



# SAN FRANCISCO PLANNING DEPARTMENT

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## Executive Summary Conditional Use Authorization to Allow a Wireless Telecommunications Services (WTS) Facility

HEARING DATE: OCTOBER 7, 2010

*Date:* September 30, 2010  
*Case No.:* 2009.0464C  
*Project Address:* 20 Woodside Avenue aka 501 Laguna Honda Boulevard  
*Current Zoning:* RH-1(D) (One-Family, Residential, Detached)  
40-X Height and Bulk District  
*Block/Lot:* 2888A/001  
*Project Sponsor:* Margie Detiege on the behalf of Verizon Wireless  
2000 Crow Canyon Place, Suite 400  
San Ramon, CA 94583  
*Staff Contact:* Adrian C. Putra – (415) 575-9079  
adrian.putra@sfgov.org  
*Recommendation:* **Approve the Conditional Use Authorization with Conditions**

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

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### PROJECT DESCRIPTION

The project is to modify an existing WTS facility by installing three panel antennas to a WTS facility that is operated by Verizon Wireless. The existing Verizon Wireless WTS facility consists of three panel antennas that are mounted and concealed within the cupola of a church steeple. The three proposed antennas will be mounted at a maximum height of approximately 53' above grade. According to the Project Sponsor, the proposed antennas will enhance the existing WTS facility's speed and data streaming capabilities, and will not impact the existing coverage. Each antenna measures approximately 24" long by 11" wide by 4.5" deep, and will be powered by equipment cabinets located in an existing Verizon's equipment room directly below the church cupola.

Pursuant to the 1996 Wireless Telecommunications Services (WTS) Facilities Siting Guidelines and the 2003 Supplement to those Guidelines, the proposed installation is a Preference 1 Preferred Site, in that it is a publicly used structure (place of worship).

### SITE DESCRIPTION AND PRESENT USE

The project site is located at the southeast corner of Woodside Avenue and Laguna Honda Boulevard. The site contains a church building that is owned and occupied by St. John's United Church of Christ. The project site contains an a WTS facility operated by Verizon Wireless consisting three panel antennas, and a WTS facility operated by MetroPCS consisting of three panel antennas. The antennas for both of these facilities are mounted within the cupola located at the top of a church steeple. The project site also

has one micro WTS facility operated by T-Mobile consisting of two omni antennas also located within the cupola.

## SURROUNDING PROPERTIES & NEIGHBORHOOD

The Project Site is located within an RH-1(D) (One-Family, Residential, Detached) Zoning District in the Twin Peaks Neighborhood. Typically, RH-1(D) districts are characterized by lots of greater width and area than in other parts of the City, and by single-family houses with side yards. The subject block and adjacent blocks to the west of the project site are primarily residential. Directly northeast of the project site on the opposite side of Woodside Avenue is Laguna Honda Hospital.

## ENVIRONMENTAL REVIEW STATUS

The San Francisco Planning Department (hereinafter "Department") determined the application to be categorically exempt from the environmental review process (CEQA) pursuant to exemption Classes 1, 3 and 11 of Title 14 of the California Administrative Code.

## HEARING NOTIFICATION REQUIREMENTS

TYPE	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Classified News Ad	20 days	September 17, 2010	September 17, 2010	20 days
Posted Notice	20 days	September 17, 2010	September 17, 2010	20 days
Mailed Notice	20 days	September 17, 2010	September 17, 2010	20 days

## PUBLIC COMMENT

To date the Department has not received public comment regarding this application. A Community Outreach Meeting was conducted for the proposed project. The meeting was held at 7:30 PM on Tuesday, November 3, 2009, at the Forest Hill Church, 250 Laguna Honda Boulevard, San Francisco, CA 94116. According to the Project Sponsor three members of the public attended this meeting.

## ISSUES AND OTHER CONSIDERATIONS

- The project will be compatible with the neighborhood since it has been designed to be visually concealed from street view.
- The Department is not aware of opposition to the project.

## REQUIRED COMMISSION ACTION

Pursuant to Planning Code Section 209.6(b) and 303, Conditional Use authorization is required to modify an existing WTS facility by adding three additional antennas to an existing WTS facility in the NC-1 District, and 40-X Height and Bulk District.

## BASIS FOR RECOMMENDATION

The Department believes this project is necessary and/or desirable under Section 303 of the Planning Code for the following reasons:

- The project meets the criteria established under the 1996 Wireless Telecommunications Services Facilities Siting Guidelines, and it is consistent with the objectives and policies of the Commerce and Industry Element, the Community Safety Element, the Residence Element, and the Urban Design Element of the General Plan.
- The Project Site is a Location Preference Number 1, as it is a preferred location as a publicly used structure (place of worship).
- The project is desirable as it will improve Verizon Wireless' mobile telephone network by enhancing this existing WTS facility's speed and data streaming capabilities.

<b>RECOMMENDATION:</b> <b>Approval the Conditional Use Authorization with Conditions</b>
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## Exhibit Checklist

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Executive Summary   | <input checked="" type="checkbox"/> Project sponsor submittal            |
| <input checked="" type="checkbox"/> Draft Motion        | Drawings: <u>Existing Conditions</u>                                     |
| <input type="checkbox"/> Environmental Determination    | <input checked="" type="checkbox"/> Check for legibility                 |
| <input checked="" type="checkbox"/> Zoning District Map | Drawings: <u>Proposed Project</u>  |
| <input type="checkbox"/> Height & Bulk Map              | <input checked="" type="checkbox"/> Check for legibility                 |
| <input checked="" type="checkbox"/> Parcel Map          | <input checked="" type="checkbox"/> Public Correspondence                |
| <input checked="" type="checkbox"/> Sanborn Map         | <input checked="" type="checkbox"/> Coverage Maps                        |
| <input checked="" type="checkbox"/> Aerial Photo        | <input checked="" type="checkbox"/> RF Report and DPH Evaluation         |
| <input checked="" type="checkbox"/> Context Photos      | <input checked="" type="checkbox"/> Notice of Community Outreach Meeting |
| <input checked="" type="checkbox"/> Site Photos         |  |

Exhibits above marked with an "X" are included in this packet

\_\_\_\_\_  
Planner's Initials

ACP



# SAN FRANCISCO PLANNING DEPARTMENT

Subject to: (Select only if applicable)

- Inclusionary Housing (Sec. 315)
- Jobs Housing Linkage Program (Sec. 313)
- Downtown Park Fee (Sec. 139)
- First Source Hiring (Admin. Code)
- Child Care Requirement (Sec. 314)
- Other

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## Planning Commission Motion

HEARING DATE: OCTOBER 7, 2010

*Date:* September 30, 2010  
*Case No.:* **2009.0464C**  
*Project Address:* **20 Woodside Avenue aka 501 Laguna Honda Boulevard**  
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**ADOPTING FINDINGS RELATING TO THE APPROVAL OF A CONDITIONAL USE AUTHORIZATION UNDER PLANNING CODE SECTIONS 209.6(b) AND 303 TO MODIFY AN WIRELESS TELECOMMUNICATION SERVICES (WTS) FACILITY BY ADDING THREE PANEL ANTENNAS WITHIN THE CUPOLA OF ST. JOHN' UNITED CHURCH OF CHRIST, AS PART OF THE VERIZON WIRELESS TELECOMMUNICATIONS NETWORK IN A RH-1(D) (ONE-FAMILY, RESIDENTIAL, DETACHED) ZONING DISTRICT, AND A 40-X HEIGHT AND BULK DISTRICT.**

### PREAMBLE

On June 4, 2009, Margie Detiege on the behalf of Verizon Wireless (hereinafter "project sponsor"), made an application (hereinafter "application"), for Conditional Use authorization on the property at **20 Woodside Avenue also known as 501 Laguna Honda Boulevard, Lot 001 in Assessor's Block 2888A**, (hereinafter "project site") to modify a wireless telecommunication services (WTS) facility by adding three panel antennas within the church cupola of St. John's United Church of Christ, as part of the Verizon wireless telecommunications network in a RH-1(D) (One-Family, Residential, Detached) Zoning District, and a 40-X Height and Bulk District, in general conformity with plans filed with the Application and labeled "EXHIBIT B" (hereinafter "Project").

The San Francisco Planning Department (hereinafter "Department") determined the application to be categorically exempt from the environmental review process (CEQA) pursuant to exemption Classes 1, 3 and 11 of Title 14 of the California Administrative Code.

On October 7, 2010, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Application No. 2009.0464C.

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 requested in Application No. 2009.0464C, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

## FINDINGS

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

1. The above recitals are accurate and constitute findings of this Commission.
2. **Site Description and Present Use.** The project site is located at the southeast corner of Woodside Avenue and Laguna Honda Boulevard. The site contains a church building that is owned and occupied by St. John's United Church of Christ. The project site contains an a WTS facility operated by Verizon Wireless consisting three panel antennas, and a WTS facility operated by MetroPCS consisting of three panel antennas. The antennas for both of these facilities are mounted within the cupola located at the top of a church steeple. The project site also has one micro WTS facility operated by T-Mobile consisting of two omni antennas also located within the cupola.
3. **Surrounding Properties and Neighborhood.** The Project Site is located within an RH-1(D) (One-Family, Residential, Detached) Zoning District in the Twin Peaks Neighborhood. Typically, RH-1(D) districts are characterized by lots of greater width and area than in other parts of the City, and by single-family houses with side yards. The subject block and adjacent blocks to the west of the project site are primarily residential. Directly northeast of the project site on the opposite side of Woodside Avenue is Laguna Honda Hospital.
4. **Project Description.** The project is to modify an existing WTS facility by installing three panel antennas to a WTS facility that is operated by Verizon Wireless. The existing Verizon Wireless WTS facility consists of three panel antennas that are mounted and concealed within the cupola of a church steeple. The three proposed antennas will be mounted at a maximum height of approximately 53' above grade. According to the Project Sponsor, the proposed antennas will enhance the existing WTS facility's speed and data streaming capabilities (i.e. 3G Data Network) and will not impact the existing coverage. Each antenna measures approximately 24" long by 11" wide by 4.5" deep, and will be powered by equipment cabinets located in an existing Verizon's equipment room directly below the church cupola.

Pursuant to the 1996 Wireless Telecommunications Services (WTS) Facilities Siting Guidelines and the 2003 Supplement to those Guidelines, the proposed installation is a Preference 1 Preferred Site, in that it is a publicly used structure (place of worship).

5. **Community Outreach.** A Community Outreach Meeting was conducted for the proposed project. The meeting was held at 7:30 PM on Tuesday, November 3, 2009, at the Forest Hill Church, 250 Laguna Honda Boulevard, San Francisco, CA 94116. According to the Project Sponsor three members of the public attended this meeting.
6. **Public Comment.** To date the Department has not received public comment regarding this application.
7. **Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the amendments to Planning Code in the following manner:
  - A. **Use.** A WTS facility is considered a public utility under Planning Code Section 209.6(b), which requires Conditional Use authorization in the RH-1(D) District under Planning Code Section 303.

*By modifying a Verizon Wireless macro wireless telecommunications facility to add three panel antennas, the Project must be authorized for conditional use by the Planning Commission, subject to the 1996 Wireless Telecommunications Services (WTS) Facilities Siting Guidelines and the 2002 supplement to those guidelines.*

- B. **Height.** Per Planning Code Section 260(b)2(I), radio antennae for transmission, reception, or relay of radio, television or other electronic signals, where permitted as principal or conditional uses are exempt from height limits.
    - C. **WTS Guidelines.** The WTS Facilities Siting Guidelines identify different types of buildings for the siting of wireless telecommunications facilities, with Location Preference 1 being the most desirable location and Location Preference 7 being the least desirable location.

*Under the Guidelines, the Project is a Location Preference Number 1 site, as it is a preferred location for a publicly used structure (place of worship).*

8. **Planning Code Section 303** establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use approval. On balance, the project does comply with said criteria in that:
  - A. The proposed new uses and building, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable, and compatible with, the neighborhood or the community.

*The project will be generally desirable and compatible with the surrounding neighborhood because the project will not conflict with the existing uses of the property. The project will be of such size and*

*nature to be compatible with the use of the project site, and the public-use nature of Laguna Honda Hospital located directly northeast of the project site on the opposite side of Woodside Avenue. The approval of this authorization has been found, first and foremost, to insure public safety, and insure that the placement of antennas and related support and protection features are so located, designed, and treated architecturally to minimize their visibility from public places, to avoid intrusion into public vistas, avoid disruption of the architectural design integrity of building and insure harmony with neighborhood character. The proposed project will also provide necessary facilities for emergency transmission and improved communication for the neighborhood, community and the region.*

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

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

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

*An evaluation of potential health effects from RF radiation, conducted by the Department of Public Health, has concluded that the proposed wireless transmission facility and cumulative effects of the existing facility are in compliance with the FCC-adopted health and safety standards.*

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

*No significant increase in traffic volume is anticipated with the establishment of the proposed WTS facility. According to the Project Sponsor, Verizon will visit the site only about once a month for maintenance work.*

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

*While some noise and dust may result from the installation of the antennas and transceiver equipment, once the proposed antennas are installed, impacts with regards to the above will likely be insignificant.*

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

*The subject site has ample landscaping and open space. The installation of antennas within an existing church cupola will not affect the existing landscaping.*



- 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.*

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

## COMMERCE AND INDUSTRY ELEMENT

### Objectives and Policies

#### OBJECTIVE 1:

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

#### Policy 1:

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

#### Policy 2:

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

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

#### OBJECTIVE 2:

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

#### Policy 1:

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

#### Policy 3:

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

*The site is an integral part of a wireless communications network that will enhance the City's diverse economic base.*

**OBJECTIVE 4:**

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

**Policy 1:**

Maintain and enhance a favorable business climate in the City.

**Policy 2:**

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

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

**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 Verizon Wireless mobile telecommunications.*

**COMMUNITY SAFETY ELEMENT**

**Objectives and Policies**

**OBJECTIVE 3:**

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

**Policy 1:**

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

**Policy 2:**

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

**Policy 3:**

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

**Policy 4:**

Establish and maintain an adequate Emergency Operations Center.

**Policy 5:**

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

**Policy 6:**

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

*In the event that traditional land line telephones are rendered inoperable during a natural disaster the project would enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by improving wireless communication services.*

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

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

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

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

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

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

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

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

*The Project will not adversely impact public transit or place a burden on the existing supply of parking in the neighborhood. According to the Project Sponsor, the proposal to add three antenna to an existing WTS facility will only require access by Verizon representatives once a month.*

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

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

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

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

- G. That landmarks and historic buildings be preserved.

*No landmarks or historic buildings would be affected by the project.*

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

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

11. 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.
12. The Commission hereby finds that approval of the Determination of Compliance 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 Application No. 2009.0464C** subject to the following conditions attached hereto as "EXHIBIT A" 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 No. XXXXX. The effective date of this Motion shall be the date of this Motion if not appealed (after the 30-day period has expired) OR the date of the decision of the Board of Supervisors if appealed to the Board of Supervisors. For further information, please contact the Board of Supervisors at (415) 554-5184, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **October 7, 2010**.

---

Linda Avery  
Commission Secretary

AYES:

NAYES:

ABSENT:

ADOPTED: October 7, 2010

# Exhibit A

## Conditions of Approval

Whenever "Project Sponsor" is used in the following conditions, the conditions shall also bind any successor to the Project or other persons having an interest in the Project or underlying property.

### GENERAL CONDITIONS

1. This authorization is for a Conditional Use Authorization under Planning Code Sections 209.6(b) and 303 to modify a wireless telecommunication services (WTS) facility by adding three panel antennas within the church cupola of St. John's United Church of Christ, as part of the Verizon wireless telecommunications network in a RH-1(D) (One-Family, Residential, Detached) Zoning District, and a 40-X Height and Bulk District, in general conformance with plans filed with the Application dated April 16, 2010, stamped "EXHIBIT B" and are subject to the following conditions, included in the docket for Case No. 2009.0464C, reviewed and approved by the Commission on October 7, 2010.
2. **Plan Drawings.** 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.
3. **Project Implementation Report.** 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.



- a. 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:
    - i. Modify the placement of the facilities;
    - ii. Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;
    - iii. 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; or
    - iv. Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.
  - b. To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:
  - c. Antennas and back-up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual impacts;
  - d. Rooftop installations shall be setback such that back-up facilities are not viewed from the street;
  - e. Antennae attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and
  - f. 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.
8. **Out of Service.** The Project Sponsor or Property Owner shall remove antennae and equipment that has been out of service for a continuous period of six months or otherwise abandoned.
9. **Periodic Safety Monitoring.** 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.
10. **Emissions Conditions.** 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.
11. **Noise and Heat.** The WTS facility, including power source and cooling facility, shall be operated at all times within the limits of the San Francisco Noise 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.
12. **Implementation and Monitoring Costs.**
- a. The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of



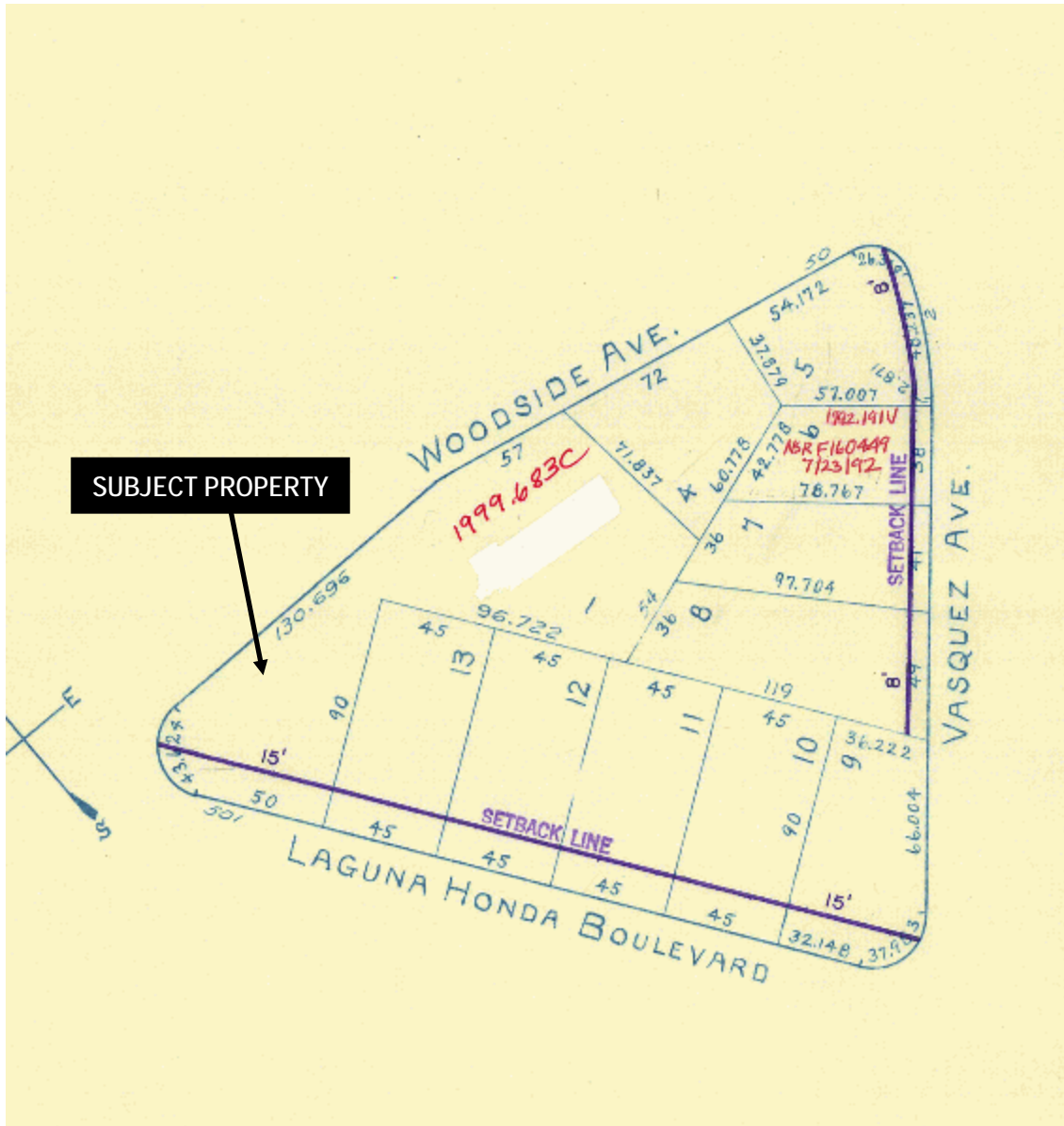
- WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.
- b. The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with the monitoring of the conditions of approval contained in this authorization, including costs incurred by this Department, the Department of Public Health, the Department of Electricity and Telecommunications, Office of the City Attorney, or any other appropriate City Department or agency pursuant to Planning Code Section 351(f)(2). The Planning Department shall collect such costs on behalf of the City.
  - c. The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility, which are assessed by the City pursuant to all applicable law.
13. **All Conditions Basis for Revocation.** The Project Sponsor or its successors shall comply fully with all conditions specified in this authorization. Failure to comply with any condition shall constitute grounds for revocation under the provisions of Planning Code sections 174, 176 and 803(d). The Zoning Administrator shall schedule a public hearing before the Planning Commission to receive testimony and other evidence to demonstrate a finding of a violation of a condition of the authorization of the use of the facility and, finding that violation, the Commission shall revoke the Conditional Use authorization. Such revocation by the Planning Commission is appealable to the Board of Supervisors.
14. 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.
15. **Complaints and Proceedings.** Should any party complain to the Project Sponsor about the installation or operation of the facilities, which complaints are not resolved by the Project Sponsor, the Project Sponsor (or its appointed agent) shall advise the Zoning Administrator of the complaint and the failure to satisfactorily resolve such complaint. If the Zoning Administrator thereafter finds a violation of any provision of the City Planning Code and/or any condition of approval herein, the Zoning Administrator shall attempt to resolve such violation on an expedited basis with the Project Sponsor. If such efforts fail, the Zoning Administrator shall refer such complains to the Commission for consideration at the next regularly scheduled public meeting.
16. **Severability.** 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 of the remaining provisions, clauses, sentences, or sections of these conditions. It is hereby declared to be the intent of the Commission that these conditions of approval would have been adopted had such invalid sentence, clause, or section or part thereof not been included herein.
17. **Transfer of Operation.** 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.

18. **Compatibility with City Emergency Services.** The facility shall not be operated, nor 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.
19. **Notice of Recordation.** Prior to the issuance of any building permit for the construction of 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, which notice shall state that construction of the Project has been authorized by and is subject to the conditions of this Motion. From time to time after the recordation of such notice, at the request of the Project Sponsor, the Zoning Administrator shall affirm in writing the extent to which the conditions of this Motion have been satisfied, and record said writing if requested.
20. Violation of the conditions contained in this Motion or of any other provisions of the Planning Code may be subject to abatement procedures and fines up to \$500 a day in accordance with Planning Code Section 176.
21. Should monitoring of the Conditions of Approval contained in Exhibit A of this Motion be required, the Project Sponsor or successors shall pay fees as established in Planning Code Section 351(e)(1).
22. The authorization and right vested by virtue of this action shall be deemed void and canceled if, within 3 years of the date of this Motion, a site permit or building permit for the Project has not been secured by Project Sponsor. This authorization may be extended at the discretion of the Zoning Administrator only if the failure to issue a permit by the Department of Building Inspection is delayed by a city, state, or federal agency or by appeal of the issuance of such permit.

ACP:G:\DOCUMENTS\CU\20 Woodside aka 501 Laguna Honda - 2009.0464C\20 Woodside aka 501 Laguna Honda - 2009.0464C Motion.DOC

# Parcel Map



Conditional Use Request Hearing  
Case Number 2009.0464C  
Wireless Telecommunications Facility  
20 Woodside Ave. aka 501 Laguna Honda Blvd



# Aerial Photo view looking North



**SUBJECT PROPERTY**

Conditional Use Request Hearing  
Case Number 2009.0464C  
Wireless Telecommunications Facility  
20 Woodside Ave. aka 501 Laguna Honda Blvd

# Aerial Photo view looking West



**SUBJECT PROPERTY**

Conditional Use Request Hearing  
Case Number 2009.0464C  
Wireless Telecommunications Facility  
20 Woodside Ave. aka 501 Laguna Honda Blvd

# Zoning Map



Conditional Use Request Hearing  
Case Number 2009.0464C  
Wireless Telecommunications Facility  
20 Woodside Ave. aka 501 Laguna Honda Blvd

# Site Photo



Conditional Use Request Hearing  
Case Number 2009.0464C  
Wireless Telecommunications Facility  
20 Woodside Ave. aka 501 Laguna Honda Blvd





**Review of Cellular Antenna Site Proposals**

**Project Sponsor:** Verizon Wireless **Planner:** Jonas Ionin

**RF Engineer Consultant:** Bill Hammett, Hammett & Edison **Phone number** 707-996-5200

**Project Address/Location:** 501 Laguna Honda Blvd. (#123816)

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

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

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

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

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

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

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

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

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

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

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

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

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

*Comments: There are existing three (3) antennas operated by Verizon installed in the bell tower of the church located at 501 Laguna Honda Boulevard. Also located at this site are antennas used by MetroPCS and T-Mobile. Existing RF levels at ground level were less than 1% of the FCC public exposure limit. There were observed no other antennas within 100 feet of this site. Verizon proposes to add three antennas which are Andrew Model P65.15.XL.0. The antennas would be mounted at effective height of about 52 feet above the ground. The estimated ambient RF field from the proposed Verizon transmitters at ground level is calculated to be 0.013 mW/sq. cm., which is 2.3% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit is calculated to extend 33 feet and does not reach any publicly accessible areas. Warning signs must be posted at the bell tower access door and antennas in English, Spanish and Chinese. Worker should not have access within 7 feet of the front of the antennas while they are in operation.*

     **Not Approved**, additional information required. \_\_\_\_\_

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

  1   Hours spent reviewing

  \$167.00   Charges to Project Sponsor (in addition to previous charges, to be received at time of receipt by Sponsor)

Signed Patrick Fosdahl Date May 19, 2009

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

**Verizon Wireless • Base Station No. 123816 “Twin Peaks”**  
**501 Laguna Honda Boulevard • San Francisco, California**  
*20 Woodside Ave*

**Statement of Hammett & Edison, Inc., Consulting Engineers**

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Verizon Wireless, a wireless telecommunications carrier, to evaluate proposed modifications to its existing base station (Site No. 123816 “Twin Peaks”) at 501 Laguna Honda Boulevard with respect to prevailing standards limiting human exposure to radio frequency energy.

**Background**

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

Personal Wireless Service	Approx. Frequency	Occupational Limit	Public Limit
Broadband Radio (“BRS”)	2,600 MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Advanced Wireless (“AWS”)	2,100	5.00	1.00
Personal Communication (“PCS”)	1,950	5.00	1.00
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio (“SMR”)	855	2.85	0.57
Long Term Evolution (“LTE”)	700	2.33	0.47
[most restrictive frequency range]	30–300	1.00	0.20

The site was visited during normal business hours by Mr. David Kelly, a qualified technician contracted by Hammett & Edison, Inc., on December 2, 2008, a non-holiday weekday, and reference has been made to information provided by Verizon.

**Checklist**

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

Three directional panel antennas for use by Verizon were installed inside the bell tower of St. John’s Church located at 501 Laguna Honda Boulevard. Similar antennas were observed for use by MetroPCS and T-Mobile, other wireless telecommunications carriers. Existing RF levels at ground near the site measured less than 1% of the most restrictive public exposure limit.

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

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

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

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



**Verizon Wireless • Base Station No. 123816 “Twin Peaks”  
501 Laguna Honda Boulevard • San Francisco, California**

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

Verizon proposes to add three Andrew Model P65.15.XL.0 directional panel antennas for LTE service at an effective height of about 51<sup>1</sup>/<sub>2</sub> feet above ground next to the existing antennas, which are reportedly Andrew Model DB731DG65VTAX-M directional dualband antennas for PCS and cellular service. The antennas would be oriented in pairs (one of each) toward 90°T, 230°T, and 340°T, with up to 10° downtilt in the latter two directions. The MetroPCS antennas were also mounted within the bell tower, and the T-Mobile antennas were mounted on the outside of the tower.

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

The maximum rating of the PCS and cellular transmitters is 20 watts, with the proposed LTE transmitters rated at 16 watts. The ratings of the MetroPCS and T-Mobile transmitters are not known. The actual operating power of the transmitters will depend upon the system losses encountered after the physical cabling runs have been installed; the transmitters may operate at a power less than their maximum rating, such that the total power radiated from the antennas does not exceed the level given in Item 6 below.

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

The maximum effective radiated power in any direction for Verizon would be 2,040 watts, representing simultaneous operation at 640, 1,000, and 400 watts for PCS, cellular, and LTE service, respectively. The number of watts for the current MetroPCS and T-Mobile operations are not known.

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

The antennas would be mounted on the building as described in Item 4 above. There were noted no buildings of similar height nearby.

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

For a person anywhere at ground near the site, the maximum ambient RF exposure level due to the proposed Verizon operation is calculated to be 0.013 mW/cm<sup>2</sup>, which is 2.3% of the applicable public exposure limit. Therefore, ambient levels at ground are estimated to be less than 3% of the public limit. The three-dimensional perimeter of RF levels equal to the public exposure limit does not reach any publicly accessible areas; it is calculated to extend about 33 feet directly in front of the Verizon antennas and to much lesser distances behind, below, above, and to the sides.



**Verizon Wireless • Base Station No. 123816 “Twin Peaks”  
501 Laguna Honda Boulevard • San Francisco, California**

9. Describe proposed signage at site.

Due to their mounting location, the Verizon antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 7 feet directly in front of the antennas themselves, such as might occur during maintenance work on the bell tower, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Explanatory warning signs\* had been posted near the antennas, readily visible from any angle of approach to persons who might need to work within that distance. Similar measures should already be in place for the other carriers at this site; applicable keep-back distances have not been determined as part of this study.

10. Statement of authorship.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registrations Nos. E-13026 and M-20676, which expire on June 30, 2009. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

**Conclusion**

Based on the information and analysis above, it is my professional opinion that the Verizon Wireless base station operation located at 501 Laguna Honda Boulevard in San Francisco will continue to comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment.

March 13, 2009



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

\* Warning signs complied with OET-65 color and symbol recommendations. Contact information was provided in English to arrange for access to restricted areas, with Spanish and Chinese translations (not by this firm) included.

**NOTICE OF NEIGHBORHOOD MEETING**  
**TO: Neighbors/Owners within 500' radius of 501 Laguna Honda Boulevard**

**Meeting Information:** Verizon Wireless is proposing to add new antennas to their existing cell site at 501 Laguna Honda Blvd. in San Francisco to boost the data speed on their wireless network. The proposed Verizon Wireless addition to the existing unmanned facility consists of removing/replacing three (3) 8' panel antennas with six (6) 4' panel antennas stealthed inside the church cupola.

**Site Information:**  
Address: 501 Laguna Honda Blvd. Plans and photo simulations will be available for your review at the meeting.  
Block/Lot: 2888a-001 This project will be scheduled for Planning Commission review on a future date. You are invited to attend a community meeting held at Forest Hill Church located at 250 Laguna Honda Blvd, San Francisco, CA on November 3, 2009 at 7:30 PM to learn more about the project.  
Zoning: RH1D

**Applicant:** Verizon Wireless

**Contact Information:** If you have any questions regarding the proposal and are unable to attend the meeting, please contact James Singleton or Margie Detiege at 925-244-1890. Please call Aaron Hollister at 415-575-9078 with the City of San Francisco Planning Department if you have any questions regarding the planning process.

NSA Wireless, Inc.  
James Singleton  
925-244-1890

**NOTE: If you require an interpreter be present at the meeting, please contact us at 925-244-1890 and we will make every effort to provide one for you.**

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**Información Acerca de la Reunión:** Verizon Wireless propone a instale las nuevas antenas panel en su instalación existente en 501 Laguna Honda Blvd. a alce la velocidad de datos como parte de su red inalámbrica de San Francisco. Los adiciones al instalación existente sin personal porsupuesta por Verizon Wireless consiste en eliminación y reemplazo de tres (3) 8' antenas panel con seis (6) 4' antenas panel oscureado en la cúpula de la iglesia

Fecha: 10/27/2009  
Hora: 7:30 de la noche  
Lugar: Forest Hill Church

**Información Sobre el Sitio:**  
Direccion: 501 Laguna Honda Blvd.  
Bloque/Lote: 2888a-001  
Zona: RH1D

**Solicitante:** Verizon Wireless

**Información del Contacto:**  
NSA Wireless, Inc.  
James Singleton  
925-244-1890

En la reunión tendremos dibujos y simulaciones fotográficas para su consulta por parte de los asistentes. La revisión de este proyecto por parte de la Comisión de Planeación estará programado para la fecha futura. Le invitamos a concurrir a la reunión informativa para la comunidad que se realizará en Forest Hill Church, ubicada en 250 Laguna Honda Blvd., el día 3 de Noviembre a las 7:30 de la noche, a fin de obtener más información sobre el proyecto.

Si tiene alguna pregunta acerca de la propuesta y no puede asistir a la reunión, por favor llámase con James Singleton al 925-244-1890. Póngase en contacto con Aaron Hollister del Departamento de Planeación de la Ciudad de San Francisco al teléfono 415-575-9078 si tiene alguna pregunta referente al proceso de planeación.

**NOTA: Si requiere la presencia de un intérprete en la reunion, por favor comuníquese con nuestra oficina al 925-244-1890 en cuanto pueda y trataremos de proporcionarle un intérprete.**

---

Verizon Wireless 公司建議加裝新的天線在501 Laguna Honda Blvd., San Francisco 現有的網路系統上以取代舊的網路系統,

**會議詳情** 建議將目前現有無人使用的設備移除裝上新的設施,建議將目前現有無人使用的設備移除裝上新的設施,也就是用6呎的有顏色的天線板來取代原有的3吋的天線板,如此一來,新的天在教會屋頂尖頂掩藏。

日期: 2009年11月3日  
時間: 下午7:30 PM  
地點: Forest Hill Church  
250 Laguna Honda Blvd.

**設施地點資料** 這個計劃,結構圖與模擬圖像將會在公聽會中對大家展示,在將來另外,在11/03/2009下午7:30,我們將有一場說明會;地點在: Forest Hill Church, 250 Laguna Honda Blvd.

地址: 501 Laguna Honda Blvd  
街段/地段: 2888a-001  
劃區: RH1D

**申請公司:** Verizon Wireless

我們誠摯的邀請您來參加,在會議上您將得到更清楚的資訊  
如果您有任何問題或是建議但是不克參加會議,歡迎您致電: 925-2441890 找 James Singleton 或 Margie Detiege  
如果您對整個計劃有問題,請致電三藩市都市計畫部門415-5759078 找 Aaron Hollister

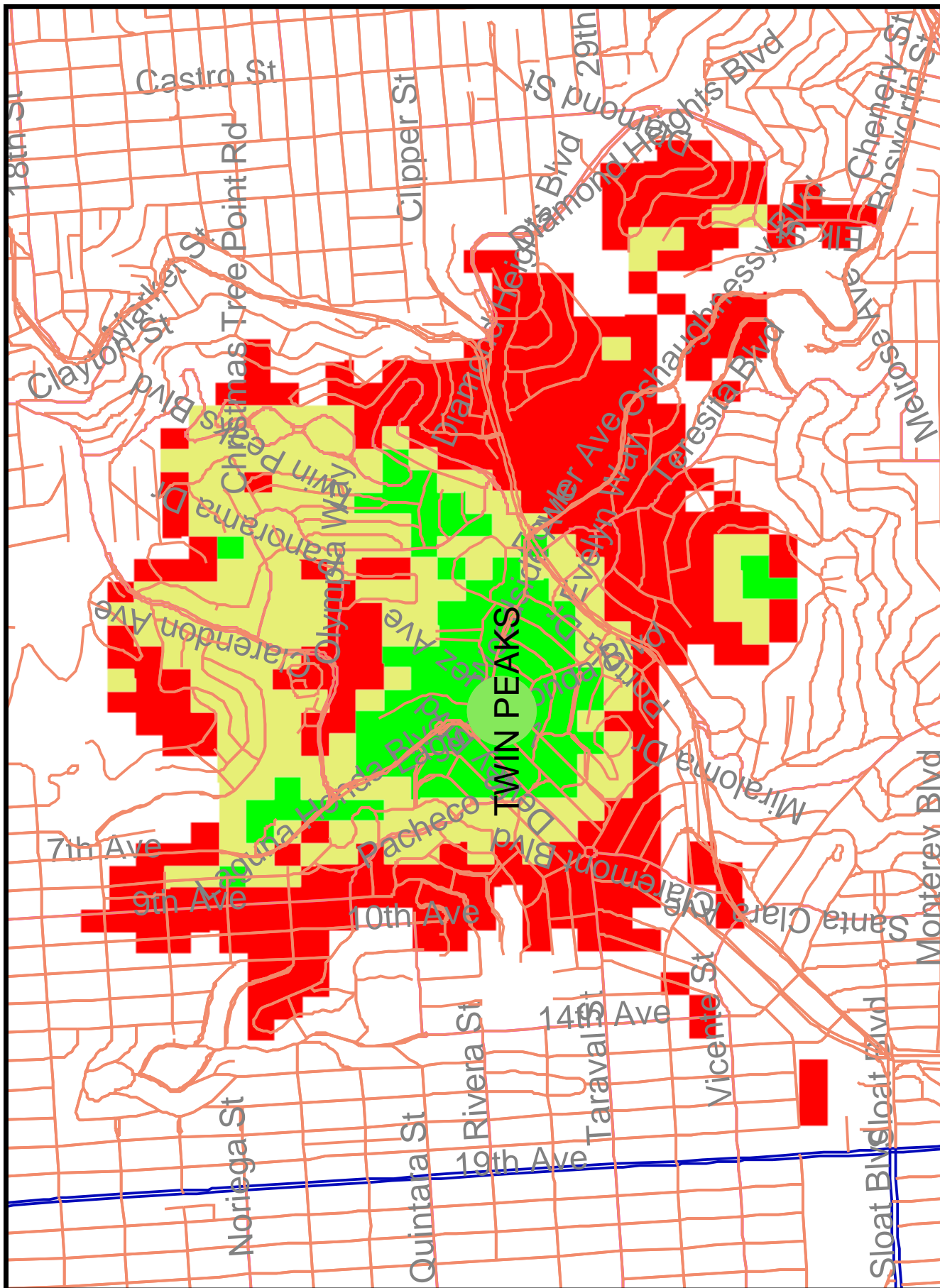
**聯絡人** NSA Wireless, Inc.  
James Singleton  
925-244-1890

如果您需要翻譯人員在會議上協助您,請即致電  
925-2441890,我們將盡力為您安排翻譯服務

### 501 Laguna Honda Existing Coverage Map

The proposed added antennas are for increased data speed and to increase the number of calls that can be handled at one time. It will have no effect on the current coverage.

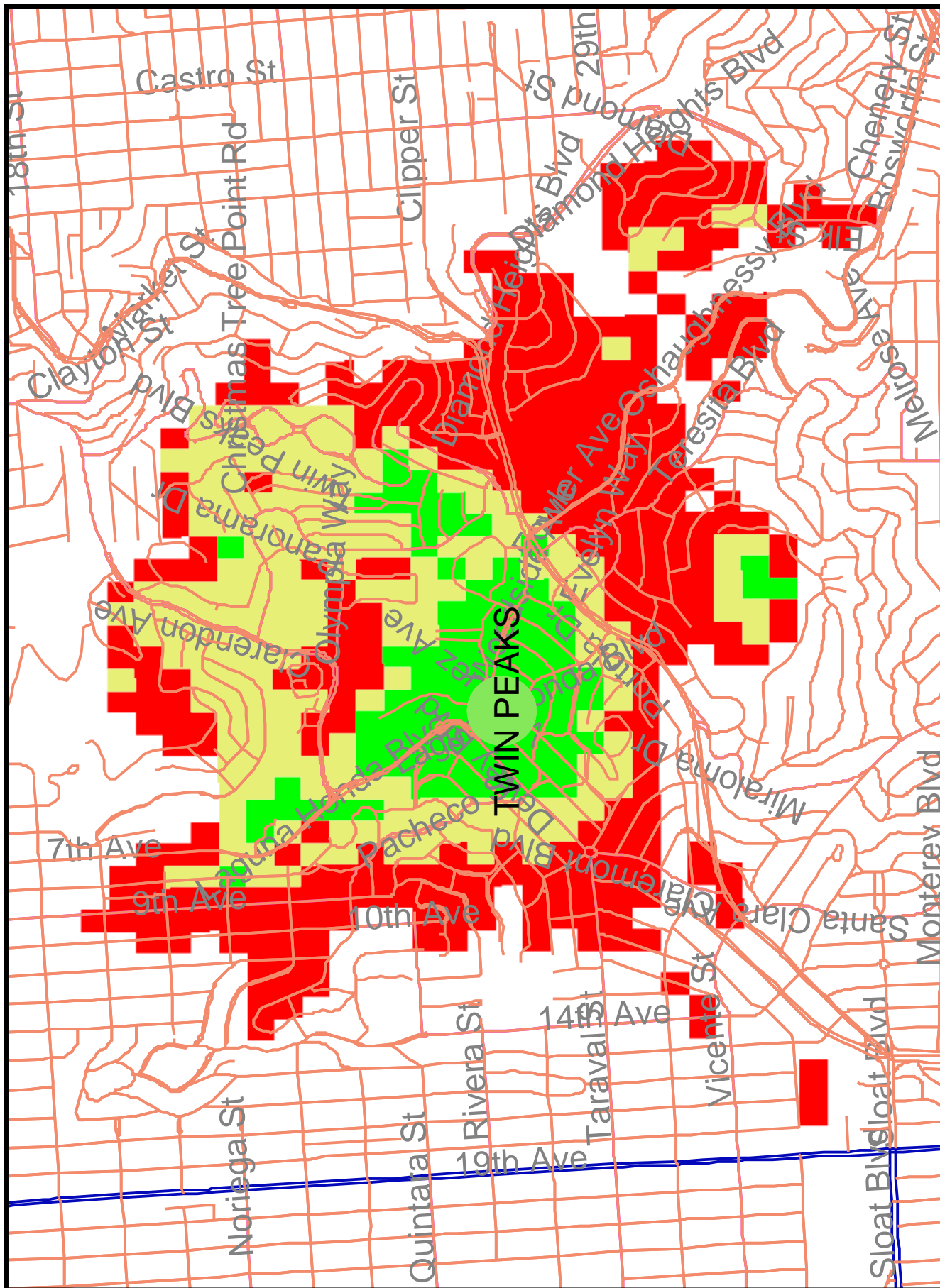
Green = Good    Yellow = Fair    Red = Poor    White = None



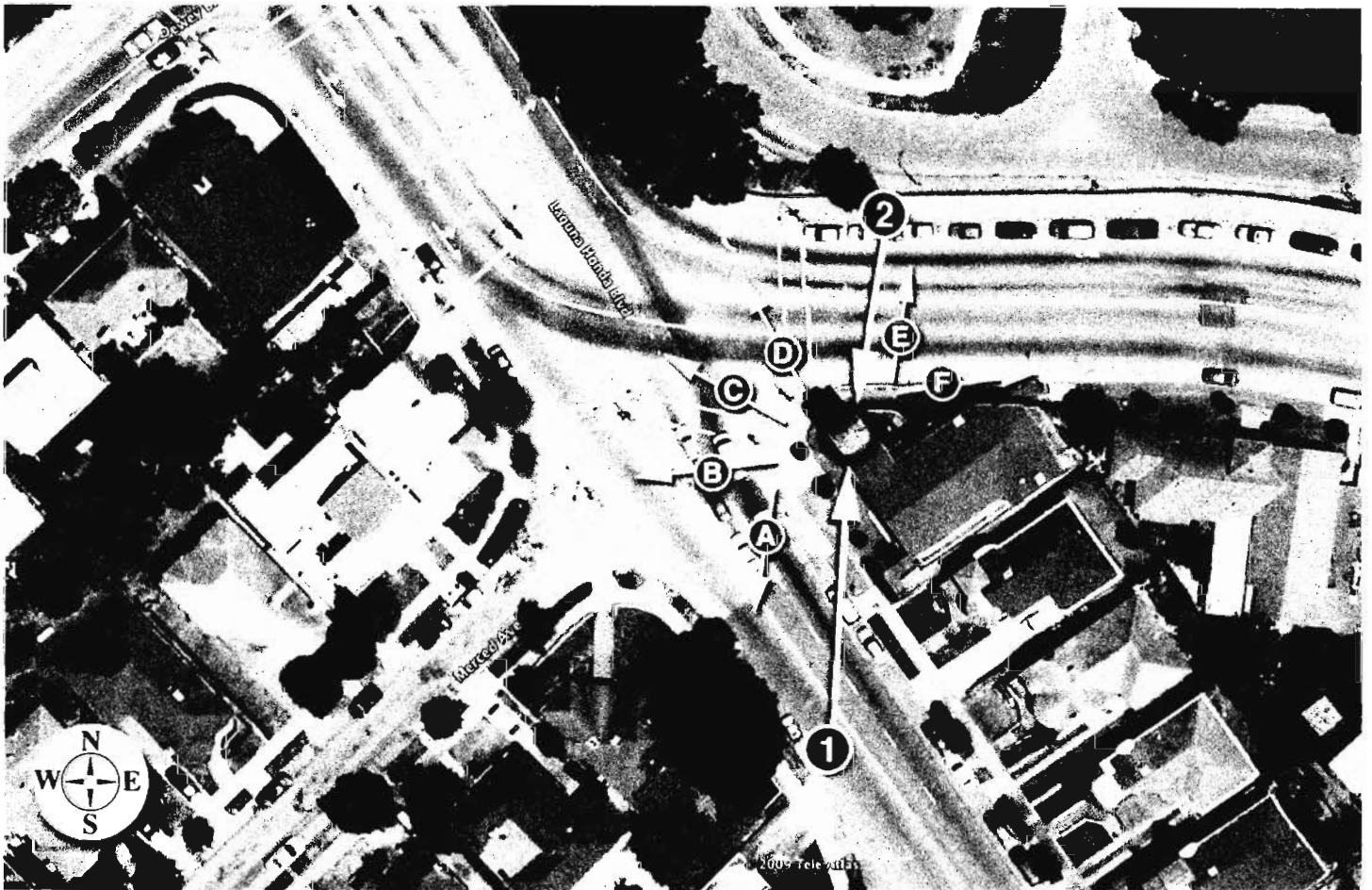
### 501 Laguna Honda Proposed Coverage Map

The proposed added antennas are for increased data speed and to increase the number of calls that can be handled at one time. It will have no effect on the current coverage.

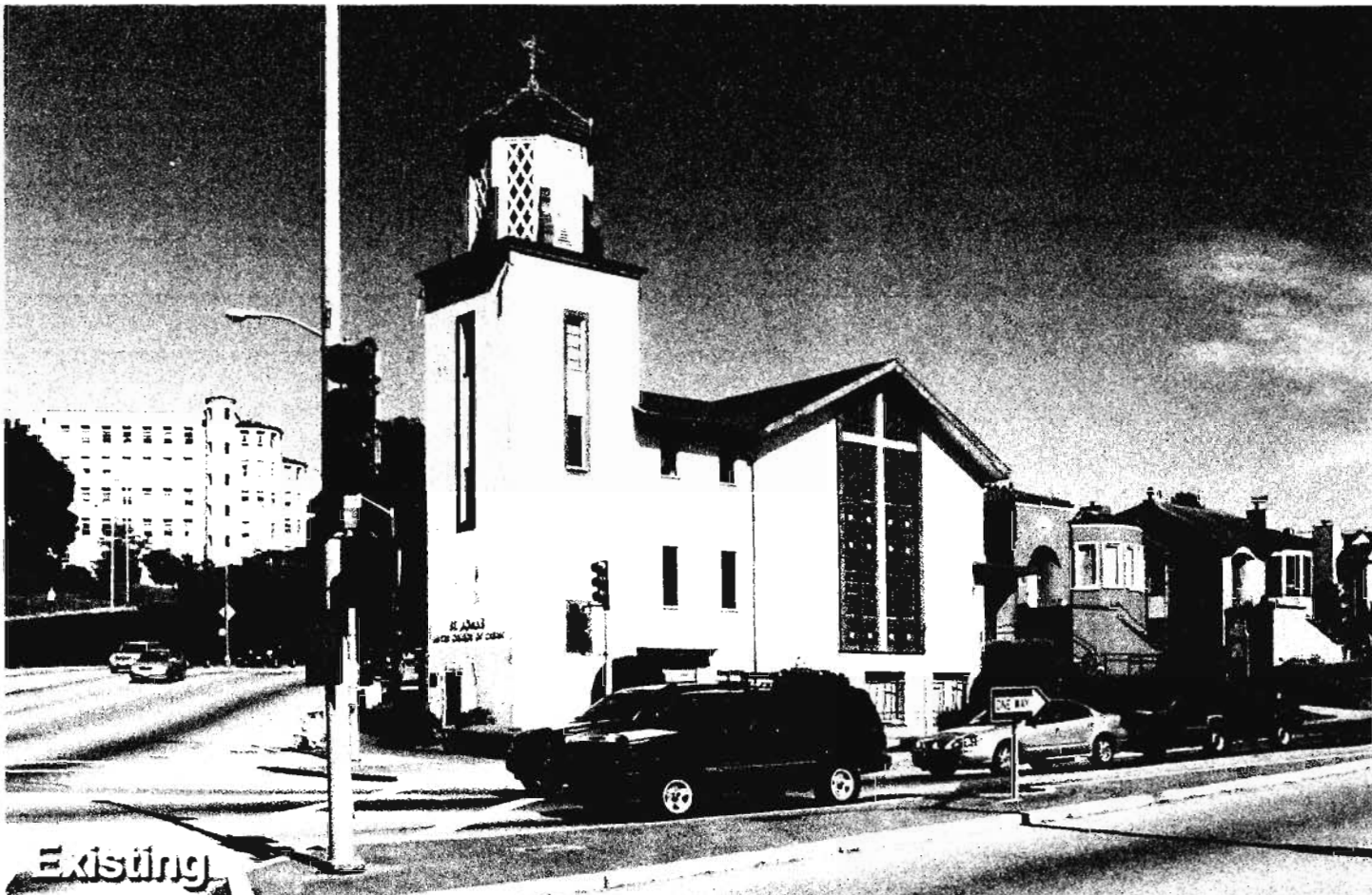
Green = Good    Yellow = Fair    Red = Poor    White = None



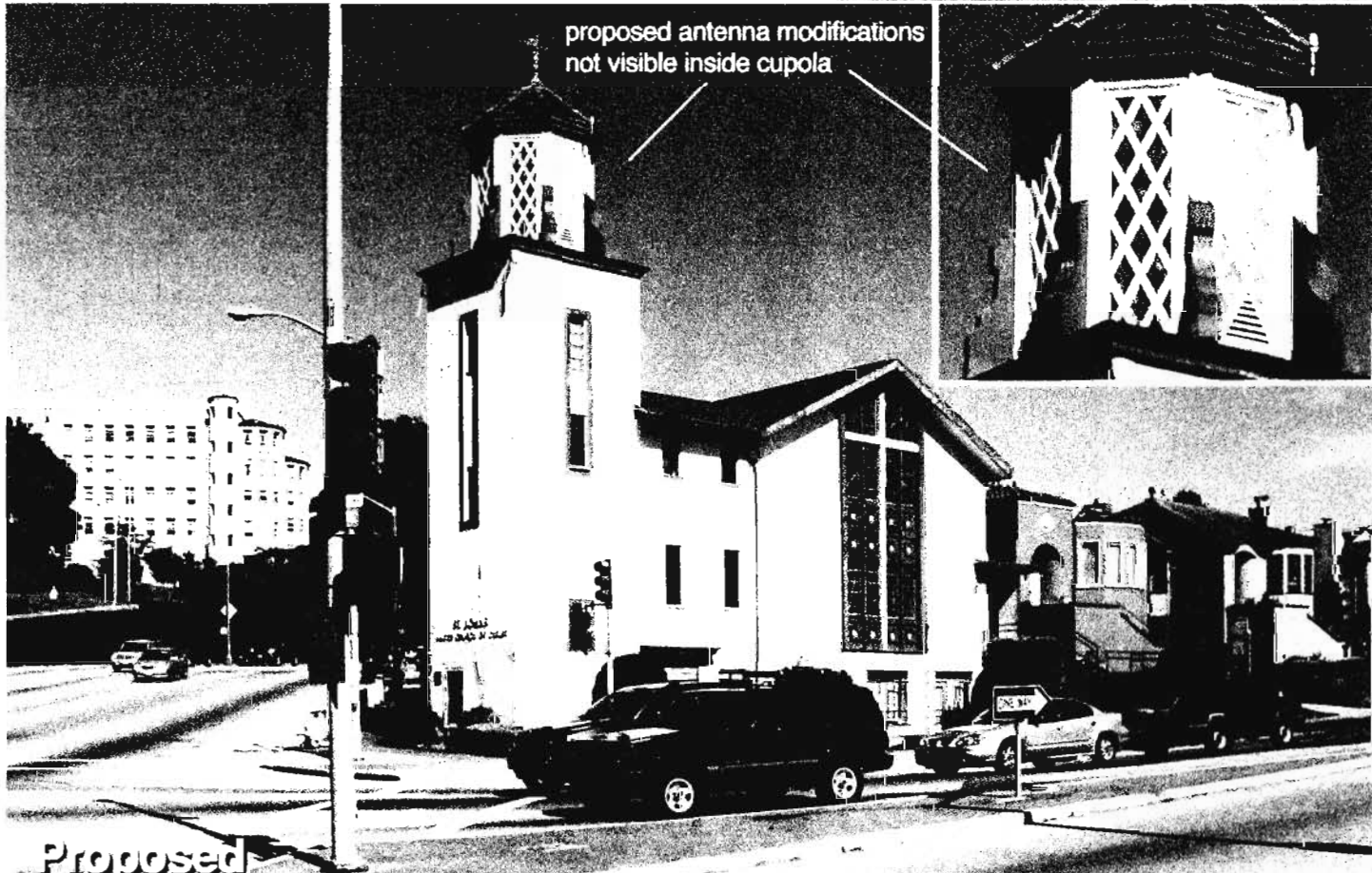








Existing



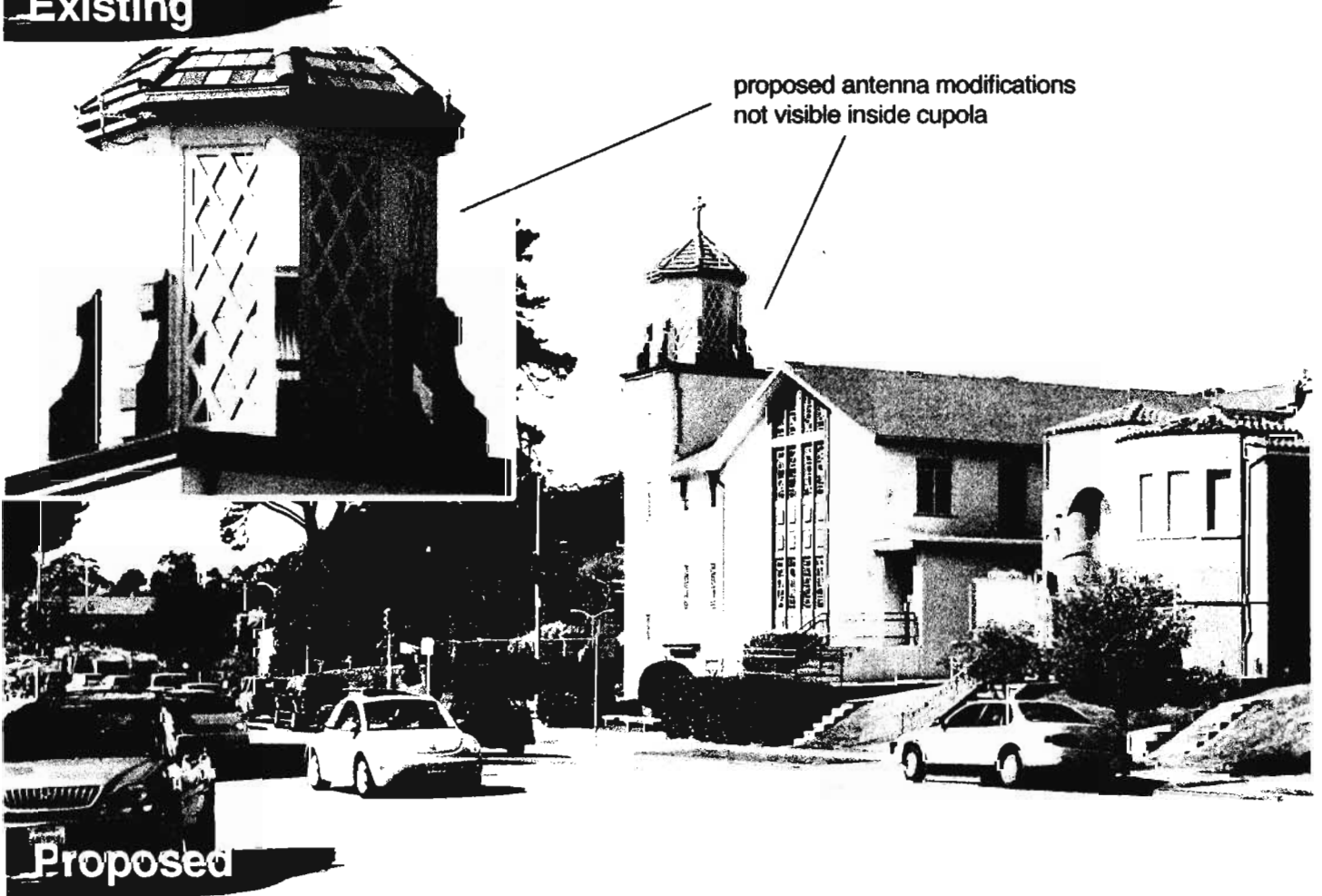
proposed antenna modifications  
not visible inside cupola

Proposed



**Existing**

proposed antenna modifications  
not visible inside cupola



**Proposed**



**Twin Peaks**

**Site # 123816**

**Looking North from Laguna Honda Blvd.**

5/11/09

501 Laguna Honda Blvd.  
San Francisco, CA 94127

Applied Imagination 510 914-0500



# TWIN PEAKS 1

SITE NO. 123816  
501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127



VERIZON WIRELESS  
2785 MITCHELL DRIVE  
WALNUT CREEK, CA 94598

PROJECT INFORMATION:

### TWIN PEAKS 1

SITE NO. 123816  
501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127

### NSA Wireless, Inc.

Site Acquisition • Planning • Construction Management • Site Modifications  
Bishop Ranch 15 1st Floor  
12847 Alameda Blvd., Suite 110  
San Ramon, CA 94583  
(925) 244-1890 OFFICE

CURRENT ISSUE DATE:

04/16/10

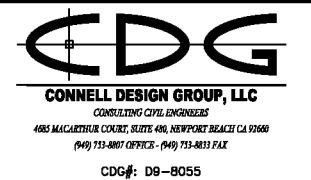
ISSUED FOR:

100% CD

REV.: DATE: DESCRIPTION: BY:

REV.	DATE	DESCRIPTION	BY
4	04/16/10	100% CD	EN
3	04/08/10	100% CD	EN
2	05/06/09	100% CD	DC
1	05/01/09	100% CD	DC
0	03/30/09	90% CD	DC

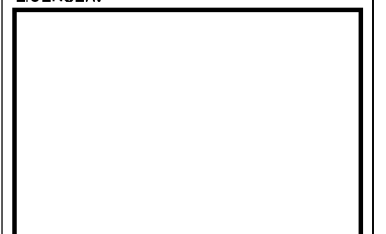
CIVIL ENGINEER:



DRAWN BY: CHK.: APV.:

DC	SA
----	----

LICENSER:



SHEET TITLE:

TITLE SHEET, SITE INFORMATION  
AND VICINITY MAP

SHEET NUMBER:

T-1

### CODE COMPLIANCE

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

- 2007 CALIFORNIA BUILDING CODE ('07 CBC)
- 2007 CALIFORNIA FIRE CODE ('07 CFC)
- 2007 CALIFORNIA ELECTRIC CODE ('07 CEC)
- 2007 CALIFORNIA MECHANICAL CODE ('07 CMC)
- 2007 SAN FRANCISCO FIRE CODE (2007 SFFC)
- 2002 NEPA 13 AUTOMATIC SPRINKLER SYSTEMS
- 2002 NFPA 72 NATIONAL FIRE ALARM CODE

### PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A MODIFICATIONS TO AN EXISTING VERIZON WIRELESS WIRELESS ANTENNA FACILITY, MODIFICATIONS INCLUDE:

- THE ADDITION OF ONE (1) NEW 2' PANEL ANTENNA TO BE MOUNTED BELOW (E) ANTENNAS INSIDE THE EXISTING CHURCH TOWER PER SECTOR FOR A TOTAL OF THREE (3) NEW ANTENNAS.
- THE ADDITION OF (6) NEW RUNS OF COAX IN EXISTING CONDUITS.

### DRIVING DIRECTIONS

START OUT GOING SOUTHWEST ON MITCHELL DR. TOWARD N WIGET LN. TURN LEFT ONTO N WIGET LN. TURN RIGHT ONTO YONACIO VALLEY RD. YONACIO VALLEY RD. BECOMES HILLSIDE AVE. MERGE ONTO CA-24 W TOWARD OAKLAND. TAKE THE I-580 W EXIT TOWARD SAN FRANCISCO. MERGE ONTO I-580 W VIA THE EXIT ON THE LEFT TOWARD HAYWARD. MERGE ONTO I-80 W VIA THE EXIT ON THE LEFT TOWARD SAN FRANCISCO (PORTION TOLL). MERGE ONTO US-101 N TOWARD MISSION STREET. TURN LEFT ONTO MARKET STREET. MARKET STREET BECOMES PORTOLA DRIVE. TURN SLIGHT RIGHT ONTO WOODSIDE AVE. TURN LEFT ONTO VASQUEZ AVE. TURN RIGHT ONTO LAGUNA HONDA BLVD.

### SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET, SITE INFORMATION AND VICINITY MAP
T-1.1	FIRE DEPARTMENT CHECKLIST
T-1.2	RF EXPOSURE LETTER / STRIPING DETAILS
T-1.3	RF EXPOSURE NOTES / SIGNAGE DETAILS
T-2	GENERAL CONSTRUCTION NOTES, GENERAL NOTES, ABBREVIATIONS & LEGEND
A-1	SITE PLAN / ANTENNA LAYOUT
A-2	ELEVATIONS
A-3	ELEVATIONS
D-1	DETAILS

### PROJECT TEAM

#### CIVIL ENGINEER:

CONNELL DESIGN GROUP, LLC  
4685 MACARTHUR COURT, SUITE 480  
NEWPORT BEACH, CA 92660  
PHONE: (949) 753-8807  
FAX: (949) 753-8833  
E-MAIL: dconnell@connelldesigngroup.com  
CONTACT: DAN CONNELL

#### SITE ACQUISITION:

NSA WIRELESS, INC.  
4685 MACARTHUR COURT SUITE 480  
NEWPORT BEACH, CA 92660  
CONTACT: MARGIE DETIEGE  
PHONE: 925-244-1890 ex 227  
E-MAIL: margie.detiege@nsawireless.com

### PROJECT INFORMATION

#### APPLICANT

VERIZON WIRELESS  
2785 MITCHELL DRIVE  
WALNUT CREEK, CA 94598  
JAY INOLYE  
(925) 519-9247

#### OWNER

ST. JOHN'S UNITED CHURCH OF CHRIST  
501 LAGUNA HONDA BLVD.  
SAN FRANCISCO, CA 94127  
415-731-9333

SITE ADDRESS: 501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127

LATITUDE (NAD 83): 37.746692

LONGITUDE (NAD 83): -122.458431

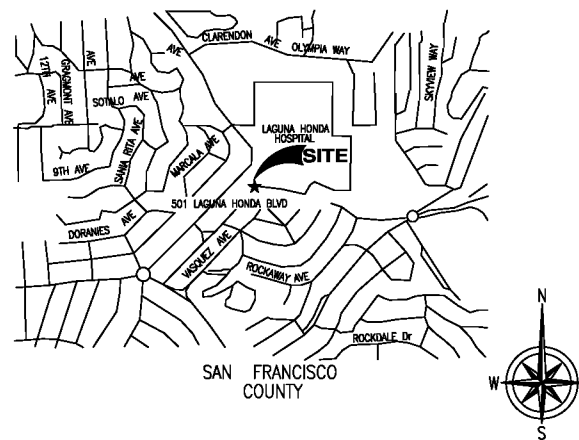
JURISDICTION: THE CITY OF SAN FRANCISCO

OCCUPANCY TYPE: B

CONST. TYPE: V-B

BLOCK/LOT NUMBER: 2888A-001

### VICINITY MAP (NOT TO SCALE)



### GENERAL CONTRACTOR NOTES

#### DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS WITH EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE. SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

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

THIS CHECKLIST SHALL BE PRINTED ON A DRAWING SHEET AND SUBMITTED AS PART OF THE PLANS SUBMITTED WITH ANY BUILDING PERMIT APPLICATION CREATING OR MODIFYING CELLULAR ANTENNA SITES REGARDLESS OF RF EMISSION QUANTITIES. THIS CHECKLIST IS DESIGNED TO ASSIST DESIGNERS, INSTALLERS, PLAN REVIEWERS, AND FIELD INSPECTORS. THIS CHECKLIST SHALL BE PREPARED BY THE DESIGN PROFESSIONAL AND SHALL BE STAMPED AND WET-SIGNED.

THIS DOCUMENT IS NOT ALL-INCLUSIVE OF ALL REQUIREMENTS FOR CELLULAR ANTENNA SITES AND IT IS THE RESPONSIBILITY OF THE DESIGNER TO RESEARCH THE APPLICABLE CODES. DOCUMENTS REFERENCED FOR THIS BULLETIN ARE AS FOLLOWS:

- FCC OET BULLETIN 56 – QUESTIONS AND ANSWERS ABOUT BIOLOGICAL EFFECTS AND POTENTIAL HAZARDS OF RADIO FREQUENCY ELECTROMAGNETIC FIELDS (AUGUST 1999)
- FCC OET BULLETIN 65 – EVALUATING COMPLIANCE WITH FCC GUIDELINES FOR HUMAN EXPOSURE TO RADIOFREQUENCY ELECTROMAGNETIC FIELDS (ED. 97-01:AUGUST 1997)
- FCC – A LOCAL GOVERNMENT OFFICIAL'S GUIDE TO TRANSMITTING ANTENNA RF EMISSION SAFETY: RULES, PROCEDURES, AND PRACTICAL GUIDANCE (JUNE 2, 2000)
- 2007 CALIFORNIA BUILDING CODE (2001 CBC)
- 2007 CALIFORNIA FIRE CODE (2001 CFC)
- 2007 CALIFORNIA MECHANICAL CODE (2001 CMC)
- 2007 SAN FRANCISCO FIRE CODE (2001 SFFC)
- 2002 NFPA 13 AUTOMATIC SPRINKLER SYSTEMS
- 2002 NFPA 72 NATIONAL FIRE ALARM CODE

COMPLETE, EXISTING OR N/A	SHEET LOCATION
COMPLETE	T-1
EXISTING	A-1 A-2
COMPLETE	T-1.1
COMPLETE	A-1
EXISTING	T-1.3 A-1
EXISTING	N/A
EXISTING	A-1 A-2
EXISTING	N/A
EXISTING	A-1 A-2

1. DESCRIPTION OF SCOPE OF WORK (BOTH ON THE APPLICATION AND PLANS) SHALL MATCH THE ACTUAL WORK BEING DONE.
2. PLANS SHALL INCLUDE PLAN VIEWS AND ELEVATIONS SHOWING ALL EQUIPMENT LOCATIONS AND CABLE RUNS.
3. SUBMIT ON A DRAWING SHEET THE SAN FRANCISCO HEALTH DEPARTMENT CELLULAR ANTENNA SITE (WTS) CHECKLIST/PROPOSAL/ENGINEER'S RF REPORT. THE FCC REQUIRES CARRIERS TO INFORM AND PREVENT OCCUPATIONAL EXPOSURE (I.E. BUILDING MAINTENANCE WORKERS, FIRE FIGHTERS, ETC.) THE RF REPORT SHALL NOT SPECIFY LOCKING THE ROOF ACCESS DOOR TO KEEP THE GENERAL PUBLIC OFF OF THE ROOF PER 2001 SFFC 1207.7.1. THE RF REPORT SHALL BE WET STAMPED AND SIGNED BY AN ENGINEER.
4. DRAWINGS SHALL REFLECT THE STRIPED/EXCLUSION AREAS PER THE ABOVE RF REPORT WITH A MINIMUM RADIUS BEING 1 FOOT.
5. NOTICE TO WORKERS WARNING SIGNAGE AS APPLICABLE PER THE ABOVE RF REPORT: SIGNAGE SHALL BE IN ENGLISH, CHINESE AND SPANISH; THE SIGNAGE SHALL BE PERMANENTLY MOUNTED AT THE STAIRWELL SIDE OF THE ROOF-ACCESS STAIRWELL, DOOR, IN THE FIRE CONTROL ROOM WITHIN PROXIMITY OF THE CELL-SITE SHUTDOWN SIGNAGE AND ANY OTHER SPACE NECESSARY TO WARN WORKERS (IE. PARAPETS, STREET SIDE OF FIRE ESCAPES); THE SIGNAGE SHALL BE CLEARLY LABELED AND VISIBLE FROM ANY DIRECTION OF APPROACH; THE SIGN SHALL BE WEATHERPROOF WITH CONTRASTING BACKGROUND AND LETTERING COLORS AND SHALL BE READABLE FROM AT LEAST FIFTEEN (15) FEET FROM THE SIGN; THERE IS A YELLOW TRIANGLE AROUND THE ANTENNA SYMBOL (SEE ANSI C95.2-1999); AND LOCATION AND SIGNAGE DETAIL WITH SITE SPECIFIC INFORMATION SHALL BE INCLUDED ON A DRAWING SHEET.
6. PROVIDE A QUANTITATIVE THREE-DIMENSIONAL PERIMETER OF THE RF LEVELS IF THE ANTENNAS APPEAR TO ENCROACH ON ANY MEANS OF EXITING.
7. CAMOUFLAGED ANTENNAS SHALL HAVE 4INCH X 4INCH SIGNAGE PERMANENTLY MOUNTED TO THE EXTERIOR OF THE RF SCREEN AS PROVIDED BELOW. THESE ANTENNAS SHALL ALSO HAVE THE STRIPPED EXCLUSION AREA TO THE FULLEST EXTENT OF THE ANTENNA LOCATION WITH A MINIMUM RADIUS OF 1 FOOT: THE SIGNAGE SHALL BE CLEARLY LABELED AND VISIBLE FROM ANY DIRECTION OF APPROACH EVEN IF ACCESS IS ACHIEVED FROM THE BUILDING FACE (I.E. LADDERS, CHERRY PICKER, ETC.); THE SIGN SHALL BE WEATHERPROOF WITH CONTRASTING BACKGROUND COLOR AND SHALL BE RECOGNIZABLE FROM AT LEAST FIFTEEN (15) FEET FROM THE SIGN; THE SIGN SHALL CONTAIN THE YELLOW TRIANGLE AROUND THE ANTENNA SYMBOL (SEE ANSI C95.2-1999); AND LOCATION AND SIGNAGE DETAIL SHALL BE INCLUDED ON A DRAWING SHEET.
8. PLANS SHALL SHOW WHETHER A NEW ELECTRICAL SERVICE IS INSTALLED FOR THE CELL SITE. IN GENERAL, BUILDINGS SHOULD ONLY HAVE ONE ELECTRICAL SERVICE. HOWEVER, WITH THE PRIOR APPROVAL OF THE SAN FRANCISCO FIRE DEPARTMENT AND THE ELECTRICAL INSPECTION DIVISION, BUILDINGS MAY HAVE ONE ADDITIONAL SERVICE TO SERVE ROOFTOP ANTENNA EQUIPMENT, PROVIDED A PERMANENT PLACARD IS PROVIDED AT THE LOCATION OF EACH SERVICE DISCONNECT STATING THE LOCATION OF THE OTHER AND IDENTIFYING THE EQUIPMENT SERVED BY EACH SERVICE.
9. PROVIDE ROUTE OF ALL CABLES FROM THEIR ORIGIN TO THE EQUIPMENT (PLAN, ELEVATION AND SECTION VIEWS). CABLES/WIRING SHALL NOT BE ALLOWED IN EXIT ENCLOSURES OR IN FRONT OF DRY STANDPIPES (2007 CBC 1020.1.1).

COMPLETE, EXISTING OR N/A	SHEET LOCATION
EXISTING	N/A
N/A	N/A
N/A	N/A
(E)	N/A
(E)	N/A
(E)	N/A
(E)	N/A

10. EITHER:
  - PROVIDE A MANUAL BATTERY DISCONNECT:
    - \* INSTRUCTIONAL SIGNAGE SHALL BE PROVIDED ON THE PROCEDURE TO DISCONNECT OR DE-ENERGIZE RADIO FREQUENCY (RF) SIGNAL FOR THE ABOVE MANUAL DISCONNECT FOR THE BATTERIES.
    - \* SIGNAGE SHALL BE PERMANENTLY MOUNTED NEXT TO THE BATTERY'S ELECTRICAL PANEL AND CLEARLY LABELED IN A PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.
    - \* THE ACTUAL BREAKER(S) SHALL BE A PHENOLIC LABEL (RED BACKGROUND AND WHITE LETTERING) WITH LETTERING NOT LESS THAN 1/8" HIGH.
    - \* THE SIGNAGE SHALL ALSO BE LIKE POSTED IN THE FCC ROOM WITHIN PROXIMITY OF THE FIRE ALARM PANEL AND BUILDING'S MAIN ELECTRICAL ROOM WITHIN PROXIMITY OF THE MAIN SHUTOFF.
    - \* A COPY OF THE SIGNAGE SHALL BE INCLUDED ON A DRAWING SHEET.
    - \* PROVIDE SFFD APPROVED KEY LOCK BOX FOR EQUIPMENT/ELECTRICAL ROOM FOR BATTERY/EQUIPMENT SHUTDOWN.
    - \* THE PERMANENTLY MOUNTED LABEL ABOVE THE LOCK BOX SHALL READ "SFFD BATTERY DISCONNECT ACCESS KEY" AND SHALL BE A PHENOLIC LABEL WITH A RED BACKGROUND AND WHITE LETTERING.
    - \* LOCATION AND LABEL OF THE KEY LOCK BOX SHALL BE INCLUDED ON A DRAWING SHEET.
  - OR:
    - PROVIDE 24 HOUR/7 DAYS A WEEK TELEPHONE SERVICE CENTER SHUT-DOWN:
      - \* PROVIDE INSTRUCTIONAL SIGNAGE FOR EMERGENCY SHUTDOWN OF THE CELL SITE INCLUDING TELEPHONE NUMBER AND CELL SITE IDENTIFICATION NUMBER.
      - \* THE SIGN SHALL STATE THAT THERE IS NO MANUAL SHUT DOWN FOR THE CELL SITE AND TO CALL THE CONTACT NUMBER (THE NUMBER SHALL BE PRINTED ON THE SIGN) WITH THE SITE IDENTIFICATION NUMBER (THE NUMBER SHALL BE PRINTED ON THE SIGN) FOR IMMEDIATE SHUT-DOWN OF THE SITE 24HR/7DAYS A WEEK.
      - \* THE SIGN SHALL ALSO STATE WHETHER OR NOT THE BACK-UP BATTERY POWER TO THE ANTENNAS IS ALSO SHUT-DOWN.
      - \* THE SIGNAGE SHALL BE PERMANENTLY MOUNTED NEXT TO THE MAIN ELECTRICAL SHUT-OFF, IN THE FCC ROOM WITHIN CLOSE PROXIMITY TO THE FIRE ALARM PANEL, AT THE BATTERY CABINET AND AT THE EQUIPMENT ROOM.
      - \* THE SIGN SHALL BE CLEARLY LABELED IN A PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.
      - \* A COPY OF THE SIGNAGE SHALL BE INCLUDED ON A DRAWING SHEET.
11. IS A NEW HVAC SYSTEM BEING INSTALLED?
  - \_\_\_ YES
    - \* WHAT IS THE VOLUME OF REFRIGERANT USED BY THE COOLING UNIT(S)? \_\_\_\_\_
  - \_\_\_ NO
    - \* WHAT IS THE TYPE OF REFRIGERANT PER 2007 CMC? \_\_\_\_\_
    - \* ASSURE COMPLIANCE WITH 2007 CFC SECTION 606.
12. PLANS STATE SEQUENCE OF OPERATIONS FOR ANY NEW DETECTION, DAMPERS, OR FANS.
13. PLANS SHALL CLEARLY SHOW LOCATIONS OF BATTERIES AND BATTERY CABINETS.
14. PLANS SHALL STATE WHETHER THE BUILDING IS FULLY SPRINKLERED OR NOT.
15. IN FULLY SPRINKLERED BUILDINGS, EQUIPMENT ROOMS SHALL BE PROVIDED WITH SPRINKLERS IN ACCORDANCE WITH NFPA 13.
16. PROVIDE A TABLE ON A DRAWING SHEET SHOWING THE MANUFACTURER, MODEL, TYPE, AMOUNT (GALLONS OR POUNDS) OF ELECTROLYTE, FLOODED LEAD ACID, NI-CD, VRLA OR LI-ION. PLEASE SHOW DETAILED COMPLIANCE WITH 2007 CFC SECTION 608 ON THE DRAWING SHEETS. WHEN COMPLIANCE WITH SECTION 608 OF THE 2007 CALIFORNIA FIRE CODE IS REQUIRED, THE FOLLOWING ADDITIONAL INFORMATION SHALL BE PROVIDED:
  - \* ROOFTOP BATTERY ROOMS EXCEEDING THE ABOVE REQUIREMENTS SHALL BE SEPARATED FROM THE BUILDING AND ANY OPENINGS AS SPECIFIED BY THE 2007 CBC AND CMC.
  - \* PLANS STATE THAT A SEPARATE FIRE DEPARTMENT PERMIT WILL BE OBTAINED FROM SFFD HEADQUARTERS AT 698 2ND ST.

PREPARED BY: DANIEL CONNELL, PE STAMP

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 ADDRESS: 4685 MACARTHUR COURT, SUITE 480, NEWPORT BEACH, CA 92660  
 PHONE NUMBER: 949-753-8807  
 FAX NUMBER: 949-753-8833



VERIZON WIRELESS  
 2785 MITCHELL DRIVE  
 WALNUT CREEK, CA 94598

PROJECT INFORMATION:

**TWIN PEAKS 1**  
 SITE NO. 123816  
 501 LAGUNA HONDA BLVD.,  
 SAN FRANCISCO, CA 94127

NSA Wireless, Inc.

12847 Alameda Blvd., Suite 110  
 San Ramon, CA 94583  
 (925) 244-1890 OFFICE

CURRENT ISSUE DATE:

04/16/10

ISSUED FOR:

100% CD

REV.: DATE: DESCRIPTION: BY:

REV.	DATE	DESCRIPTION	BY
4	04/16/10	100% CD	EN
3	04/08/10	100% CD	EN
2	05/06/09	100% CD	DC
1	05/01/09	100% CD	DC
0	03/30/09	90% CD	DC

CIVIL ENGINEER:



DRAWN BY: DC CHK.: SA APV.: DC

LICENSER:

SHEET TITLE:

FIRE DEPARTMENT CHECKLIST

SHEET NUMBER:

T-1.1



PROJECT INFORMATION:  
**TWIN PEAKS 1**  
 SITE NO. 123816  
 501 LAGUNA HONDA BLVD.,  
 SAN FRANCISCO, CA 94127

**NSA Wireless, Inc.**  
 Site Acquisition • Planning • Construction Management • Site Maintenance  
 12000 Alameda Street, Suite 110  
 San Francisco, CA 94130  
 (415) 241-1800 OFFICE

CURRENT ISSUE DATE:  
**04/16/10**

ISSUED FOR:  
**100% CD**

REV. DATE	DESCRIPTION	BY
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3	04/08/10	100% CD EN
2	05/06/09	100% CD DC
1	05/01/09	100% CD DC
0	03/30/09	90% CD DC

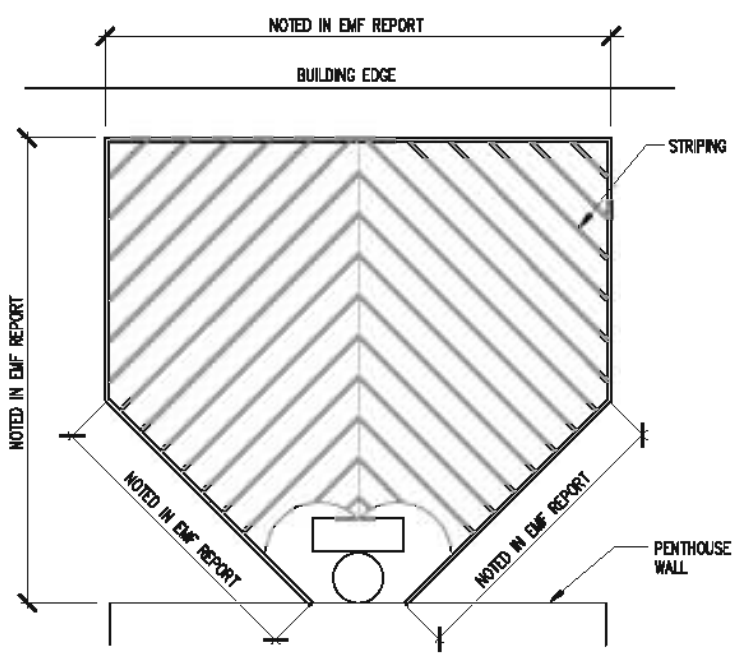
CIVIL ENGINEER:  
  
 12000 ALAMEDA STREET, SUITE 110, SAN FRANCISCO, CA 94130  
 (415) 241-1800 OFFICE (415) 733-0000 FAX  
 CDG#: 09-8035

DRAWN BY: DC    CHK.: SA    APV.:  
 \_\_\_\_\_

LICENSER:  
 \_\_\_\_\_

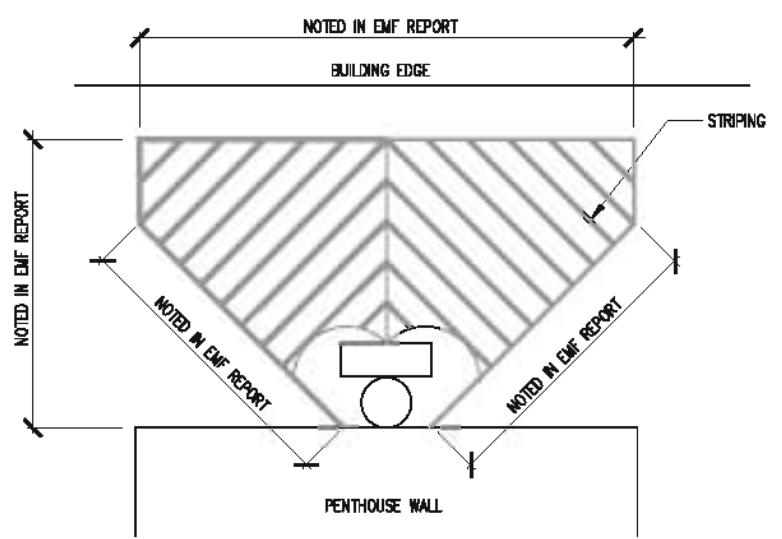
SHEET TITLE:  
**RF EXPOSURE LETTER / STRIPING DETAILS**

SHEET NUMBER:  
**T-1.2**



NOTE: TO BE USED ONLY WHEN INDICATED.

TYPICAL CAUTION STRIPAGE WITH PUBLIC ACCESS    SCALE: NONE    2



NOTE: TO BE USED ONLY WHEN INDICATED.

TYPICAL CAUTION STRIPAGE WITH NO PUBLIC ACCESS    SCALE: NONE    3

Verizon Wireless • Base Station No. 123816 "Twin Peaks"  
 501 Laguna Honda Boulevard • San Francisco, California

Statement of Hammitt & Edison, Inc., Consulting Engineers

The firm of Hammitt & Edison, Inc., Consulting Engineers, has been retained by Verizon Wireless, a wireless telecommunications carrier, to evaluate proposed modifications to its existing base station (Site No. 123816 "Twin Peaks") at 501 Laguna Honda Boulevard with respect to prevailing standards limiting human exposure to radio frequency energy.

Background

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

Personal Wireless Service	Average Frequency	Occupational Limit	Public Limit
Broadband Radio ("BRS")	2,600 MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Advanced Wireless ("AWS")	2,100	5.00	1.00
Personal Communication ("PCS")	1,950	5.00	1.00
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio ("SMR")	855	2.85	0.57
Long Term Evolution ("LTE")	700	2.33	0.47
[most restrictive frequency range]	30-300	1.00	0.20

The site was visited during normal business hours by Mr. Robert Taylor, a qualified technician employed by Hammitt & Edison, Inc., on October 28, 2009, a non-holiday weekday, and reference has been made to information provided by Verizon.

Checklist

- The location of all existing antennas and facilities at site. Existing RF levels.  
 Three directional panel antennas for use by Verizon were installed inside the bell tower of St. John's Church located at 501 Laguna Honda Boulevard. Similar antennas were installed for use by MetroPCS, and T-Mobile had installed two omnidirectional "whip" antennas on the outside of the tower. Existing RF levels at ground near the site measured less than 1% of the most restrictive public exposure limit.
- The location of all approved (but not installed) antennas and facilities. Expected RF levels from approved antennas.  
 No other WTS facilities are reported to be approved for this site, but not yet installed.
- The number and types of WTS within 100 feet of proposed site and estimates of additive EMF emissions at proposed site.  
 There were no other WTS facilities observed within 100 feet of the proposed site.

HAMMETT & EDISON, INC.  
 CONSULTING ENGINEERS  
 1000 MARKET STREET

VW123816599.1  
 Page 1 of 3

Verizon Wireless • Base Station No. 123816 "Twin Peaks"  
 501 Laguna Honda Boulevard • San Francisco, California

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

Verizon proposes to install three Arel Model BXA-70063/QCF directional panel antennas for LTE service next to the existing antennas, which are reportedly Arel Model DB71DG65VTAN-M directional panel dual-band antennas for PCS and cellular service. The antennas would be mounted at an effective height of about 47 feet above ground and would be oriented in pairs (one of each) toward 90°T, 225°T, and 340°T, with up to 10° down-tilt in the latter two directions. The antennas for the other carriers was mounted as described in Item 1 above.

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

The maximum rating of the PCS and cellular transmitters is 20 watts, with the proposed LTE transmitters rated at 16 watts. The power ratings of the MetroPCS and T-Mobile transmitters are not known. The actual operating power of the transmitters will depend upon the system losses encountered after the physical cabling runs have been installed; the transmitters may operate at a power less than their maximum rating, such that the total power radiated from the antennas does not exceed the level given in Item 6 below.

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

The maximum effective radiated power in any direction for Verizon would be 2,040 watts, representing simultaneous operation at 640, 1,000, and 400 watts for PCS, cellular, and LTE service, respectively. The number of watts for the current MetroPCS and T-Mobile operations are not known.

7. Plot or map showing method of antenna layout, directionality of antennas, and levels above and below. Discuss nearby buildings.

The antennas would be mounted on the building as described in Item 4 above. There were noted no buildings of similar height nearby.

8. Estimated ambient RF levels for proposed site and identify non-Verizon antennas where exposure measurements are exceeded.

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed Verizon operation is calculated to be 0.021 mW/cm<sup>2</sup>, which is 4.0% of the applicable public exposure limit. Therefore, ambient levels at ground are estimated to be less than 5% of the public limit. The three-dimensional perimeter of RF levels equal to the public exposure limit does not reach any publicly accessible areas; it is calculated to extend about 23 feet directly in front of the Verizon antennas and to much lesser distances behind, below, above, and to the sides.

HAMMETT & EDISON, INC.  
 CONSULTING ENGINEERS  
 1000 MARKET STREET

VW123816599.1  
 Page 2 of 3

Verizon Wireless • Base Station No. 123816 "Twin Peaks"  
 501 Laguna Honda Boulevard • San Francisco, California

9. Describe proposed signage at site.  
 Due to their mounting location, the Verizon antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 10 feet directly in front of the antennas themselves, such as might occur during maintenance work on the bell tower, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Explanatory warning signs had been posted near the antennas, readily visible from any angle of approach to persons who might need to work within that distance; such measures should already be in place for the existing antennas at the site.

10. Statement of authorship.  
 The undersigned author of this statement is a qualified Professional Engineer, holding California Registrations Nos. E-43026 and M-20676, which expire on June 30, 2011. This work has been carried out under his direction, and all statements are true and correct of his own knowledge, except where noted, when data has been supplied by others, which data he believes to be correct.

Conclusion

Based on the information and analysis above, it is my professional opinion that the Verizon Wireless base station operation located at 501 Laguna Honda Boulevard in San Francisco will continue to comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. Posting of explanatory signs is recommended to establish compliance with occupational exposure limitations.



April 15, 2010

HAMMETT & EDISON, INC.  
 CONSULTING ENGINEERS  
 1000 MARKET STREET

VW123816599.1  
 Page 3 of 3

RF EXPOSURE LETTER    SCALE: NONE    1

**SIGNAGE AND STRIPING INFORMATION**

THE FOLLOWING INFORMATION IS A GUIDE LINE WITH RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATION SHOULD BE IN CONFLICT WITH ANY PART OF THESE NOTES OR PLANS THE MORE RESTRICTIVE GUIDE LINE OR REGULATION SHALL BE FOLLOWED AND OVER RIDE THE LESSER.

THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY VERIZON WIRELESS IS  $1mW/cm^2$  AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY VERIZON WIRELESS IS  $5mW/cm^2$

IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR ROOF LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOSE NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.

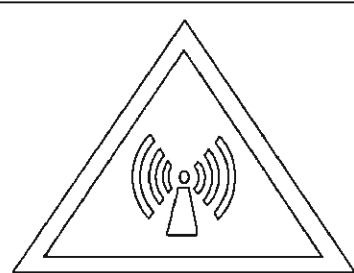
IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED OR HAVING A FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. USE THE PLANS AS A GUIDE LINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.

IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS NOT EXCEEDED AND THE AREA IS NOT PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR IS LOCKED), THEN JUST STRIPING OUT TO THE PUBLIC LIMIT WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. USE THE PLANS AS A GUIDE LINE FOR PLACEMENT OF SUCH STRIPING.

ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH AND CHINESE. THIS SIGN WILL BE PROVIDED TO THE CONTRACTOR BY THE VERIZON WIRELESS CONSTRUCTION MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES IN PLANE SITE AND THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNAS THEMSELVES OR ON THE OUT SIDE OF THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGN WILL HAVE VERIZON WIRELESS'S NAME AND THE COMPANY CONTACT INFORMATION (e.g., TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER WILL BE PROVIDED TO THE CONTRACTOR BY THE VERIZON WIRELESS CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.

PHOTOS OF ALL STRIPING, BARRICADES AND SIGNAGE WILL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE AND WILL BE TURNED INTO THE VERIZON WIRELESS CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE WITH FADE RESTRAINT YELLOW SAFETY PAINT IN A CROSS HATCH PATTERN AS SHOW BY THE DETAIL. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO THAT NOT TO BLOCK OR INTERFERE WITH THE OPERATION OF THE SITE SHALL BE PAINTED WITH FADE RESTRAINT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEED AND SHALL PROVIDE THE VERIZON WIRELESS CONSTRUCTION PROJECT MANAGER WITH A THE DETAILED SHOP DRAWING OF EACH BARRICADE.

**NOTE:**  
1. ALL REQUIRED SIGNAGE WILL BE INSTALLED AND FIELD VERIFIED. SEE SHEET A-1 FOR SIGN LOCATIONS



**WARNING**  
HIGH RADIO FREQUENCY EXPOSURE AREA

KEEP BACK 7 FEET FROM THIS ANTENNA. IF ACCESS IS REQUIRED WITHIN THIS DISTANCE, PLEASE CONTACT ANTENNA OWNER BEFORE APPROACHING.

**ADVERTENCIA**  
AREA DE EXPOSICION DE ALTAS FRECUENCIAS DE RADIO

MANTENERSE A 7 PIES DE DISTANCIA DE ESTA ANTENA. SI ES NECESARIO ACERCARSE MAS, COMUNIQUESE CON EL PROPIETARIO DE LA ANTENA ANTES DE HACERLO.

**警告**  
高電磁波能量地區

請保持在此天線 7 呎以外，如需要進入此範圍內，請在進入之前先聯絡天線的持有人

PHONE NUMBER/ NUMERO DE TELEFONO/ 電話號碼

ST. JOHNS UNITED CHURCH OF CHRIST  
OWNER/ PROPIETARIO/ 持有人

123816

SITE NUMBER/ NUMERO DEL SITIO/ 此站號碼

Hammett & Edison, Inc.

TO BE INSTALLED ON OUTER CUPOLA WALL  
INSTALLED ON WALL AT ACCESS LADDER

**NOTICE**



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

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

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

INSTALLED ON CUPOLA ENTRY HATCH

TYPICAL NOTICE SIGN

SCALE: 1/8"=1'-0" 4

**CAUTION**

Radio frequency fields within one foot of this antenna may exceed Federal limits for human exposure. Stay clear by that distance.

VERIZON  
Carrier  
123816  
Site #

NOT NEEDED AT THIS SITE - NO PUBLIC ACCESS

TYPICAL CAUTION SIGN

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

**CAUTION**



Beyond this point: Radio frequency fields at this site may exceed FCC rules for human exposure.

For your safety obey all posted signs and site guidelines for working in radio frequency environments.

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

NOT NEEDED AT THIS SITE - NO PUBLIC ACCESS

TYPICAL CAUTION SIGN

SCALE: 1/8"=1'-0" 5

**IN CASE OF EMERGENCY**

CALL

1-800-242-7622

Site No: 123816

INSTALLED ON CUPOLA ENTRY HATCH

EMERGENCY CONTACT SIGN

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

**WARNING**



Beyond this point: Radio frequency fields at this site exceed the FCC rules for human exposure.

Failure to obey all posted signs and site guidelines for working in radio frequency environments could result in serious injury

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

NOT NEEDED AT THIS SITE - NO PUBLIC ACCESS

TYPICAL WARNING SIGN

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

**NOTICE**

**GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS**

- All personnel should have electromagnetic energy (EME) awareness training.
- All personnel entering this site must be authorized, obey all posted signs.
- Assume all antennas are active. Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 7 feet clearance from all antennas. Do not stop in front of antennas.
- Use personal RF monitors while working near antennas.
- Never operate transmitters without shields during normal operation.
- Do not operate base station antennas in equipment rooms.

TO BE INSTALLED ON EQUIPMENT ROOM DOOR

RF GUIDELINES SIGN

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

GENERAL NOTES

SCALE: N.T.S. 8

MULTI-LANGUAGE SIGN

SCALE: 1/8"=1'-0" 7

TYPICAL WARNING SIGN

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

RF GUIDELINES SIGN

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



VERIZON WIRELESS  
2785 MITCHELL DRIVE  
WALNUT CREEK, CA 94598

PROJECT INFORMATION:

**TWIN PEAKS 1**  
SITE NO. 123816  
501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127

**NSA Wireless, Inc.**

Site Acquisition • Planning • Construction Management • Site Maintenance  
Bishop Ranch 15 1st Floor  
18847 Alameda Blvd., Suite 110  
San Ramon, CA 94583  
(925) 844-1880 OFFICE

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0	03/30/09	90% CD	DC

CIVIL ENGINEER:



DRAWN BY: DC CHK.: SA APV.: SA

LICENSER:

SHEET TITLE:

RF EXPOSURE NOTES / SIGNAGE DETAILS

SHEET NUMBER:

T-1.3



A.B.	ANCHOR BOLT	GRND.	GROUND
ABV.	ABOVE	HDR.	HEADER
ACCA	ANTENNA CABLE COVER ASSEMBLY	HGR.	HANGER
ADD'L	ADDITIONAL	HT.	HEIGHT
A.F.F.	ABOVE FINISHED FLOOR	ICGB.	ISOLATED COPPER GROUND BUS
A.F.G.	ABOVE FINISHED GRADE	IN.(")	INCH(ES)
ALUM.	ALUMINUM	INT.	INTERIOR
ALT.	ALTERNATE	LB.(#)	POUND(S)
ANT.	ANTENNA	L.B.	LAG BOLTS
APPRX.	APPROXIMATE(LY)	L.F.	LINEAR FEET (FOOT)
ARCH.	ARCHITECT(URAL)	L.	LONG(TUDINAL)
AWG.	AMERICAN WIRE GAUGE	MAS.	MASONRY
BLDG.	BUILDING	MAX.	MAXIMUM
BLK.	BLOCK	M.B.	MACHINE BOLT
BLKG.	BLOCKING	MECH.	MECHANICAL
BM.	BEAM	MFR.	MANUFACTURER
B.N.	BOUNDARY NAILING	MIN.	MINIMUM
BTOW.	BARE TINNED COPPER WIRE	MISC.	MISCELLANEOUS
B.O.F.	BOTTOM OF FOOTING	MTL.	METAL
B/U	BACK-UP CABINET	(N)	NEW
CAB.	CABINET	NO.(#)	NUMBER
CANT.	CANTILEVER(ED)	N.T.S.	NOT TO SCALE
C.I.P.	CAST IN PLACE	O.C.	ON CENTER
CLG.	CEILING	OPNG.	OPENING
CLR.	CLEAR	P/C	PRECAST CONCRETE
COL.	COLUMN	PCS	PERSONAL COMMUNICATION SERVICES
CONC.	CONCRETE	PLY.	PLYWOOD
CONN.	CONNECTION(OR)	PPC	POWER PROTECTION CABINET
CONST.	CONSTRUCTION	PRC	PRIMARY RADIO CABINET
CONT.	CONTINUOUS	P.S.F.	POUNDS PER SQUARE FOOT
d	PENNY (NAILS)	P.S.I.	POUNDS PER SQUARE INCH
DBL.	DOUBLE	P.T.	PRESSURE TREATED
DEPT.	DEPARTMENT	PWR.	POWER (CABINET)
D.F.	DOUGLAS FIR	QTY.	QUANTITY
DIA.	DIAMETER	RAD.(R)	RADIUS
DIAG.	DIAGONAL	REF.	REFERENCE
DIM.	DIMENSION	REIN.	REINFORCEMENT(ING)
DWG.	DRAWING(S)	REQ'D.	REQUIRED
DWL.	DOWEL(S)	RGS.	RIGID GALVANIZED STEEL
EA.	EACH	SCH.	SCHEDULE
EL.	ELEVATION	SHT.	SHEET
ELEC.	ELECTRICAL	SM.	SIMILAR
ELEV.	ELEVATOR	SPEC.	SPECIFICATION(S)
EMT.	ELECTRICAL METALLIC TUBING	SQ.	SQUARE
E.N.	EDGE NAIL	S.S.	STAINLESS STEEL
ENG.	ENGINEER	STD.	STANDARD
EQ.	EQUAL	STL.	STEEL
EXP.	EXPANSION	STRUC.	STRUCTURAL
EXST.(E)	(E)	TEMP.	TEMPORARY
EXT.	EXTERIOR	THK.	THICK(NESS)
FAB.	FABRICATION(OR)	T.N.	TOE NAIL
F.F.	FINISH FLOOR	T.O.A.	TOP OF ANTENNA
F.G.	FINISH GRADE	T.O.C.	TOP OF CURB
FIN.	FINISH(ED)	T.O.F.	TOP OF FOUNDATION
FLR.	FLOOR	T.O.P.	TOP OF PLATE (PARAPET)
FDN.	FOUNDATION	T.O.S.	TOP OF STEEL
F.O.C.	FACE OF CONCRETE	T.O.W.	TOP OF WALL
F.O.M.	FACE OF MASONRY	TP.	TYPICAL
F.O.S.	FACE OF STUD	U.G.	UNDER GROUND
F.O.W.	FACE OF WALL	U.L.	UNDERWRITERS LABORATORY
F.S.	FINISH SURFACE	U.N.O.	UNLESS NOTED OTHERWISE
FT.(')	FOOT(FEET)	V.I.F.	VERIFY IN FIELD
FTG.	FOOTING	W	WIDE(WIDTH)
G.	GROWTH (CABINET)	W/	WITH
GA.	GAUGE	WD.	WOOD
GL.	GALVANIZE(D)	W.P.	WEATHERPROOF
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER	WT.	WEIGHT
GLB.(GLU-LAM)	GLUE LAMINATED BEAM	¢	CENTERLINE
GPS	GLOBAL POSITIONING SYSTEM	£	PLATE

**ABBREVIATIONS**

**3**

	NEW ANTENNA		GROUT OR PLASTER
	EXISTING ANTENNA		EXISTING BRICK
	GROUND ROD		EXISTING MASONRY
	GROUND BUS BAR		CONCRETE
	MECHANICAL GRND. CONN.		EARTH
	CADWELD		GRAVEL
	GROUND ACCESS WELL		PLYWOOD
	ELECTRIC BOX		SAND
	TELEPHONE BOX		WOOD CONT.
	LIGHT POLE		WOOD BLOCKING
	FND. MONUMENT		STEEL
	SPOT ELEVATION		CENTERLINE
	SET POINT		PROPERTY/LEASE LINE
	REVISION		MATCH LINE
	GRID REFERENCE		WORK POINT
	DETAIL REFERENCE		GROUND CONDUCTOR
	ELEVATION REFERENCE		TELEPHONE CONDUIT
	SECTION REFERENCE		ELECTRICAL CONDUIT
			COAXIAL CABLE
			OVERHEAD SERVICE CONDUCTORS
			CHAIN LINK FENCING

**LEGEND**

**4**

**GENERAL NOTES**

1. THE LATEST EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS DOCUMENT A201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" ARE INCLUDED IN THESE SPECIFICATIONS AS IF COMPLETELY REPRODUCED HEREIN.
2. THIS FACILITY IS AN UNOCCUPIED PCS TELECOMMUNICATIONS SITE AND IS EXEMPT FROM DISABLED ACCESS REQUIREMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS PARTICIPATING SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE NEW PROJECT, WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, FIELD CONDITIONS, AND CONFIRM THAT THE PROJECT CAN BE ACCOMPLISHED AS SHOWN, PRIOR TO PROCEEDING WITH SUBMISSION OF BIDS & CONSTRUCTION. SHOULD ANY ERRORS, OMISSION, OR DISCREPANCIES BE FOUND, THE CONTRACTORS SHALL IMMEDIATELY NOTIFY PROJECT MANAGER, AND THE ARCHITECT IN WRITING. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY OR EXTENSIVE WORK IN THE BID, UNLESS SPECIFICALLY DIRECTED OTHERWISE. IF A DISCREPANCY EXISTS AND THE PROJECT MANAGER AND ARCHITECT ARE NOT NOTIFIED, THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR OR CORRECT ALL PROBLEMS THAT RESULT.
4. DRAWINGS SHALL NOT BE SCALED. FIGURED DIMENSIONS HAVE PRECEDENCE OVER DRAWING SCALE AND DETAIL DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS. CONTRACTOR SHALL CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS, OR BEGIN ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAS BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.
5. CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER AND THE ARCHITECT IF ANY DETAILS ARE CONSIDERED IMPRACTICAL, UNSUITABLE, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO ANY DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.
6. (E) ELEVATIONS AND LOCATIONS TO BE JOINED SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. IF THEY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER, AND THE ARCHITECT SO THAT MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH THE WORK.
7. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE PROJECT MANAGER, AND THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK.
8. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK AND INCLUDE THOSE IN THE COST OF THE WORK TO VERIZON WIRELESS.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK, USING THE BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES, AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT, INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE'S
10. WORKMANSHIP THROUGHOUT SHALL BE OF THE BEST QUALITY OF THE TRADE INVOLVED, AND SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REFERENCE STANDARDS FOR QUALITY AND PROFESSIONAL CONSTRUCTION PRACTICE:  
  
NRCA - NATIONAL ROOFING CONTRACTORS ASSOCIATION  
ASSOCIATION  
O'HARE INTERNATIONAL CENTER  
10255 W. HIGGINS ROAD, SUITE 600 ROSEMONT, IL 60018  
SMACNA - SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION  
4201 LAFAYETTE CENTER DRIVE CHATTILLY, VA 22021-1209  
  
ITLP - INTERNATIONAL INSTITUTE FOR LATH AND PLASTER  
820 TRANSFER ROAD  
ST. PALM MN 55114-1406  
AMA - ADHESIVE MANUFACTURERS ASSOCIATION  
401 NORTH MICHIGAN AVENUE, SUITE 2400  
CHICAGO, IL 60611
11. THE CONTRACTOR SHALL VERIFY, COORDINATE, AND PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORTS FOR ALL ITEMS REQUIRING THE SAME.
12. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTORS SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS. CONTRACTORS SHALL COMPLY WITH STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (OSHA) REQUIREMENTS.

13. CONTRACTORS SHALL PROTECT THE OWNERS' PROPERTY FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND (E) CONSTRUCTION, STRUCTURE, LANDSCAPING, CURBS, STAIRS, OR EQUIPMENT, ETC., SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE PROPERTY OWNER, OR HIS REPRESENTATIVE, AND VERIZON WIRELESS' REPRESENTATIVE, AT THE EXPENSE OF THE CONTRACTOR.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REPLACE OR REMEDY, ANY FAULTY, IMPROPER, OR INFERIOR MATERIALS OR WORKMANSHIP, OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE YEAR AFTER THE COMPLETION AND ACCEPTANCE OF THE WORK UNDER THIS CONTRACT BY VERIZON WIRELESS.
15. ALL SITE WORK SHALL BE CAREFULLY COORDINATED BY GENERAL CONTRACTOR WITH LOCAL UTILITY COMPANY, TELEPHONE COMPANY, AND ANY OTHER UTILITY COMPANIES HAVING JURISDICTION OVER THIS LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO LOCATE ALL (E) UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTORS SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT SITE WHILE THE JOB IS IN PROGRESS AND UNTIL THE JOB IS COMPLETED AND ACCEPTED BY VERIZON WIRELESS.
17. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER, POWER AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER AND THE CITY OR GOVERNING AGENCY.
18. THE LATEST EDITION OF ALL PERMITTED AND APPROVED PLANS PERTAINING TO THIS PROJECT SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKERS. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN IN GOOD CONDITION, ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA AND CHANGE ORDERS, ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.
19. THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND WASTE MATERIALS ON A DAILY BASIS, AND SHALL EXERCISE STRICT CONTROL OVER JOB CLEANING THROUGHOUT CONSTRUCTION, INCLUDING FINAL CLEANUP UPON COMPLETION OF WORK. ALL AREAS ARE TO BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH DAY. ALL MATERIALS COLLECTED DURING CLEANING OPERATIONS SHALL BE DISPOSED OF OFF-SITE BY THE GENERAL CONTRACTOR.
20. THE GENERAL CONTRACTOR MUST PERFORM WORK DURING PROPERTY OWNER'S PREFERRED HOURS TO AVOID DISRUPTION OF NORMAL ACTIVITY.
21. ALL EXPOSED METAL SHALL BE HOT-DIPPED GALVANIZED.
22. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHAL APPROVED MATERIALS IF AND WHERE APPLICABLE TO THIS FACILITY AND PROJECT SITE.
23. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A, 10-BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT CONSTRUCTION AREA.
24. ELECTRICAL POWER SYSTEM SHALL BE GROUNDED PER NEC ARTICLES 250 AND 810.
25. ALL NEW OPENINGS IN THE EXTERIOR ENVELOPE OF CONDITIONED SPACES SUCH AS AT WALL AND ROOF PENETRATIONS SHALL BE CAULKED OR SEALED TO LIMIT INFILTRATION OF AIR AND MOISTURES.
26. U.N.O., CONTRACTOR SHALL PROVIDE CLOSE-OUT PACKAGE TO VERIZON WIRELESS WHICH WILL INCLUDE:  
(CONTRACTOR SHALL REFER TO THEIR CURRENT CONTRACT FOR A COMPLETE LIST OF DELIVERABLES.)  
  
A. BUILDING PERMITS/ELECTRICAL PERMITS  
B. FINAL INSPECTION CARD  
C. STAMPED BUILDING PERMIT PLANS  
D. GROUNDING TEST  
E. SWEEP TEST  
F. CONCRETE TEST  
G. SPECIAL INSPECTION REPORTS  
H. WARRANTIES, MANUAL, EQUIPMENT SPECIFICATIONS  
I. SUBCONTRACTOR CONTACT LIST  
J. RED LINED ASBUILTS  
K. CONSTRUCTION PROCESS PHOTOS  
L. SITE COMPLETION PHOTOS  
M. A WRITTEN REPORT ON ANTENNA SERIAL NUMBER FOR EACH SECTOR  
N. MANUFACTURER'S PERFORMANCE REPORT FOR EACH ANTENNA  
CONTRACTOR SHALL REFER TO THEIR CURRENT CONTRACT FOR A COMPLETE LIST OF DELIVERABLES.

**2**

**GENERAL CONSTRUCTION NOTES**

1. PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
2. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT,) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HRS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
6. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT/ENGINEER.
7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
8. THE ARCHITECT/ENGINEER, CONNELL DESIGN GROUP LLC, AND REPRESENTATIVES OF THE OWNER, MUST BE NOTIFIED AT LEAST TWO FULL DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
10. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON PLANS HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT/ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
11. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
12. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
13. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE RETURNED TO ITS ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO ARCHITECT/ENGINEER AT COMPLETION OF PROJECT.
14. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
15. INCLUDE MISC. ITEMS PER VERIZON WIRELESS SPECIFICATIONS.

**1**



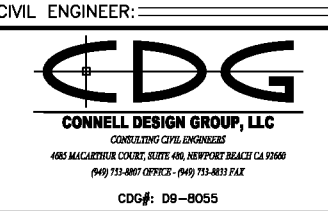
PROJECT INFORMATION:  
**TWIN PEAKS 1**  
SITE NO. 123816  
501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127



CURRENT ISSUE DATE:  
**04/16/10**

ISSUED FOR:  
**100% CD**

REV. DATE	DESCRIPTION	BY
4 04/16/10	100% CD	EN
3 04/08/10	100% CD	EN
2 05/06/09	100% CD	DC
1 05/01/09	100% CD	DC
0 03/30/09	90% CD	DC



DRAWN BY: DC    CHK.: SA    APV.: SA

LICENSER:  
  
SHEET TITLE:  
**GENERAL CONSTRUCTION NOTES, GENERAL NOTES, ABBREVIATIONS & LEGEND**

SHEET NUMBER:  
**T-2**

NOTE:  
SITE PLAN IS PRELIMINARY  
AND DONE WITHOUT THE  
BENEFIT OF A SURVEY.

**verizon**wireless  
VERIZON WIRELESS  
2785 MITCHELL DRIVE  
WALNUT CREEK, CA 94598

PROJECT INFORMATION:  
**TWIN PEAKS 1**  
SITE NO. 123816  
501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127

**NSA Wireless, Inc.**  
The Acquisition • Planning • Construction Management • Site Modifications  
Bishop Ranch 15 1st Floor  
12847 Alameda Blvd., Suite 110  
San Ramon, CA 94583  
(925) 244-1800 OFFICE

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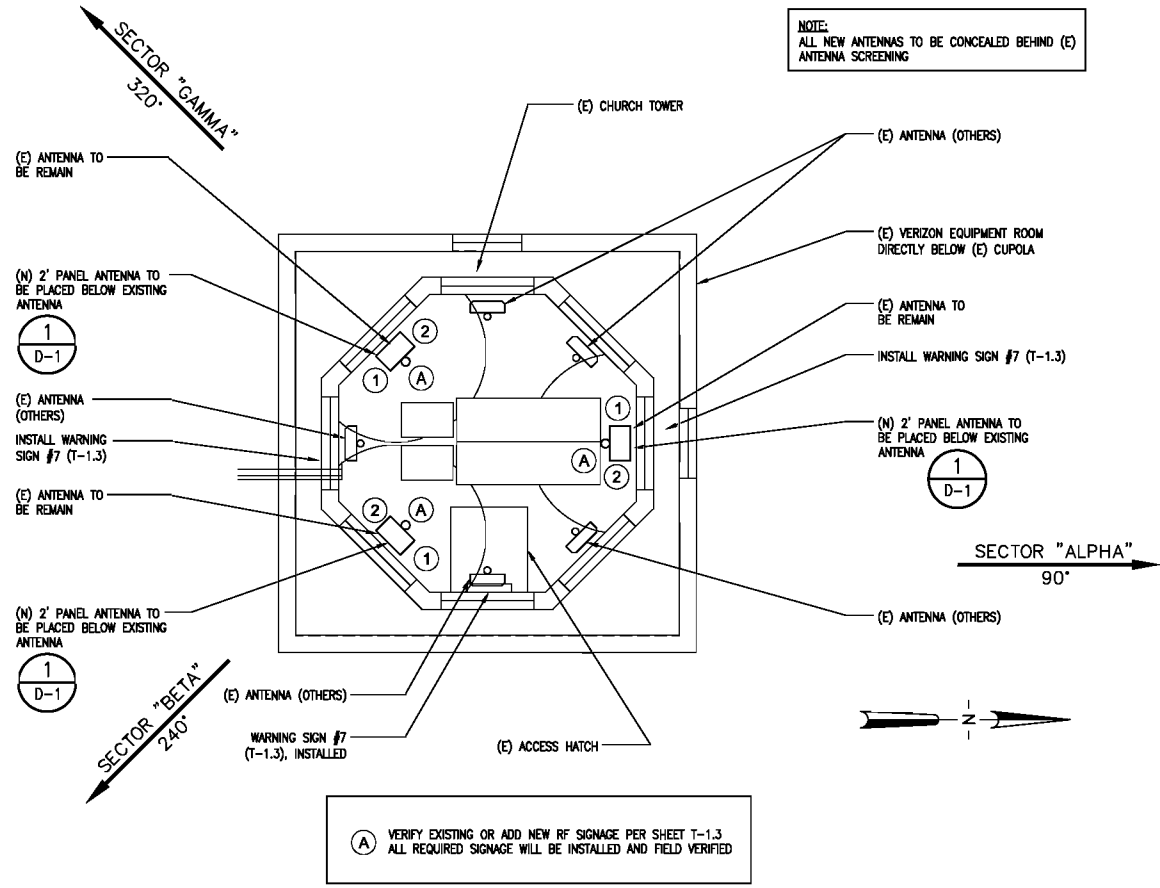
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CIVIL ENGINEER:  
**CDG**  
**CONNELL DESIGN GROUP, LLC**  
CONSULTING CIVIL ENGINEERS  
4885 MACARTHUR COURT, SUITE 400, NEWPORT BEACH CA 92660  
(949) 753-8807 OFFICE • (949) 753-8833 FAX  
CDG#: 08-8055

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LICENSER:

SHEET TITLE:  
**SITE PLAN / ANTENNA LAYOUT**

SHEET NUMBER:  
**A-1**

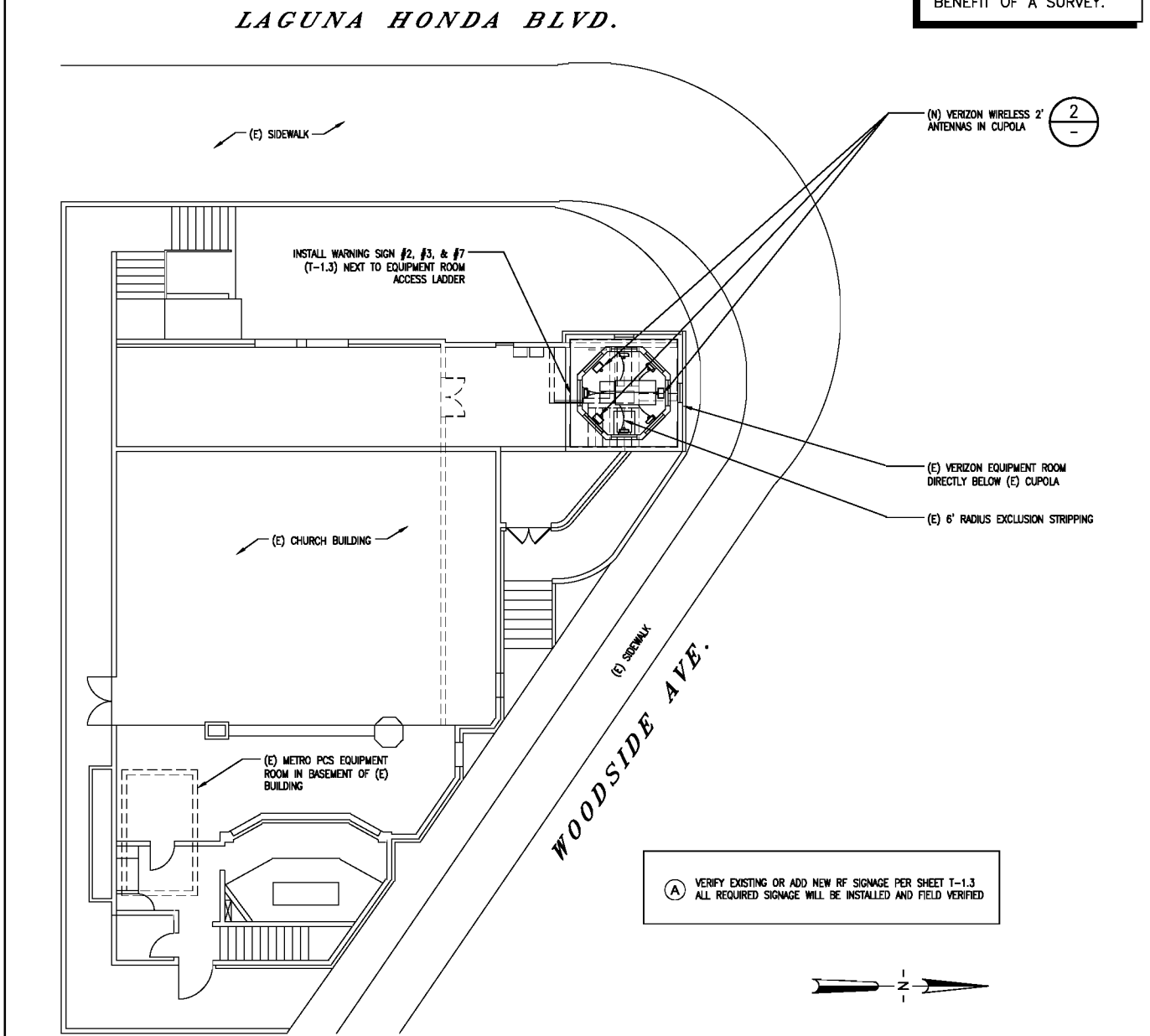


(A) VERIFY EXISTING OR ADD NEW RF SIGNAGE PER SHEET T-1.3  
ALL REQUIRED SIGNAGE WILL BE INSTALLED AND FIELD VERIFIED

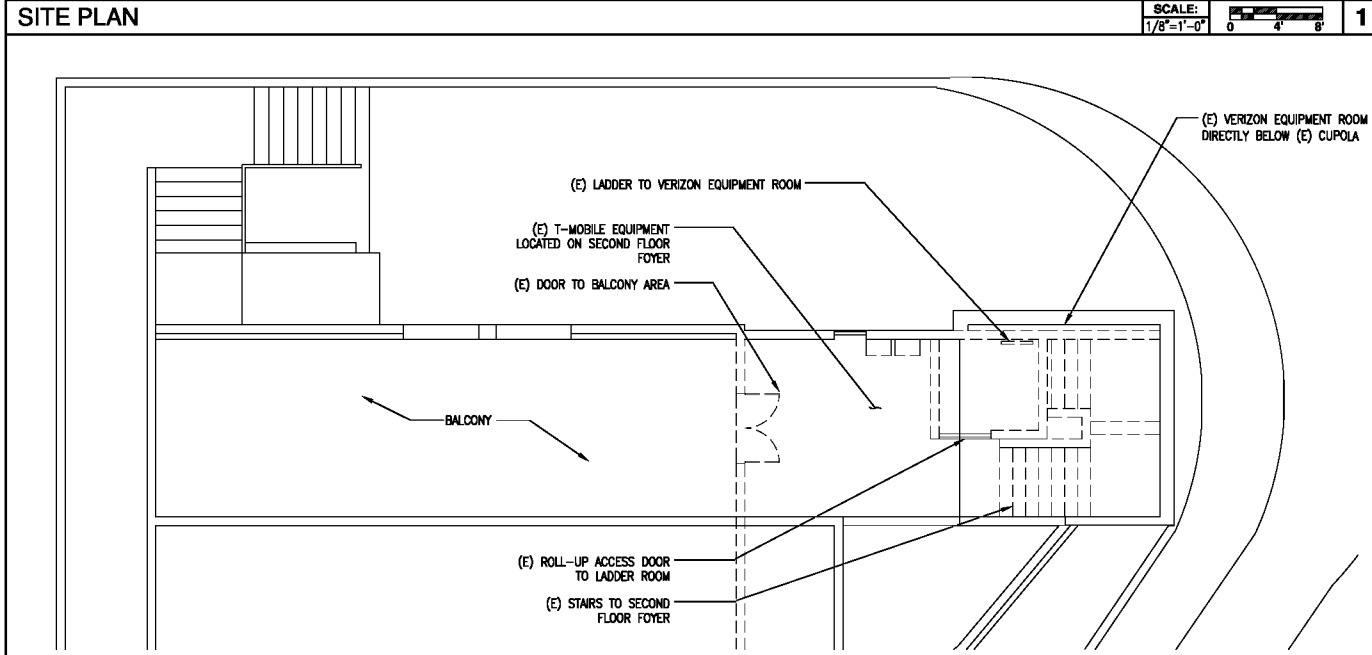
SECTOR 'ALPHA'						
ANTENNA POSITION	EXISTING			PROPOSED		
	FREQUENCY	ANT. MODEL	ANTENNA SIZE (L x W x D) IN.	FREQUENCY	ANT. MODEL	ANTENNA SIZE (L x W x D) IN.
1	850/1900	DB731DG65VTAXM	48 x 13 x 7	NO CHANGE	NO CHANGE	NO CHANGE
2	-	-	-	700	BXA-70063/2CF	23.8" x 11.2" x 4.5"

SECTOR 'BETA'						
ANTENNA POSITION	EXISTING			PROPOSED		
	FREQUENCY	ANT. MODEL	ANTENNA SIZE (L x W x D) IN.	FREQUENCY	ANT. MODEL	ANTENNA SIZE (L x W x D) IN.
1	850/1900	DB731DG65VTAXM	48 x 13 x 7	NO CHANGE	NO CHANGE	NO CHANGE
2	-	-	-	700	BXA-70063/2CF	23.8" x 11.2" x 4.5"

SECTOR 'GAMMA'						
ANTENNA POSITION	EXISTING			PROPOSED		
	FREQUENCY	ANT. MODEL	ANTENNA SIZE (L x W x D) IN.	FREQUENCY	ANT. MODEL	ANTENNA SIZE (L x W x D) IN.
1	850/1900	DB731DG65VTAXM	48 x 13 x 7	NO CHANGE	NO CHANGE	NO CHANGE
2	-	-	-	700	BXA-70063/2CF	23.8" x 11.2" x 4.5"



(A) VERIFY EXISTING OR ADD NEW RF SIGNAGE PER SHEET T-1.3  
ALL REQUIRED SIGNAGE WILL BE INSTALLED AND FIELD VERIFIED





VERIZON WIRELESS  
2785 MITCHELL DRIVE  
WALNUT CREEK, CA 94598

PROJECT INFORMATION:

**TWIN PEAKS 1**

SITE NO. 123816  
501 LAGUNA HONDA BLVD.,  
SAN FRANCISCO, CA 94127

**NSA Wireless, Inc.**

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3	04/08/10	100% CD	EN
2	05/06/09	100% CD	DC
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0	03/30/09	90% CD	DC

CIVIL ENGINEER:

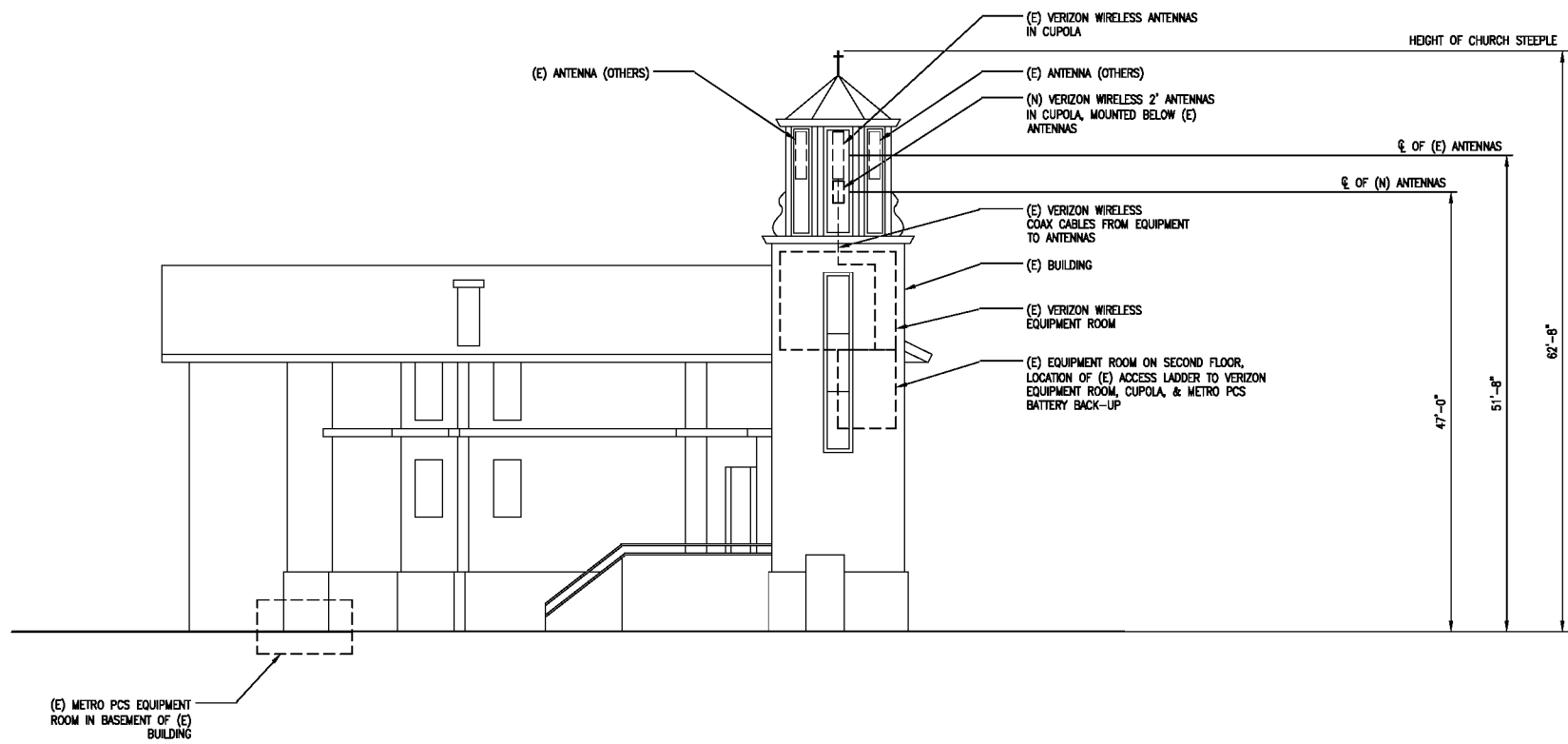


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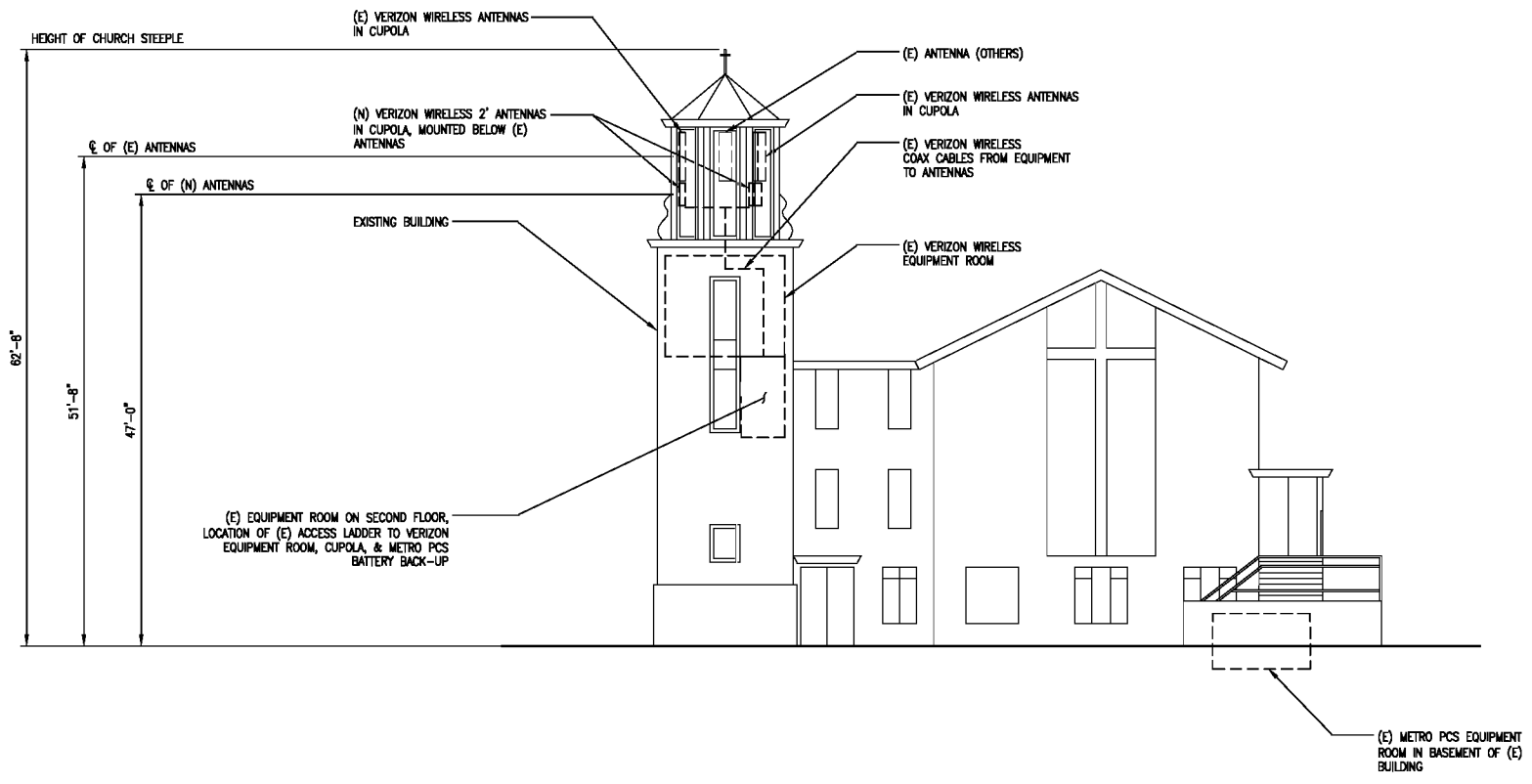
SHEET TITLE:  
**ELEVATIONS**

SHEET NUMBER:  
**A-2**



**NORTH ELEVATION**

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



**WEST ELEVATION**

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



VERIZON WIRELESS  
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0	03/30/09	90% CD	DC

CIVIL ENGINEER:



DRAWN BY: DC    CHK.: SA    APV.:

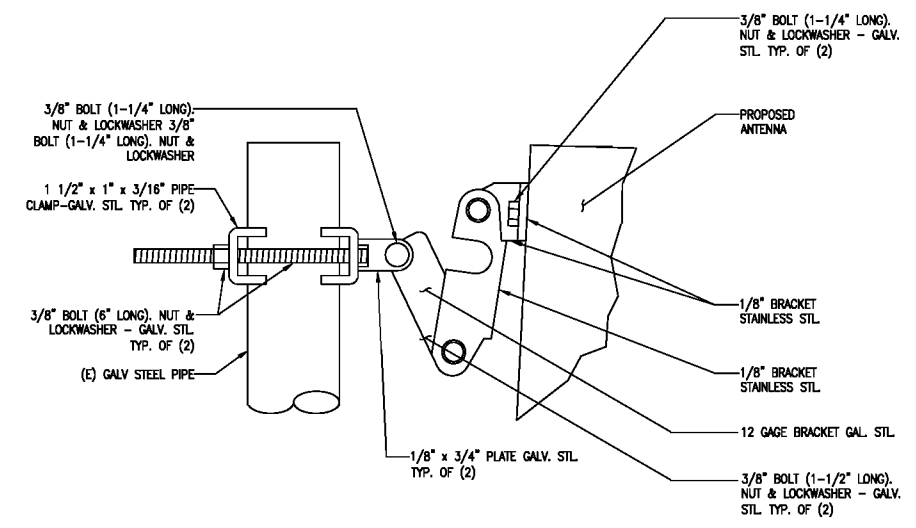
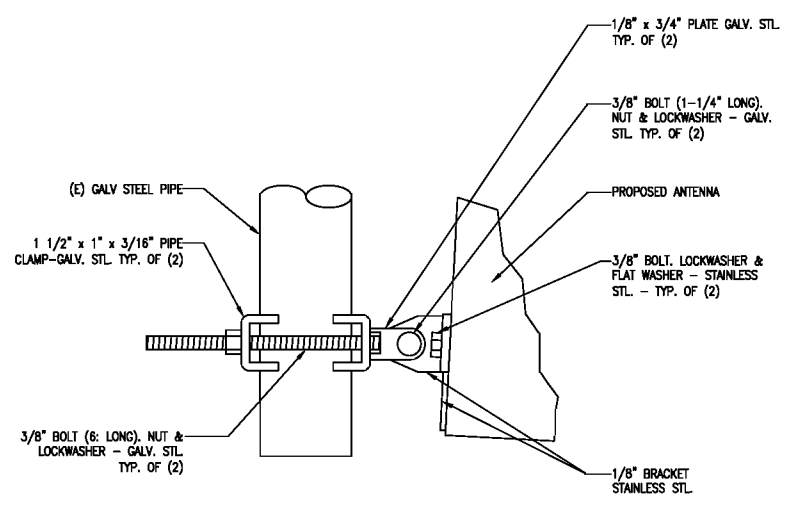
LICENSER:

SHEET TITLE:

DETAILS

SHEET NUMBER:

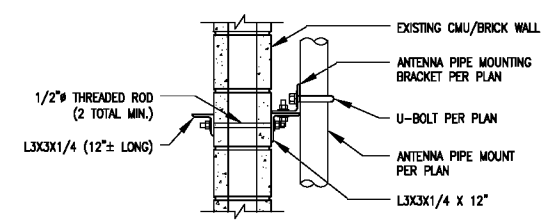
D-1



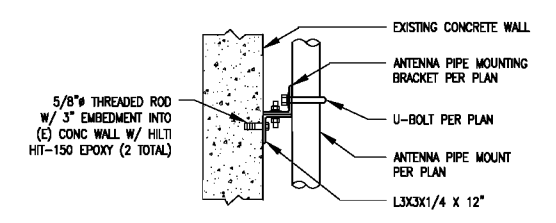
NOT USED    SCALE: N.T.S.    10

LOWER ANTENNA MOUNTING BRACKET

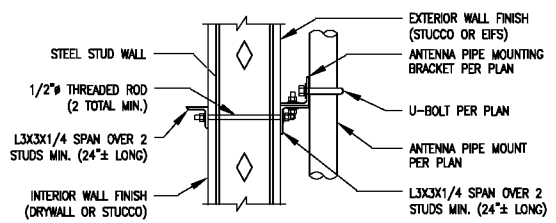
SCALE: N.T.S.    4    UPPER ANTENNA MOUNTING BRACKET    SCALE: N.T.S.    1



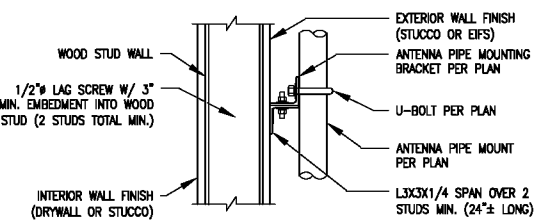
FOR HOLLOW WALLS UP TO 20" THICK



FOR SOLID CONCRETE/CMU WALLS



FOR STEEL STUD WALLS

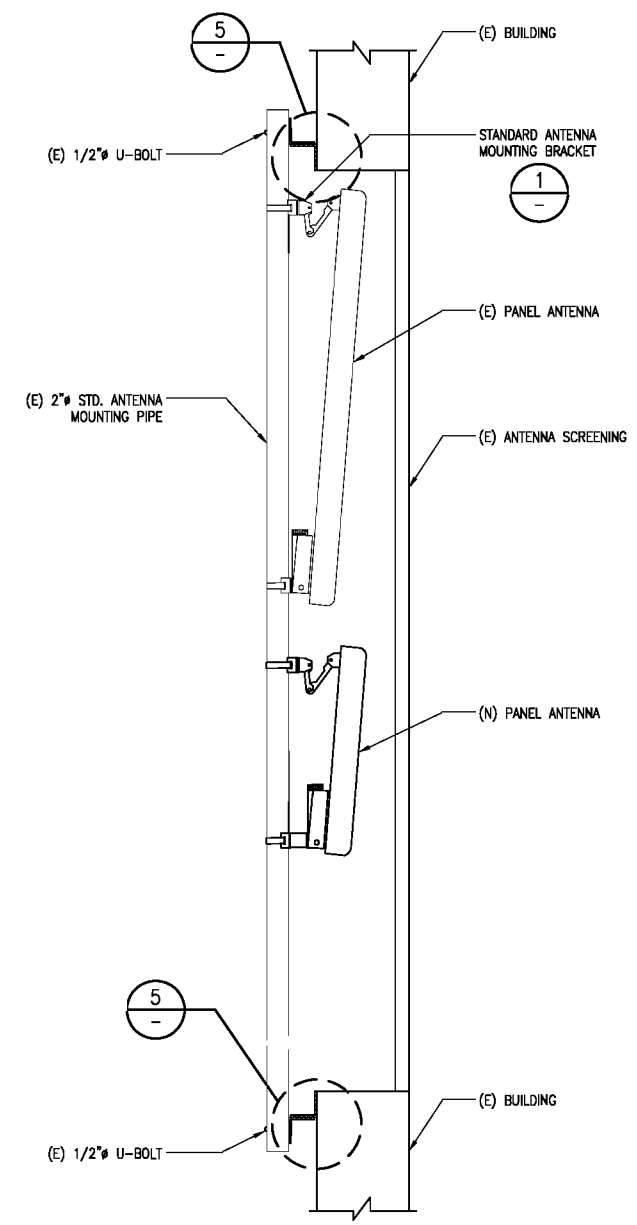


FOR WOOD STUD WALLS

NOT USED    SCALE: N.T.S.    11

ATTACHMENT DETAIL

SCALE: N.T.S.    5



NOT USED    SCALE: N.T.S.    12

NOT USED

SCALE: N.T.S.    9    NOT USED

SCALE: N.T.S.    6    ANTENNA MOUNTING SECTION    SCALE: N.T.S.    3