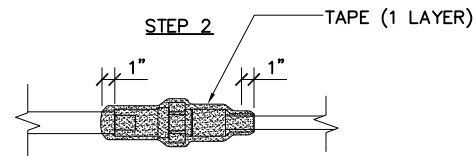
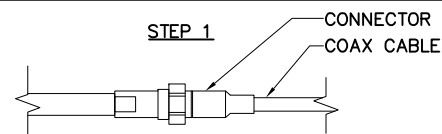


REAR VIEW



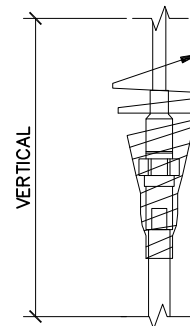
SIDE VIEW

MANUFACTURER: TIL-TEK
MODEL#: TA-2324-LHCP
WEIGHT: ±26 LBS



NOTE:
ELECTRICAL TAPE ENDS
ARE TO BE CUT, DO
NOT STRETCH

VERTICAL CONNECTIONS
SHOULD BE TAPED FROM
THE BOTTOM UP SO
OVERLAP SHEDS WATER
AWAY FROM CONNECTION



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APPROVED BY:		AR	
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	01/13/17	90% REVIEW	K
	03/14/17	REVISION	K
	03/28/17	REVISION	K
	04/03/17	FINAL	K
1	1/11/18	REVISED FINAL	F
2	7/2/18	REVISED FINAL	F

RX DISH SPECS

SCALE: N.T.S.

1

NOT USED

SCALE: N.T.S.

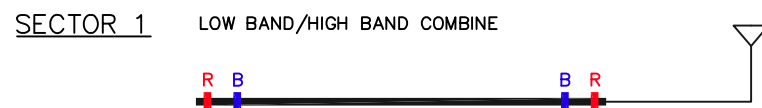
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WEATHERPROOFING DETAIL

SCALE: N.T.S.

3

1. COAX MAINLINE FOR TX & RX ANTENNAS WILL BE LABELED AT THE TOP AND BOTTOM WITHIN 12" OF THE CONNECTORS.
2. FOR COAX MAIN LINE CABLE CONNECTS TO A POWER SPLITTER, LABEL MUST ALSO BE PLACED ON THE JUMPER CABLE 12" FROM THE ANTENNA CONNECTOR.
3. ANY COAX MAKING A WALL PENETRATION WILL BE LABELED ON EACH SIDE OF THE PENETRATION.
4. LOW BAND DIVERSITY IS NOT INSTALLED IN ALL THE SITES, ONLY THE CORE SITE FOR THE MARKET.
5. ALL COLOR CODED TAPE SHOULD BE 1-1/2" IN WIDTH.
6. ANTENNA LINE COLORS WILL BE AS FOLLOWS:
 - A. LB-RED (R)
 - B. HB-BLUE (B)
 - C. GPS-WHITE (W)
 - D. VSAT-YELLOW (Y)
 - E. RX DISH-GREEN (G)
 - F. DIVERSITY-ORANGE (O)



TYPICAL COLOR CODING

SCALE: N.T.S.

4

NOT USED

SCALE: N.T.S.

5

CABLE ROUTING DETAIL

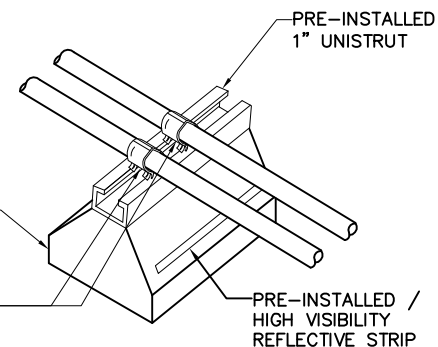
SCALE: N.T.S.

6

PRODUCT INFORMATION:

COOPER B-LINE
509 W. MONROE ST.
HIGHLAND, IL 62249
PH: 800-851-7415
FAX 618-654-1917
WEB: WWW.COOPERBLINE.COM

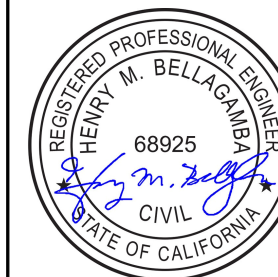
NEW COOPER B-LINE
"DURA-BLOK"
MODEL DB10
PART# 782051 49972
UNISTRUT CABLE
SNAP-INS



NOTE:
COOPER B-LINE "DURA-BLOK" HAS
A FIRE RATING OF: ASTM D573

NOTE:
MAXIMUM SPACING 10'

SLEEPER DETAIL



SITE NAME

400 BEALE
STREET

SITE I.D.

SFX502T

SITE ADDRESS

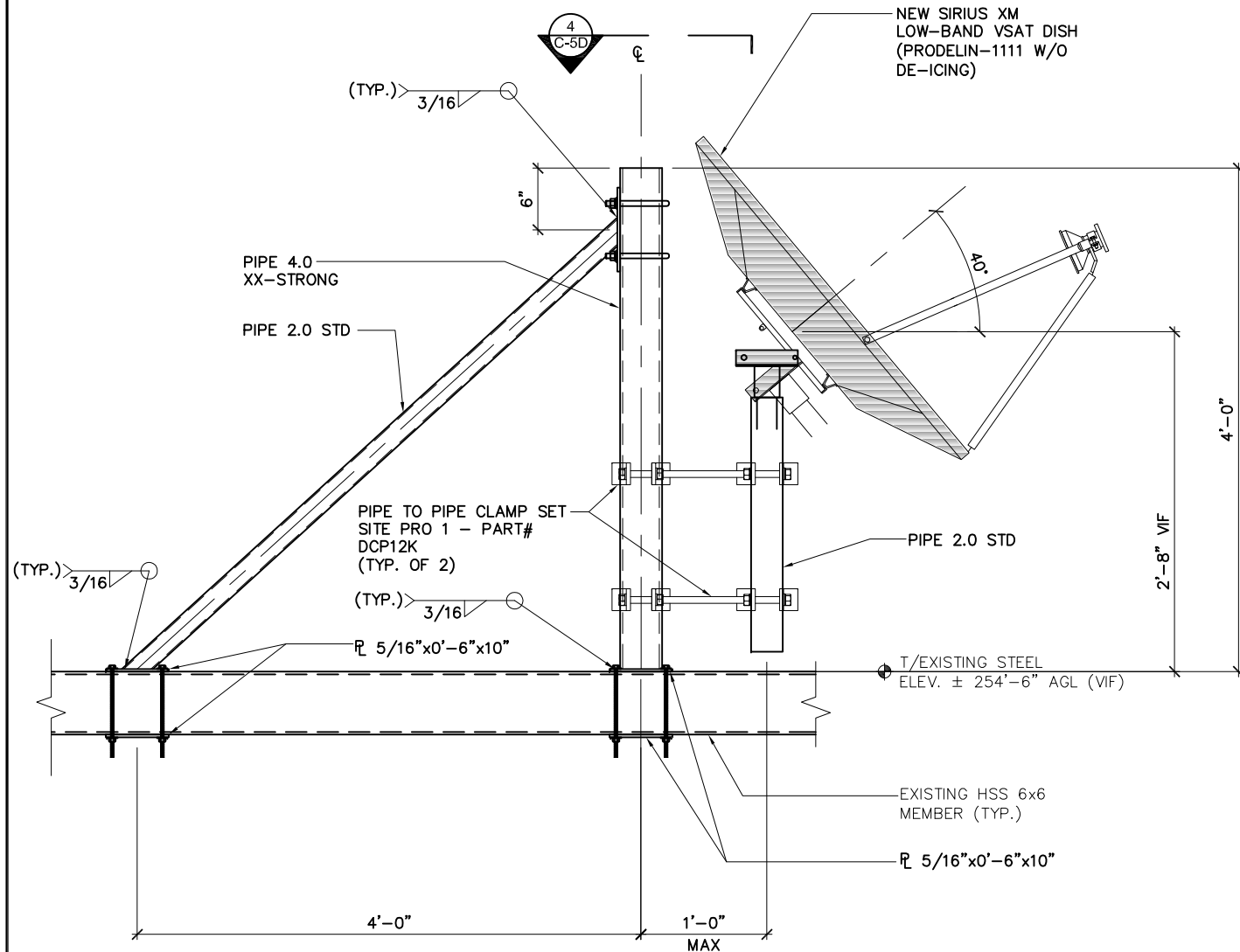
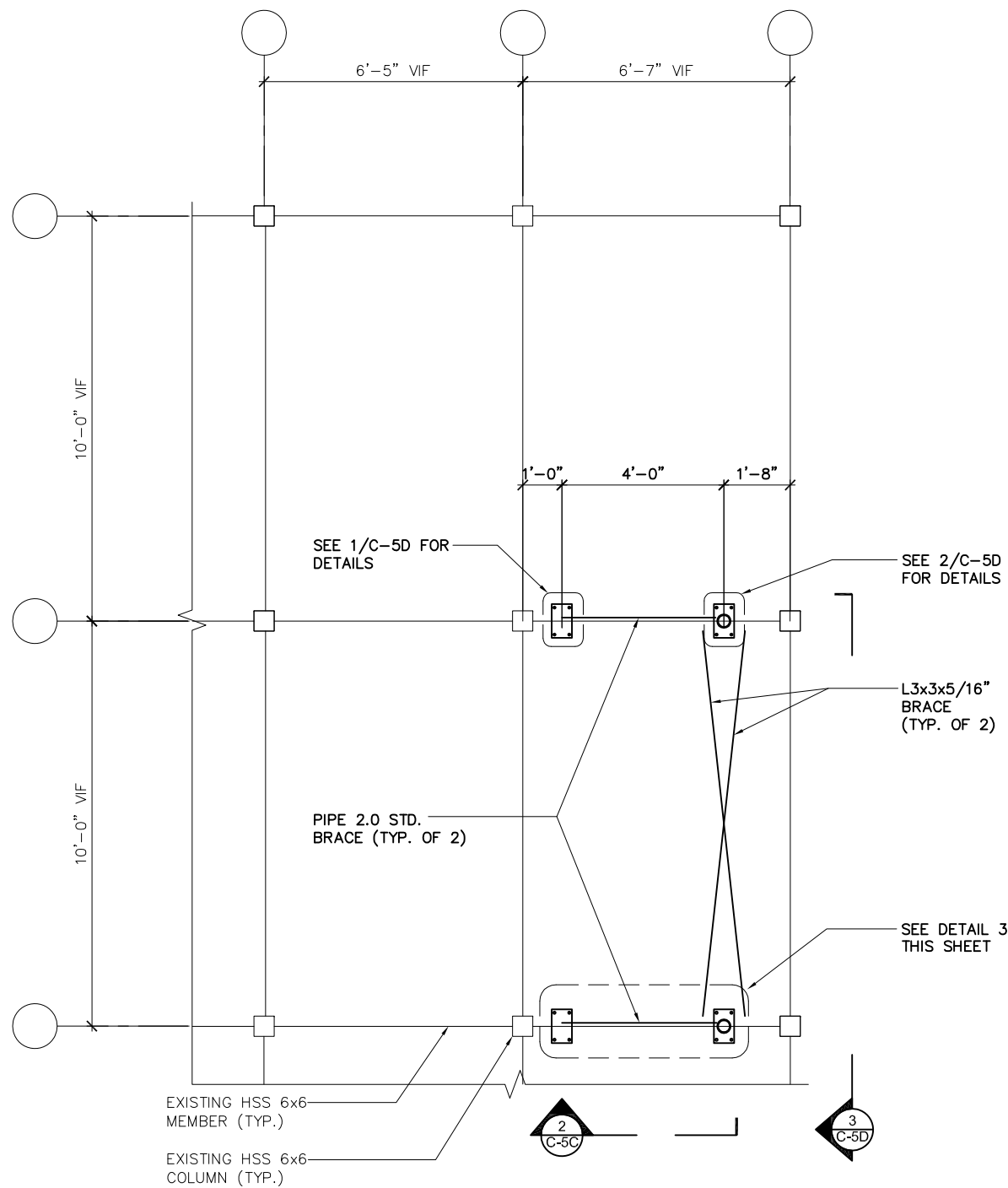
400 BEALE STREET
SAN FRANCISCO, CA 94105

SHEET NAME

SITE DETAILS

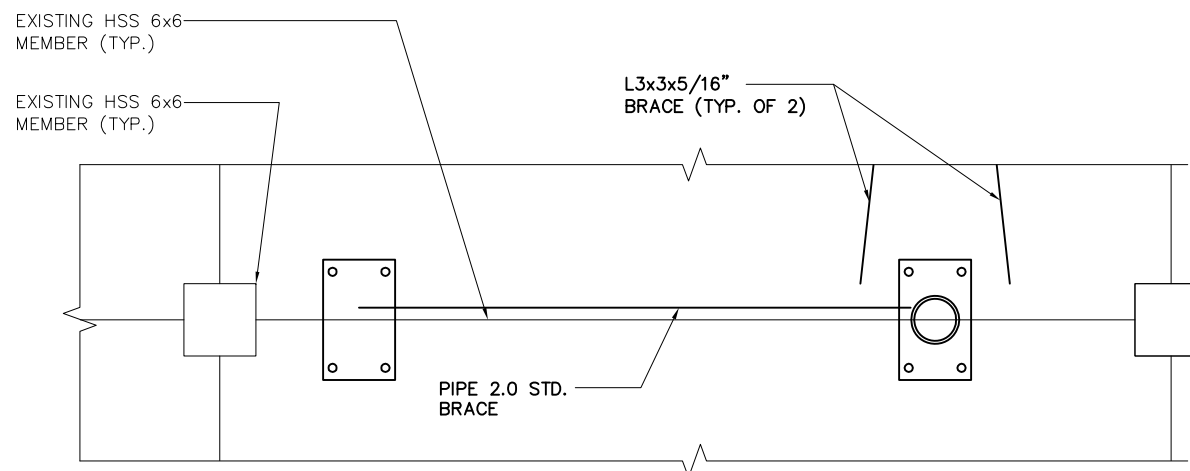
SHEET NUMBER

C-5A



NEW DISH ANTENNAS MOUNTING STRUCTURE SECTION

SCALE: 3/4" = 1'-0" 2



DETAIL

SCALE: 3/4" = 1'-0" 3

NEW DISH ANTENNAS FRAMING PLAN

SCALE: 1/4" = 1'-0" 1

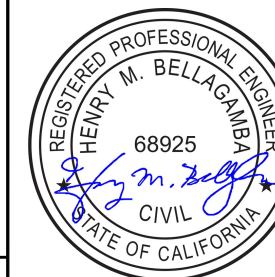


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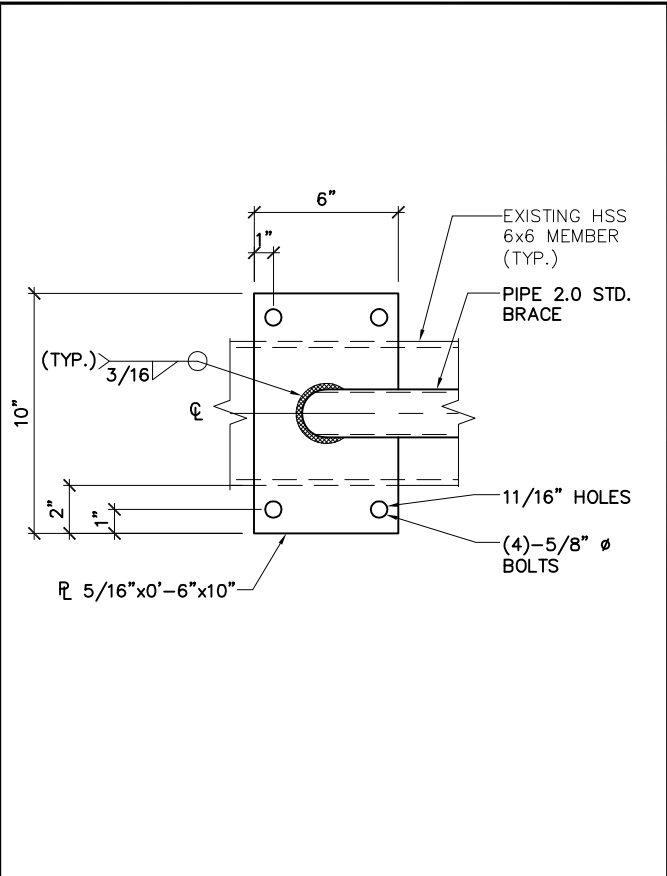
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SHEET NAME

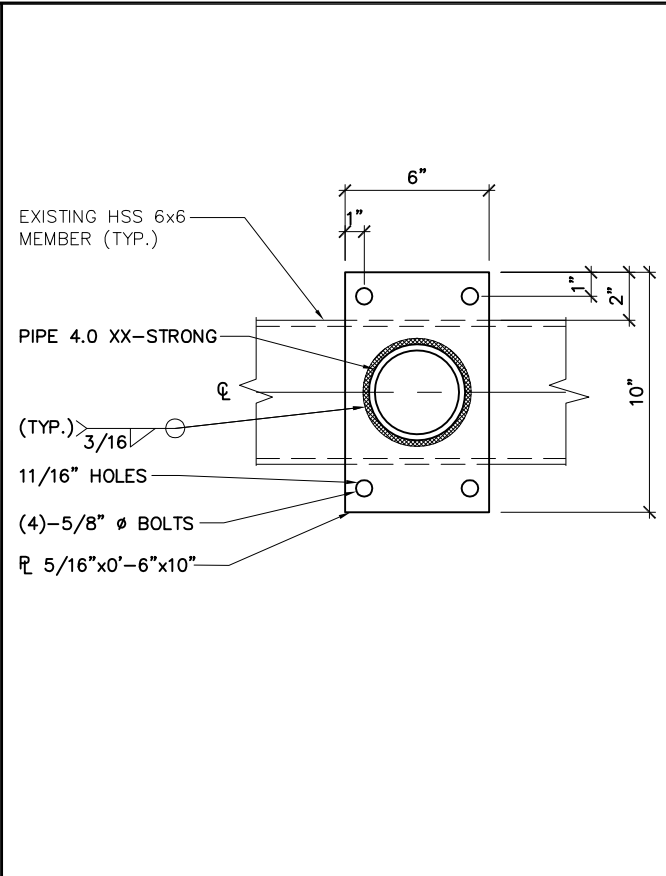
MOUNTING
DETAILS

SHEET NUMBER

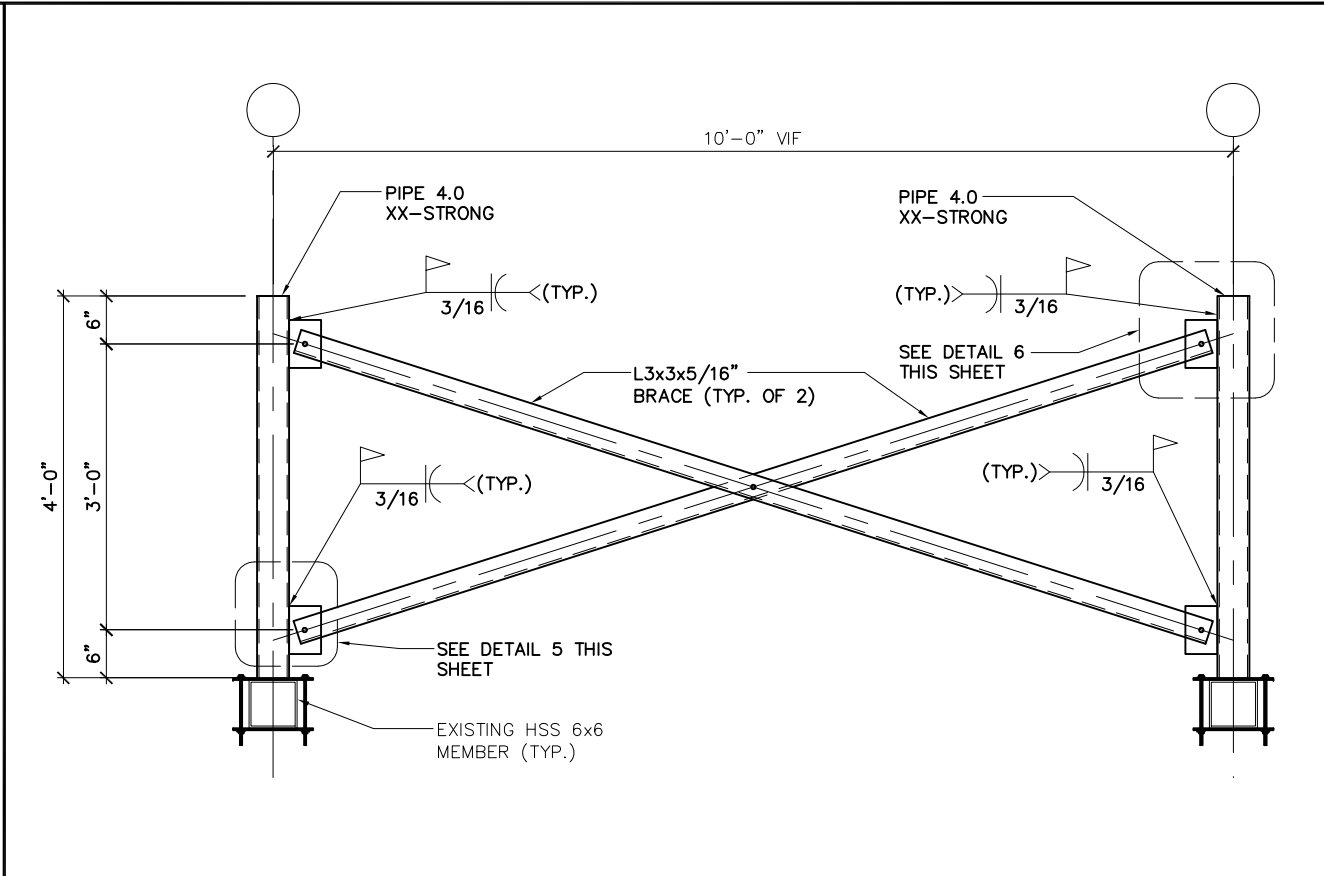
C-5C



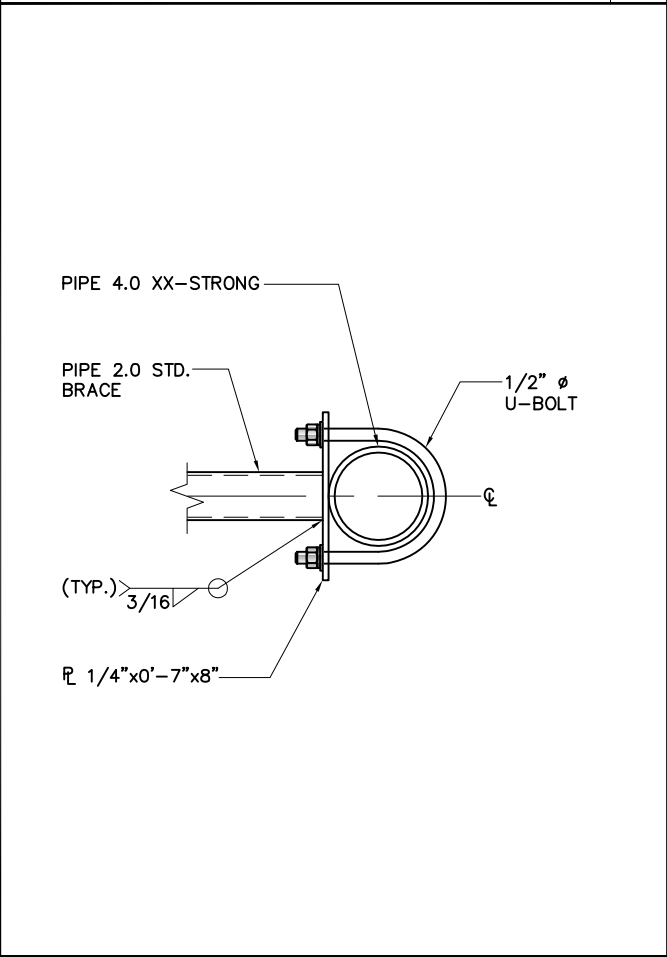
DETAIL SCALE: 1-1/2" = 1'-0" 1



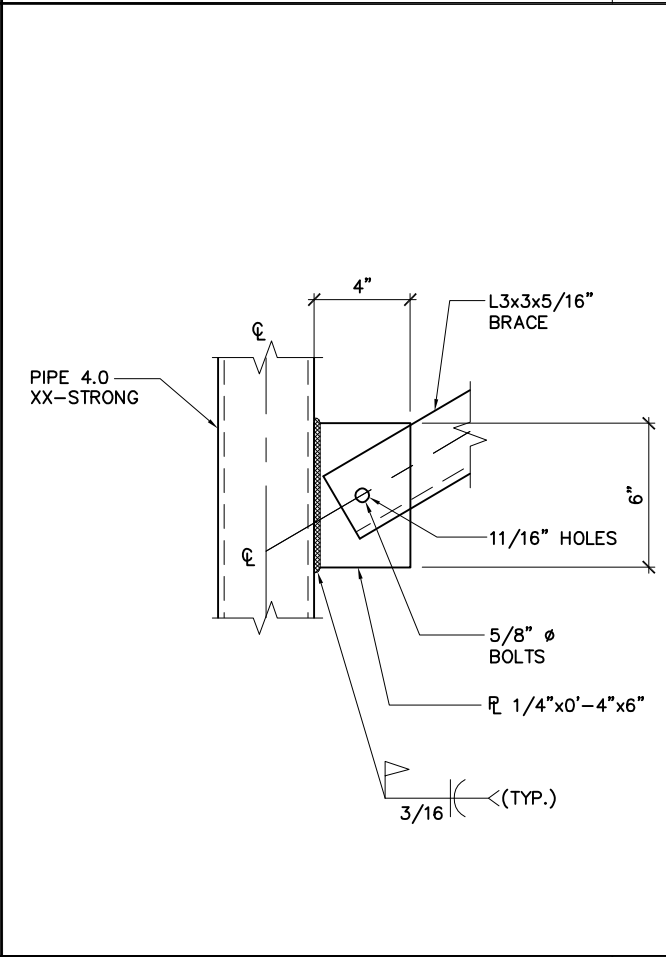
DETAIL SCALE: 1-1/2" = 1'-0" 2



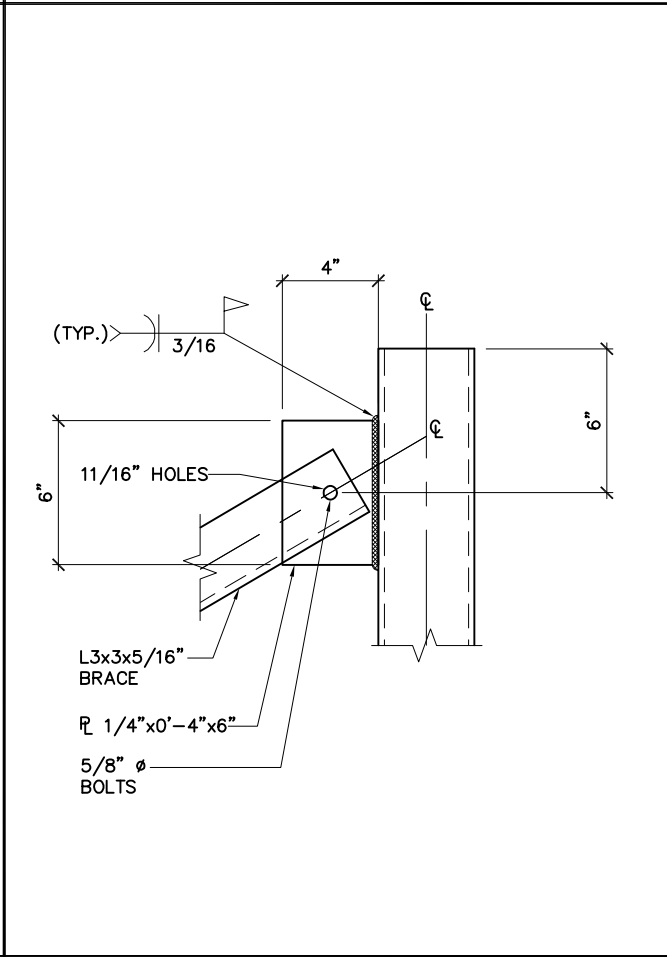
X - BRACE DETAIL SCALE: 1/2" = 1'-0" 3



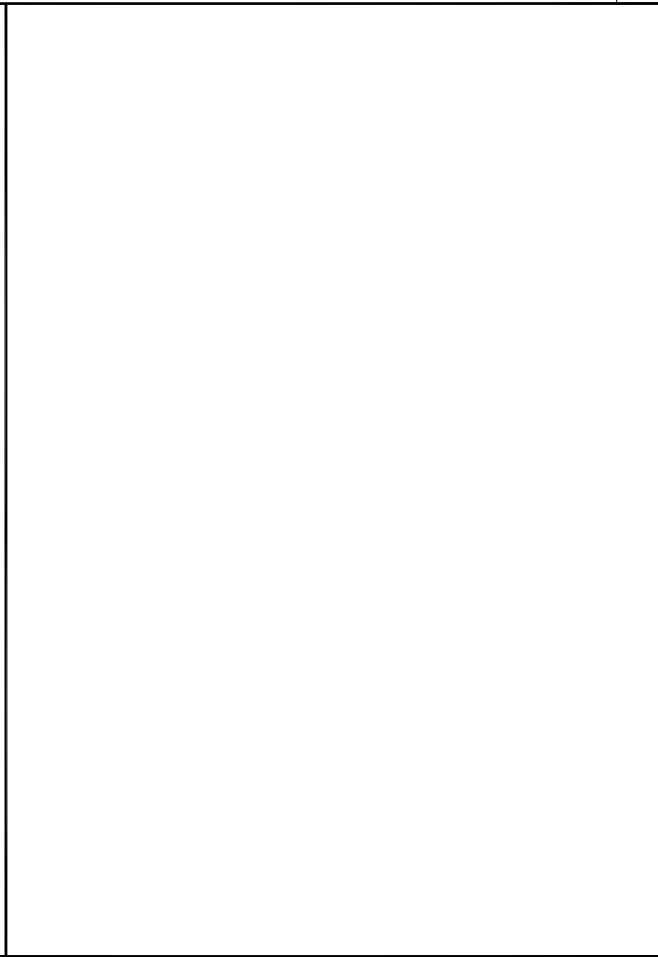
DETAIL SCALE: 1-1/2" = 1'-0" 4



DETAIL SCALE: 1-1/2" = 1'-0" 5



DETAIL SCALE: 1-1/2" = 1'-0" 6



NOT USED SCALE: NTS 7

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400 BEALE STREET
SITE I.D.
SFX502T
SITE ADDRESS
400 BEALE STREET SAN FRANCISCO, CA 94105
SHEET NAME
MOUNTING DETAILS
SHEET NUMBER
C-5D

NEW ANTENNA CONFIGURATION	
---------------------------	--

ANTENNA								CABLE			
ANTENNA NUMBER	NEW OR EXISTING	ANTENNA MANUFACTURER	ANTENNA TYPE	MODEL NUMBER	AZIMUTH (TN)	TILT (+ OR -)	CL OF ANTENNA FROM GROUND LEVEL (FT)	NEW OR EXISTING	CABLE TYPE	CABLE SIZE (DIA. IN)	CABLE LENGTH (FT)
1	NEW	TIL-TEK	PANEL	TA-2304-2-DAB-L-045	40°	0°	257'-2"±	NEW	LDFR-50A	1/2"	45'
2	NEW	PRODELIN	VSAT	1111 W/O DE-ICING	145°	40°	257'-2"±	NEW	RG6-QS	0.298"	75'
3	NEW	TILTEK	RX	TA-2324-LHCP	129°	32°	257'-2"±	NEW	LDF4-50A	1/2"	60'
4	NEW	TRIMBLE	GPS	57860-30	N/A	N/A	261'-7"±	NEW	RG6-QS	.298	50'



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ENGINEERING • DESIGN

NEW EQUIPMENT SCHEDULE									
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CABINET NUMBER	CABINET MANUFACTURER	CABINET TYPE	MODEL NUMBER	NOTES
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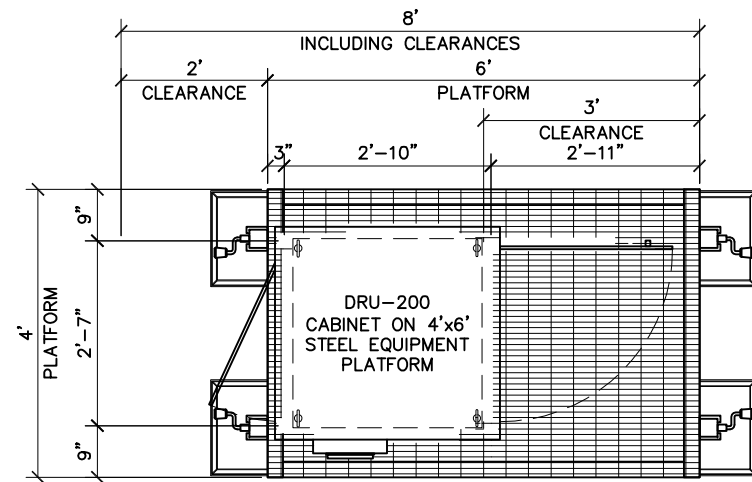
1	UBS	REPEATER	DRU-200W	
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NEW POWER SCHEDULE	
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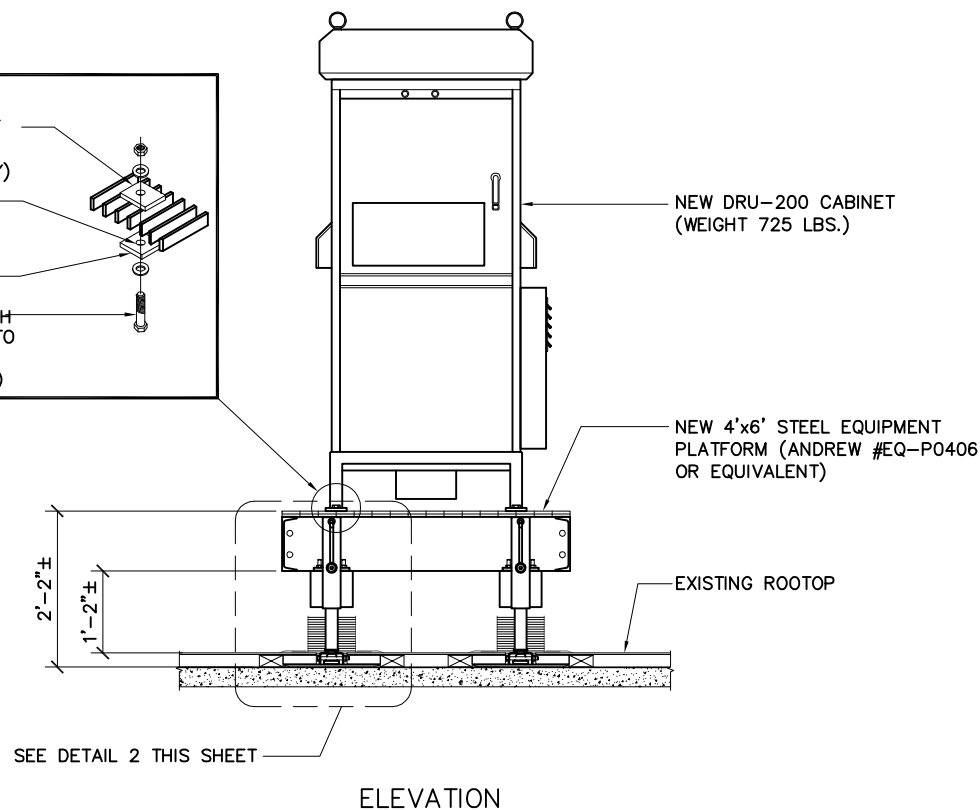
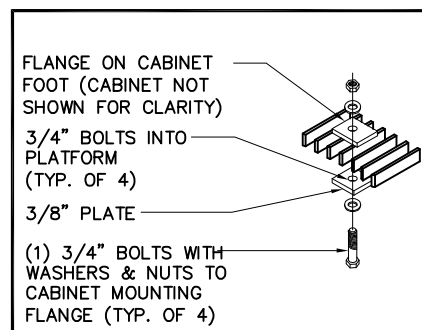
AMPERE	VOLTAGE	PHASE	NOTES
40 AMPS	208/120V	3	UTILIZE EXISTING PANEL INSIDE ELECTRICAL ROOM ON 26TH FLOOR

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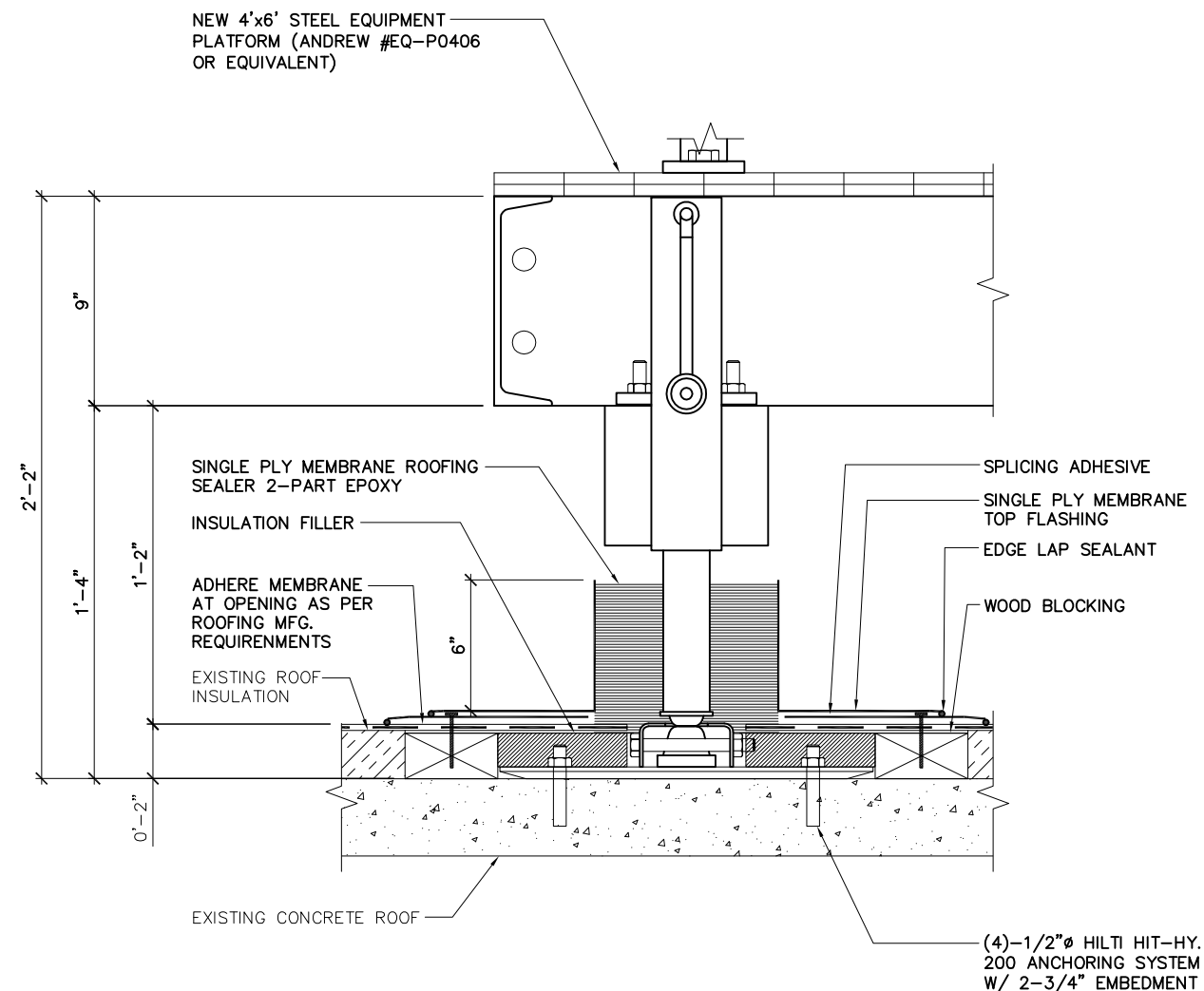




PLAN



ELEVATION



UBS DRU-200W CABINET DETAIL

SCALE: 3/8" = 1'-0"

1

MOUNTING DETAIL

SCALE: N.T.S.

2



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SITE NAME

400 BEALE STREET

SITE I.D.

SFX502T

SITE ADDRESS

400 BEALE STREET
SAN FRANCISCO, CA 94105

SHEET NAME

EQUIPMENT
SPECS

SHEET NUMBER

C-7

SERVICE EQUIPMENT NOTES:

- 1. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS
- 2. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK

CONDUCTOR NOTES:

- 1. ALL CONDUCTORS SHALL BE COPPER
- 2. ALL WIRING SHALL BE COPPER WITH THHN/THWN DUAL RATED 600 VOLTS INSULATION
- 3. GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER UNLESS OTHERWISE NOTED

CONDUIT NOTES:

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- 3. SEAL TIGHT, FLEXIBLE CONDUIT MAY BE USED WHERE CODE PERMITS. ALL CONDUIT SHALL HAVE FULL SIZE EQUIPMENT GROUND WIRE
- 4. SERVICE CONDUITS SHALL HAVE NO MORE THAN (3) – 90° BENDS IN ANY SINGLE RUN. THE CONTRACTOR SHALL PROVIDE PULL BOXES AS NEEDED WHERE CONDUIT REQUIREMENTS EXCEED THESE CONDITIONS
- 5. ALL CABLES, POWER AND/OR TELEPHONE AND/OR FIBER SYSTEM CONDUITS SHALL HAVE A MINIMUM 24" RADIUS SWEEPS TO EQUIPMENT, PULL BOXES, ETC., UNLESS OTHERWISE NOTED, OR AS REQUIRED BY UTILITY COMPANIES

NEW CABLE GROUNDING NOTES:

- 1. AVOID DISRUPTION OF EXISTING GROUNDING SYSTEM. REPAIR ANY DAMAGE TO THE SATISFACTION OF THE OWNER
- 2. CONTRACTOR SHALL CONNECT GROUND KITS TO THE EXISTING GROUND BARS AT THE TOP AND BASE OF TOWER
- 3. CONTRACTOR SHALL CONNECT GROUND KITS TO THE NEW GROUND BAR BEFORE ENTRY TO CABINET
- 4. NO BACK TO BACK LUGGING OF GROUNDS

GENERAL GROUNDING NOTES:

- 1. VERTICAL DROPS SHALL BE 20'-0" OF #2 AWG SOLID TINNED COPPER WIRE. CADWELD TO GROUND BAR
- 2. ALL BENDS MINIMUM 8" RADIUS
- 3. APPLY ANTI-OXIDATION COMPOUND TO ALL CONNECTIONS
- 4. BARE COPPER CONDUCTORS SHALL NOT BE IN CONTACT WITH ANY DISSIMILAR MATERIAL. PLACE ON STANDOFFS, IF NECESSARY TO ALLOW FOR PROPER INSTALLATION
- 5. SHARP BENDS IN GROUNDING CONDUCTORS SHALL BE AVOIDED. 90° BENDS SHALL NOT BE USED
- 6. ALL GROUNDING CONDUCTORS SHALL BE KEPT AS SHORT AS POSSIBLE. THE SHORTEST PRACTICAL ROUTE SHALL BE CHOSEN WITH THE LEAST AMOUNT OF BENDS AND SPLICES. USE THIS RULE AT ALL TIMES
- 7. ALL CONNECTIONS TO GROUND BARS SHALL BE WITH A 2-HOLE LUG UNLESS OTHERWISE SPECIFIED
- 8. WHEN GROUNDING MORE THAN ONE PIECE OF EQUIPMENT, DO NOT USE THE EQUIPMENT AS A GROUNDING CONDUCTOR. DOUBLE-STACKING OF LUGS SHALL BE USED TO GET FROM EQUIPMENT TO EQUIPMENT
- 9. REMOVE ALL PAINT BENEATH THE SURFACE OF GROUND LUGS



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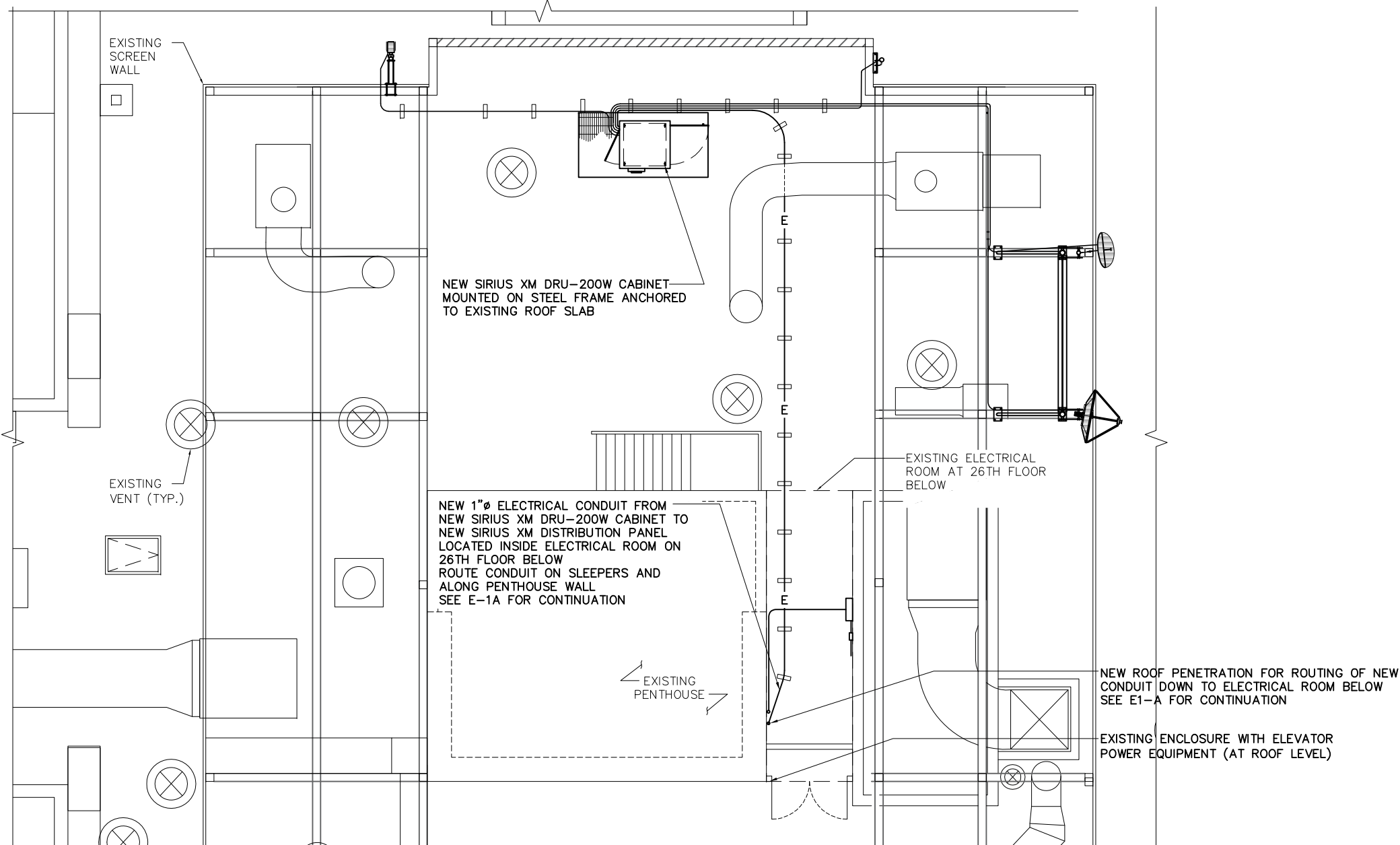


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ELECTRICAL NOTES

SCALE: N.T.S. 1

NOTE:
CONTRACTOR TO VERIFY AVAILABILITY
OF EXISTING CONDUIT AND REUSE
WHEN POSSIBLE



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SAN FRANCISCO, CA 94105

SHEET NAME

UTILITY PLAN
AND NOTES

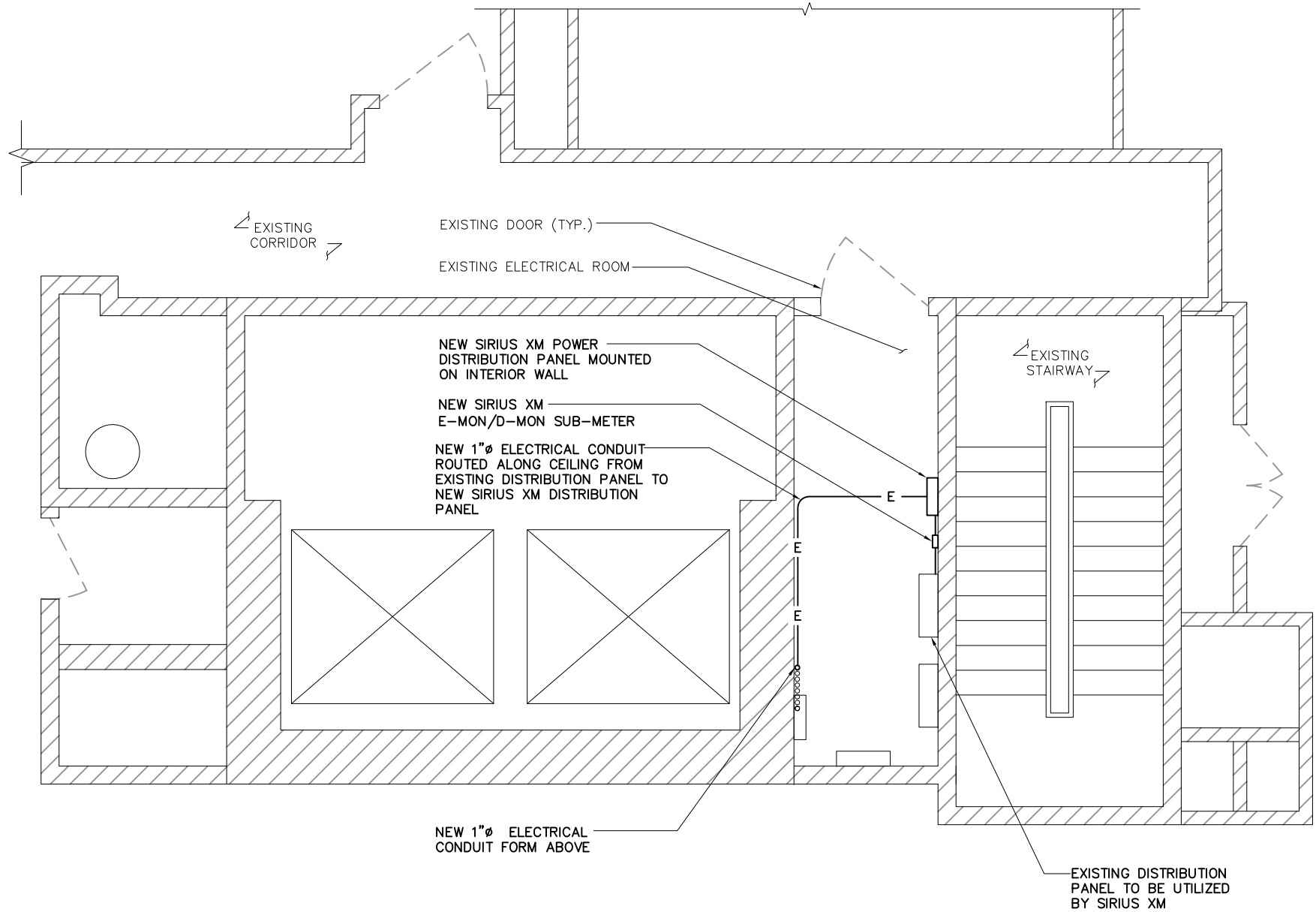
SHEET NUMBER

E-1

FINAL UTILITY PLAN

SCALE: 1/8" = 1'-0" 2

NOTE:
CONTRACTOR TO VERIFY AVAILABILITY
OF EXISTING CONDUIT AND REUSE
WHEN POSSIBLE



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SITE ADDRESS
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SHEET NAME
UTILITY PLAN AND NOTES
SHEET NUMBER
E-1A





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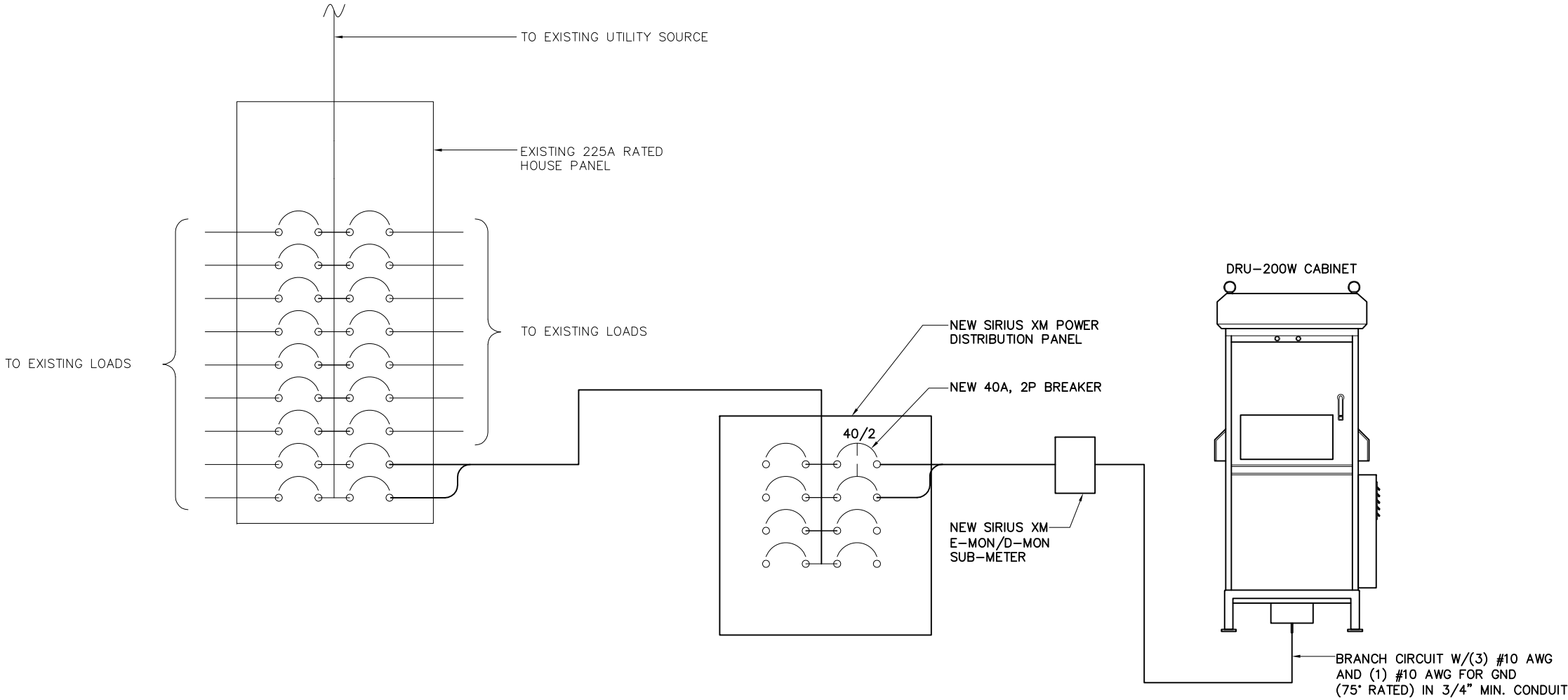
400 BEALE STREET
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SHEET NAME

FINAL SINGLE
LINE DIAGRAM/
PANEL SCHED.

SHEET NUMBER

E-2



FINAL SINGLE LINE DIAGRAM

SCALE: N.T.S.

1

SITE NUMBER:		SFX502T		MODEL NUMBER:		TBD									
VOLTAGE:		240V/120		PHASE:		3		WIRE:		4					
MAIN BREAKER:		225AMP MLO		BUSS RATING:		225 AMPS		AIC:		10,000					
MOUNT:		SURFACE		NEUTRAL BAR:		YES		GROUND BAR:		YES					
ENCLOSURE TYPE:		NEMA 1		N to GROUND BOND		YES									
PANEL STATUS:		EXISTING		INTERNAL TVSS:		YES									
CKT	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	TELEPHONE BOARD PLUGS	20	1	ON	200	1.00	400		1.00	200	ON	1	20	TELEPHONE BOARD PLUGS	2
3	TELEPHONE BOARD PLUGS	20	1	ON	200	1.00		400	1.00	200	ON	1	20	TELEPHONE BOARD PLUGS	4
5	TELEPHONE BOARD PLUGS	20	1	ON	200	1.00	400		1.00	200	ON	1	20	SPARE	6
7	SPARE	20	1	ON	200	1.00		400	1.00	200	ON	1	20	SPARE	8
9	SPACE	---	---	---	0	0.00	0		0.00	0	---	---	---	SPACE	10
11	SPACE	---	---	---	0	0.00		0	0.00	0	---	---	---	SPACE	12
13	SPACE	---	---	---	0	0.00	0		0.00	0	---	---	---	SPACE	14
15	TEMP POWER	40	2	ON	2194	1.25		2742.5	0.00	0	---	---	---	SPACE	16
17		---	---	N/A	2194	1.25	2743		0.00	0	---	---	---	SPACE	18
							3543	3543	VA				TOTAL KVA	7.09	
													AMPS	29.52	
	MIGRATION PERIOD LOADING														

FINAL PANEL SCHEDULE

SCALE: N.T.S.

2

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8. WHEN GROUNDING MORE THAN ONE PIECE OF EQUIPMENT, DO NOT USE THE EQUIPMENT AS A GROUNDING CONDUCTOR. DOUBLE-STACKING OF LUGS SHALL BE USED TO GET FROM EQUIPMENT TO EQUIPMENT.
9. REMOVE ALL PAINT BENEATH THE SURFACE OF GROUND LUGS
10. GROUND SYSTEM TO BE TESTED TO 5 OHMS OR LESS

NOTES

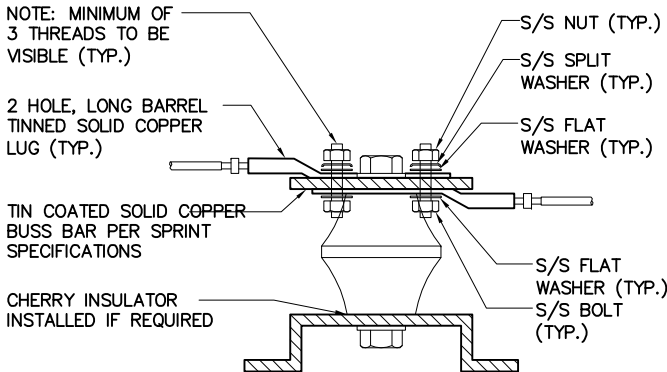
SCALE: N.T.S.

1

FINAL SINGLE LINE GROUNDING DIAGRAM

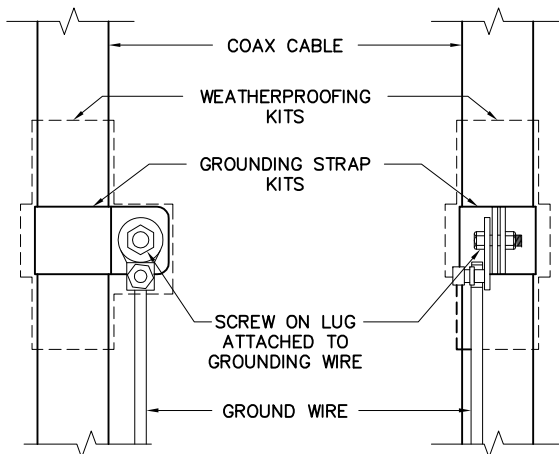
SCALE: N.T.S.

5



NOTES:

1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING SPLIT WASHERS.
2. COAT WIRE END WITH ANTI-OXIDATION COMPOUND PRIOR TO INSERTION INTO LUG BARREL AND CRIMPING.
3. APPLY ANTI-OXIDATION COMPOUND BETWEEN ALL LUGS AND BUSS BARS PRIOR TO MATING AND BOLTING.



NOTES:

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- THIS DETAILS IS TYPICAL FOR EACH CABLE WHERE IT IS SPECIFIED TO BE GROUNDED

NOT USED

SCALE: N.T.S.

2

GROUND LUG DETAIL

SCALE: N.T.S.

3

COAX GROUND KIT

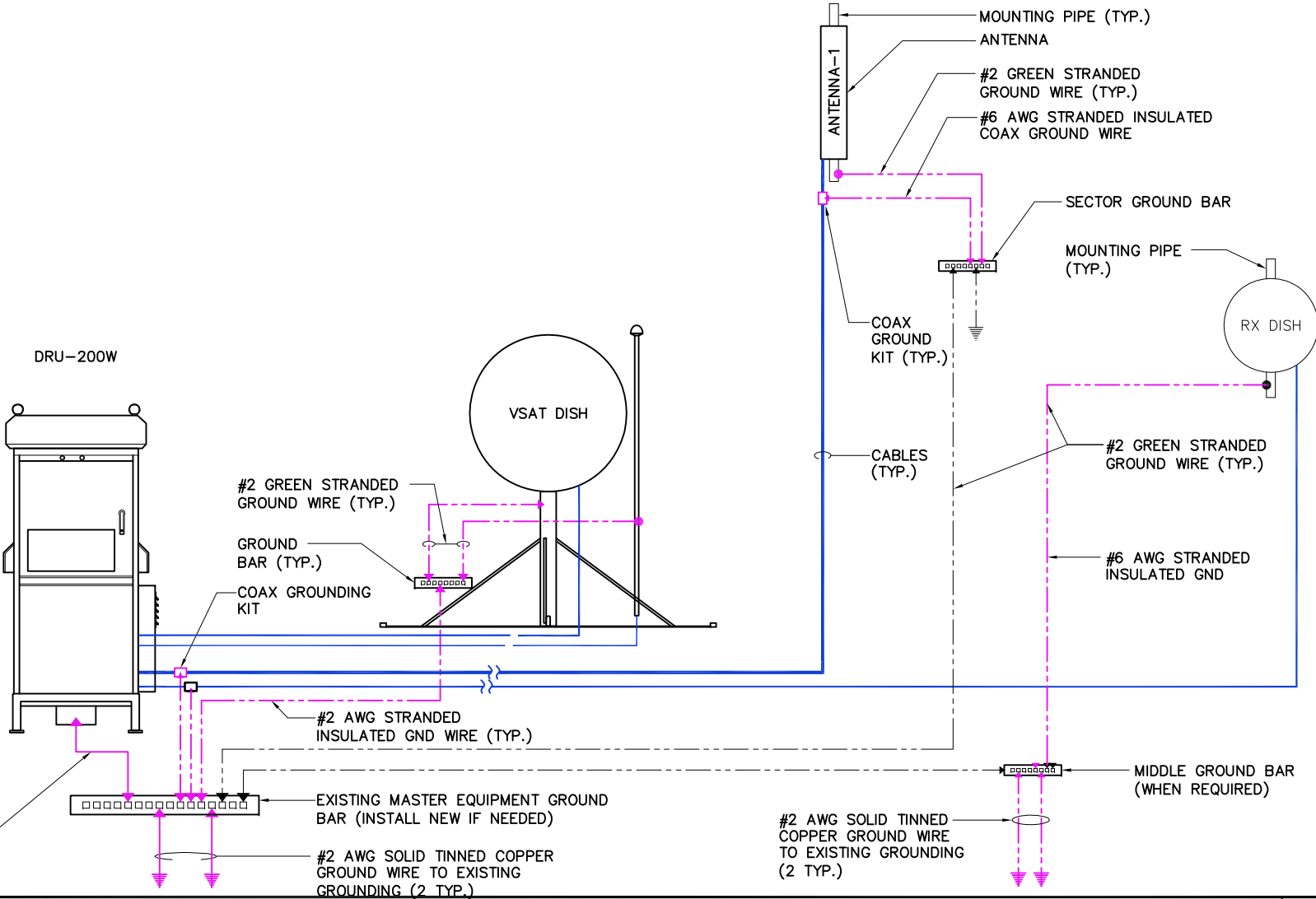
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4

NOTE:
ALL NEW GROUND BARS SHALL BE TIED TO (E) GROUND RING OR BONDED TO (E) GROUND BARS

▲ MECHANICAL CONNECTION ● EXOTHERMIC CONNECTION

GROUND EACH CABINET FROM GROUND BAR INSIDE CABINET TO MASTER GROUND BAR. INSTALL GROMMET AT BOTTOM OF CABINET, 2 HOLE LUG.



3659 GREEN RD STE. 214,
CLEVELAND, OH 44122
OFFICE: (216) 593-0400
FAX: (216) 593-0401



1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
TEL: 847-908-8400
www.FullertonEngineering.com

CHECKED BY:		AG	
APPROVED BY:		AR	
#	DATE	DESCRIPTION	INITIALS
	01/13/17	90% REVIEW	K
	03/14/17	REVISION	K
	03/28/17	REVISION	K
	04/03/17	FINAL	K
1	1/11/18	REVISED FINAL	P
2	7/2/18	REVISED FINAL	D



SITE NAME

400 BEALE STREET

SITE I.D.

SFX502T

SITE ADDRESS

400 BEALE STREET
SAN FRANCISCO, CA 94105

SHEET NAME

GROUNDING
DETAILS AND
NOTES

SHEET NUMBER

E-3



3659 GREEN RD STE. 214,
CLEVELAND, OH 44122
OFFICE: (216) 593-0400
FAX: (216) 593-0401



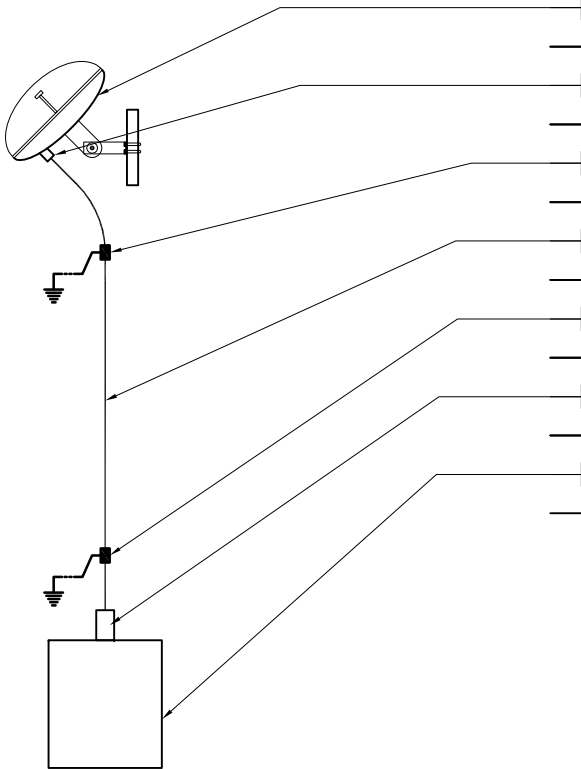
1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
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CHECKED BY:		AG	
APPROVED BY:		AR	
#	DATE	DESCRIPTION	INT.
	01/13/17	90% REVIEW	KC
	03/14/17	REVISION	KC
	03/28/17	REVISION	KC
	04/03/17	FINAL	KC
1	1/11/18	REVISED FINAL	PK
2	7/2/18	REVISED FINAL	DZ



SITE NAME
400 BEALE STREET
SITE I.D.
SFX502T
SITE ADDRESS
400 BEALE STREET SAN FRANCISCO, CA 94105
SHEET NAME
SITE CONFIGURATIONS MATERIAL LIST
SHEET NUMBER
E-4A

ITEM#	DESCRIPTION	SIZE	QUANTITY	LENGTH	MANUFACTURER	PART NUMBER	REMARKS	PROVIDED BY
1	HB RX DISH (2330-2345 MHz)	25.25"	1 NEW	N/A	TIL-TEK	TA-2324-LHCP	CIRCULAR POLARIZED SOLID PARABOLIC DISH ANTENNA	SIRIUS XM
2	7-16 DIN MALE CONNECTOR	N/A	1 NEW	N/A	ANDREW	L4TDM-PSA	ATTACH TO CABLE PRIOR TO INSTALLATION	VENDOR
3	GROUNDING KIT	N/A	1 NEW	N/A	ANDREW	SG12-06B2A	INCLUDES 59" #6 GROUND WIRE, INSTALL 1 KIT EVERY 100 FT. MIN.	VENDOR
4	COAXIAL CABLE	1/2" ϕ	1 NEW	60'	ANDREW	LDF4-50A	MINIMUM BEND RADIUS PER MANUFACTURER SPECS	VENDOR
5	GROUNDING KIT	N/A	1 NEW	N/A	ANDREW	SG12-06B2A	INCLUDES 59" #6 GROUND WIRE, INSTALL 1 KIT EVERY 100 FT. MIN.	VENDOR
6	N MALE CONNECTOR	N/A	1 NEW	N/A	ANDREW	L4TNM-PSA	-	VENDOR
7	CABINET	N/A	1 NEW	N/A	UBS	DRU-200W	-	SIRIUS XM





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TEL: 847-908-8400
www.FullertonEngineering.com

CHECKED BY: AG

APPROVED BY: AR

#	DATE	DESCRIPTION	INT.
	01/13/17	90% REVIEW	KC
	03/14/17	REVISION	KC
	03/28/17	REVISION	KC
	04/03/17	FINAL	KC
1	1/11/18	REVISED FINAL	PK
2	7/2/18	REVISED FINAL	DZ



SITE NAME
400 BEALE STREET

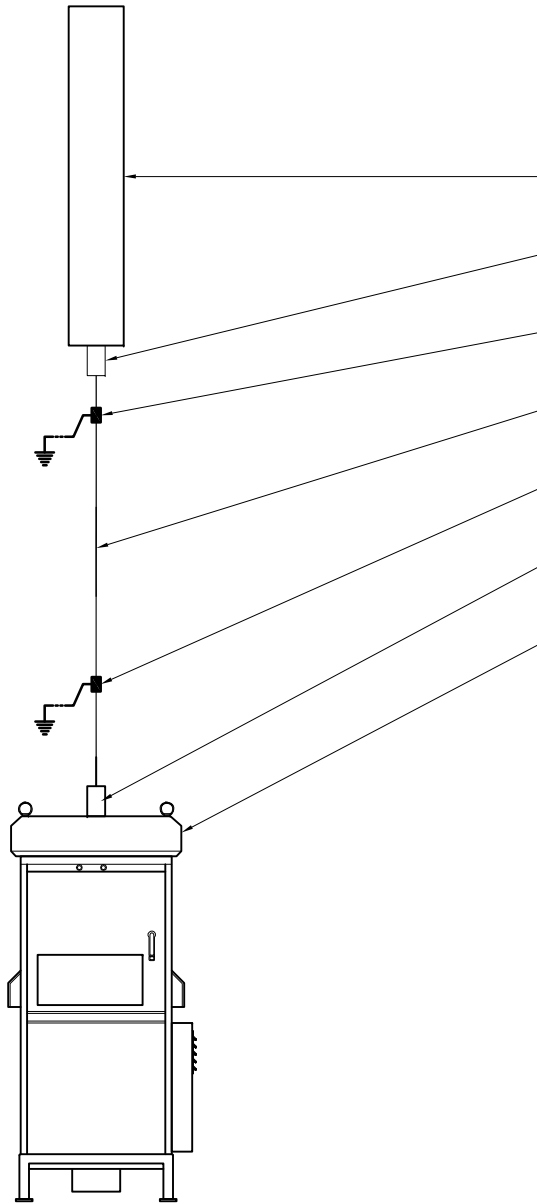
SITE I.D.
SFX502T

SITE ADDRESS
400 BEALE STREET
SAN FRANCISCO, CA 94105

SHEET NAME
SITE CONFIGURATIONS
MATERIAL LIST

SHEET NUMBER
E-5

ITEM#	DESCRIPTION	SIZE	QUANTITY	LENGTH	MANUFACTURER	PART NUMBER	REMARKS	PROVIDED BY
1	TRANSMIT ANTENNA	N/A	1 NEW	N/A	TIL-LEK	TA-2304-2-DAB-L-045	-	SIRIUS XM
2	7-16 DIN MALE CONNECTOR	N/A	1 NEW	N/A	ANDREW	L4TDM-PSA	ATTACH TO CABLE PRIOR TO INSTALLATION	VENDOR
3	GROUNDING KIT	N/A	1 NEW	N/A	ANDREW	SG12-06B2A	INCLUDES 59" #6 GROUND WIRE, INSTALL 1 KIT EVERY 100 FT. MIN.	VENDOR
4	COAXIAL CABLE	1/2"	1 NEW	60'	ANDREW	LDF4-50A	MINIMUM BEND RADIUS PER MANUFACTURER SPECS	VENDOR
5	GROUNDING KIT	N/A	1 NEW	N/A	ANDREW	SG12-06B2A	INCLUDES 59" #6 GROUND WIRE, INSTALL 1 KIT EVERY 100 FT. MIN.	VENDOR
6	7/8" EIA CONNECTOR	N/A	1 NEW	N/A	ANDREW	L4E78-PS	ATTACH TO CABLE PRIOR TO INSTALLATION	VENDOR
7	CABINET	N/A	1 NEW	N/A	UBS	DRU-200W	-	SIRIUS XM



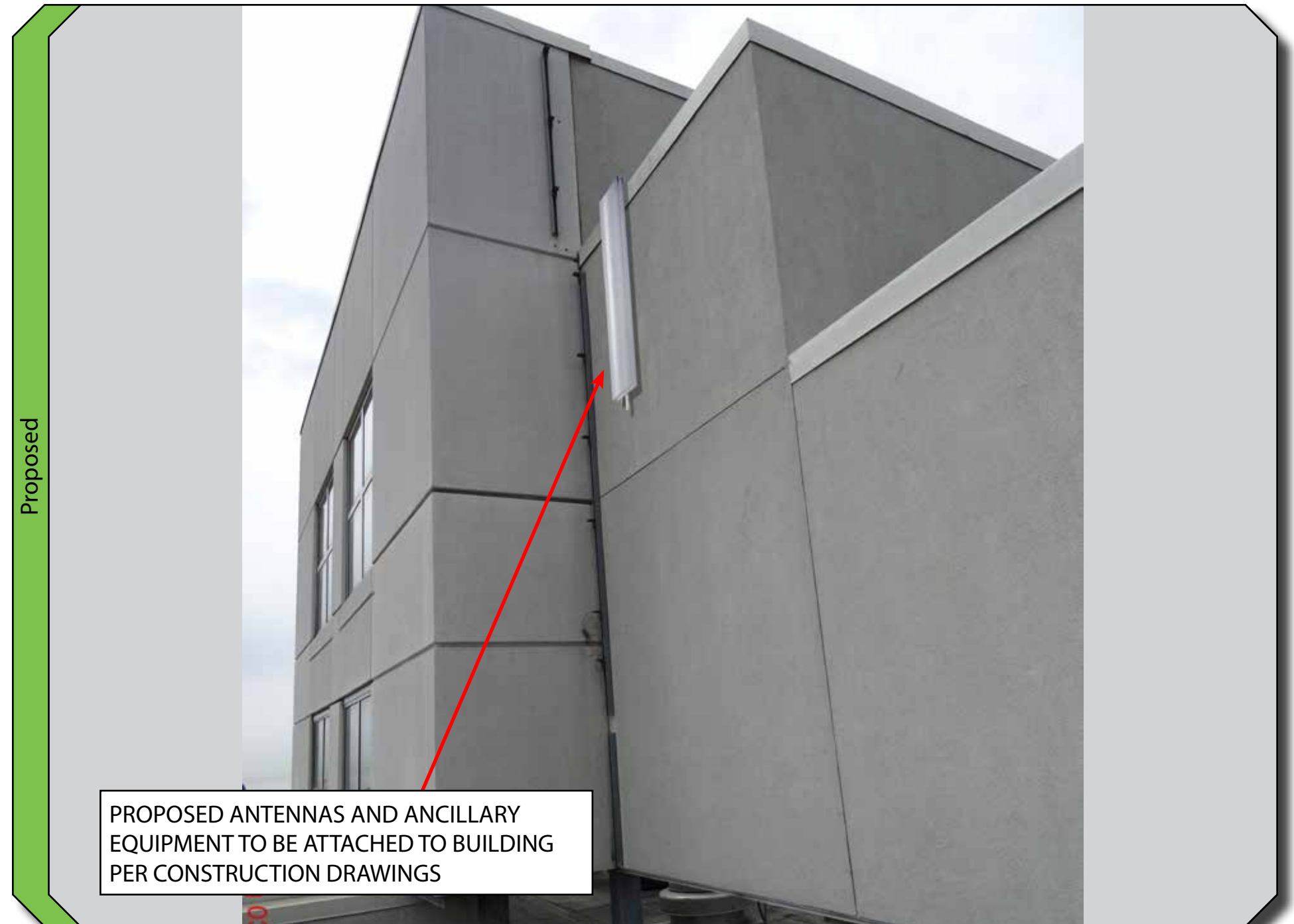
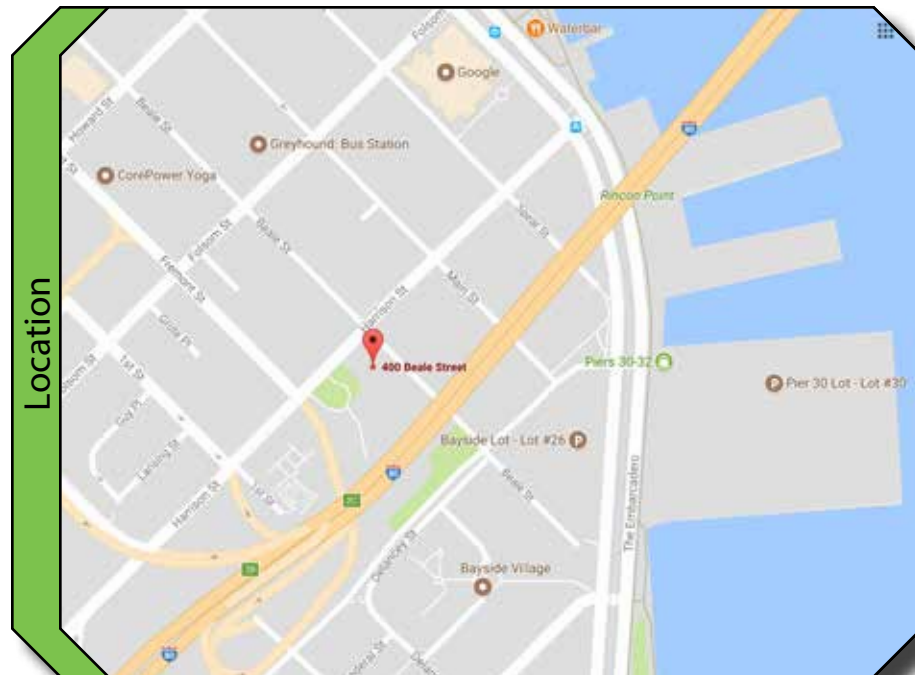


SFX502T 400 BEALE STREET

400 BEALE STREET
SAN FRANCISCO, CA



View 1 of 3



August 14, 2017

Prepared by: ZLN

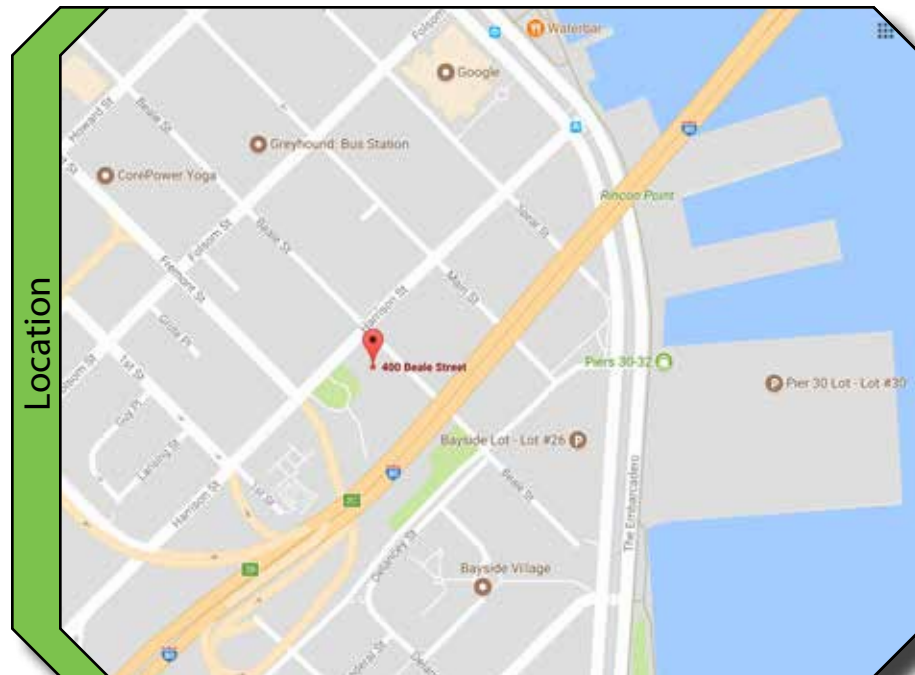


SFX502T 400 BEALE STREET

400 BEALE STREET
SAN FRANCISCO, CA



View 2 of 3



August 14, 2017

Prepared by: ZLN

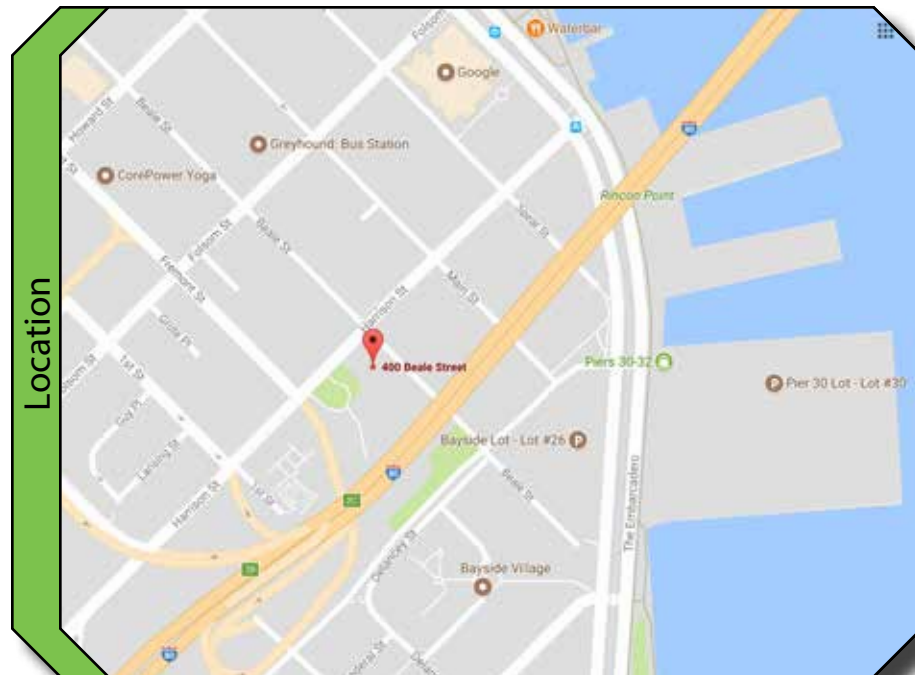


SFX502T 400 BEALE STREET

400 BEALE STREET
SAN FRANCISCO, CA



View 3 of 3



August 14, 2017

Prepared by: ZLN

EXHIBIT C



SAN FRANCISCO PLANNING DEPARTMENT

CEQA Categorical Exemption Determination

PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address		Block/Lot(s)
400 BEALE ST		3766012
Case No.		Permit No.
2018-001707PRJ		
<input type="checkbox"/> Addition/ Alteration	<input type="checkbox"/> Demolition (requires HRE for Category B Building)	<input type="checkbox"/> New Construction
Project description for Planning Department approval. INSTALL 1 NEW PANEL ANTENNA ON EXISTING ROOFTOP, NEW RX DISH ON EXISTING ROOFTOP, VSAT DISH ON EXISTING ROOFTOP, NEW GPS ANTENNA EXISTING ROOFTOP, NEW CABINET NEW STEEL PLATFORM EXISTING ROOFTOP		

STEP 1: EXEMPTION CLASS

Note: If neither class applies, an <i>Environmental Evaluation Application</i> is required.	
<input checked="" type="checkbox"/>	Class 1 - Existing Facilities. Interior and exterior alterations; additions under 10,000 sq. ft.
<input type="checkbox"/>	Class 3 - New Construction. Up to three new single-family residences or six dwelling units in one building; commercial/office structures; utility extensions; change of use under 10,000 sq. ft. if principally permitted or with a CU.
<input type="checkbox"/>	Class 32 - In-Fill Development. New Construction of seven or more units or additions greater than 10,000 sq. ft. and meets the conditions described below: (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations. (b) The proposed development occurs within city limits on a project site of no more than 5 acres substantially surrounded by urban uses. (c) The project site has no value as habitat for endangered rare or threatened species. (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. (e) The site can be adequately served by all required utilities and public services. FOR ENVIRONMENTAL PLANNING USE ONLY
<input type="checkbox"/>	Class ____

STEP 2: CEQA IMPACTS

TO BE COMPLETED BY PROJECT PLANNER

If any box is checked below, an *Environmental Evaluation Application* is required.

<input type="checkbox"/>	Air Quality: Would the project add new sensitive receptors (specifically, schools, day care facilities, hospitals, residential dwellings, and senior-care facilities within an Air Pollution Exposure Zone? Does the project have the potential to emit substantial pollutant concentrations (e.g., backup diesel generators, heavy industry, diesel trucks, etc.)? (refer to EP_ArcMap > CEQA Catex Determination Layers > Air Pollution Exposure Zone)
<input type="checkbox"/>	Hazardous Materials: If the project site is located on the Maher map or is suspected of containing hazardous materials (based on a previous use such as gas station, auto repair, dry cleaners, or heavy manufacturing, or a site with underground storage tanks): Would the project involve 50 cubic yards or more of soil disturbance - or a change of use from industrial to residential? If yes, this box must be checked and the project applicant must submit an Environmental Application with a Phase I Environmental Site Assessment. <i>Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Maher program, a DPH waiver from the Maher program, or other documentation from Environmental Planning staff that hazardous material effects would be less than significant (refer to EP_ArcMap > Maher layer).</i>
<input type="checkbox"/>	Transportation: Does the project create six (6) or more net new parking spaces or residential units? Does the project have the potential to adversely affect transit, pedestrian and/or bicycle safety (hazards) or the adequacy of nearby transit, pedestrian and/or bicycle facilities?
<input type="checkbox"/>	Archeological Resources: Would the project result in soil disturbance/modification greater than two (2) feet below grade in an archeological sensitive area or eight (8) feet in a non -archeological sensitive area? (refer to EP_ArcMap > CEQA Catex Determination Layers > Archeological Sensitive Area)
<input type="checkbox"/>	Subdivision/Lot Line Adjustment: Does the project site involve a subdivision or lot line adjustment on a lot with a slope average of 20% or more? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography)
<input type="checkbox"/>	Slope = or > 20%: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography) If box is checked, a geotechnical report is required.
<input type="checkbox"/>	Seismic: Landslide Zone: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report is required.
<input type="checkbox"/>	Seismic: Liquefaction Zone: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report will likely be required.

If no boxes are checked above, GO TO STEP 3. If one or more boxes are checked above, an *Environmental Evaluation Application* is required, unless reviewed by an Environmental Planner.

Comments and Planner Signature (optional): Ashley Lindsay

STEP 3: PROPERTY STATUS - HISTORIC RESOURCE
TO BE COMPLETED BY PROJECT PLANNER

PROPERTY IS ONE OF THE FOLLOWING: (refer to Parcel Information Map)	
<input type="checkbox"/>	Category A: Known Historical Resource. GO TO STEP 5.
<input type="checkbox"/>	Category B: Potential Historical Resource (over 45 years of age). GO TO STEP 4.
<input checked="" type="checkbox"/>	Category C: Not a Historical Resource or Not Age Eligible (under 45 years of age). GO TO STEP 6.

STEP 4: PROPOSED WORK CHECKLIST
TO BE COMPLETED BY PROJECT PLANNER

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

STEP 5: CEQA IMPACTS - ADVANCED HISTORICAL REVIEW
TO BE COMPLETED BY PROJECT PLANNER

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

<input type="checkbox"/>	7. Addition(s) , including mechanical equipment that are minimally visible from a public right-of-way and meet the <i>Secretary of the Interior's Standards for Rehabilitation</i> .
<input type="checkbox"/>	8. Other work consistent with the <i>Secretary of the Interior Standards for the Treatment of Historic Properties</i> (specify or add comments):
<input type="checkbox"/>	9. Other work that would not materially impair a historic district (specify or add comments): (Requires approval by Senior Preservation Planner/Preservation Coordinator)
<input type="checkbox"/>	10. Reclassification of property status. (Requires approval by Senior Preservation Planner/Preservation <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <input type="checkbox"/> Reclassify to Category A a. Per HRER dated b. Other (specify): </div> <div style="width: 45%;"> <input type="checkbox"/> Reclassify to Category C (attach HRER) </div> </div>
Note: If ANY box in STEP 5 above is checked, a Preservation Planner MUST check one box below.	
<input type="checkbox"/>	Further environmental review required. Based on the information provided, the project requires an <i>Environmental Evaluation Application</i> to be submitted. GO TO STEP 6.
<input type="checkbox"/>	Project can proceed with categorical exemption review. The project has been reviewed by the Preservation Planner and can proceed with categorical exemption review. GO TO STEP 6.
Comments (optional):	
Preservation Planner Signature:	

STEP 6: CATEGORICAL EXEMPTION DETERMINATION

TO BE COMPLETED BY PROJECT PLANNER

<input type="checkbox"/>	Further environmental review required. Proposed project does not meet scopes of work in either (check all that apply): <input type="checkbox"/> Step 2 - CEQA Impacts <input type="checkbox"/> Step 5 - Advanced Historical Review STOP! Must file an <i>Environmental Evaluation Application</i>.	
<input checked="" type="checkbox"/>	No further environmental review is required. The project is categorically exempt under CEQA. There are no unusual circumstances that would result in a reasonable possibility of a significant effect.	
	Project Approval Action: Building Permit If Discretionary Review before the Planning Commission is requested, the Discretionary Review hearing is the Approval Action for the project.	Signature: Ashley Lindsay 09/19/2018
	Once signed or stamped and dated, this document constitutes a categorical exemption pursuant to CEQA Guidelines and Chapter 31 of the Administrative Code. In accordance with Chapter 31 of the San Francisco Administrative Code, an appeal of an exemption determination can only be filed within 30 days of the project receiving the first approval action. Please note that other approval actions may be required for the project. Please contact the assigned planner for these approvals.	

STEP 7: MODIFICATION OF A CEQA EXEMPT PROJECT

TO BE COMPLETED BY PROJECT PLANNER

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

PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address (If different than front page)		Block/Lot(s) (If different than front page)
400 BEALE ST		3766/012
Case No.	Previous Building Permit No.	New Building Permit No.
2018-001707PRJ		
Plans Dated	Previous Approval Action	New Approval Action
	Building Permit	
Modified Project Description:		

DETERMINATION IF PROJECT CONSTITUTES SUBSTANTIAL MODIFICATION

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

DETERMINATION OF NO SUBSTANTIAL MODIFICATION

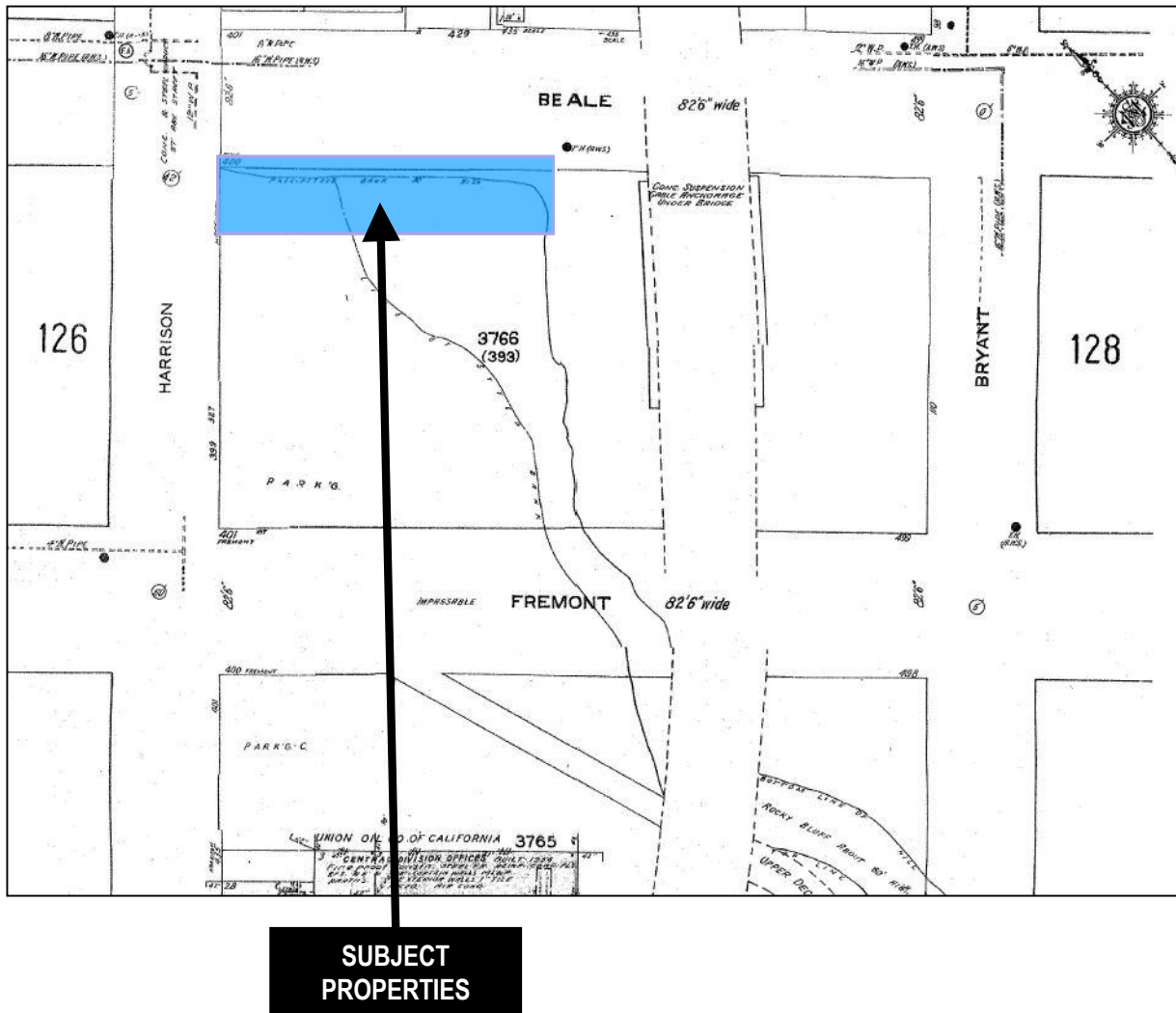
<input type="checkbox"/>	The proposed modification would not result in any of the above changes.
If this box is checked, the proposed modifications are categorically exempt under CEQA, in accordance with prior project approval and no additional environmental review is required. This determination shall be posted on the Planning Department website and office and mailed to the applicant, City approving entities, and anyone requesting written notice.	
Planner Name:	Signature or Stamp:

EXHIBIT D

Block Book Map



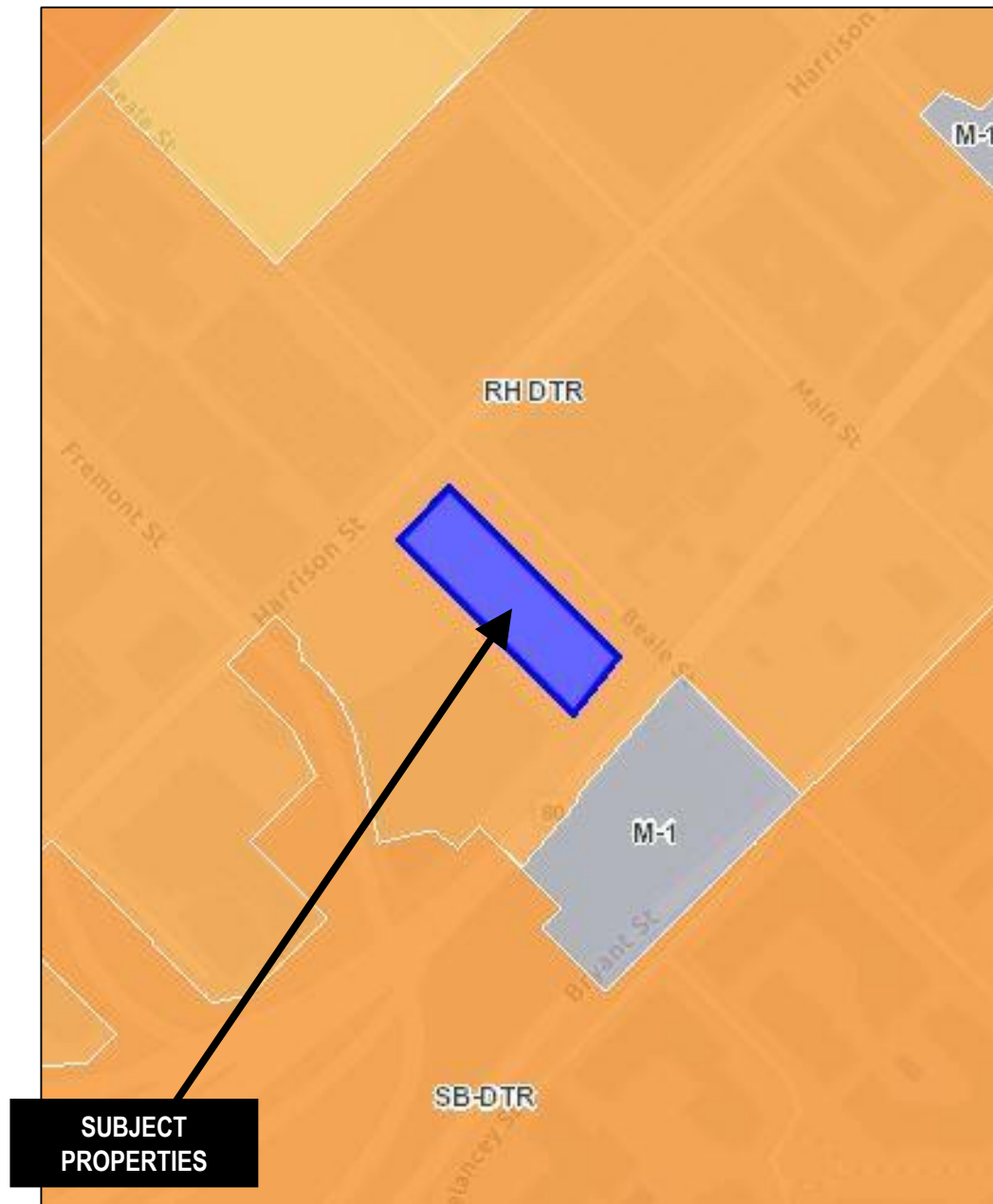
Sanborn Map*



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



Zoning Map



Aerial Photo



EXHIBIT E

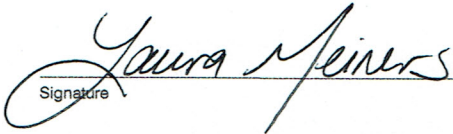
Affidavit of Conducting a Pre-Application Meeting, Sign-in Sheet and Issues/Responses submittal

I, Laura Meiners, do hereby declare as follows:

1. I have conducted a Pre-Application Meeting for the proposed new construction, alteration or other activity 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 Courtyard by Marriott, 299 2nd St, San Francisco (location/address) on 11/16/17 (date) from 7:30 pm - 8:30 pm (time).
3. I have included the mailing list, meeting invitation and postmarked letter, 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, November 16, 20 17 IN SAN FRANCISCO.


Signature

Laura Meiners

Name (type or print)

Agent for Sirius XM, Applicant

Relationship to Project (e.g. Owner, Agent)

(if Agent, give business name & profession)

400 Beale Street

Project Address

Summary of discussion from the Pre-Application Meeting

Meeting Date: November 16, 2017

Meeting Time: 7:30 pm

Meeting Address: Courtyard by Marriott, 299 2nd Street, San Francisco, CA 94105

Project Address: 400 Beale Street

Property Owner Name: Multiple Owners - Residential Condos

Project Sponsor/Representative: Sirius XM/ Laura Meiners, SureSite Consulting

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): Dr. Miriam Jang/ concerned neighbor at 501 Beale: RF concern - retired medical doctor wants more studies about dangers of RF emissions before she will support any proposal to install equipment near her residence. She is a member of a group of residents at that location and has come to represent her concerned neighbors.

Project Sponsor Response: _____

Applicant's RF engineer, Sokratis Papageorgiou, was in attendance, and explained the TX antenna in relation to her residence is pointed in the opposite direction, and RF emissions from the antenna could not possibly reach the building at 501 Beale. The signal is too weak to pass through walls.

Question/Concern #2: Natasha Zouves/ concerned neighbor at 501 Beale St: As a journalist, she is also interested in additional studies about the safety of RF emissions. After an internet search, she was not able to find much information on any scientific studies that have been done in this field, but she came across some concerning stories from residents who have experienced ill health after antennas have been installed near their house. She is interested in writing a story about it.

Project Sponsor Response: _____

Applicant's RF engineer, Sokratis Papageorgiou, again explained that the signal is very weak and she is no danger from RF emissions at 501 Beale St. Applicant gave this resident a copy of the RF Report and asked her to call the RF engineer who prepared the report for additional facts and scientific information regarding RF emissions.

Question/Concern #3: _____

Project Sponsor Response: _____

Question/Concern #4: _____

Project Sponsor Response: _____

<u>Date</u>	<u>From</u>	<u>Method of contact</u>	<u>Address</u>	<u>Email</u>	<u>Phone Number</u>	<u>Issue</u>	<u>Action Taken</u>
11/6/2017	Daniel Coming	Email	One Rincon Hill	Daniel Coming <techdan@gmail.com>		1. Will any of the proposed equipment extend above or outside of the existing screen wall on the roof of 400 Beale? I'm specifically not asking about street level views. Just about the height and extents of equipment relative to the screen wall. 2. What are the frequency bands and maximum possible signal strength the equipment are capable of emitting?	11/16 Responded to his email with a copy of the plans, RF Report, and photo sims
11/7/2017	Jack	Voice Mail	290 Fremont		415-905-0282	Wants more info regarding proposed project	11/16 Returned his call to ask about any specific issues he has - Wanted to offer a property that he manages as a site for the installation (390 Fremont)
11/8/2017	Robert Collett	Email	1715 Polk Street	Robert Collett <rcollett50@yahoo.com>	541-683-3211	These towers emit too much radiation that can damage DNA and can cause cancer. Please find an industrial land for the tower because this tower is not welcome in my neighborhood or in the residential vicinity, because it is unsafe and puts citizens at a health risk due to exposure to radiation.	11/16 Responded to his email with the RF Report
11/16/2017	Natasha Zuvers (sp?)	Voice Mail	501 Beale Street		415-652-3495	Wants more info regarding proposed project	Returned her call and met her at the Community Meeting on 11/16
11/16/2017	Ida	Voice Mail	400 Beale Street		415-468-8890	Wants more info regarding proposed project	11/20 Called and left message 11/21 Spoke to Ida and chatted about project. No specific issues, just wanted to know what the project is about

Pre-Application Meeting Sign-in Sheet

Meeting Date: November 16, 2017

Meeting Time: 7:30 pm

Meeting Address: Courtyard by Marriott, 299 2nd Street, San Francisco, CA 94105

Project Address: 400 Beale Street

Property Owner Name: Multiple Owners - Residential Condos

Project Sponsor/Representative: Sirius XM/ Laura Meiners. SureSite Consulting

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. <u>Natasha Zouves</u>	<u>501 Beale St</u>		<u>nzouves@gmail.com</u>	<input checked="" type="checkbox"/>
2. <u>DR MIRIAM JANG</u>	<u>501 BEALE ST</u>		<u>miriamjangnd@comcast.net</u>	<input checked="" 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 COMMUNITY OUTREACH MEETING ON A PROPOSED SATELLITE RADIO WIRELESS COMMUNICATION FACILITY IN YOUR NEIGHBORHOOD

To: Neighborhood Groups and Neighbors & Owners within 500' radius of 400 Beale Street.

Meeting Information

Date: Thursday, Nov 16, 2017
Time: 7:30 p.m.
Where: Courtyard by Marriott
299 2nd Street
San Francisco, CA 94105

Site Information

Address: 400 Beale Street
Block/Lot: 3766/012-259
Zoning: RH DTR

Applicant

Sirius XM

Contact Information

Sirius XM Hotline, 216-342-9605
or email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com)

Sirius XM is proposing to construct a new satellite radio wireless communication facility at 400 Beale Street as needed by Sirius XM as part of its San Francisco satellite radio network. Sirius XM proposes to install equipment on the roof of the existing building. There will be no visual changes with this proposed project as the Sirius XM equipment will not be visible from street level view. Plans and photo simulations will be available for your review at the meeting. You are invited to attend an informational community meeting located at the Courtyard by Marriott, Conference Room Rincon 1, at 299 2nd Street on Thursday, November 16, 2017, at 7:30 p.m. to learn more about the project.

If you have any questions regarding the proposal and are unable to attend the meeting, please contact the Sirius XM Hotline at 216-342-9605 or email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com) and a specialist will return your call. Please contact the San Francisco Planning Department at (415) 558-6378 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 216-342-9605 or email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com) no later than 5:00pm on Friday, November 10, 2017, and we will make every effort to provide you with an interpreter.

AVISO DE REUNIÓN DE ALCANCE COMUNITARIO SOBRE EL RADIO POR SATÉLITE PROPUESTA A UNA INSTALACIÓN DE COMUNICACIÓN INALÁMBRICA EN SU VECINDARIO

Para: Grupos del vecindario, vecinos y propietarios dentro de un radio de 500' en 400 Beale Street.

Información de la reunión

Fecha: Jueves, 16 de noviembre de 2017
Hora: 7:30 p.m.
Dónde: Courtyard by Marriott
299 2nd Street
San Francisco, CA 94105

Información del lugar

Dirección: 400 Beale Street
Block/Lot: 3766/012-259
Zonificación: RH DTR

Solicitante

Sirius XM

Información de contacto

Línea directa de Sirius XM, 216-342-9605
o [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com)

Sirius XM propone construir una nueva de la instalación de comunicaciones inalámbricas en 400 Beale Street necesaria para Sirius XM como parte de su red de radio satelital en San Francisco. Sirius XM propone instalar equipos en el techo del edificio existente. No habrá cambios visuales con este proyecto propuesta, ya que las antenas de Sirius XM no será visible desde el nivel de calle. Habrá planos y fotos disponibles para que usted los revise en la reunión. Se lo invita a asistir a una reunión informativa de la comunidad que se realizará en el Courtyard by Marriott, Sala de conferencias Rincon 1, en 299 2nd Street el jueves, 16 de noviembre de 2017, a las 7:30 p.m., para obtener más información sobre el proyecto.

Si tiene preguntas relacionadas con la propuesta y no puede asistir a la reunión, por favor llame a la Línea Directa de Sirius XM, 216-342-9605 o email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com), y un especialista le devolverá el llamado. Por favor, contáctese con el Departamento de Planificación de la Ciudad de San Francisco al (415) 558-6378 si tiene alguna pregunta relacionada con el proceso de planificación.

NOTA: Si necesita que un intérprete esté presente en la reunión, por favor, contáctese con nuestra oficina al 216-342-9605 o email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com) antes del viernes, 10 de noviembre de 2017 a las 5:00 p.m. y haremos todos lo posible para proporcionarle un intérprete.

ABISO NG OUTREACH NA PULONG NG PAGBABAGO SA BAGONG NA WIRELESS NA PASILIDAD NG KOMUNIKASYON SA INYONG KAPITBAHAYAN

Sa: Mga Pangkat ng Kapitbahayan at Mag-ari sa loob ng 500' radius ng 400 Beale Street.

Impormasyon sa Pulong

Petsa: Huwebes, Nobyembre 16, 2017
Oras: 7:30 p.m.
Saan: Courtyard by Marriott
299 2nd Street
San Francisco, CA 94105

Impormasyon sa Site

Address: 400 Beale Street
Block/Lot: 3766/012-259
Zoning: RH DTR

Aplikante

Sirius XM

Impormasyon sa Pakikipag-ugnayan

Sirius XM Hotline
216-342-9605 o email
[SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com)

Pinapanukala ng Sirius XM upang bumuo ng isang bagong na wireless na pasilidad na pangkomunikasyon sa 400 Beale Street na kailangan ng Sirius XM bilang bahagi ng satellite radio network nito sa San Francisco. Pinapanukala ng Sirius XM na mag-install ng kagamitan sa bubong ng umiiral na gusali. Walang mga visual na pagbabago sa proyektong ito na iminumungkahi na ang Sirius XM na kagamitan ay hindi makikita mula sa pagtingin sa antas ng kalye. Ang mga plano at simulasyong litrato ay maaari niyong repasuhin sa pulong. Iniimbitahan kayong dumalo sa impormal na pulong ng komunidad sa ang Courtyard by Marriott, pulong kuwartero Rincon 1, sa 299 2nd Street sa Huwebes, Nobyembre 16, ng 7:30 p.m.

Kung mayroon kayong anumang mga tanong tungkol sa panukala at hindi kayo makakadalo sa pulong, mangyaring makipag-ugnayan sa Sirius XM Hotline sa 216-342-9605 o email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com) at ang specialist ay tatawag sa iyo. Mangyaring makipag-ugnayan sa San Francisco Planning Department sa (415) 558-6378 kung may anumang mga tanong kayo patungkol sa proseso ng pagpapalano.

TANDAAN: Kung kailangan niyong mayroong tagapagsaling-wika sa pulong, mangyaring makipag-ugnayan sa aming tanggapan sa 216-342-9605 o email [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com) nang hindi lalagpas sa 5:00pm sa Biyernes, Nobyembre 10, 2017, at gagawin namin lahat ng aming makakaya para bigyan kayo ng tagapagsaling-

**社区推广会议通知：关于您所在地区新的卫星无线电无线通信设备的建议
致：比尔街 (Beale Street) 400号 500 英尺范围内的社区团体及邻居和业主。**

会议信息

日期: 2017年11月16日星期四
时间: 下午 7:30 点
地点: 庭院万豪 (Courtyard by Marriott)
第二街 (2nd Street) 299
利福尼亚州旧金山,
邮编: 94105

场地信息

地址: 400 Beale Street
街段/区: 3766/012-259
区划: RH DTR

申请人

Sirius XM

联系信息

Sirius XM 热线, 216-342-9605
或电子邮件 [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com)

Sirius XM 拟议的新工厂位于比尔街400无线通信设备, 作为旧金山无线网络的一部分, 满足 Sirius XM 的需求。Sirius XM建议在现有建筑物的屋顶上安装设备。提出的这项修改, 不会带来任何视觉上的变化, 因为 Sirius XM 的天线会被完全屏蔽起来, 是看不见的。将在会上向您展示计划内容及模拟图片, 供您审阅。我们邀请您参加将在旧金山 庭院万豪 (Courtyard by Marriott), 会议室Rincon 1, 第二街 (2nd Street) 299 周四在那里2017年11月16日下午7:30点 借此机会了解更多关于该项目的信息。

您如有任何关于该提议的问题, 但无法出席会议, 请拨打 Sirius XM 热线: 216-342-9605 或电子邮件 [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com), 专家将回复您的消息。如果您对该规划过程有任何问题, 请拨打电话(415) 558-6378, 联系旧金山市规划部。

注: 如果您在会议期间需要一名口译人员在场, 请于2017年11月10日星期一下午5点之前联系我们的办公室, 联系电话216-342-9605 或电子邮件 [SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com), 我们将尽全力为您提供一名口译人员。

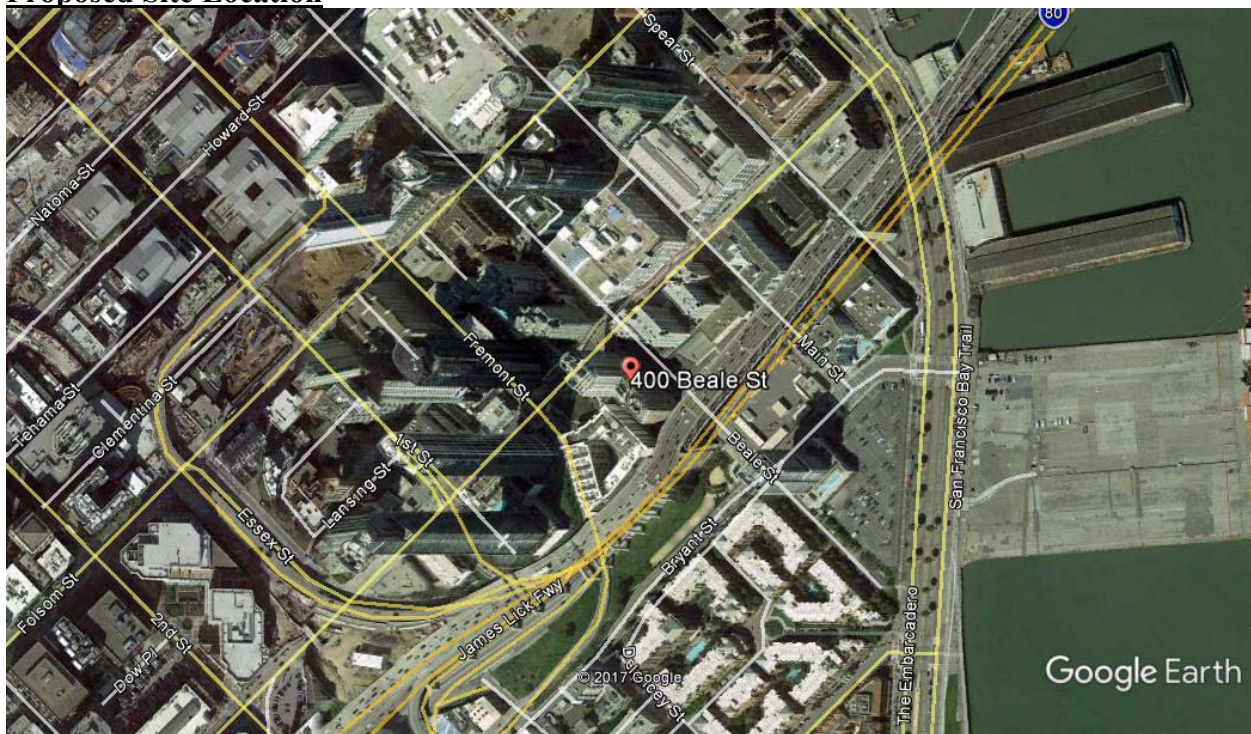
October 26, 2017

Sirius XM is working to improve satellite radio service in San Francisco!

Dear Neighbor:

Sirius XM (“SXM”) is proposing to install state-of-the-art satellite radio equipment on the rooftop of the existing building at **400 Beale Street**. The equipment to be installed includes one (1) SXM panel antenna, one (1) GPS antenna, two (2) satellite dishes, and one (1) equipment cabinet. This equipment is designed as part of Sirius XM’s nationwide effort to upgrade its repeater networks to provide comparable levels of service to subscribers on the Sirius and XM networks, despite those networks’ significantly different and incompatible technologies.

Proposed Site Location



The installation requires only electric utilities and, once completed, may require, on average, one to two monthly maintenance visits by qualified company technicians. No water, sewer or other municipal services are required. Please also note that no permanent backup generator is included as part of the installation.

Company Information

In 2008, Sirius Satellite Radio and XM Satellite Radio merged to create Sirius XM. Sirius XM provides high quality digital radio to over 32 million subscribers and offers more than 140 channels to its subscribers across North America. Sirius XM broadcasts commercial free sports, news, weather, traffic, music and entertainment to automobile radios, computers, smart phones, and home/business radios.

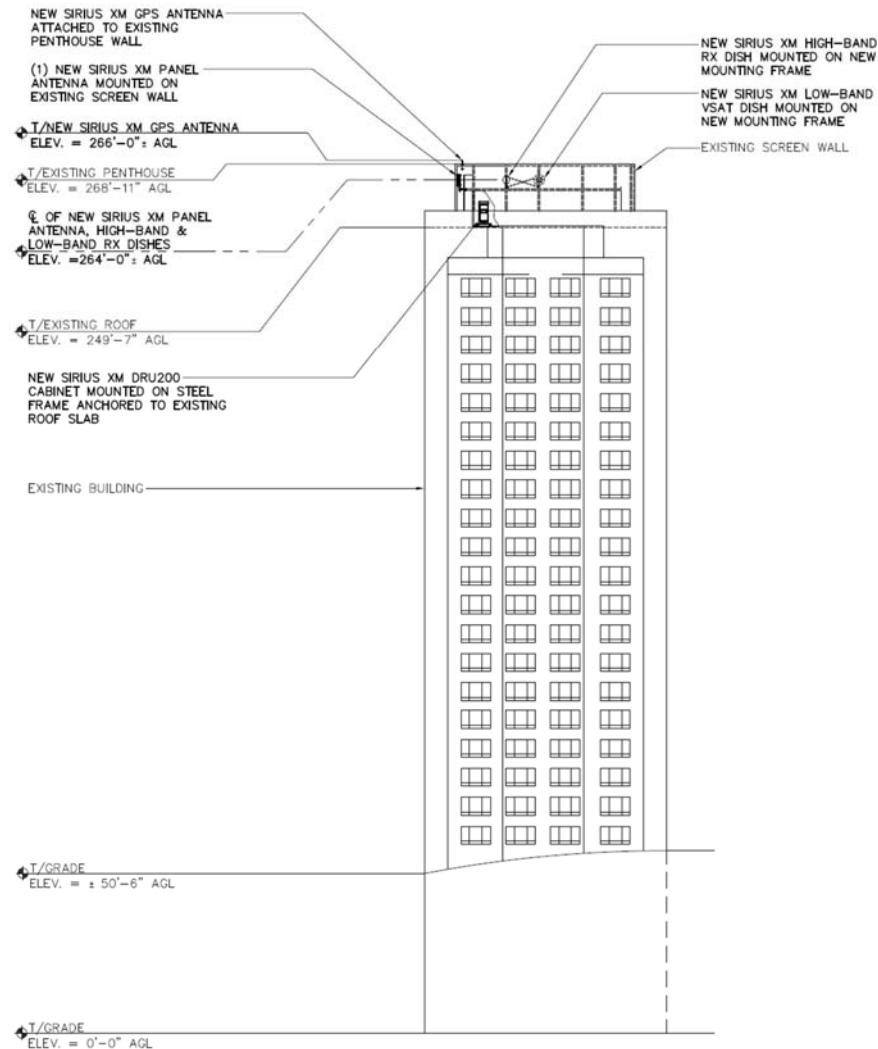
The Sirius XM network serves as a key source of information that can be critical to listeners in the event of a natural disaster or public safety emergency. Sirius XM participates in the Emergency Alert System, not only by transmitting national alerts to satellite radio subscribers on all channels, but also by partnering with the Federal Emergency Management Agency to provide a backup mechanism for distributing those alerts to other Primary Entry Point stations in the United States. Sirius XM also delivers timely news and weather information specific to major metropolitan markets on its Traffic and Weather channels and supplies the nation's truckers with updates on highway closures and weather.

During weather emergencies such as Hurricane Irma, Sirius XM took further steps to help those in the hurricane's path and their family and friends to monitor the progress and severity of the storm. Sirius XM replaced its Preview Channel with the Weather Channel Hurricane live coverage to supply live hurricane coverage to every Sirius XM receiver, including those not currently authorized to receive the Sirius XM service. Providing this service through the course of the storm offered millions of listeners across the country in-depth, expert coverage including evacuation and safety tips, and tips on how to deal with severe storms.

Photo Simulation of Proposed Equipment



Proposed Elevations



We look forward to meeting with the surrounding property owners and occupants at the meeting location and time presented in the enclosed Notice of Pre-Application Meeting to discuss this project in more detail.

Sincerely,

Laura Meiners, SureSite Consulting Group
Agent for Sirius XM

[SXMSFXSD@sure-site.com](mailto: SXMSFXSD@sure-site.com)

216-342-9605

EXHIBIT F

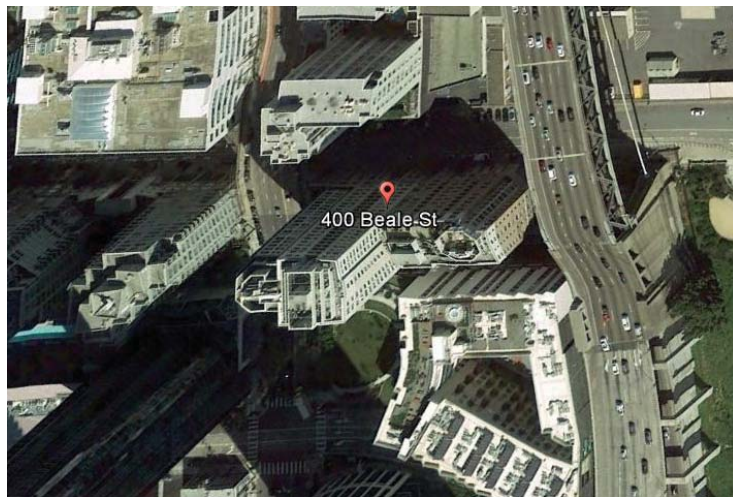
Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report (NSB)

Sirius Proposed Facility

Site ID: SFX502 T
400 Beale Street
400 Beale Street, San Francisco, California 94105

September 5, 2017

EBI Project Number:
6217003368



Status:

The proposed site will be compliant with the installation of the mitigation measures described in Attachment I.

Remarks: See signage plan for mitigation measures to be installed upon upgrade/installation of the site to comply with FCC and Sirius standards.

Prepared by:



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I.0 Executive Summary

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Sirius to conduct radio frequency electromagnetic (RF-EME) modeling for Sirius Site SFX502 T located at 400 Beale Street in San Francisco, California to determine RF-EME exposure levels from proposed Sirius wireless communications equipment at this site. As described in detail in Appendix B of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields. This report contains a detailed summary of the RF EME analysis for the site.

This document addresses the compliance of Sirius's proposed transmitting facilities independently at the site.

The Maximum Emissions Value is 45.0000% of the FCC's general public limit (9.0000% of the FCC's occupational limit) at the main roof level. The proposed site will be in compliance with Federal regulations regarding (radio frequency) RF Emissions with the installation of signage in Attachment I.

Based on worst-case predictive modeling, there are no areas on the main roof that exceed the FCC MPE limits.

Signage is recommended at the site as presented in Attachment I. Posting of the signage brings the site into compliance with FCC rules and regulations.

2.0 MPE Calculations

Calculations were completed for the proposed Sirius Wireless antenna rooftop facility located at 400 Beale Street in San Francisco, California using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed a distance above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of in areas in the immediate vicinity of the antennas.

For this report, EBI utilized antenna and power data provided by Sirius and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65. All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration.

The assumptions used in the modeling are based upon information provided by Sirius in the supplied drawings and known configuration values information gathered from other sources to approximate each additional carrier's contribution.

There are no collocated carriers on the rooftop.

The data for all Sirius antennas used in this analysis is shown in Section 3.0. Actual antenna gains for each antenna were used per manufacturer's specifications. All calculations were done with respect to uncontrolled and general public threshold limits.

3.0 Sirius Antenna Inventory

Sector	Antenna Number	Antenna Make	Antenna Model	Height (ft) Above Nearest Walking Surface	Azimuth (°)	Technology	Frequency Band	Power Per Channel (W)	Number of Channels	ERP (W)
Sirius Panel	1	Til-Tek	TA-2304-2-DAB-L	12.8	40	Sirius	2330 MHz	200	2	2168
Sirius Panel	2	Prodelin	1183	13	145	Sirius	Rx only	Rx only	Rx only	N/A
Sirius Panel	3	Til-Tek	TA-2324-LHCP	13	129	Sirius	Rx only	Rx only	Rx only	N/A

Sirius Site Inventory and Power Values

4.0 Summary and Conclusions

All calculations performed for this analysis yielded results that were within the allowable limits for exposure to RF Emissions. Based on predictive modeling, there are no modeled exposures on any accessible main roof level-level walking/working surface related to Sirius's equipment in the area that exceed the FCC's occupational and/or general public exposure limits at this site. Installation of mitigation measures will bring the proposed site into compliance.

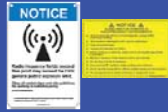
The anticipated maximum contribution from each sector of the proposed Sirius facility is 45.0000% of the allowable FCC established general public limit (9.0000% of the FCC occupational limit). This was determined through calculations along a radial from each sector taking full power values into account as well as actual vertical plane antenna gain values per the manufacturers supplied specifications for gain.

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards. For this facility, the composite values calculated were within the allowable 100% threshold standard per the federal government.

EBI's modeling indicates that there are no areas on the walking/working surfaces at the rooftop level in front of the Sirius antennas that may exceed the FCC standards for general population and/or occupational exposure. To reduce the risk of exposure and/or injury, EBI recommends that access to the rooftop or areas associated with the active antenna installation be restricted and secured where possible. In order to alert any workers potentially accessing the site, a blue Notice sign and a yellow Guidelines sign are recommended for installation at the access to the rooftop as depicted on the Signage Plan – Attachment I.

n

Post at all roof access points



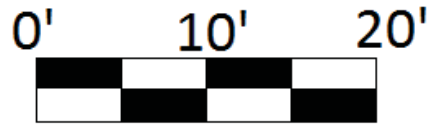
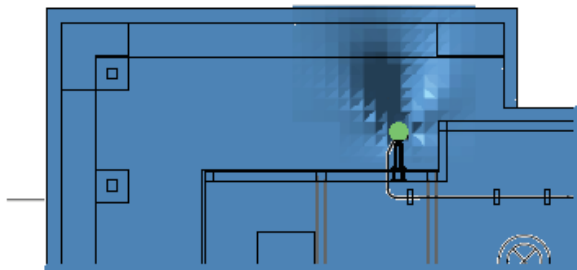
Sirius Panel Antenna

Main Roof

Sirius Rx Dish

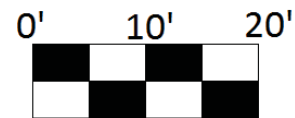
Sirius Rx dish

3D Field Closeup of Panel Antenna







% FCC Public Exposure Limit

- 500 < Exposure Level
- 100 < Exposure Level ≤ 500
- Exposure Level ≤ 100



Sirius Antennas

Sign	Sign Count	Description	Posting Instructions
	I	Blue Notice Sign Used to notify individuals they are entering an area where the power density emitted from transmitting antennas may exceed the FCC's MPE limit for the general public or occupational exposures.	Securely post at all access points to the site in a manner conspicuous to all individuals entering thereon.
	I	Guidelines Informational sign used to notify workers that there are active antennas installed and provide guidelines for working in RF environments.	Securely post at all access points to the site in a manner conspicuous to all individuals entering thereon.
	N/A	Yellow Caution Sign Used to notify individuals that they are entering a hot spot where either the general public or occupational FCC's MPE limit is or could be exceeded.	Not Required.
	N/A	Red Warning Sign Used to notify individuals that they are entering a hot zone where either the general public or occupational FCC's MPE limit has been exceeded.	Not Required.
Notes:	<p>The proposed site will be compliant with the installation of the mitigation measures.</p> <p>The actual number of access points may vary based on documentation provided and/or if a survey was conducted. Recommended signage locations are based on Sirius's guidance for the worst-case scenario in each sector. The actual signage installation is dependent on accessibility of the facility and antennas. Locations deemed inaccessible due to OSHA safety standards (proximity to unprotected roof edge or slope, etc.) will be compliant upon installation of recommended signage at the closest accessible point.</p>		

Appendix A: Certifications

Reviewed and Approved by:



sealed 14aug2017


Michael McGuire
Electrical Engineer

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

Preparer Certification

I, Christopher Ilgenfritz, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified “occupational” under the FCC regulations.
- I am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

A handwritten signature in black ink, enclosed within a rectangular box. The signature appears to be "Chris Ilgenfritz" written in a cursive, stylized script.

Appendix B: Federal Communications Commission (FCC) Requirements

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 and 800 MHz Bands is 467 $\mu\text{W}/\text{cm}^2$ and 567 $\mu\text{W}/\text{cm}^2$ respectively, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

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

Additional details can be found in FCC OET 65.

Appendix C: Modeling Parameters

[illegible]



San Francisco Planning Department Wireless Telecommunications

Services Facility Siting Checklist for Sirius Site: SFX502 T

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

There are no other antennas or facilities installed based on information provided to EBI and Sirius at the time of this report.

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

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

3. Provide a narrative description of the proposed work for this project. The description should be consistent with scope of work for the final installation drawings.

This project involves the addition of one (1) proposed Sirius XM Panel antenna, one (1) Sirius XM RX dish, and one (1) Sirius XM VSAT dish on an existing rooftop located at 400 Beale Street in San Francisco, California.

4. Provide an inventory of the make and model of antennas or transmitting equipment being installed or removed. The antenna inventory should also include the proposed installation height above the nearest walking/working surface as well as the height above ground level. Also include the orientations of the antennas.

Existing and Proposed Antennas

Carrier	Antenna Number	Type	Antenna Make	Antenna Model	Height (ft) Above Nearest Walking Surface	Height (ft) Above Ground	Azimuth	Antenna Status (existing or proposed)
Sirius	1	Panel	Til-Tek	TA-2304-2-DAB-L	12.8	262.3	40	Proposed
Sirius	2	Dish	Prodelin	1183	13	261	145	Proposed
Sirius	3	Dish	Til-Tek	TA-2324-LHCP	13	261	129	Proposed



5. Describe the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level. This description may be based on field measurements or calculations. Please include a description of any assumptions made when doing the calculations.

Not applicable as there are no existing transmitting equipment installed.

6. Provide the maximum effective radiated power per sector for the proposed installation. The power should be reported in Watts and reported both as a total and broken down by the frequency band width (i.e. PCS, AWS, Cellular, etc...)

Effective Radiated Power (ERP) per Frequency and Sector		
Antenna	Frequency (MHz)	ERP (Watts)
Panel	2330	2427
RX	N/A	N/A
VSAT	N/A	N/A

7. Based on the antenna orientation, describe the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area. Include the address of the building or structure and the maximum predicted amount of radio frequency energy both as a percent of the FCC standard and in mW/cm². Include a description of any assumptions made when doing these calculations.

The nearest publicly accessible area is ground/street level (approx. 264 ft). At ground/street level the maximum power density generated by all antennas for this proposed site is 0.0037 mW/cm², which is 0.8000 percent of the FCC's general public limit (0.1600 percent of the FCC's occupational limit).

8. Report the estimated cumulative radio frequency fields for the proposed site at ground level. State the percentage of the FCC standard utilized and power density exposure level in mW/cm².

At ground level, the maximum power density generated by all antennas for this proposed site is 0.0037 mW/cm², which is 0.8000 percent of the FCC's general public limit (0.1600 percent of the FCC's occupational limit).



9. Provide the maximum distance (in feet) the three dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas. Indicate if this will include any walking/working surfaces or if it extends only into free space.

Based on worst-case modeling at antenna face level there are modeled exceedances of the general public and occupational limits. It is predicted that there will be an occupational exceedance in front of the Sirius panel antennas within 4 feet and a general public exceedance within 10 feet. These exceedances are into free space and do not impact any walking working/surface at this site.

10. Provide a description of whether or not the public has access to the antennas. Describe any existing or proposed warning signs, barricades, barriers, rooftop striping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards. At a minimum, signs should be provided in English, Spanish and Chinese.

Access to the rooftop of the site is locked. To reduce the risk of exposure and/or injury, EBI recommends that access to the rooftop or areas associated with the active antenna installation continue to be restricted and secured where possible. In order to alert any workers potentially accessing the site, a blue Notice sign and a yellow Guidelines sign are recommended for installation at the access to the rooftop. Additionally, a Caution sign is recommended to be posted below the Sirius panel antenna.

11. Statement on who produced this report and qualifications. Report must be signed off by a licensed engineer expert in the field of radio frequency emissions. Typically, this is a licensed electrical engineer. The engineer must be licensed in the State of California.

Please see report for this information.

EXHIBIT G



San Francisco City and County
Department of Public Health
Environmental Health Branch

London N. Breed, *Acting Mayor*
Barbara Garcia, *Director of Health*
Stephanie K.J. Cushing, MSPH, CHMM, REHS
Director of Environmental Health

Review of Cellular Antenna Site Proposals

Project Sponsor : XM Satellite Radio **Planner:** Elizabeth Watty
RF Engineer Consultant: EBI Consulting INC. **Phone Number:** (781) 273-2500
Project Address/Location: 400 Beale St
Site ID: 2810 **SiteNo.:** SFX502T **Report Dated:** 9/5/2017

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, identity and total number of all operational radiating antennas installed at this site was provided. (WTS-FSG, Section 10.4.1, Section 11, 2b)
Number of Existing Antennas: 0
- X 2. A list of all radiating antennas located within 100 feet of the site which could contribute to the cumulative radio frequency energy at this location was provided. (WTS-FSG, Section 10.5.2)
☒ Yes ☐ No
- X 3. A narrative description of the proposed work for this project was provided. The description should be consistent with scope of work for the final installation drawings. (WTS-FSG, Section 10)
☒ Yes ☐ No
- X 4. An inventory of the make and model of antennas or transmitting equipment being installed or removed was provided. The antenna inventory included the proposed installation height above the nearest walking/working surface, the height above ground level and the orientations of the antennas. (WTS-FSG, Section 10.5.2)
☒ Yes ☐ No
- X 5. A description of the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level was provided. A description of any assumptions made when doing the calculations was also provided. (WTS-FSG, Section 10.4.1a, Section 10.4.1c, Section 10.5)
☒ Yes ☐ No
- X 6. The maximum effective radiated power per sector for the proposed installation was provided along with the frequency bands used by the antennas. (WTS-FSG, Section 10.1.2, Section 10.5.1)
Maximum Effective Radiated Power: 2427 Watts
- X 7. Based on the antenna orientation, the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area was provided. (WTS-FSG, Section 10.4, Section 10.5.1)
Maximum percent of applicable FCC public standard at the nearest building or structure: 0.8 %
Distance to this nearby building or structure: 264 feet
- X 8. The estimated maximum cumulative radio frequency fields for the proposed site at ground level. (WTS-FSG, Section 10.5)
Maximum RF Exposure: 0.0037 mW/cm² Maximum RF Exposure Percent: 0.8 %

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

☒ Public Exclusion Area

Public Exclusion In Feet: 10

☒ Occupational Exclusion Area

Occupational Exclusion In Feet: 4

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

☒ Yes

☐ No

X 11. Statement regarding the engineer who produced the report and their qualifications was provided. The engineer is licensed in the State of California. (WTS-FSG, Section 11.8)

☒ Yes

☐ No

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

Comments:

There are 0 antennas existing operated by XM Satellite Radio installed on the roof top of the building at 400 Beale St. Existing RF levels at ground level were around 1% of the FCC public exposure limit. No other antennas were observed within 100 feet of this site. XM Satellite Radio proposes to install 1 new antennas. The antennas are mounted at a height of 262 feet above the ground. The estimated ambient RF field from the proposed XM Satellite Radio transmitters at ground level is calculated to be 0.0037 mW/sq cm., which is 0.8 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 10 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 4 feet of the front of the antennas while they are in operation. Access to the rooftop site is locked to unauthorized persons.

 Not Approved, additional information required.

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

 1 Hours spent reviewing

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

Dated: 1/30/2018

Signed: _____



Arthur Duque

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

EXHIBIT H

Existing Sirius XM Terrestrial Coverage Before SFX502T



Sirius XM Terrestrial Coverage After SFX502T



SFX502T one mile radius site list and distances

Site Number	Distance (Miles)	Name	Street Number	Street Name	Cross Street	Latitude	Longitude
SFX502T	NA	400 Beale St	400	Beale	Harrison St	37.78706	-122.39137
SFX005	.88	Grand Hyatt	345	Stockton St	Sutter St	37.789157	-122.40728

EXHIBIT I



Radio Frequency Review for a Proposed Wireless Broadcast Installation

Applicant

Sirius XM

Site ID

SFX502T

400 Beale Street
San Francisco, CA 94105



Prepared for:

Fullerton Engineering Consultants
1100 E Woodfield Rd, Suite 500
Schaumburg, IL 60173

Reviewed by: Jason Palmer, PE-EE

FULLERTON
ENGINEERING • DESIGN

Prepared By: G Pierson
Date: December 14 2017

California License Number: 20363
Expiration Date: 6/30/2019

Introduction

The following Radio Frequency (RF) review was prepared for Sirius XM. It has been prepared by Pier Four Enterprises LLC, an independent RF consulting company with over 30 years of experience with wireless systems. The purpose of the analysis is to address the application requirements in the City of San Francisco, California for a proposed wireless broadcast installation on an existing rooftop. The location of the proposed installation is the property known as 400 Beale Street San Francisco, CA 94105.

Background

Sirius XM is licensed by the Federal Communications Commission (FCC) and maintains a wireless broadcast network throughout the country. A part of maintaining the wireless broadcast network is to address any deficiencies and strive to provide consumers with ubiquitous service. The Sirius XM network is comprised of satellites located near the equator, broadcasting their signal across the earth, and land based transmitters designed to fill in areas where the satellite coverage is inadequate. The satellite signal performs well in open areas and along open roadways without nearby obstructions. Obstructions that can block the satellite signal and cause gaps in service are nearby buildings, dense trees and hills. Since the satellites are located south of the San Francisco area, when consumers are located north of obstructions, the signal from the satellite is blocked, which creates a gap in the broadcast service. These gaps in service (from the satellites) are often experienced in cities with and in areas with steep hills. San Francisco is a city with many buildings and steep hills, creating gaps in the satellite service.

Currently Sirius XM has two (2) land based transmitters in San Francisco which supplement the satellite coverage by repeating the satellite signal. The coverage that can be obtained from the land based (terrestrial) installations is limited by local terrain and obstructions similar to any other land based wireless network such as public safety systems and cellular networks. Similar to the cellular networks, the Sirius XM signal requires a near line of site path to the consumers vehicles in order to provide reliable service. The range that can be obtained from a Sirius XM terrestrial installation varies between a half mile and 1 ½ miles. The actual coverage from any terrestrial installation will vary based on the elevation of the antenna, the local topography and obstructions. Due to the nature of the terrestrial sites being a repeater of the satellite signal the installation gathers the satellite signal (from the south towards the equator) and retransmits them northward. The terrestrial site transmit antenna (panel antenna depicted in drawings) need physical separation and isolation from satellite receive dishes. Therefore, on the proposed rooftop installation, terrestrial coverage can only be provided in the northerly direction.

Justification of a New Wireless Facility

Sirius XM has identified gaps in their wireless broadcast service in the City of San Francisco. Propagation maps have been provided in support of a new terrestrial installation on the rooftop of an existing building at 400 Beale Street. The computer generated propagation maps were created by Sirius XM using an industry accepted propagation program and depict existing coverage from only the two (2) Sirius XM existing terrestrial installations. One of these existing terrestrial installations is near the proposed installation, Site ID SFX005 located at 345 Stockton Street. Coverage from satellites is not provided but based on the background provided above, one can easily determine where satellite coverage would

be unreliable (for example, on the north sides of steep hills and amongst buildings and where the view to the sky is blocked by structures). Based on an analysis of the propagation maps, review of the topography, review of the site drawings by Fullerton Engineering Design dated 4/03/2017, and review of the buildings and other man-made structures in the area, gaps in satellite and terrestrial coverage exist in the northeast portion of the city. They are as follows:

- Interstate 80 on the eastbound lanes along the bridge to Treasure Island (lower deck of the bridge).
- Along Fremont Street, Beale Street, Main Street, Spear Street and the Embarcadero, amongst the many buildings.
- Folsom Street and Harrison Street from Fremont Street to the Embarcadero

For reference, the Sirius XM propagation map depicting the coverage from existing terrestrial installations is attached below as Exhibit A. In addition to the propagation map provided, below is an aerial view from the existing SFX005 installation at 345 Stockton Street is provided below.



The view above is looking northeast toward the Interstate 80 bridge. In reviewing the aerial, one can see that the existing SFX005 installation is not capable of providing service to the Interstate 80 bridge due to the existing buildings which block the signal.

The proposed Sirius XM terrestrial installation at 400 Beale Street is located on the corner of Harrison Street. This location near the Interstate 80 Bridge to Treasure Island has a specific view to the bridge in order to provide service to the lower level (Eastbound) portion of the bridge. The proposed installation is also positioned to get as much signal into the tunnel at Treasure Island as possible. The section of Interstate 80 East of Treasure Island is not a two level bridge and is not a concern at this time. In addition, there is a gap in Sirius XM terrestrial coverage in the northeast portion of the city as shown on Exhibit A and defined above. In addition, this area is a gap in satellite coverage due to the many buildings which block the satellite signals.

The proposed installation at 400 Beale Street alleviates the coverage gap on Interstate 80 and in the northeastern portion of the city along the streets defined above. The Sirius XM propagation map depicting the existing and proposed terrestrial coverage is attached below as Exhibit B. There are areas to the south and west of the proposed installation shown on Exhibit B without terrestrial coverage. These areas, if deemed to need enhanced coverage from a terrestrial site in the future, are not part of the SFX502T project objective since the installation can only provide coverage in the northerly direction.

Conclusion

Based on the analysis above, I conclude that a gap in coverage in Sirius XM coverage exists in the northern section of San Francisco and along Interstate 80. This conclusion is based on the propagation maps provided by Sirius XM (Exhibit A), which accurately depict the existing terrestrial coverage, review of the San Francisco topology, and knowledge of the characteristics of satellite broadcast propagation. The proposed installation SFX502T eliminates all of the identified gaps in coverage utilizing an existing structure located at 400 Beale Street in San Francisco. The additional terrestrial coverage provided by the proposed installation has been accurately demonstrated by the attached propagation map provided by Sirius XM (Exhibit B).

Please feel free to reach out to me if there are any questions regards the above review and analysis. For reference, a copy of my CV summary is attached as Exhibit C below.

Regards,

A handwritten signature in black ink, appearing to read 'G. Pierson'.

Glenn Pierson

Senior Radio Frequency Engineer

Pier Four Enterprises

Appendix

Exhibit A: Existing Sirius XM Terrestrial Coverage Before SFX502T 8

Exhibit B: Sirius XM Terrestrial Coverage After SFX502T 9

Exhibit C: Curriculum Vitae Summary 10

Exhibit A: Existing Sirius XM Terrestrial Coverage Before SFX502T

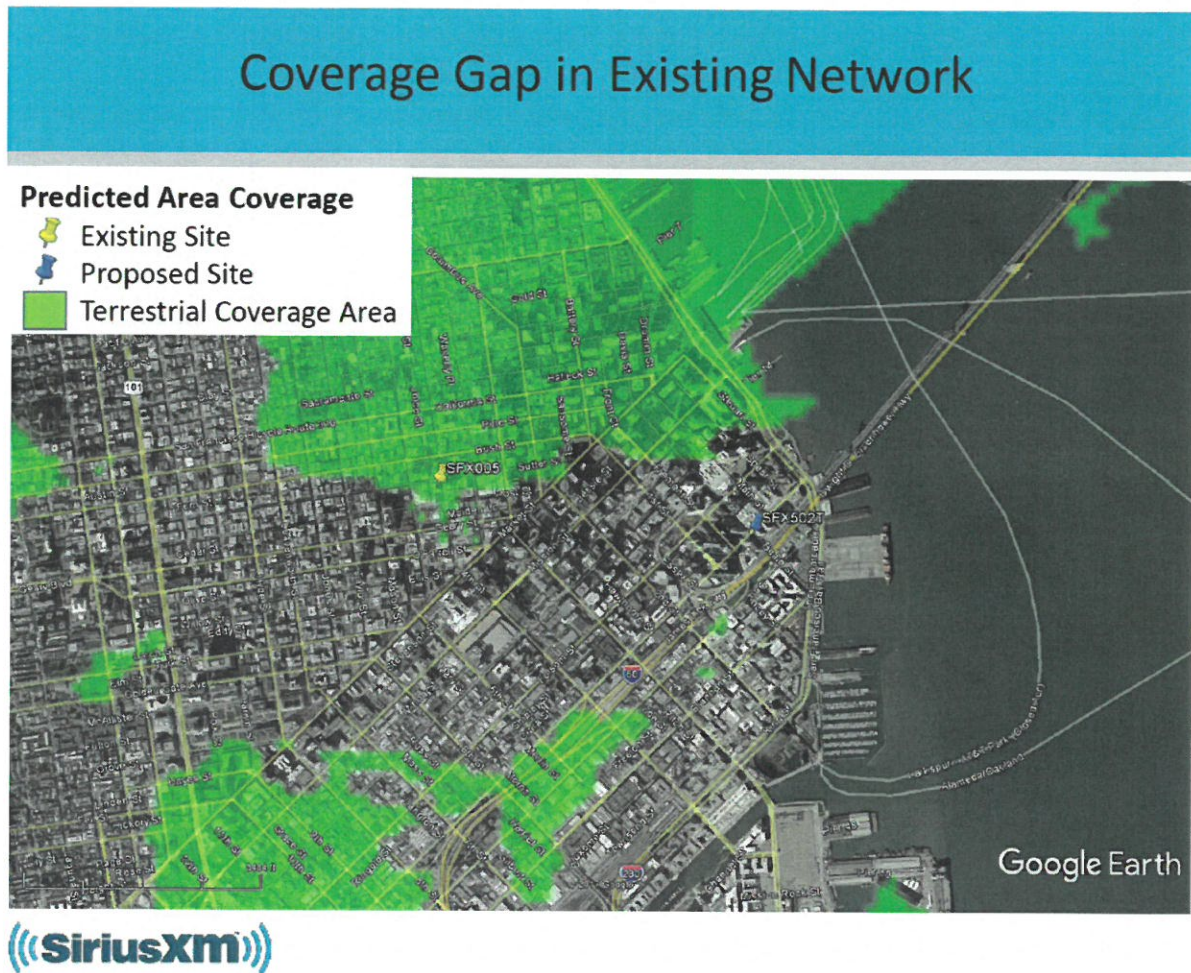


Exhibit B: Sirius XM Terrestrial Coverage After SFX502T

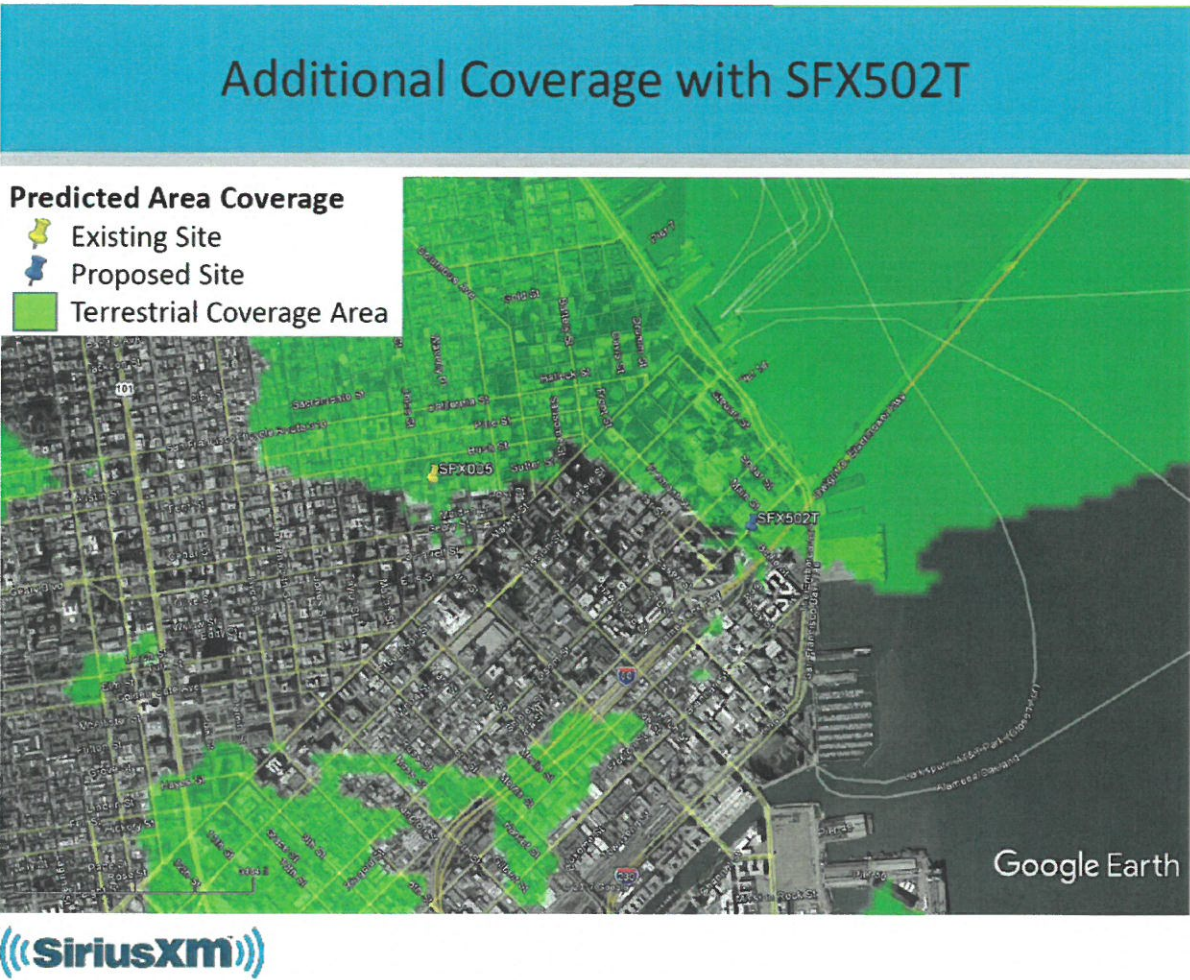


Exhibit C: Curriculum Vitae Summary

GLENN D. PIERSON

Pier Four Enterprises LLC
39 Overlook Avenue
East Hanover, NJ 07936
(201) 572-6206

EXPERIENCE

Pier Four Enterprises LLC June 2017 to Present

Verizon Wireless – 2017 – to Present

Services provided to Verizon Wireless include RF design and expert testimony.

PierCon Solutions LLC April 1998 to June 2017

Co-Owner - Responsible for providing technical consulting services to Clients in the wireless industry. Services include all aspects of Wireless System Design, Optimization, Implementation and Project Management.

Primary Clients:

Verizon Wireless – 2003 – to 2017

Services provided to Verizon Wireless include, expert testimony, and drive testing.

T-Mobile - 2006 –to 2017

Services provided includes, expert testimony, and drive testing.

Rockland County, NY – 2007 –to 2012

Services included Public Safety System Design.

Sprint – 1998 – to 2017

Services provided to Sprint-Nextel includes RF Engineering and design, project coordination, expert testimony, and new cell site planning and design.

Motorola Solutions – 2007-2017

Services provided include site design, frequency planning, project management and interference analysis.

Wireless Systems Consulting October 1996 to November 1998

Consultant - Providing Radio Frequency Engineering and Management

Clients:

Omnipoint Communications Services (currently d.b.a T-Mobile) October 1996 to September 1998

Services provided to Omnipoint included RF Engineering and design for the start-up network, training Omnipoint engineers, design and deployment of special projects, project coordination, expert testimony, and new cell site planning and design.

Bell Atlantic Mobile (currently d.b.a. Verizon Wireless) January 1991 to October 1996

Manager - New Technologies - The position focused on being a member of a small, highly skilled team responsible for implementing new products and services such as CDMA, fraud systems and voice activated dialing.

Manager - RF Design - Managed, as part of an engineering team, four engineers with the responsibility for radio engineering, expert testimony and expansion of the Northern New Jersey Cellular Network.

Senior Radio Engineer - Responsible for the Performance and Growth of the Northern NJ Cellular network.

Senior Support Engineer- Providing training and RF design assistance to 6 regions within Bell Atlantic Mobile and assigned as the Bell Atlantic Mobile representative for Telecommunications Industry Association (TIA)

Lead Radio Engineer- Provided all RF engineering support for the Baltimore/Washington Cellular system.

Motorola Communications & Electronics Inc. January 1986 to January 1991

System Engineer to Senior Systems Engineer - National Engineering Team

Primary function consisted of complete system design for major Public and Private Two-Way radio systems including state wide communication systems. Responsibilities included:

Providing assistance and training to Motorola Engineers throughout the United States. Explore emerging technologies in radio communications. Continue research in the area of RF propagation and assist with the development of RF propagation programs. Customer Engineer for ConEdison.

PATENTS

Co-Author on 2 US Patents relating to Cellular services.

EDUCATION

New Jersey Institute of Technology
Newark, New Jersey
May 1986 Bachelor of Science, Electrical Engineering

REFERENCES

Will be furnished upon request

EXHIBIT J

SIRIUS XM SFX502T – Wireless Conditional Use Permit Application
400 Beale Street

Alternative Site Analysis Requirement

Identify the Location Preference the proposed facility meets using Section 8.1 of the WTS Facilities Siting Guidelines. Project Sponsors shall pursue the most preferential location feasible. In addition, if the proposed site is not a preferred location (Preference 1 thru 4), provide an alternative site analysis and describe:

- 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 location (Preference 1 thru 4);
- c) why such efforts were unsuccessful; and
- d) how and why the proposed site is essential to meet service demands for the geographic service area and the Applicant's citywide network.

Pursuant to Planning Commission Resolution No. 16539, Co-location sites must have a facility approved pursuant to the WTS Guidelines. "Micro" sites approved as Accessory Use Determinations, or Macro sites installed prior to the Guidelines, are not eligible for co-location status.

Response:

This site is within the RH-DTR zone, which is not listed in the Favored or Disfavored Sites criteria.

However, this site is a Mixed-Use building, and therefore falls under Favored Sites: **Mixed Use Buildings in High Density Districts.**

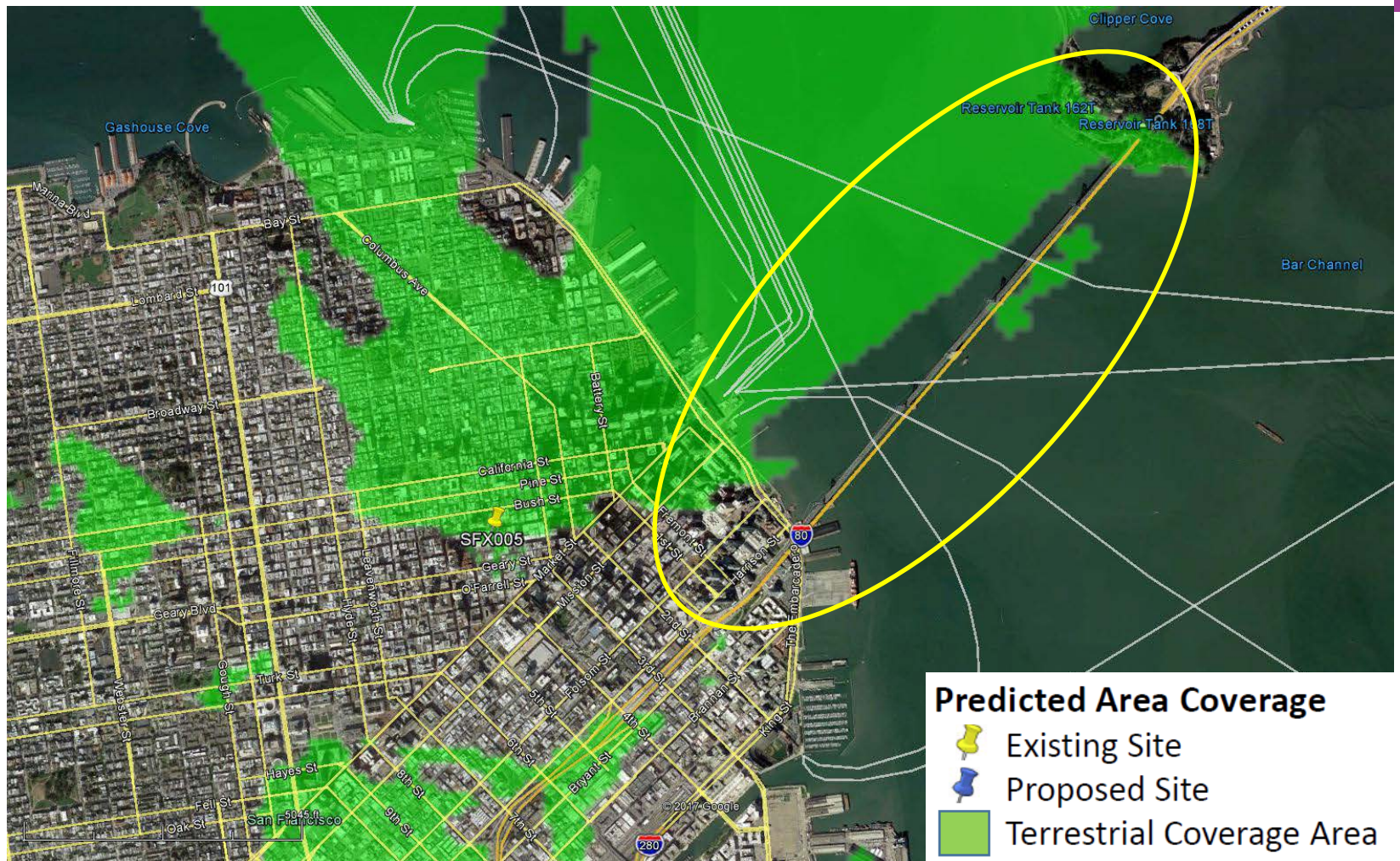
However, please also find a map of alternate sites attached, prepared by the RF Engineer, including a summary of each site and why it was or was not chosen as the Primary Candidate.



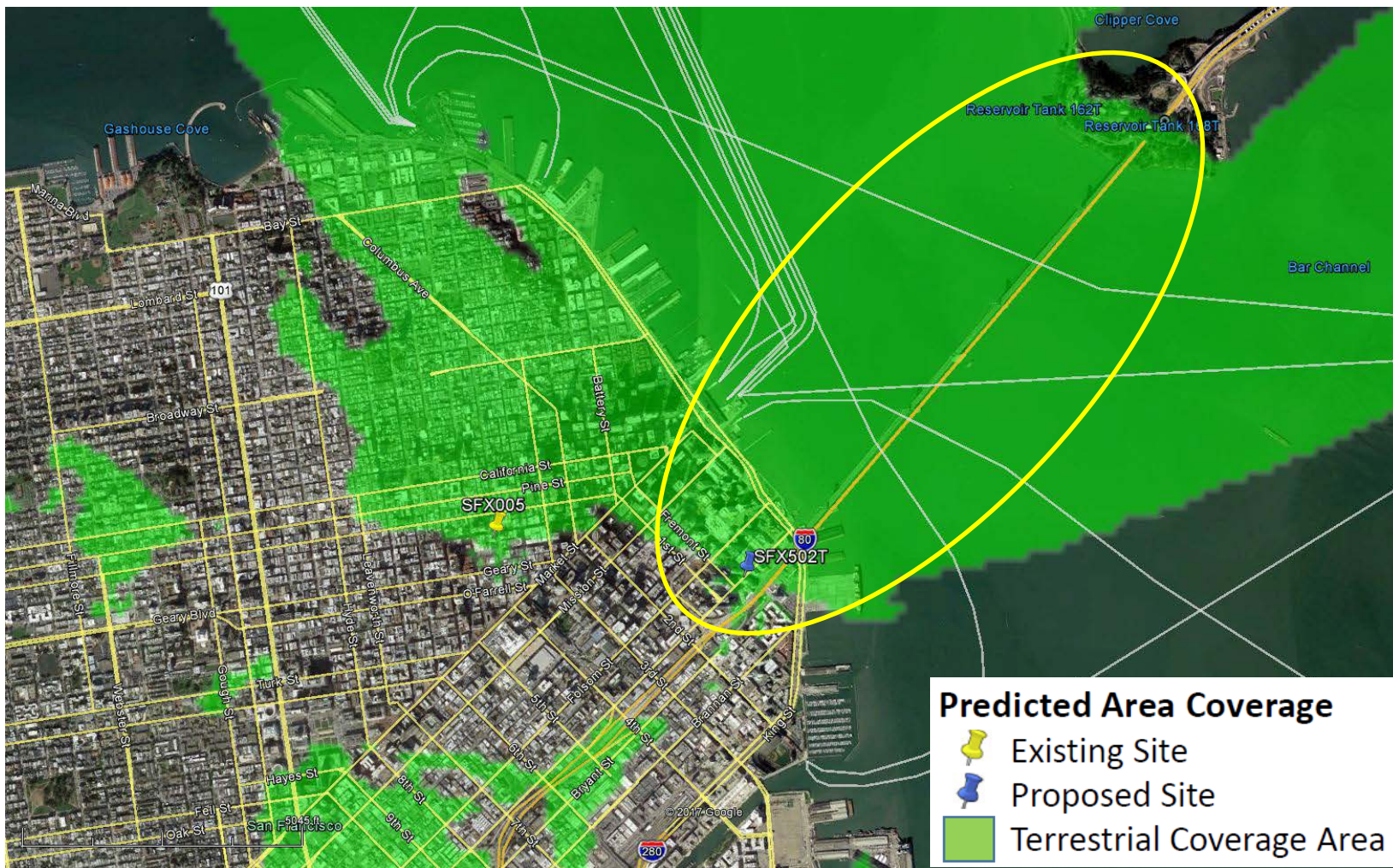
SFX502T Candidate History
and
Coverage Requirements

Terrestrial Engineering

Coverage Gap in Existing Network

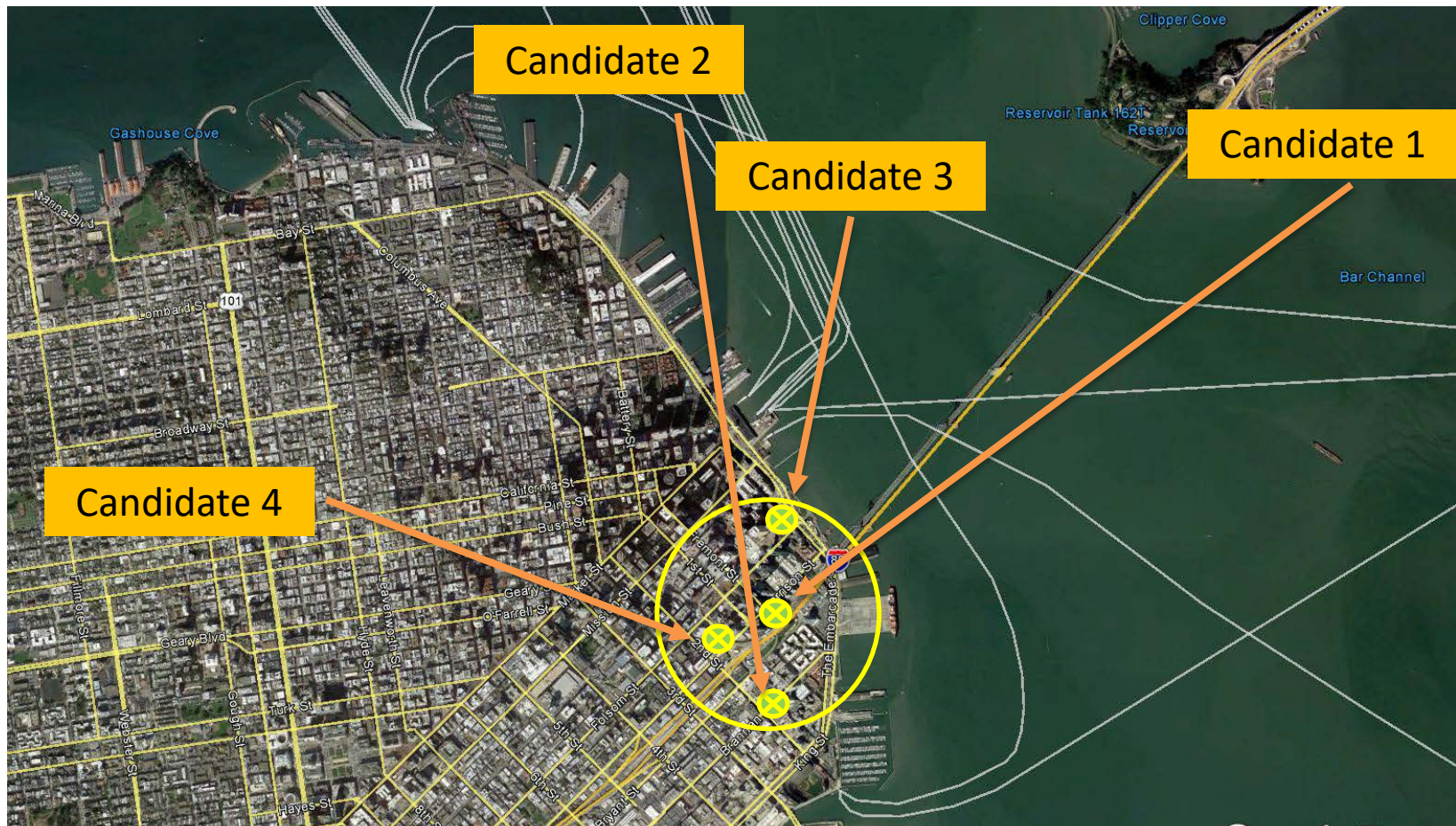


Additional Coverage with SFX502T added



Site Procurement and Search Ring Analysis

SFX502T



The search ring (shown in yellow) for SFX502 required a candidate situated near the center of the coverage gap area. This central location would enable us to maximize coverage from the site

Site Procurement and Search Ring Analysis

SFX502T

Candidate 1 (Selected Candidate) 400 Beale Street : Site is situated in a good location and is tall enough to direct signal into the middle level of the Oakland Bay Bridge as well as the segment of I-80 going all the way to Yerba Buena Island. The site has an unobstructed view of the Oakland Bay Bridge as well as being located directly in the center of the coverage gap underneath it.

Candidate 2 : (274 Brannan Street): Building is too far south and not of adequate height to eliminate all muting on I-80 as well as the coverage gap to the north of it. Other buildings of greater height block the signal that would come from this building.

Candidate 3 : (345 Spear Street): Building is of adequate height. However, rooftop layout makes antenna placement difficult. Building is located to the north of the coverage gap below the I-80 freeway overpass and the considerable building density in the area would prevent signal from this building reaching that signal deficient area.

Candidate 4 : (450 Harrison Street): Building does not possess a height adequate enough to satisfy coverage requirements.

