



Scenic Pacifica
Incorporated Nov. 22, 1957

PLANNING COMMISSION Staff Report

DATE: December 7, 2015

FILE: UP-63-15

ITEM: 2.h

PUBLIC NOTICE: Notice of Public Hearing was published in the Pacifica Tribune on November 25, 2015, was mailed to 1,258 property owners and occupants within the Vallemar neighborhood, and was posted at the project site.

APPLICANT: Ana Gomez, agent for New Cingular Wireless (d.b.a. AT&T Mobility)
2999 Oak Road, Suite 490
Walnut Creek, CA 94597
(913) 458-9148

OWNER: Pole: Joint ownership through Northern California Joint Pole Association (NCJPA)
Site: Public right-of-way

PROJECT LOCATION: Utility pole within the public right-of-way adjacent to 465 Reina Del Mar Avenue (APN 018-052-090) – Vallemar

PROJECT DESCRIPTION: Construct a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way.

SITE DESIGNATIONS: General Plan: Low Density Residential (LDR)
Zoning: R-1 (Single-Family Residential)

RECOMMENDED CEQA STATUS: Class 3 Categorical Exemption, Section 15303.

ADDITIONAL REQUIRED APPROVALS: None. Subject to appeal to the City Council.

RECOMMENDED ACTION: Approve as conditioned.

PREPARED BY: Christian Murdock, Associate Planner

PROJECT SUMMARY, RECOMMENDATION, AND FINDINGS

PROJECT SUMMARY

1. General Plan, Zoning, and Surrounding Land Uses

Section 1 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

2. Municipal Code

Section 2 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

3. Project Description

A. Antennas and Equipment

The applicant proposes to install a WCF on an existing utility pole adjacent to a single-family residence. The utility pole is 54'-10" tall and contains electrical, cable, and telephone utility wires. The antenna mounting bracket, antennas, and remote radio unit (RRU) will be located approximately 27'-0" above ground while the electrical meter and disconnect will be located approximately 7'-0" above ground. The proposed antennas and equipment will be connected via nonmetallic conduit installed along the pole face. The antenna mounting bracket will mount on the face of the utility pole and the mounting arm, which holds the antennas, will project perpendicular from the pole by 2'-0". Full details of the proposed facility are shown in Attachment D and described in the applicant's letter of explanation, Attachment E. Photosimulation renderings providing a visual approximation of the scale and design of the proposed facility are included in Attachment F.

The facility type proposed by the applicant is a new design which features a highly-compact form factor. Unlike traditional facilities featuring multiple large panel antennas up to six feet in height with large ground-mounted equipment enclosures, the proposed facility will include two cylindrical antennas measuring 7.7"-tall by 1.1"-wide. The facility will include no ground-mounted equipment; rather, one small equipment cabinet measuring 17.7"-tall by 11.9" wide by 5.3" deep will be installed on the pole along with one 3'-2"-tall by 1'-0" wide by 4'-1" deep electrical meter. Electrical and telecommunications connections will be made through existing services on the pole, and will require no trenching on the ground. The small size of the facilities also means there is no need for large equipment cabinets with air conditioners or backup generators, which can often generate noise in the immediate vicinity. The applicant has prepared a noise analysis to demonstrate the very low levels of noise generated by the proposed WCF (Attachment G).

The facility type proposed by the applicant incorporates a low power antenna design which services a small area in the immediate vicinity of the site. The lower power results in a smaller facility form factor, but also requires a greater number of sites throughout the coverage area. The applicant has proposed a total of 12 sites throughout the Vallemar neighborhood, inclusive of the subject site, which are being processed as individual use permit applications given the independent function of each site and the unique characteristics of each proposed location.

B. Alternative Site Analysis

The applicant assessed several alternatives before deciding to pursue the development of the subject site (Attachment H). The alternative sites assessed included other utility poles in the vicinity of the project site as well as an existing "macro site," or large-scale tower, located at the west end of the Vallemar neighborhood at the Pacifica Police Department (2075 Coast Highway). None of the alternative utility poles were suitable candidates due to one or more of the following reasons: increased visibility based on their location; unavailability due to all pole quadrants being occupied by existing utility equipment; violation of a zoning standard; pole height will not meet coverage objectives; and/or, the location of the pole not meeting the applicant's coverage objective for filling-in a service gap.

The existing macro site at the Pacifica Police Department also was an unsuitable candidate for facility construction due to the challenging topography of the Vallemar neighborhood. There are a number of elevation changes within the neighborhood which result in obstructions in the line-of-sight between the macro site and the coverage objectives. The applicant's modeling showed that even a new tower of 200 feet in height could not achieve the desired coverage objectives.

Based upon the location of other existing utility poles available for mounting, the impact of neighborhood topography on line-of-sight to the existing macro site at the Pacifica Police Department, and an assumption that construction of a new pole anywhere in the Vallemar neighborhood would be undesirable, the applicant concluded that locating on the subject utility pole was the least visually obtrusive facility design which could also meet its coverage objectives.

C. Article 26 Wireless Communications Facility Standards

Section 3.C of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

4. Required Findings

Section 4 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

5. Public Comments Received

Section 5 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

6. CEQA Recommendation

Section 6 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

7. Staff Analysis

The topography of the Vallemar neighborhood is the dominant factor driving the applicant's siting decisions. Existing wireless telephone and data communications coverage is poor throughout much of the neighborhood. The result is that wireless communications service is nonexistent within many homes and is marginally better outdoors. Access to reliable wireless telephone and data communications is an essential component of modern neighborhoods as technological trends continue away from wired communications devices toward the greater flexibility and mobility of wireless communications solutions.

The applicant's chosen facility design – locating on an existing utility pole support structure – is the least visually obtrusive design alternative available. In addition, the antenna and equipment configuration proposed by the applicant are very small, further limiting visual impacts. The applicant will also paint the antennas and equipment to closely match the existing utility pole. Combined, these measures have resulted in a facility design which meets the applicant's coverage objectives while respecting and preserving the existing neighborhood character. Based on the evidence contained in the record and analyzed by staff, it is staff's opinion that the Planning Commission can make all findings required for project approval.

8. Summary:

Staff has determined that, as conditioned, the project will satisfy all zoning regulations and applicable development standards, will be consistent with the General Plan, and which, on balance, is consistent with the Design Guidelines. The project will result in the least impactful project design which will also meet the applicant's coverage objectives. The proposed project will retain and enhance the character of the Vallemar neighborhood and provide an important communications link to City information, emergency services, and commerce. Thus, staff recommends approval of the project subject to the conditions in Exhibit A of the Resolution.

COMMISSION ACTION

MOTION FOR APPROVAL:

Move that the Planning Commission find the project is exempt from the California Environmental Quality Act; **APPROVE** Use Permit UP-63-15 by adopting the attached resolution, including conditions of approval in Exhibit A; and, incorporate all maps and testimony into the record by reference.

Attachments:

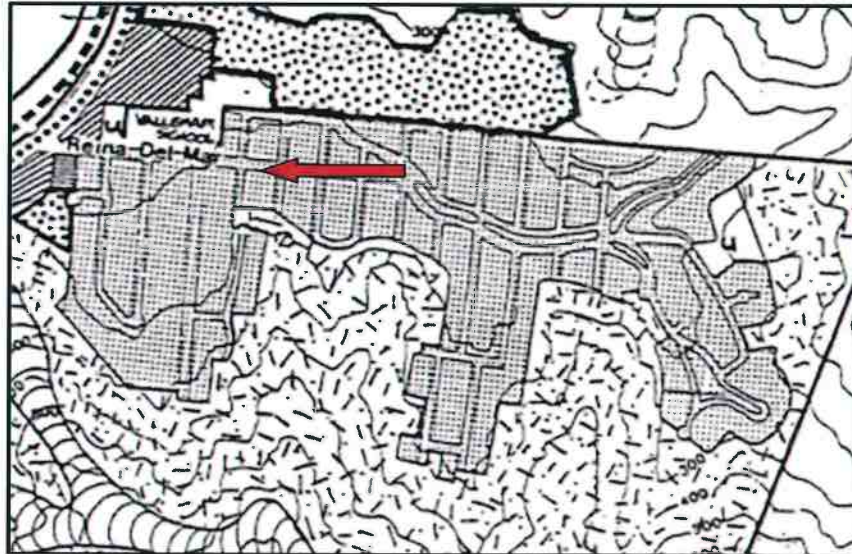
- A. Land Use and Zoning Exhibit
- B. Resolution of Approval
- C. Exhibit A to Resolution of Approval – Conditions of Approval
- D. Site Plan, Floor Plan, and Elevations
- E. Applicant's letter of explanation
- F. Photosimulation renderings
- G. Noise analysis
- H. Alternative site analysis
- I. Radiofrequency (RF) emissions calculations
- J. Alternatives for concealment and stealth of antennas, equipment, and support structure
- K. Reference Attachment K to the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, which is hereby incorporated by reference

Land Use & Zoning Exhibit

City of Pacifica Planning Department

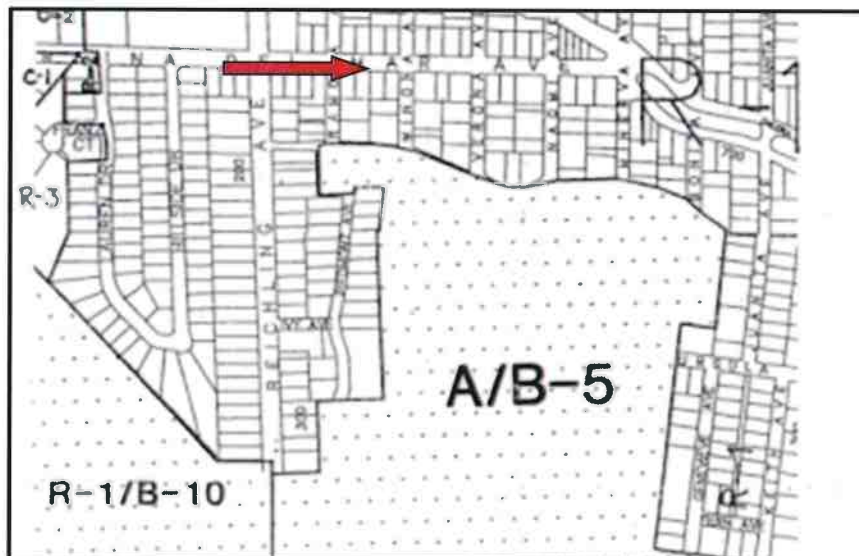
General Plan Diagram

Neighborhood: Vallemar
Land Use Designation: Low Density Residential



Zoning Map Diagram

Zoning District: R-1 (Single-Family Residential)



RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PACIFICA APPROVING USE PERMIT UP-63-15, SUBJECT TO CONDITIONS, FOR A WIRELESS COMMUNICATIONS FACILITY ON AN EXISTING UTILITY POLE IN THE PUBLIC RIGHT-OF-WAY WITHIN THE R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICT ADJACENT TO 465 REINA DEL MAR AVENUE (APN 018-052-090), AND FINDING THE PROJECT EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA).

Initiated by: Ana Gomez, agent for New Cingular Wireless (d.b.a. AT&T Mobility) (“Applicant”).

WHEREAS, an application has been submitted to construct a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 465 Reina Del Mar Avenue (APN 018-052-090); and

WHEREAS, construction of the proposed wireless communications facility requires approval of a use permit prior to the issuance of a building permit because the project site is within the public right-of-way; and

WHEREAS, the Planning Commission of the City of Pacifica did hold a duly noticed public hearing on December 7, 2015, at which time it considered all oral and documentary evidence presented, and incorporated all testimony and documents into the record by reference.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Pacifica does hereby make the following findings pertaining to Use Permit UP-63-15:

1. That the establishment, maintenance, or operation of the use or building applied for will not, under the circumstances of the particular case, be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.
 - A. The project will require a building permit prior to construction. The building permit process includes a detailed plan review for building and electrical code compliance, as well as field inspections of the work prescribed in the approved project plans to verify proper performance of the work. This will ensure safe installation of the proposed wireless communications facility. The project approval contains a condition of approval which requires the applicant to obtain a building permit prior to installation of the wireless communications facility.
 - B. The applicant has demonstrated its facility will comply with radiofrequency (RF) emissions standards established by the Federal Communications Commission

(FCC). Since the applicant has provided relevant information prepared by a qualified professional engineer to demonstrate compliance with FCC RF emissions standards, the project must be considered safe for the public in terms of RF emissions.

- C. The applicant has submitted an analysis prepared by a qualified professional engineer demonstrating that the proposed wireless communications facility will not generate noise that is objectionable or harmful to persons in the vicinity of the facility. Therefore, any noise generated by the facility will be safe for the public.
 - D. Based on the information provided by the applicant, City staff's analysis of that and other information, and the conditions of approval proposed for this project, the project will not be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.
2. That the use or building applied for is consistent with the applicable provisions of the General Plan and other applicable laws of the City and, where applicable, the local Coastal Plan.
- A. The proposed project is consistent with the following provisions of the General Plan and other laws of the City. Since the project is not within the Coastal Zone, the provisions of the Local Coastal Plan do not apply.
 - i. Noise Element, Policy No. 2: Establish and enforce noise emission standards for Pacifica which are consistent with the residential character of the City and environmental, health, and safety needs of the residents.

The project has been designed to emit minimal noise, as demonstrated in the applicant's noise analysis. The limited noise generation by the project will result in being compatible and consistent with the residential character of the city and environmental, health, and safety needs of the residents.

- ii. Community Design Element, Policy No. 1: Preserve the unique qualities of the City's neighborhoods.

The Vallemar neighborhood has a predominantly residential character with mature trees throughout the neighborhood. Electrical and telecommunications utilities are provided via above-ground utility poles. The project involves construction of a wireless communications facility on an existing utility pole with no ground-mounted equipment or removal of trees required. By designing the project in this manner, it will preserve the unique qualities of the Vallemar neighborhood which include above-ground utility service and mature tree coverage.

iii. Community Design Element, Policy No. 2: *Encourage the upgrading and maintenance of existing neighborhoods.*

Public comments received from residents of the Vallemar neighborhood and analysis provided by the applicant indicate that wireless telephone and data coverage is poor throughout much of the Vallemar neighborhood. In many cases residents have no coverage within their homes and unreliable coverage outdoors. The project involves construction of a wireless communications facility to improve wireless telephone and data coverage. Improving service availability and reliability will allow residents to contact emergency services, family, and business contacts as needed. Additionally, high-speed wireless data connectivity is an increasingly important part of modern home life and commerce for home-based and mobile businesses. The project will increase the quality and reliability of wireless telephone and data service with the subject project, which will result in an upgrade to the existing neighborhood.

iv. Community Facilities Element, Policy No. 4: *Meet basic social needs of City residents, such as transportation, housing, health, information and referral services, and safety, consistent with financial constraints.*

Public comments received from residents of the Vallemar neighborhood and analysis provided by the applicant indicate that wireless telephone and data coverage is poor throughout much of the Vallemar neighborhood. In many cases residents have no coverage within their homes and unreliable coverage outdoors. The project involves construction of a wireless communications facility to improve wireless telephone and data coverage. Improving service availability and reliability will allow residents to obtain information on City services and to request emergency services more reliably. A reliable means of contacting police and fire emergency services from all locations within the Vallemar neighborhood, as improved by the project, is essential to meeting residents' basic social needs, including safety.

v. Land Use Element, Policy No. 4: *Continue to cooperate with other public agencies and utilities in applying compatible uses for their lands, rights-of-way and easements.*

The project will occur within the public right-of-way. The City cooperated with the applicant, AT&T Mobility, a communications service provider, in processing its application for the subject wireless communications facility. The coordination between the City and AT&T Mobility has resulted in a proposed project which is a compatible use for the public right-of-way in the Vallemar neighborhood. This is evidenced by the small scale of the equipment proposed, the measures to reduce the visual impact of the equipment, and the

installation of the equipment on an existing utility pole, thus reducing the need for additional structures within the public right-of-way.

In sum, there is sufficient evidence for the Planning Commission to find that the establishment, maintenance, and operation of the proposed wireless communications facility will not, under the circumstances of the particular case, be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.

3. Where applicable, that the use or building applied for is consistent with the City's adopted Design Guidelines.

A. Building Design

- i. Design. *The style and design of new buildings should be in character with that of the surrounding neighborhood. This does not mean that new buildings should be identical to existing buildings on neighboring lots, but that new buildings should complement, enhance, and reinforce the positive characteristics of surrounding development. This can be accomplished by incorporating the dominant architectural features of an area into the design of new development. Such features may include bay windows, chimneys, balconies, porches, roof shapes, and other architectural details and materials.*

Additions to an existing structure should also retain and/or be consistent with the positive architectural features of the original structure.

The Vallemar neighborhood has a predominantly residential character with mature trees throughout the neighborhood. Electrical and telecommunications utilities are provided via above-ground utility poles and associated wires. The project involves construction of a wireless communications facility on an existing utility pole with no ground-mounted equipment or removal of trees required. Electricity and telecommunications connections will be made from existing wires on the utility pole. The proposed antenna mounting will be made on a bracket mounted to the face of the utility pole which will extend at a 90-degree angle from the pole in the same manner as typical utility pole cross-members. The prominent vertical mast and smaller perpendicular cross-members are the dominant architectural themes of the utility poles in the Vallemar neighborhood. By designing the project in this manner, it will be in character with the surrounding neighborhood.

- ii. *Scale. An important aspect of design compatibility is scale. Scale is the measure of the relationship of the relative overall size of one structure with one or more other structures. Scale is also used to refer to a group of buildings, a neighborhood, or an entire city. A development can be “out of scale” with its surroundings due to its relative height, bulk, mass, or density.*

A structure which is out of scale with its site and neighborhood threatens the integrity of the overall streetscape, and residential projects, particularly single-family dwellings, which are much larger than neighboring structures are therefore discouraged. The City’s height limitation is a maximum only, and the maximum height may often be inappropriate when considered in the context of surrounding development and topography. The “carrying capacity” of a given site is also an important factor in determining appropriate scale and lot coverage. As with the height limitation, the City’s lot coverage limitation is a maximum only.

The project will locate on an existing utility pole and will not increase the height of the utility pole. By maintaining the existing height, the project will preserve the most noticeable factor that could impact the project scale. The project will result in a new horizontal projection from the utility pole, but the projection will be 2’-0”, which is a minor increase. By staying within the existing vertical envelope of the utility pole and by creating a very small new horizontal projection, the proposed wireless communications facility will remain in scale with the existing utility pole and the surrounding neighborhood.

- iii. *Color. Building color should be compatible with the neighborhood and should reinforce and complement the visual character of the building’s environment. Multiple colors applied to a single building should relate to changes of material or form.*

The existing utility pole onto which the project will locate is made of wood. The project will include painting the antennas and equipment brown to achieve a similar color to the utility pole which will result in an installation that blends into the utility pole. Painting the wireless communications facility brown will be compatible with the neighborhood.

The Design Guidelines are drafted primarily to address construction of residential and commercial buildings. Few guidelines directly address the construction of utility poles in rights-of-way. However, based upon those guidelines which are applicable to this project type, the Planning Commission determines that there is a sufficient

basis to find that the proposed project is consistent with the City's adopted Design Guidelines.

4. That the project will not cause localized interference with reception of area television or radio broadcasts or other signal transmission or reception.
 - A. The Planning Commission considered evidence submitted by the applicant and prepared by a qualified professional engineer which assessed the communications technologies involved in the wireless communications facility. The analysis indicated that the technologies involved will not cause the type of interference described in this finding. Based upon the applicant's analysis prepared by a qualified professional engineer, the Planning Commission finds that the project will not cause localized interference with reception of area television or radio broadcasts or other signal transmission or reception.
5. That the information submitted proves that a feasible alternate site that would result in fewer visual impacts does not provide reasonable signal coverage.
 - A. The applicant prepared an alternative site assessment describing the feasibility and desirability of several sites. The analysis relied on a presumption that construction of a new support structure (i.e. pole) would result in greater visual impacts than locating on an existing support structure, whether a utility pole or the existing macro pole at the Pacifica Police Department. Therefore, the analysis did not consider any specific locations for new poles within the Vallemar neighborhood but did consider a new macro pole up to 200 feet in height at the Pacifica Police Department.
 - B. Based on its presumption that new support structure construction would be undesirable, a presumption accepted by the Planning Commission, the applicant considered other existing utility poles in the vicinity of the project site. All of the other utility poles were more visually prominent and impactful; were unavailable for installation (due to all quadrants being occupied); and/or, did not meet the applicant's coverage objectives. Therefore, the Planning Commission finds that the information submitted by the applicant proves that a feasible alternate site that would result in fewer visual impacts does not provide reasonable signal coverage.
6. That the application meets all applicable requirements of Section 9-4.2608 of the Pacifica Municipal Code.
 - A. Article 26 of the Zoning Regulations sets for the standards for wireless communications facilities. Subsections (a), (b), and (e) include the development standards applicable to the subject project. As set forth in the staff report, namely in Section 3.C, the Planning Commission finds that project meets or exceeds all applicable requirements of Section 9-4.2608, including but not limited to

requirements for height and width, placement, equipment facilities, radiofrequency emissions standards, localized interference, lighting, concealment, colors and materials, fencing and walls, and landscaping.

7. That the project is exempt from the California Environmental Quality Act (CEQA) as a Class 3 exemption provided in Section 15303 of the CEQA Guidelines.
 - A. Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure.
 - B. The project involves construction of a wireless communications facility on an existing utility pole, which fits within the scope of a Class 3 categorical exemption. Specifically, the project includes installation of two small antennas measuring 7.7-inches wide by 1.1-inches tall and mounted on an antenna bracket projecting 2-feet from an existing utility pole, with associated small equipment cabinets mounted on the pole and involving no disturbance to the ground.
 - C. The project, while being undertaken concurrently with 11 other similar projects within the Vallemar neighborhood, is an independent project under CEQA and its impacts are not cumulative. According to information provided by the applicant, the wireless communications facility can operate independently of the other facilities proposed in the area. The facility provides coverage to a small area surrounding the facility and is connected to existing electrical and telecommunications lines on an existing utility pole. There is no direct site-to-site communication between this facility and other facilities proposed in the area.
 - D. As to the visual impact of the facility, there are several factors that result in a negligible visual impact from the project. The wireless communications facility will be visible to passersby and observers from nearby buildings, but it will not be so visually prominent that it will necessarily be noticed. The applicant will paint the antennas and associated equipment a dark brown color to minimize the contrast between the antennas and equipment and the utility pole on which they are mounted. The subdued paint color will minimize the visual prominence of the facility. The facility will be observed in the context of the existing utility pole and associated utility lines and equipment already installed on the subject and surrounding utility poles. Utility poles and equipment of this sort are common throughout Pacifica's urbanized environment, including in the vicinity of the project site. The visual effect of the facility will be further minimized by its isolation from the other facilities. No other proposed facility is visible from the subject site, meaning any minor visual impact resulting from the project will not

be cumulative. The result is a minimal incremental visual effect from the installation of this particular facility.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission of the City of Pacifica does hereby approve Use Permit UP-63-15 for construction of a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 465 Reina Del Mar Avenue (APN 018-052-090), subject to conditions of approval included as Exhibit A to this resolution.

* * * * *

Passed and adopted at a regular meeting of the Planning Commission of the City of Pacifica, California, held on the 7th day of December 2015.

AYES, Commissioner:

NOES, Commissioner:

ABSENT, Commissioner:

ABSTAIN, Commissioner:

Richard Campbell, Chair

ATTEST:

APPROVED AS TO FORM:

Tina Wehrmeister, Planning Director

Michelle Kenyon, City Attorney

Exhibit A

Conditions of Approval: Use Permit UP-63-15 for construction of a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 465 Reina Del Mar Avenue (APN 018-052-090)

Planning Commission Meeting of December 7, 2015

Planning Division of the Planning Department

1. Development shall be substantially in accord with the plans entitled "Small Cell - ZD," dated July 13, 2015, except as modified by the following conditions.
2. That the approval or approvals is/are valid for a period of two years from the date of final determination. If the use or uses approved is/are not established within such period of time, the approval(s) shall expire unless Applicant submits a written request for an extension and applicable fee prior to the expiration date, and the Planning Director or Planning Commission approves the extension request as provided below. The Planning Director may administratively grant a single, one year extension provided, in the Planning Director's sole discretion, the circumstances considered during the initial project approval have not materially changed. Otherwise, the Planning Commission shall consider a request for a single, one year extension.
3. Prior to the issuance of a building permit, Applicant shall submit information on exterior finishes, including colors and materials, subject to approval of the Planning Director.
4. Prior to final inspection, and where technically feasible (as determined by the Planning Director), paint all equipment, conduit, antennas, and other appurtenances of the facility dark brown to blend in with the utility pole and to reduce visual obtrusiveness. Painted surfaces shall be maintained in a uniform condition substantially free of peeling, chipping, or other paint defects except normal fading, to the satisfaction of the Planning Director.
5. The project shall not include any ground-mounted equipment or trenching.
6. Applicant shall maintain its site in a fashion that does not constitute a public nuisance and that does not violate any provision of the Pacifica Municipal Code.
7. All outstanding and applicable fees associated with the processing of this project shall be paid prior to the issuance of a building permit.
8. Prior to issuance of a building permit, Applicant shall clearly indicate compliance with all conditions of approval on the plans and/or provide written explanations to the Planning Director's satisfaction.

9. The applicant shall indemnify, defend and hold harmless the City, its Council, Planning Commission, advisory boards, officers, employees, consultants and agents (hereinafter "City") from any claim, action or proceeding (hereinafter "Proceeding") brought against the City to attack, set aside, void or annul the City's actions regarding any development or land use permit, application, license, denial, approval or authorization, including, but not limited to, variances, use permits, developments plans, specific plans, general plan amendments, zoning amendments, approvals and certifications pursuant to the California Environmental Quality Act, and/or any mitigation monitoring program, or brought against the City due to actions or omissions in any way connected to the applicant's project, but excluding any approvals governed by California Government Code Section 66474.9. This indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and costs of suit, attorneys fees and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, City, and/or parties initiating or bringing such Proceeding. If the applicant is required to defend the City as set forth above, the City shall retain the right to select the counsel who shall defend the City.

Building Division of the Planning Department

10. The project requires review and approval of a building permit by the Building Official. Applicant shall apply for and receive approval of a building permit prior to commencing any construction activity.
11. Prior to issuance of a building permit, the City shall assign the site a unique address.
12. Prior to final inspection, the applicant shall provide evidence that Pacific Gas & Electric (PG&E) has approved the location of the proposed meter.
13. All mounting hardware shall be made of corrosion resistant materials, to the satisfaction of the Building Official and City Engineer.

Engineering Division of Public Works Department

14. Construction shall be in conformance with the San Mateo Countywide Storm Water Pollution Prevention Program. Best Management Practices shall be implemented.
15. Roadways shall be maintained clear of construction materials and debris, especially mud and dirt tracked onto Beaumont Boulevard. Dust control and daily road cleanup will be strictly enforced.
16. Prior to the issuance of a building permit, add a note on the Site Plan that says, "Any damage to improvements within the city right-of-way or to any private property, whether adjacent to subject property or not, that is determined by the City Engineer to have resulted from construction activities related to this project shall be repaired or replaced as directed by the City Engineer."

17. Applicant shall locate all equipment to the greatest extent possible so that the meter cabinets are not directly over sidewalks (including the decomposed granite public walkways) in order to reduce the future possibility of deteriorated equipment falling on a person.
18. Applicant shall, if some point in the future the utility pole on which the subject wireless communications facility is installed is no longer needed for carrying electrical power or communications wires, apply to the City for alternate options for providing wireless communications service to its customers in the vicinity of the project.
19. Prior to issuance of a building permit, Applicant shall apply for and receive approval of a City of Pacifica Encroachment Permit for all work undertaken in the public right-of-way. All work shall be performed in accordance with City Standards, Standard Specifications for Public Works Construction (Green Book) or Caltrans Standard Specifications, Pacifica Municipal Code, Administrative Policies and to the satisfaction of the City Engineer or his designee. Permit fees shall be determined per the current adopted fee schedule.
20. All recorded survey points, monuments, railroad spikes, pins, cross cuts on top of sidewalks and tags on top of culvert headwalls or end walls whether within private property or public right-of-way shall be protected and preserved. If survey point/s are altered, removed or destroyed, the applicant shall be responsible for obtaining the services of a licensed surveyor or qualified Civil Engineer to restore or replace the survey points and record the required map prior to occupancy of the first unit.

END

STATEMENT OF SPECIAL INSPECTION

THE ENGINEER OF RECORD, BEING FULLY ADVISED OF THE CODE AND SCOPE OF THE SUBJECT PROJECT, STATES SPECIAL INSPECTION IS NOT REQUIRED FOR THIS PROJECT WORK IN CONFORMANCE WITH THE 2013 CBC 1705.11.6. THE SPECIAL INSPECTION PLAN CONSISTS OF THE ENGINEER OF RECORD SHOWING THE ATTACHMENTS ON THE DESIGN AND SEALING THE DESIGN DOCUMENTS. THE SPECIAL INSPECTION REPORT SHALL BE AVAILABLE TO THE BUILDING OFFICIAL WITHIN TWO WEEKS OF RECEIPT OF REQUEST (CBC 1704.2.4).

ENGINEERING

2013 CALIFORNIA BUILDING CODE OR ADOPTED CODE
 TIA/ESA-222-C OR ADOPTED CODE NESC
 CALIFORNIA RULES FOR OVERHEAD ELECTRIC LINE CONSTRUCTION - 6095

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY DISPOSITION OF LAND OR UTILITIES. POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE INSTALLATION AND REVISION OF WIRELESS TELECOMMUNICATIONS NETWORK.

PROJECT INFORMATION

COUNTY: SAN MATEO
 ZONING JURISDICTION: CITY OF PACIFICA
 ZONING DISTRICT: PUBLIC RIGHT-OF-WAY
 OCCUPANCY GROUP: U
 CONSTRUCTION TYPE: V-B
 CONSTRUCTION MANAGER: ABBY NERAM
 (813) 458-8683
 INFO@NERAMBLANCONTRACTING.COM
 SITE ACQUISITION MANAGER: ANA GOMEZ-ABARCA
 (813) 458-9148
 gomez@pacificacell.com
 RF ENGINEER: BRIAN WILLYNSKI
 (813) 458-9148
 BWS@bbsnet.com
 APPLICANT: AT&T MOBILITY
 TASHA STOKES
 (813) 458-4621
 TASHA@ATT.COM
 CARRIER P/N: 2401676313
 FA LOCATION: 13022004

CONTACT INFORMATION

ENGINEER: BLACK & VEATCH
 2995 OAK ROAD
 WILMUT CREEK, CA 94597
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 PHONE: (813) 458-4621

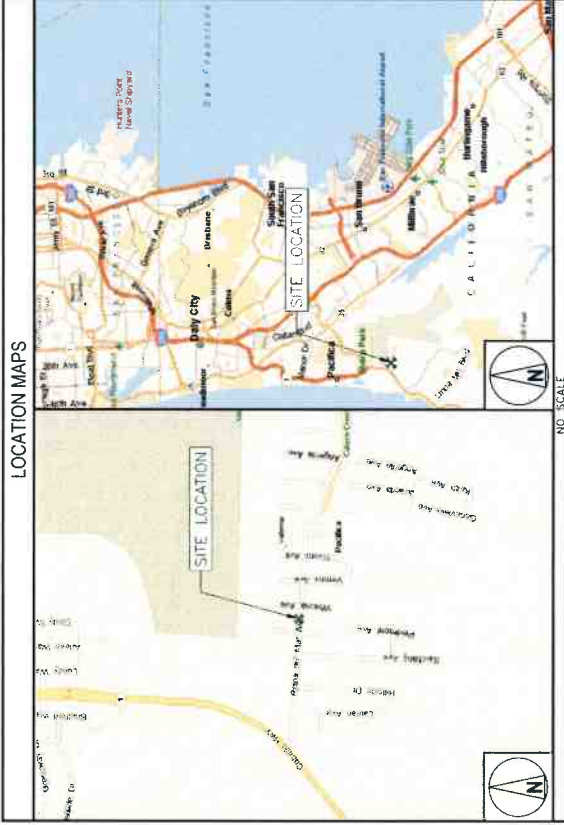
at&t

SCC-CC0004-10

PACIFICA

BETWEEN 465 & 477 REINA DEL MAR AVE

SMALL CELL - ZD



DRIVING DIRECTIONS

DIRECTIONS FROM LOCAL AT&T OFFICE: HEAD SOUTHEAST ON CAMINO RAMON TAKE THE 3RD RIGHT ONTO BOLLINGER CANYON RD. TAKE THE 2ND RIGHT ONTO REINA DEL MAR AVE. TAKE THE 1ST RIGHT ONTO I-80 W/SAN FRANCISCO AND MERGE ONTO I-80 W. KEEP LEFT AT THE FORK. FOLLOW SIGNS FOR I-80 W/SAN FRANCISCO AND MERGE ONTO I-80 W. KEEP LEFT AT THE FORK. FOLLOW SIGNS FOR SAN JOSE/U.S. 101 S/AIRPORT AND MERGE ONTO US-101 S. TAKE THE INTERSTATE 280 S EXIT TOWARD DALY CITY. MERGE ONTO I-280 S. TURN RIGHT ONTO CA-1 S (SIGNS FOR PACIFICA). TURN LEFT ONTO REINA DEL MAR AVE. SITE WILL BE ON YOUR LEFT.

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	SCC-CC0004-10 TITLE SHEET
PL-1.1	SCC-CC0004-10 LOCATION MAP
PL-2.1	SCC-CC0004-10 INFORMATION DATASHEET
AP10-1	SCC-CC0004-10 ELEVATIONS
AP10-2	SCC-CC0004-10 ISOMETRIC ELEVATIONS
AP10-3	SCC-CC0004-10 OVERALL SITE PLAN
C-1.0	EQUIPMENT DETAILS AND SPECIFICATIONS

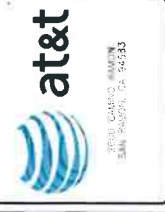
REV	DATE	DESCRIPTION
B	07/24/15	ISSUED FOR ZONING
A	04/29/15	ISSUED FOR REVIEW

PROJECT NO: 129092
 DRAWN BY: LEW
 CHECKED BY: DAE

SCC-CC0004-10
 PACIFICA
 BETWEEN 465 & 477
 REINA DEL MAR AVE
 PACIFICA, CA 94044
 SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-10
 TITLE SHEET

SHEET NUMBER
T-1



BLACK & VEATCH

2995 OAK ROAD
 WILMUT CREEK, CA 94597
 (925) 357-0243

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DO NOT SCALE DRAWINGS

SUBCONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

UNDERGROUND UTILITY PROTECTION CENTER, INC.
 811
 48 HOURS BEFORE YOU DIG

RECEIVED
 JUL 24 2015
 City of Pacifica



7600 GAMBINO RAMON
SAN RAMON, CA 94583



BLACK & VEATCH

2899 OAK ROAD
SAN RAMON, CA 94583
PHONE: 925.377-0143
FAX: 925.377-0143

PROJECT NO.	12093
DRAWN BY	LEW
CHECKED BY	PAE

REV	DATE	DESCRIPTION
B	07/28/15	ISSUED FOR STAMP
A	04/24/15	ISSUED FOR RFP

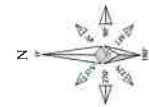
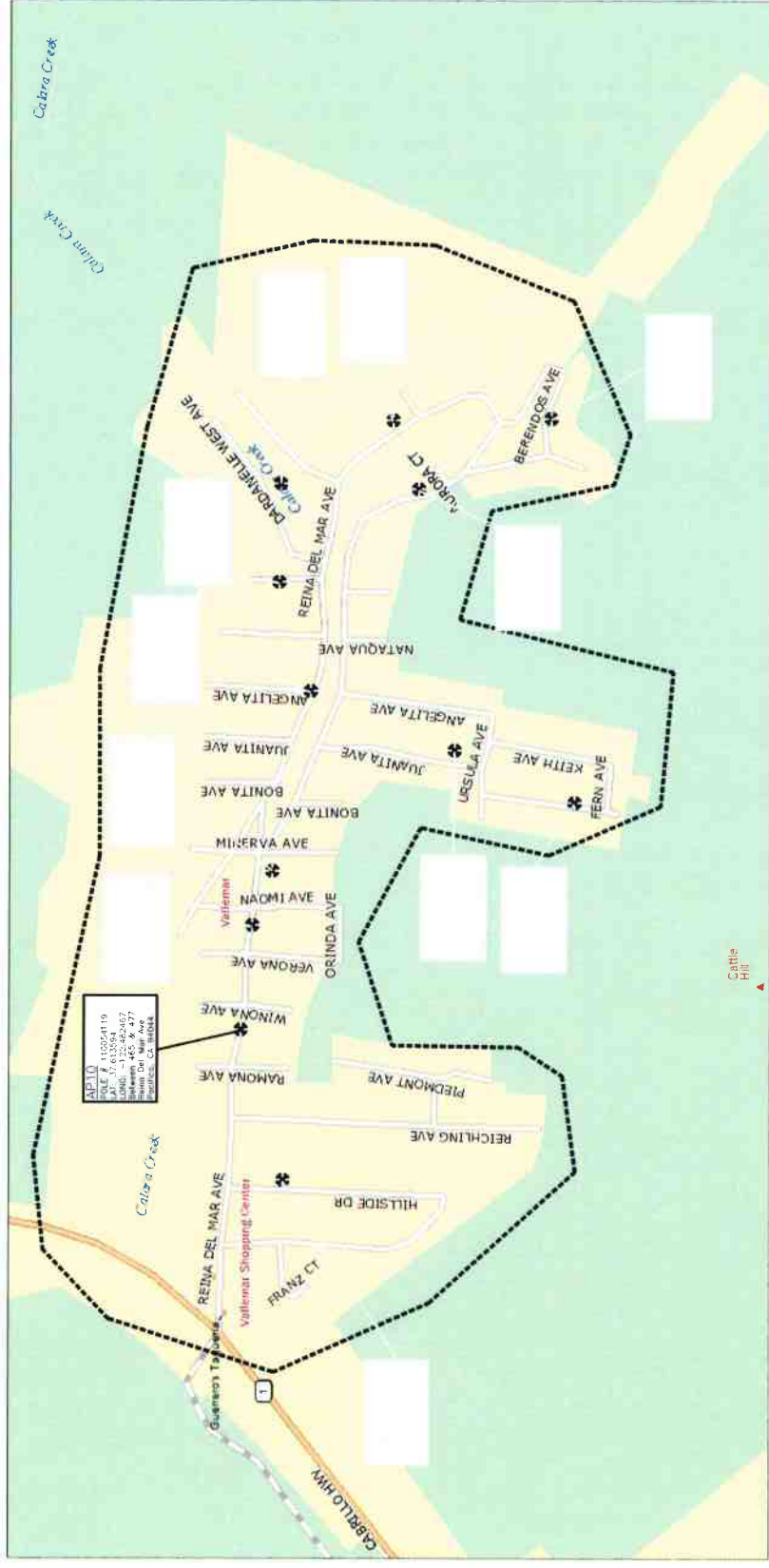
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SCC-CC0004-10
PACIFICA
BETWEEN 465 & 477
REINA DEL MAR AVE
PACIFICA, CA 94084
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-10
LOCATION MAP

SHEET NUMBER
PL-1.1

THIS DRAWING IS
NOT A SITE SURVEY
THE PURPOSE OF THIS DRAWING IS
TO RELATE TO THE PARENT PARCEL
AND ADJACENT PROPERTIES.



POLYGON_MAP



2000 SHAWNEE PARKWAY
SAN RAMON, CA 94583



BLACK & VEATCH

2999 OAK ROAD
WALNUT CREEK, CA 94597
(925) 327-0243
WWW.BV.COM
BLACK & VEATCH IS AN EQUAL OPPORTUNITY EMPLOYER

PROJECT NO: 128092
DRAWN BY: LEW
CHECKED BY: BAE

REV	DATE	DESCRIPTION
B	07/11/15	ISSUED FOR PERMITS
A	06/29/15	ISSUED FOR REVIEW

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SCC-CC0004-10
PACIFICA
BETWEEN 465 & 477
BENJAMIN WASHINGTON AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-10
INFORMATION DATASHEET

SHEET NUMBER
PL-2.1

Site Number	Site Name	USFD (UMTS)	USFD (LTE)	E911 Address	County	Latitude	Longitude	Pole ID	Structure Type	Structure Height	Road Center
SCC-CC0004-10	Pacifica	165295	165305	BETWEEN 465 & 477 BENJAMIN WASHINGTON AVE, PACIFICA, CA 94044	San Mateo	37.613594	-122.483467	110054139	Utility Pole	56'-6"	27'-0"



2000 LIVING BOWEN
SAN FRANCISCO, CA 94103



BLACK & VEATCH

3990 OAK ROAD
IRVINE, CALIFORNIA 92618
TEL: 949.222.1600
WWW.BKVI.COM

PROJECT NO: 129092
DRAWN BY: LEW
CHECKED BY: BAE

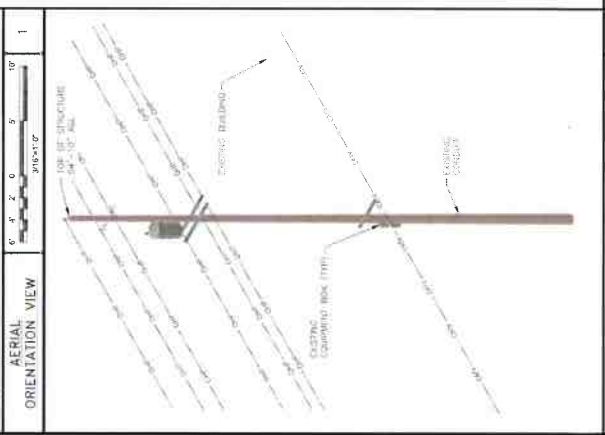
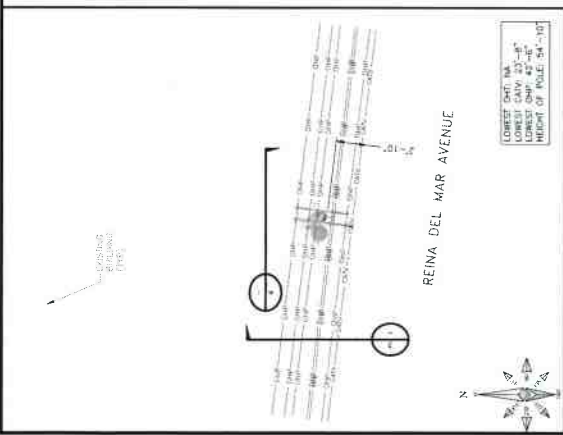
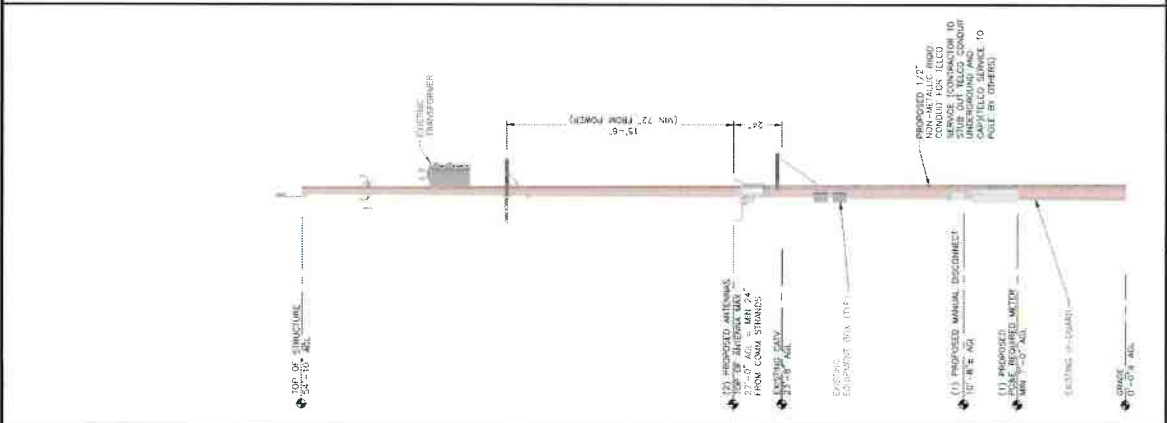
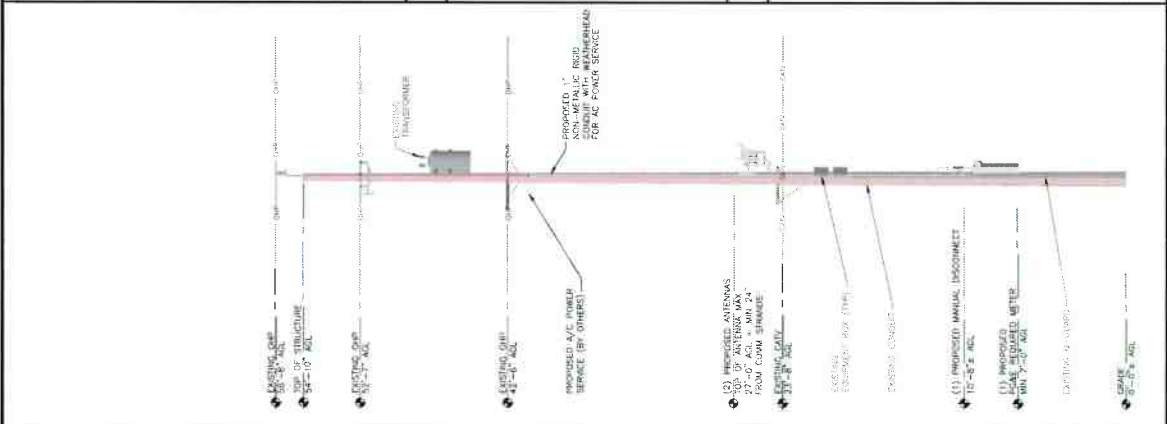
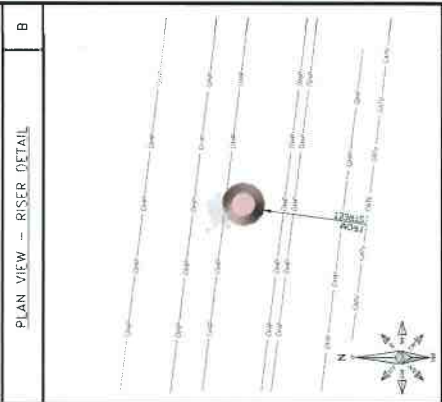
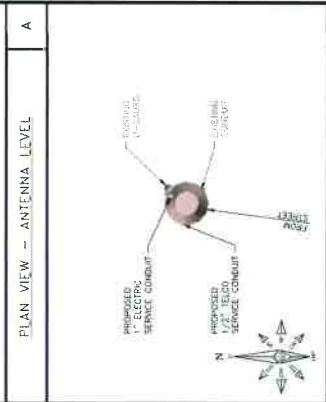
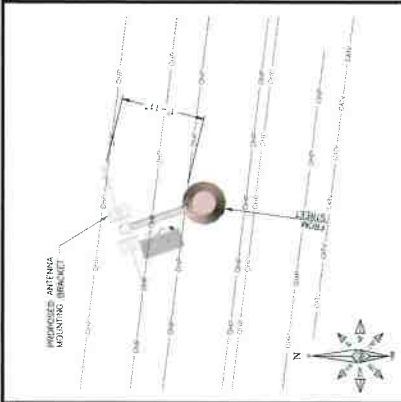
REV	DATE	DESCRIPTION
A	08/29/15	ISSUED FOR REVIEW
B	07/24/15	ISSUED FOR ZONING

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SCC-CC0004-10
PACIFICA
BETWEEN 465' & 477'
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-10
ELEVATIONS

SHEET NUMBER
AP10-1



PLAN VIEW - ANTENNA LEVEL A

PLAN VIEW - RISER DETAIL B

PLAN VIEW - EQUIPMENT LEVEL C

AFTER CONVERSION (LOOKING SOUTH) 4

AFTER CONVERSION (LOOKING EAST) 3

BEFORE CONVERSION (LOOKING NORTHEAST) 2



2000 MARINO AVENUE
SAN RAFAEL, CA 94903



BLACK & VEATCH

2995 OAK ROAD
WALNUT CREEK, CA 94597
(925) 357-0243
PROJECT NO. 125092

PROJECT NO: 125092
DRAWN BY: LEW
CHECKED BY: RAE

REV	DATE	DESCRIPTION
B	07/11/15	REVISION FOR MARKING
A	06/24/15	REVISION FOR MARKING

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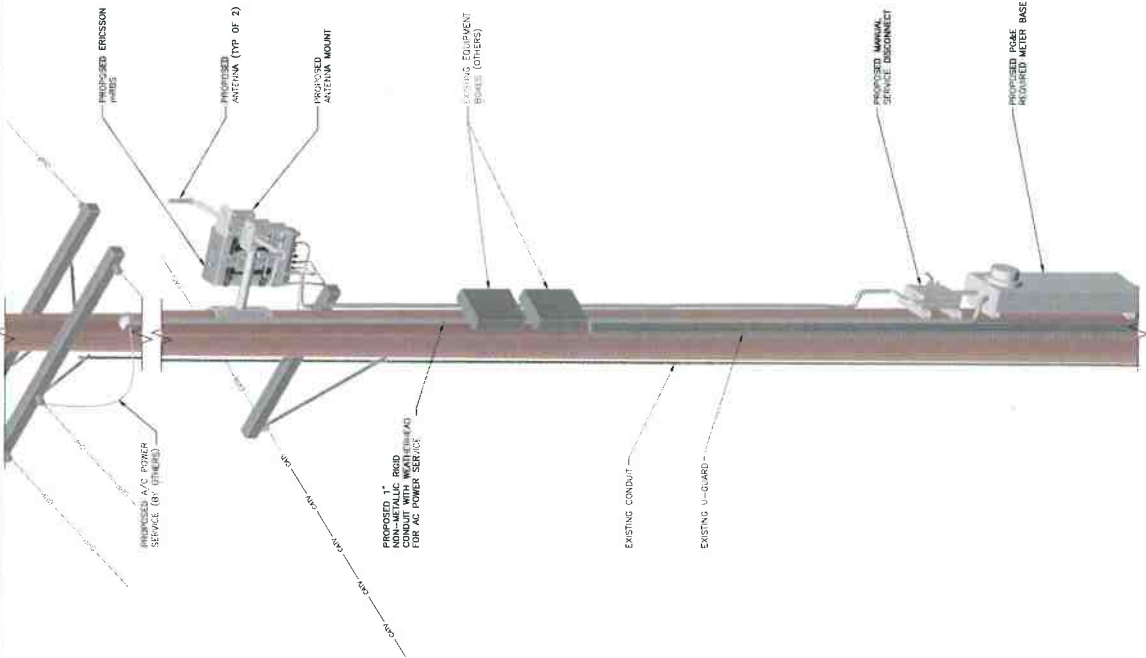
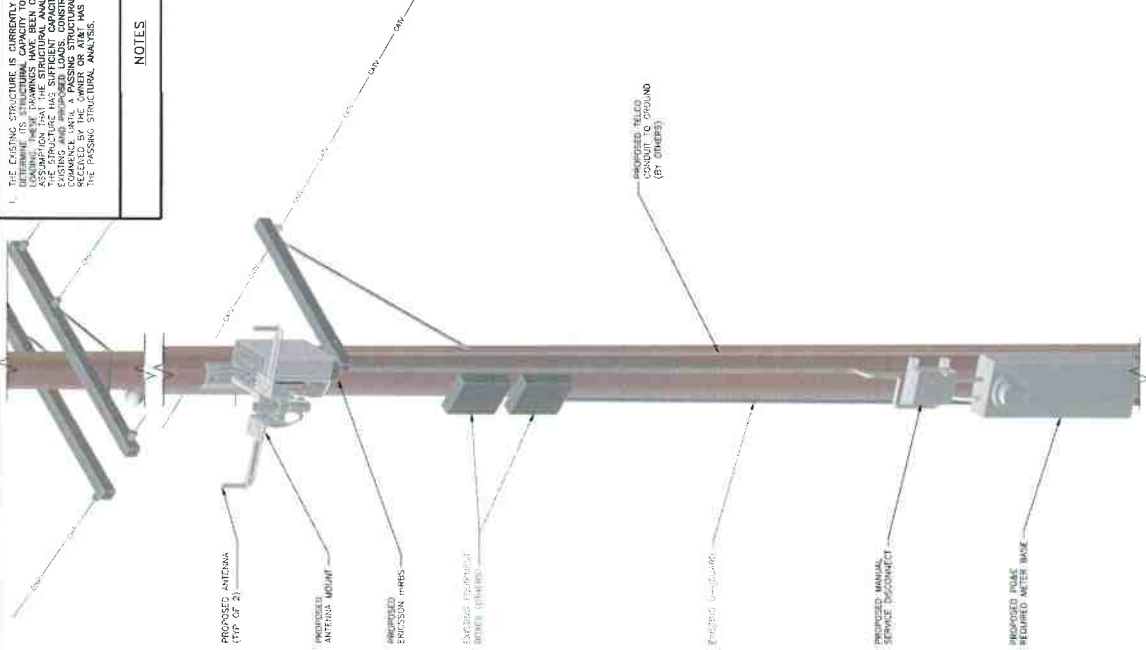
SCC-CC0004-10
PACIFICA
BETWEEN 465 & 477
BEIN DEL MAR AVE
PACIFICA CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-10
ISOMETRIC ELEVATIONS

SHEET NUMBER
AP10-2

1. THE EXISTING STRUCTURE IS CURRENTLY BEING ANALYZED TO DETERMINE IF THE EXISTING STRUCTURE CAN SUPPORT THE LOADS OF THE PROPOSED EQUIPMENT. THE STRUCTURAL ANALYSIS WILL BE BASED ON THE ASSUMPTION THAT THE STRUCTURAL ANALYSIS WILL SHOW THAT THE EXISTING AND PROPOSED LOADS, CONSTRUCTION SHALL NOT EXCEED THE ALLOWABLE STRESS. THE STRUCTURAL ANALYSIS HAS BEEN REVIEWED BY THE ENGINEER AND APPROVED FOR THE PROPOSED STRUCTURAL ANALYSIS.

NOTES



ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHEAST)

ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHWEST)



4800 CHIMNEY SAUVIN
SAN RAFAEL, CA 94933



BLACK & VEATCH

2989 DAK ROAD
WALNUT CREEK, CA 94597
SUITE 400
(925) 327-0243
WWW.BV.COM
A PROFESSIONAL CORPORATION
REGISTERED ENGINEERS OF VARIOUS DISCIPLINES

PROJECT NO: 128002
DRAWN BY: LEW
CHECKED BY: RAE

REV	DATE	DESCRIPTION
9	01/12/16	ISSUED FOR ZONING
8	06/29/16	ISSUED FOR REVIEW

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SCC-CC0004-10
PACIFICA
BETWEEN 465 & 477
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-10
OVERALL SITE PLAN

SHEET NUMBER
AP10-3

THIS DRAWING IS NOT A SITE SURVEY. THE BOUNDARIES OF THE SHOWN SITE RELATES TO THE PARENT PARCEL AND ADJACENT PROPERTIES.



1" = 20'

OVERALL SITE PLAN





PROJECT NO: 128062
 DRAWN BY: LER
 CHECKED BY: BAE

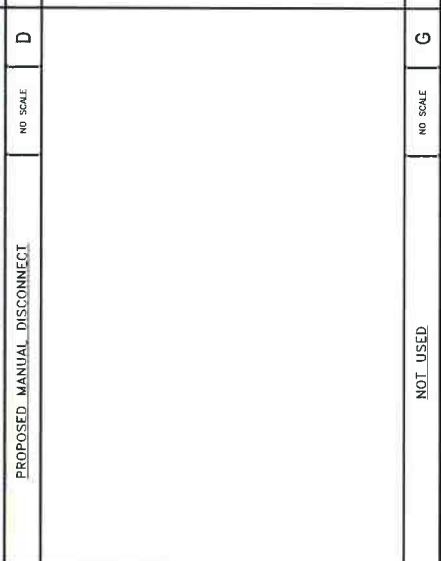
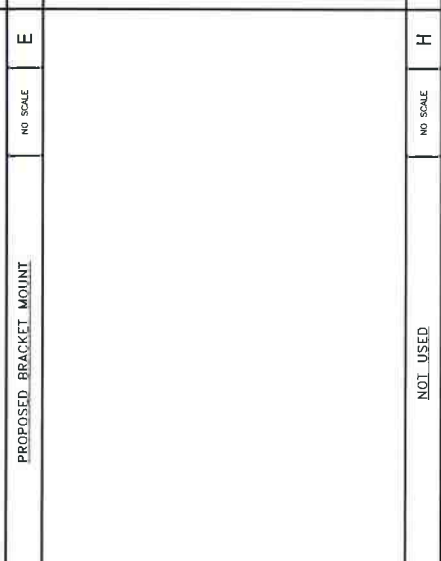
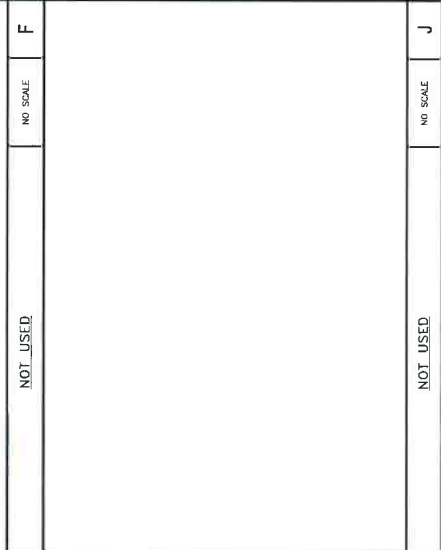
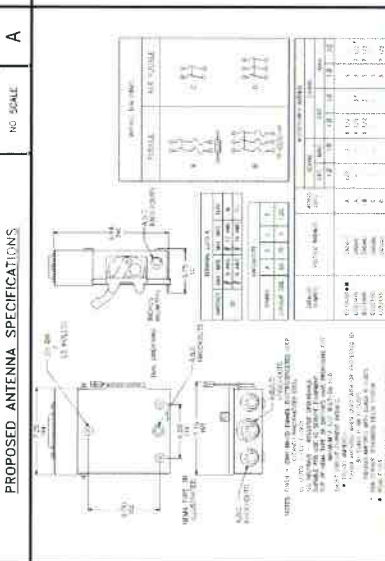
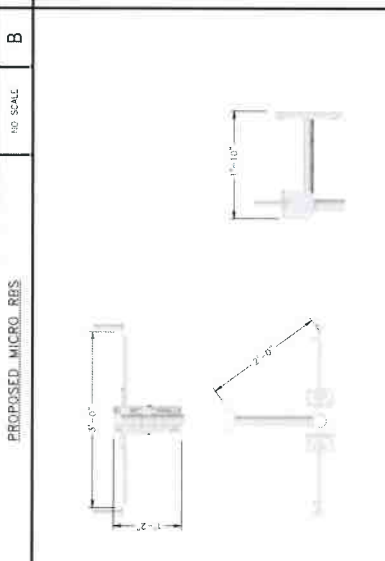
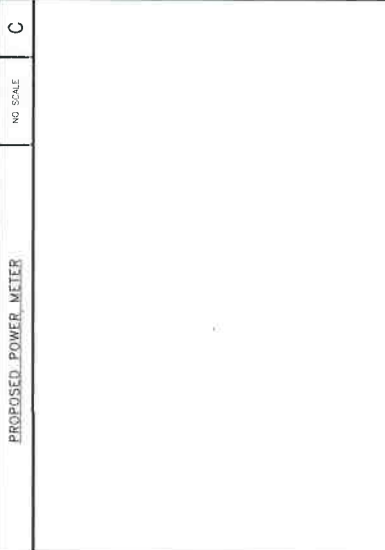
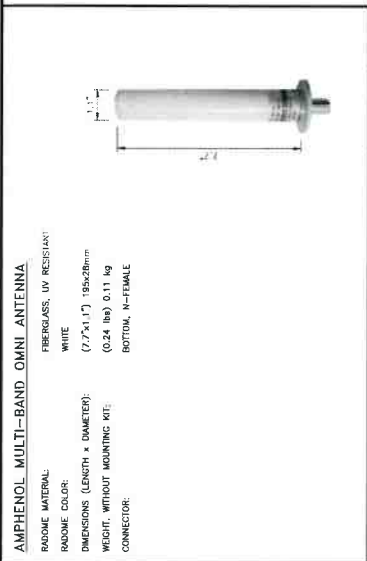
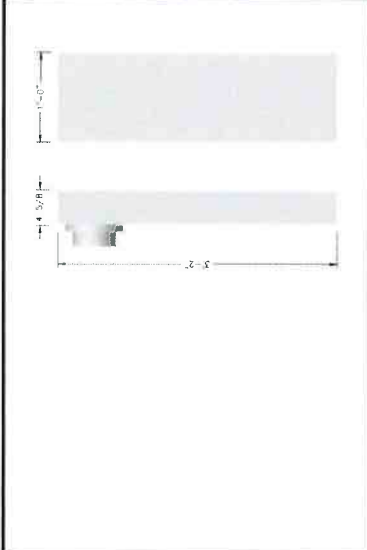
REV	DATE	DESCRIPTION
B	07/17/15	ISSUED FOR ZONING
A	06/29/15	ISSUED FOR REVIEW

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SCC-CC004-10
 PACIFICA
 RETIRED 465 & 477
 REINA DEL MAR AVE
 PACIFICA, CA 94044
 SMALL CELL - ZD

SHEET TITLE
 EQUIPMENT DETAILS
 AND SPECIFICATIONS

SHEET NUMBER
C-1-0



AMPHENOL MULTI-BAND OMNI ANTENNA
 FRIBERGSS, UV RESISTANT
 WHITE
 DIMENSIONS (LENGTH x DIAMETER):
 (7.7'x11') 195x28mm
 WEIGHT, WITHOUT MOUNTING KIT:
 (0.24 lb) 0.11 kg
 CONNECTOR:
 BOTTOM, N-FEMALE

PROPOSED ANTENNA SPECIFICATIONS
 NO SCALE

PROPOSED MANUAL DISCONNECT
 NO SCALE

PROPOSED POWER METER
 NO SCALE

PROPOSED MICRO-RBS
 NO SCALE

PROPOSED BRACKET MOUNT
 NO SCALE

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED



ANA GOMEZ-ABARCA
Sr. Site Acquisition Manager, Telecom Division
2999 Oak Road, Suite 490
Walnut Creek, CA 94598
+1 913-458-9148 | GomezAbarcaA@bv.com@BV.com

July 24, 2015

Tina Wehrmeister
Planning Director
City of Pacifica Planning Department
1800 Francisco Blvd
Pacifica, CA 94044

RECEIVED
JUL 24 2015
Pacifica

Re: Proposed AT&T Mobility Small Cell Installation
Applicant: New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)
Site Address: Between 465 & 477 Reina del Mar Avenue
Site ID: SCC-CC0004-10
Latitude/Longitude: 37.613594, -122.482467

Dear Tina Wehrmeister,

On behalf of New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility ("AT&T"), this letter and attached materials are to apply for a Conditional Use Permit, to install a small cell in the public right-of-way between 465 & 477 Reina del Mar Avenue (Small Cell SCC-CC0004-10).¹ The following is an explanation of the existing site, a project description of the facility, the project purpose and justifications in support of this proposal.

A. Project Description.

The existing site consists of an approximate 54 feet ten inch tall wooden utility pole in the public right-of-way on the south side of between 465 Reina del Mar Avenue. Primary power lines are attached to a cross arm at about 56 feet eight inches and 52 feet seven inches high. The secondary power line is attached to a cross-arm at about 42 feet six inches high. The communication line is attached to the pole at 23 feet eight inches above ground.

AT&T proposes to install two Amphenol omni antennas (7.7" x 1.1") and one remote radio head (17.7"x11.9"x5.3") 27'0" high on the pole. Below that at about 8' AT&T will place a small safety shut-off switch and electricity meter. The equipment will be connected to power and telecommunications lines already on the pole, extended through one-inch conduit. AT&T's proposal is depicted in the attached design drawings and photographic simulation.

This is an unmanned facility that will operate at all times (24 hours per day, 7 days per week) and will be serviced about once per month by an AT&T technician. AT&T's proposal will greatly benefit the area by closing an existing service coverage gap in the area.

B. Project Purpose.

¹ AT&T expressly reserves all rights concerning the city's jurisdiction to assert regulation over the placement of wireless facilities in the public rights-of-way.



The purpose of this project is to provide wireless voice and data coverage to an area where there is currently a significant gap in wireless service coverage. These wireless services include 4G LTE mobile telephone, wireless broadband, emergency 911, data transfers, electronic mail, Internet, web browsing, wireless applications, wireless mapping and video streaming. As explained in the attached Radio Frequency Statement, which includes propagation maps depicting existing and proposed coverage in the vicinity of the proposed small cell, AT&T network engineers have identified a gap in wireless service in the area generally surrounding Reina Del Mar Ave. in Pacifica. The gap is significant because it stretches approximately one mile along the densely populated neighborhoods surrounding Reina Del Mar Avenue, which includes approximately 230 homes and one park. The traffic data available from Google Earth Pro (dated 2004) for Reina del Mar Avenue, which runs through most of the gap area, counts approximately 6,038 vehicles per day. There is inadequate in-building signal strength within this area to provide reliable wireless service, which affect AT&T customers' ability to place and receive voice and data calls within their homes.

To close this significant service coverage gap, AT&T seeks to deploy 12 small cells on existing utility poles within the neighborhood. A small cell is a low-powered cell site, which, when grouped with other small cells, can provide coverage in areas that are otherwise very difficult to cover using traditional macro wireless facilities due to the local topography and mature vegetation. As illustrated in the attached zoning drawings, each small cell consists of low mounted, low profile antennas that will provide 4G LTE service. Although the signal propagated from a small cell antenna spans over a shorter range than a conventional macro site, small cells can be an effective tool to close service coverage gaps in traditionally hard to serve areas, and do with so with a minimal environmental and aesthetic footprint. The proposed small cell subject to this application is a critical part of the 12 small cells needed to close the existing service coverage gap.

C. Project Justification, Design and Placement.

Small Cell SCC-CC0004-10 is an integral part of the overall small cell solution to close the service coverage gap. It is located in a difficult coverage area because of its winding roads and plentiful trees. The coverage area consists of a Pacifica neighborhood off of Reina del Mar Avenue between Ramona Avenue and Winona Avenue and its surrounding areas. SCC-CC0004-10 will cover transient traffic along the roadways and provide in-building service to the surrounding residences as depicted in the propagation maps, which are exhibits to the attached Radio Frequency Statement.

Small Cell SCC-CC0004-10 is the least intrusive means to provide coverage to this area because it uses existing utility infrastructure, adding small equipment without disturbing the character of the neighborhoods served. Deploying a small cell onto this existing pole minimizes any visual impact by utilizing an inconspicuous location. By installing antennas and equipment onto this existing pole, AT&T does not need to propose any new infrastructure in this coverage area. Small Cell SCC-CC0004-10 should be barely noticeable amidst the backdrop of trees and terrain.

The small cell RF emissions are also much lower than the typical macro site and appropriate for the area, and they are fully compliant with the FCC's requirements for limiting human exposure to radio frequency energy. The attached radio frequency engineering analysis provided by Hammett & Edison, Inc., Consulting Engineers, confirms that the proposed equipment will operate well within (and actually far below) all applicable FCC public exposure limits. The facility will also comply with California Public Utility Commission (CPUC) General Orders 95 (concerning overhead line design, construction and maintenance) and 170 (CEQA review) that govern utility use in the public right-of-way.



As proposed, Small Cell SCC-CC0004-10 is the least intrusive option because the antennas are nestled amidst the backdrop of large trees and situated so as to minimize any view impact. Also the proposed location is a good coverage option because it sits at a location from which point AT&T can adequately propagate its wireless signal.

The proposed location is approximately equidistant from other small cells that AT&T plans to place in surrounding hard-to-reach areas, so that service coverage can be evenly distributed. There are a number of trees near the proposed site that will allow the installation to blend in with the backdrop of foliage. AT&T identified potential alternate locations and performed a comprehensive alternative site analysis on other utility poles in this area. As set forth in the Alternative Site Analysis, none of these sites are as viable from a construction and/or coverage perspective to meet AT&T's project objectives or from an aesthetics perspective to meet the City's Guidelines. The Alternative Site Analysis is included within the application materials for the Use Permit.

Drawings, an AT&T Radio Frequency Statement, propagation maps, a photographic simulation, and a radio-frequency engineering analysis are included with this packet.

As this application seeks authority to install a wireless telecommunication facility, the FCC's Shot Clock Order² requires the city to issue its final decision on AT&T's application within 150 days. We respectfully request expedited review and approval of this application. Feel free to contact me if you have any questions. Thank you.

Best Regards,

Ana Gomez-Abarca
Sr. Site Acquisition Manager
For AT&T Mobility

² See Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B), WT Docket No. 08-165, Declaratory Ruling, 24 F.C.C.R. 13994 (2009).



at&t



PHOTOGRAPHIC SIMULATION

RECEIVED
JUL 24 2015
City of Pacifica

PROPOSED SMALL CELL SITE

SITE NUMBER: SCC-CC0004-10

SITE NAME: PACIFICA

SITE ADDRESS: BETWEEN 465 & 477
REINA DEL MAR AVE
PACIFICA, CA 94044

DATE: 07/24/15

APPLICANT: AT&T WIRELESS

CONTACT: ANA GOMEZ-ABARCA
BLACK & VEATCH
(913) 458-9148

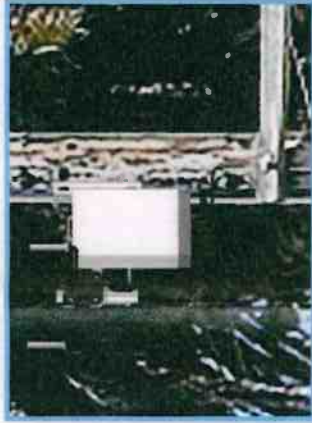


The included Photographic Simulation(s) are intended as visual representations only and should not be used for construction purposes. The materials represented within the included Photographic Simulation(s) are subject to change.



at&t

VIEW 1



EXISTING CONDITIONS



PHOTOGRAPHIC SIMULATION

PROPOSED AT&T
SMALL CELL
EQUIPMENT

PROPOSED PG&E
METER AND SERVICE
DISCONNECT



at&t

VIEW 2



EXISTING CONDITIONS



PROPOSED AT&T
SMALL CELL
EQUIPMENT

PROPOSED PG&E
METER AND SERVICE
DISCONNECT

PHOTOGRAPHIC SIMULATION

**AT&T Mobility • Small Cell No. SCC-CC0004-10
465 and 477 Reina Del Mar Avenue • Pacifica, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 465 and 477 Reina Del Mar Avenue in Pacifica, California, for compliance with appropriate guidelines limiting sound levels from the installation.

Executive Summary

AT&T proposes to install a new small cell on the utility pole located near 465 and 477 Reina Del Mar Avenue in Pacifica, consisting of two antennas and four equipment boxes on the pole. Noise from the proposed operations will comply with the pertinent noise limits.

Prevailing Standard

The City of Pacifica identifies several prohibited noise sources in Title 5 Chapter 10 of its Municipal Code, though fan noise such as is emitted from wireless telecommunications base stations is not included. Title 9 Chapter 4 Article 26 of the Pacifica Municipal Code addresses the siting of such base stations, “to minimize the potential health, safety, and aesthetic impacts of wireless communications facilities,” but does not address or limit noise levels. Therefore, for the purpose of this study, the limits set forth in the County of San Mateo General Plan are referenced. Chapter 16 Section II.A.I.a (“Noise Limitations”) reads in pertinent part, “State standards have set ... 70 CNEL from multiple sources as the maximum external noise level compatible with ordinary residential use.”

The composite Community Noise Equivalent Level (“CNEL”) to be used for evaluation of noise is an average over 24 hours, with a 5 dBA penalty applied to noise levels during evening hours (7 pm to 10 pm) and a 10 dBA penalty at night (10 pm to 7 am) to reflect typical residential conditions, where noise is more readily heard during evening and nighttime hours. By definition, CNEL will be 6.7 dBA higher than the constant level of a continuous noise source.

Figure 1 describes the calculation methodology used to determine applicable noise levels for evaluation against the prevailing standard.

General Facility Requirements

Wireless telecommunications facilities (“cell sites”) typically consist of two distinct parts: the electronic base transceivers, that are connected to traditional wired telephone lines, and the antennas, that send wireless signals created by the transceivers out to be received by individual subscriber units.

**AT&T Mobility • Small Cell No. SCC-CC0004-10
465 and 477 Reina Del Mar Avenue • Pacifica, California**

The cabinets are often located outdoors and are connected to the antennas by coaxial cables. Some cabinets require fans to cool the electronics inside; such cooling is often integrated into the cabinets.

Site & Facility Description

According to information provided by AT&T, including zoning drawings by Black and Veatch, dated June 23, 2015, and to additional information provided by AT&T, four cabinets are to be mounted on the side of the utility pole located near 465 and 477 Reina Del Mar Avenue in Pacifica. Beginning at least 7 feet above ground on the pole would be a meter, and about 3½ feet above it, a disconnect and breaker panel. Higher up on the pole, at about 26½ feet above ground, would be a Ciena Model 3931 Service Delivery Switch and Ericsson Model RBS 6501 cabinet; this cabinet is the transceiver described above, that handles the conversions of signal format between wired and wireless.

Study Results

Three of the equipment cabinets do not emit noise, including the Ciena Model 3931 Service Delivery Switch, which is passively cooled by the natural convective flow of air across its cooling fins; no fans or other moving elements are installed. For the fourth cabinet, Ericsson reports that the maximum noise level is 27 dB[A] at normal temperatures and, when the temperature is above 122°F, the noise level is 47 dB[A], both measured at a reference distance of 1.7 meters.

The County's most restrictive limit of 70 dBA CNEL is reached only within 1.1 inches of the cabinets at normal temperatures, and within 11 inches at temperatures above 122°F. Considering the heights of the cabinets on the pole and their distance from the nearest property lines, the noise level at any receiving property would be well below the County's limits.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of this AT&T Mobility small cell to be located near 465 and 477 Reina Del Mar Avenue in Pacifica, California, will comply with the pertinent standards limiting acoustic noise emission levels.



**AT&T Mobility • Small Cell No. SCC-CC0004-10
465 and 477 Reina Del Mar Avenue • Pacifica, California**

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. 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.



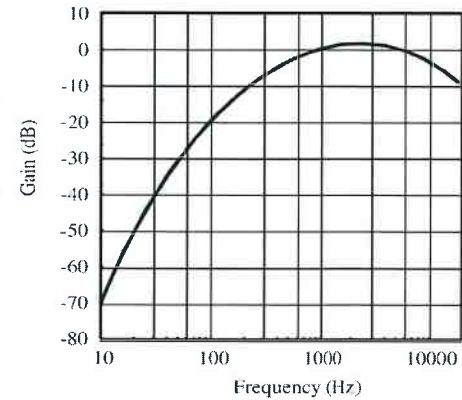
William F. Hammett

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

July 28, 2015

Noise Level Calculation Methodology

Most municipalities and other agencies specify noise limits in units of dBA, which is intended to mimic the reduced receptivity of the human ear to Sound Pressure (“L_P”) at particularly low or high frequencies. This frequency-sensitive filter shape, shown in the graph to the right as defined in the International Electrotechnical Commission Standard No. 179, the American National Standards Institute Standard No. 5.1, and various other standards, is also incorporated into most calibrated field test equipment for measuring noise levels.



30 dBA	library
40 dBA	rural background
50 dBA	office space
60 dBA	conversation
70 dBA	car radio
80 dBA	traffic corner
90 dBA	lawnmower

The dBA units of measure are referenced to a pressure of 20 μPa (micropascals), which is the threshold of normal hearing. Although noise levels vary greatly by location and noise source, representative levels are shown in the box to the left.

Manufacturers of many types of equipment, such as air conditioners, generators, and telecommunications devices, often test their products in various configurations to determine the acoustical emissions at certain distances. This data, normally expressed in dBA at a known reference distance, can be used to determine the corresponding sound pressure level at any particular distance, such as at a nearby building or property line. The sound pressure drops as the square of the increase in distance, according to the formula:

$$L_P = L_K + 20 \log(D_K/D_P),$$

where L_P is the sound pressure level at distance D_P and L_K is the known sound pressure level at distance D_K.

Individual sound pressure levels at a particular point from several different noise sources cannot be combined directly in units of dBA. Rather, the units need to be converted to scalar sound intensity units in order to be added together, then converted back to decibel units, according to the formula:

where L_T is the total sound pressure level and L₁, L₂, etc are individual sound pressure levels.

$$L_T = 10 \log (10^{L_1/10} + 10^{L_2/10} + \dots),$$

Certain equipment installations may include the placement of barriers and/or absorptive materials to reduce transmission of noise beyond the site. Noise Reduction Coefficients (“NRC”) are published for many different materials, expressed as unitless power factors, with 0 being perfect reflection and 1 being perfect absorption. Unpainted concrete block, for instance, can have an NRC as high as 0.35. However, a barrier’s effectiveness depends on its specific configuration, as well as the materials used and their surface treatment.





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PROJECT

JUL 24 2015

City of Pacifica

Small Cell SCC-CC0004-10 – Between 465 and 477 Reina Del Mar Ave. Pacifica, California Alternative Site Analysis Conditional Use Permit Request

ATTACHMENT H



On the map above, the proposed AT&T wireless facility in the public right-of-way between 465 and 477 Reina Del Mar Avenue (37.613594°, -122.482467°) is indicated as Small Cell “SCC-CC0004-10” The 9 alternative locations that AT&T analyzed are marked by pins AP10B, AP10C, AP10D, AP10E, AP10F, AP10G, AP10H, AP10I and AP10J.

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Small Cell SCC-CC0004-10 – Proposed Location

- The location for AT&T's proposed wireless facility (Small Cell SCC-CC0004-10) is in the public right-of-way at a joint utility pole identified by pole number 110054119 between 465 and 477 Reina Del Mar Avenue. (37.613594°, -122.482467°)
- AT&T evaluated this site and nearby alternatives to verify that the selected site is the least intrusive means to close AT&T's significant service coverage gap.
- AT&T carefully selected this location to close a precise section of the service coverage gap. The small cells are related to each other, and if you move one it may affect others.



Small Cell AP10B – Alternative 1



- Small Cell AP10B (Alternative 1) is in the public right-of-way at a joint utility pole located at the intersection of Reina Del Mar Avenue and Winona Avenue. (37.613583°, -122.481959°)
- The pole location is a viable alternative to close this portion of the service coverage gap, but is more intrusive than the current proposal because the pole is located at an intersection, visually exposed to two streets.



Small Cell AP10C – Alternative 2



- Small Cell AP10C (Alternative 2) is in the public right-of-way at a joint utility pole located next to 460 Reina Del Mar Avenue. (37.613335°, -122.482855°)
- The pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP10D – Alternative 3



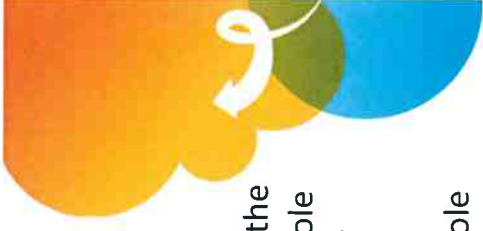
- Small Cell AP10D (Alternative 3) is in the public right-of-way at a joint utility pole located next to 612 Reina Del Mar Avenue. (37.613592°, -122.482793°)
- The pole location is a viable alternative to close this portion of the service coverage gap, but is more intrusive than the current proposal because the pole is located at an intersection, visually exposed to two streets.



Small Cell AP10E – Alternative 4



- Small Cell AP10E (Alternative 4) is in the public right-of-way at a joint utility pole located in front of 529 Reina Del Mar Avenue. (37.613521°, -122.481493°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4)(i) which prohibits wireless attachments on an existing structure located within the “building profile” of an existing residential structure.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP10F – Alternative 5



- Small Cell AP10F (Alternative 5) is in the public right-of-way at a joint utility pole located in front of 225 Winona Avenue. (37.612065°, -122.481501°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4)(i) which prohibits wireless attachments on an existing structure located within the “building profile” of an existing residential structure.
- Further, The pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP10G – Alternative 6



- Small Cell AP10G (Alternative 6) is in the public right-of-way at a joint utility pole located in front of 175 Winona Avenue. (37.614155°, -122.481930°)
- The pole location and pole height is not optimal to close this portion of the service coverage gap.



Small Cell AP10H – Alternative 7



- Small Cell AP10H (Alternative 7) is in the public right-of-way at a joint utility pole located next to 217 Ramona Avenue. (37.612997°, -122.482877°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4)(i) which prohibits wireless attachments on an existing structure located within the “building profile” of an existing residential structure.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP10I – Alternative 8



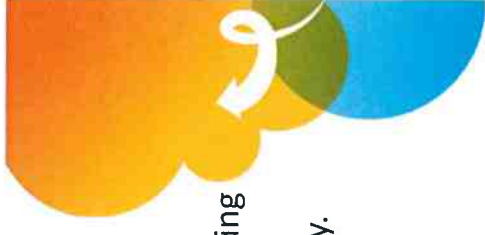
- Small Cell AP10I (Alternative 8) is in the public right-of-way at a joint utility pole located in front of 443 Reina Del Mar Avenue. (37.613622° , -122.483309°)
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would likely violate CPUC General Order-95 Regulation because all four quadrants of the pole appear occupied.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP10J – Alternative 9



- Small Cell AP10J (Alternative 9) is an existing tower located at the Pacifica Police Department at 2075 Pacific Coast Highway. (37.615393° , -122.484573°)
- Macro Antennas mounted at estimated available heights on the existing telecommunications tower would fail to close the significant service coverage gap, and would therefore require a new taller, more intrusive structure. Further, without a new taller structure, the height of neighboring buildings and trees surrounding this property will block antenna signals contributing to the inability to use this location to close AT&T's significant service coverage gap.



Small Cell SCC-CC0004-10 – Alternative Site

Analysis Conclusion



Based on AT&T’s analysis of alternative sites, and per the City of Pacifica Zoning Ordinance Article 26, qualifying the installation as a “minor antenna”, the proposed location between 465 and 477 Reina Del Mar Avenue (Small Cell SCC-CC0004-10) is the least intrusive means to close AT&T’s significant service coverage gap.



SCC-CC0004-10: 37.613594°, -122.482467° (Proposed Site)

AP10B: 37.613583°, -122.481959°

AP10C: 37.613335°, -122.482855°

AP10D: 37.613592°, -122.482793°

AP10E: 37.613521°, -122.481493°

AP10F: 37.612065°, -122.481501°

AP10G: 37.614155°, -122.481930°

AP10H: 37.612997°, -122.482877°

AP10I: 37.613622°, -122.483309°

AP10J: 37.615393°, -122.484573°

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JUL 24 2015
City of Pacifica

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 465 and 477 Reina Del Mar Avenue in Pacifica, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

AT&T proposes to install two omnidirectional antennas on a tall utility pole located near 465 and 477 Reina Del Mar Avenue in Pacifica. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.35	0.47
[most restrictive frequency range]	30–300	1.00	0.20

Power line frequencies (60 Hz) are well below the applicable range of these standards, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables.

AT&T Mobility • Small Cell No. SCC-CC0004-10
465 and 477 Reina Del Mar Avenue • Pacifica, California

A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by AT&T, including drawings by Black and Veatch, dated June 23, 2015, that carrier proposes to install a new small cell on the existing 55-foot utility pole sited in the public right-of-way in front of the residences located at 465 and 477 Reina Del Mar Avenue in Pacifica. Two Amphenol Model 7825700 omnidirectional antennas would be mounted with no downtilt at an effective height of about 26½ feet above ground. The maximum effective radiated power in any direction would be 10 watts in the 700 MHz frequency band.

Study Results

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed AT&T operation is calculated to be 0.0020 mW/cm², which is 0.41% of the applicable public exposure limit. The maximum calculated level at any nearby residence is 0.0050 mW/cm², which is 1.0% of the applicable public limit.

Recommended Mitigation Measures

Due to their mounting location and height, the AT&T antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. RF exposure levels are calculated to exceed the occupational limit out to less than 18 inches in front of the antennas, and so can be considered intrinsically compliant with FCC

**AT&T Mobility • Small Cell No. SCC-CC0004-10
465 and 477 Reina Del Mar Avenue • Pacifica, California**

occupational exposure guidelines. To prevent exposures in excess of FCC guidelines, it is recommended that training be provided to all authorized personnel needing to work within 3 feet directly in front of the antennas, including employees and contractors of AT&T and of the utility company, and that explanatory signs* be posted on the pole at or below the antennas, readily visible from any angle of approach to such persons needing to work within that distance.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of this AT&T small cell near 465 and 477 Reina Del Mar Avenue in Pacifica, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Training authorized personnel and posting explanatory signs is recommended to establish compliance with occupational exposure limits.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-20309, which expires on March 31, 2017. This work has been carried out under her direction, and all statements are true and correct of her own knowledge except, where noted, when data has been supplied by others, which data she believes to be correct.



Andrea L. Bright

Andrea L. Bright, P.E.
707/996-5200

July 24, 2015

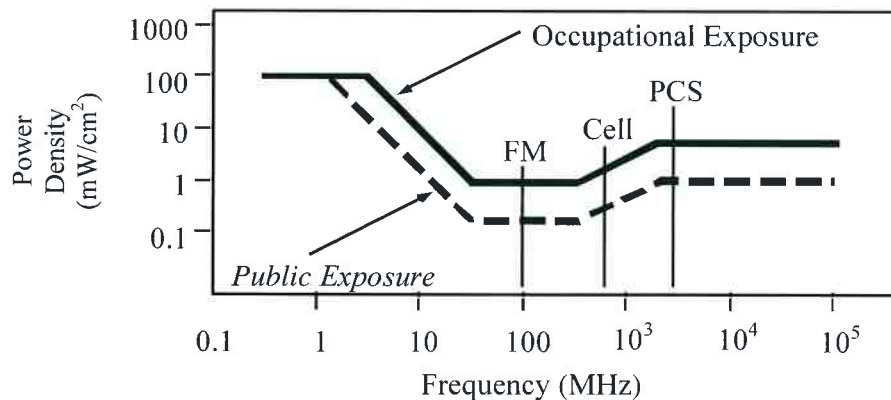
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and

P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.





ANA GOMEZ-ABARCA
Sr. Site Acquisition Manager, Telecom Division
2999 Oak Road, Suite 490
Walnut Creek, CA 94597
+1.913-458-9148 | GomezAbarcaA@BV.com

November 19, 2015

Christian Murdock, AICP
Associate Planner
City of Pacifica Planning Department
1800 Francisco Blvd
Pacifica, CA 94044

Re: Proposed AT&T Mobility Small Cell Installation
Applicant: New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)
Planning Application: UP-63-15
Site Address: Between 465 & 477 Reina del Mar Avenue
Site ID: SCC-CC0004-10
Latitude/Longitude: 37.613594, -122.482467

Dear Mr. Murdock,

This letter is written on behalf of New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility) in response to your email dated November 18, 2015 requesting a written explanation of how we are complying with the requirements of Pacifica Municipal Code Sec. 9-4.2608(b)(1), quoted below:

Pacifica Municipal Code Sec. 9-4.2608(b)(1):

“(b) Design-related standards.

- (1) All wireless communication facilities shall, to the maximum extent practicable, incorporate best practices to achieve concealment and stealth of antennas, equipment, and support structures. Further, all wireless communications facilities shall be screened to the fullest extent possible and located to minimize visibility from surrounding areas and private or public rights-of-way. In addition to the requirements of this subsection, wireless communications facilities within a private or public right-of-way shall conform to the standards of subsection (e).”

The two proposed 7.7” omni antennas and micro RBS will be placed on a proposed bracket mount on an existing utility pole. The bracket mount will be placed above line of sight. This equipment will be painted brown to blend in with the existing utility pole. The proposed PG&E meter will be placed with the required 7’ clearance.

At the time of building permit submittal the construction drawings will include a note reflecting AT&T’s commitment to paint the equipment brown.

Painting the equipment brown is less intrusive and visible than alternative concealment options such as a radome or a slimline monopole. A radome, or metal canister, would need to be wide enough to surround the

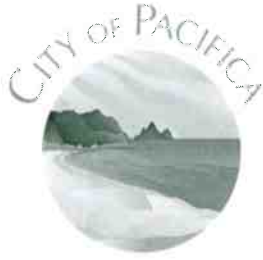


pole and cover the proposed bracket, omni antennas and RRU. This radome would extend past the maximum 2' from the point of attachment limit set in Sec. 9-4.2608(e)(1). In addition, a slimline monopole would require placement of a new pole adjacent to an existing utility pole. This would be more visually intrusive than the current proposal.

Feel free to contact me if you have any questions. Thank you.

Best Regards,

Ana Gomez-Abarca
Sr. Site Acquisition Manager
For AT&T Mobility



Scenic Pacifica
Incorporated Nov. 22, 1957

PLANNING COMMISSION Staff Report

DATE: December 7, 2015

FILE: UP-64-15

ITEM: 2.i

PUBLIC NOTICE: Notice of Public Hearing was published in the Pacifica Tribune on November 25, 2015, was mailed to 1,258 property owners and occupants within the Vallemar neighborhood, and was posted at the project site.

APPLICANT: Ana Gomez, agent for New Cingular Wireless (d.b.a. AT&T Mobility)
2999 Oak Road, Suite 490
Walnut Creek, CA 94597
(913) 458-9148

OWNER: Pole: Joint ownership through Northern California Joint Pole Association (NCJPA)
Site: Public right-of-way

PROJECT LOCATION: Utility pole within the public right-of-way adjacent to 139 Berendos Avenue (APN 018-114-120) – Vallemar

PROJECT DESCRIPTION: Construct a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way.

SITE DESIGNATIONS: General Plan: Low Density Residential (LDR)
Zoning: R-1 (Single-Family Residential)

RECOMMENDED CEQA STATUS: Class 3 Categorical Exemption, Section 15303.

ADDITIONAL REQUIRED APPROVALS: None. Subject to appeal to the City Council.

RECOMMENDED ACTION: Approve as conditioned.

PREPARED BY: Christian Murdock, Associate Planner

PROJECT SUMMARY, RECOMMENDATION, AND FINDINGS

PROJECT SUMMARY

1. General Plan, Zoning, and Surrounding Land Uses

Section 1 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

2. Municipal Code

Section 2 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

3. Project Description

A. Antennas and Equipment

The applicant proposes to install a WCF on an existing utility pole adjacent to a single-family residence. The utility pole is 29'-7" tall and contains electrical, cable, and telephone utility wires. The antenna mounting bracket, antennas, and remote radio unit (RRU) will be located approximately 17'-5" above ground while the electrical meter and disconnect will be located approximately 7'-0" above ground. The proposed antennas and equipment will be connected via nonmetallic conduit installed along the pole face. The antenna mounting bracket will mount on the face of the utility pole and the mounting arm, which holds the antennas, will project perpendicular from the pole by 2'-0". Full details of the proposed facility are shown in Attachment D and described in the applicant's letter of explanation, Attachment E. Photosimulation renderings providing a visual approximation of the scale and design of the proposed facility are included in Attachment F.

The facility type proposed by the applicant is a new design which features a highly-compact form factor. Unlike traditional facilities featuring multiple large panel antennas up to six feet in height with large ground-mounted equipment enclosures, the proposed facility will include two cylindrical antennas measuring 7.7"-tall by 1.1"-wide. The facility will include no ground-mounted equipment; rather, one small equipment cabinet measuring 17.7"-tall by 11.9" wide by 5.3" deep will be installed on the pole along with one 3'-2"-tall by 1'-0" wide by 4'-1" deep electrical meter. Electrical and telecommunications connections will be made through existing services on the pole, and will require no trenching on the ground. The small size of the facilities also means there is no need for large equipment cabinets with air conditioners or backup generators, which can often generate noise in the immediate vicinity. The applicant has prepared a noise analysis to demonstrate the very low levels of noise generated by the proposed WCF (Attachment G).

The facility type proposed by the applicant incorporates a low power antenna design which services a small area in the immediate vicinity of the site. The lower power results in a smaller facility form factor, but also requires a greater number of sites throughout the coverage area. The applicant has proposed a total of 12 sites throughout the Vallemar neighborhood, inclusive of the subject site, which are being processed as individual use permit applications given the independent function of each site and the unique characteristics of each proposed location.

B. Alternative Site Analysis

The applicant assessed several alternatives before deciding to pursue the development of the subject site (Attachment H). The alternative sites assessed included other utility poles in the vicinity of the project site as well as an existing “macro site,” or large-scale tower, located at the west end of the Vallemar neighborhood at the Pacifica Police Department (2075 Coast Highway). None of the alternative utility poles were suitable candidates due to one or more of the following reasons: increased visibility based on their location; unavailability due to all pole quadrants being occupied by existing utility equipment; violation of a zoning standard; pole height will not meet coverage objectives; and/or, the location of the pole not meeting the applicant’s coverage objective for filling-in a service gap.

The existing macro site at the Pacifica Police Department also was an unsuitable candidate for facility construction due to the challenging topography of the Vallemar neighborhood. There are a number of elevation changes within the neighborhood which result in obstructions in the line-of-sight between the macro site and the coverage objectives. The applicant’s modeling showed that even a new tower of 200 feet in height could not achieve the desired coverage objectives.

Based upon the location of other existing utility poles available for mounting, the impact of neighborhood topography on line-of-sight to the existing macro site at the Pacifica Police Department, and an assumption that construction of a new pole anywhere in the Vallemar neighborhood would be undesirable, the applicant concluded that locating on the subject utility pole was the least visually obtrusive facility design which could also meet its coverage objectives.

C. Article 26 Wireless Communications Facility Standards

Section 3.C of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

4. Required Findings

Section 4 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

5. Public Comments Received

Section 5 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

6. CEQA Recommendation

Section 6 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

7. Staff Analysis

The topography of the Vallemar neighborhood is the dominant factor driving the applicant's siting decisions. Existing wireless telephone and data communications coverage is poor throughout much of the neighborhood. The result is that wireless communications service is nonexistent within many homes and is marginally better outdoors. Access to reliable wireless telephone and data communications is an essential component of modern neighborhoods as technological trends continue away from wired communications devices toward the greater flexibility and mobility of wireless communications solutions.

The applicant's chosen facility design – locating on an existing utility pole support structure – is the least visually obtrusive design alternative available. In addition, the antenna and equipment configuration proposed by the applicant are very small, further limiting visual impacts. The applicant will also paint the antennas and equipment to closely match the existing utility pole. Combined, these measures have resulted in a facility design which meets the applicant's coverage objectives while respecting and preserving the existing neighborhood character. Based on the evidence contained in the record and analyzed by staff, it is staff's opinion that the Planning Commission can make all findings required for project approval.

8. Summary:

Staff has determined that, as conditioned, the project will satisfy all zoning regulations and applicable development standards, will be consistent with the General Plan, and which, on balance, is consistent with the Design Guidelines. The project will result in the least impactful project design which will also meet the applicant's coverage objectives. The proposed project will retain and enhance the character of the Vallemar neighborhood and provide an important communications link to City information, emergency services, and commerce. Thus, staff recommends approval of the project subject to the conditions in Exhibit A of the Resolution.

COMMISSION ACTION

MOTION FOR APPROVAL:

Move that the Planning Commission find the project is exempt from the California Environmental Quality Act; **APPROVE** Use Permit UP-64-15 by adopting the attached resolution, including conditions of approval in Exhibit A; and, incorporate all maps and testimony into the record by reference.

Attachments:

- A. Land Use and Zoning Exhibit
- B. Resolution of Approval
- C. Exhibit A to Resolution of Approval – Conditions of Approval
- D. Site Plan, Floor Plan, and Elevations
- E. Applicant's letter of explanation
- F. Photosimulation renderings
- G. Noise analysis
- H. Alternative site analysis
- I. Radiofrequency (RF) emissions calculations
- J. Alternatives for concealment and stealth of antennas, equipment, and support structure
- K. Reference Attachment K to the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, which is hereby incorporated by reference

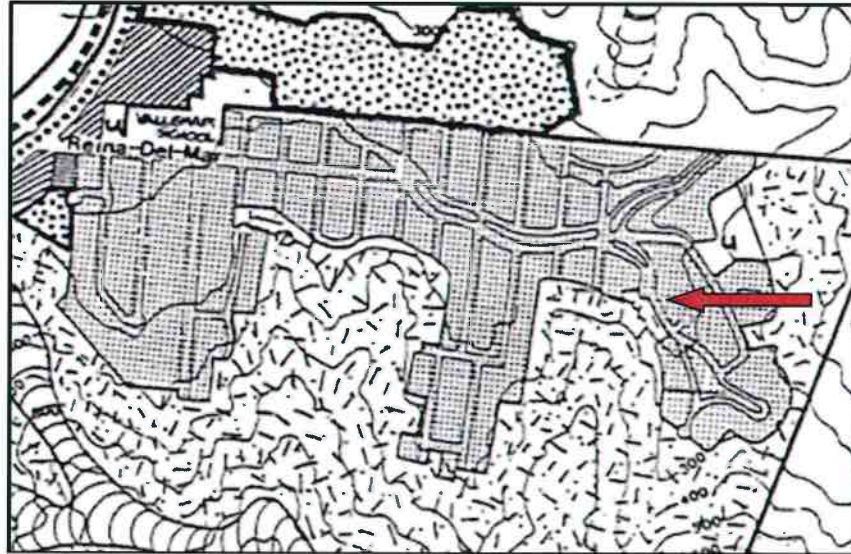
Land Use & Zoning Exhibit

City of Pacifica Planning Department

General Plan Diagram

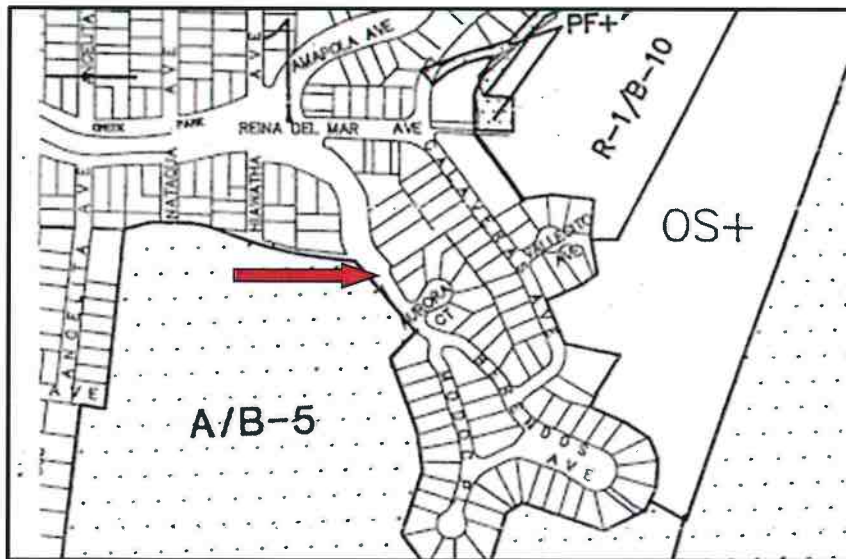
Neighborhood: Vallemar

Land Use Designation: Low Density Residential



Zoning Map Diagram

Zoning District: R-1 (Single-Family Residential)



RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PACIFICA APPROVING USE PERMIT UP-64-15, SUBJECT TO CONDITIONS, FOR A WIRELESS COMMUNICATIONS FACILITY ON AN EXISTING UTILITY POLE IN THE PUBLIC RIGHT-OF-WAY WITHIN THE R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICT ADJACENT TO 139 BERENDOS AVENUE (APN 018-114-120), AND FINDING THE PROJECT EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA).

Initiated by: Ana Gomez, agent for New Cingular Wireless (d.b.a. AT&T Mobility)
("Applicant").

WHEREAS, an application has been submitted to construct a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 139 Berendos Avenue (APN 018-114-120); and

WHEREAS, construction of the proposed wireless communications facility requires approval of a use permit prior to the issuance of a building permit because the project site is within the public right-of-way; and

WHEREAS, the Planning Commission of the City of Pacifica did hold a duly noticed public hearing on December 7, 2015, at which time it considered all oral and documentary evidence presented, and incorporated all testimony and documents into the record by reference.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Pacifica does hereby make the following findings pertaining to Use Permit UP-64-15:

1. That the establishment, maintenance, or operation of the use or building applied for will not, under the circumstances of the particular case, be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.
 - A. The project will require a building permit prior to construction. The building permit process includes a detailed plan review for building and electrical code compliance, as well as field inspections of the work prescribed in the approved project plans to verify proper performance of the work. This will ensure safe installation of the proposed wireless communications facility. The project approval contains a condition of approval which requires the applicant to obtain a building permit prior to installation of the wireless communications facility.
 - B. The applicant has demonstrated its facility will comply with radiofrequency (RF) emissions standards established by the Federal Communications Commission

(FCC). Since the applicant has provided relevant information prepared by a qualified professional engineer to demonstrate compliance with FCC RF emissions standards, the project must be considered safe for the public in terms of RF emissions.

- C. The applicant has submitted an analysis prepared by a qualified professional engineer demonstrating that the proposed wireless communications facility will not generate noise that is objectionable or harmful to persons in the vicinity of the facility. Therefore, any noise generated by the facility will be safe for the public.
 - D. Based on the information provided by the applicant, City staff's analysis of that and other information, and the conditions of approval proposed for this project, the project will not be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.
2. That the use or building applied for is consistent with the applicable provisions of the General Plan and other applicable laws of the City and, where applicable, the local Coastal Plan.
- A. The proposed project is consistent with the following provisions of the General Plan and other laws of the City. Since the project is not within the Coastal Zone, the provisions of the Local Coastal Plan do not apply.
 - i. Noise Element, Policy No. 2: Establish and enforce noise emission standards for Pacifica which are consistent with the residential character of the City and environmental, health, and safety needs of the residents.

The project has been designed to emit minimal noise, as demonstrated in the applicant's noise analysis. The limited noise generation by the project will result in being compatible and consistent with the residential character of the city and environmental, health, and safety needs of the residents.

- ii. Community Design Element, Policy No. 1: Preserve the unique qualities of the City's neighborhoods.

The Vallemar neighborhood has a predominantly residential character with mature trees throughout the neighborhood. Electrical and telecommunications utilities are provided via above-ground utility poles. The project involves construction of a wireless communications facility on an existing utility pole with no ground-mounted equipment or removal of trees required. By designing the project in this manner, it will preserve the unique qualities of the Vallemar neighborhood which include above-ground utility service and mature tree coverage.

iii. Community Design Element, Policy No. 2: *Encourage the upgrading and maintenance of existing neighborhoods.*

Public comments received from residents of the Vallemar neighborhood and analysis provided by the applicant indicate that wireless telephone and data coverage is poor throughout much of the Vallemar neighborhood. In many cases residents have no coverage within their homes and unreliable coverage outdoors. The project involves construction of a wireless communications facility to improve wireless telephone and data coverage. Improving service availability and reliability will allow residents to contact emergency services, family, and business contacts as needed. Additionally, high-speed wireless data connectivity is an increasingly important part of modern home life and commerce for home-based and mobile businesses. The project will increase the quality and reliability of wireless telephone and data service with the subject project, which will result in an upgrade to the existing neighborhood.

iv. Community Facilities Element, Policy No. 4: *Meet basic social needs of City residents, such as transportation, housing, health, information and referral services, and safety, consistent with financial constraints.*

Public comments received from residents of the Vallemar neighborhood and analysis provided by the applicant indicate that wireless telephone and data coverage is poor throughout much of the Vallemar neighborhood. In many cases residents have no coverage within their homes and unreliable coverage outdoors. The project involves construction of a wireless communications facility to improve wireless telephone and data coverage. Improving service availability and reliability will allow residents to obtain information on City services and to request emergency services more reliably. A reliable means of contacting police and fire emergency services from all locations within the Vallemar neighborhood, as improved by the project, is essential to meeting residents' basic social needs, including safety.

v. Land Use Element, Policy No. 4: *Continue to cooperate with other public agencies and utilities in applying compatible uses for their lands, rights-of-way and easements.*

The project will occur within the public right-of-way. The City cooperated with the applicant, AT&T Mobility, a communications service provider, in processing its application for the subject wireless communications facility. The coordination between the City and AT&T Mobility has resulted in a proposed project which is a compatible use for the public right-of-way in the Vallemar neighborhood. This is evidenced by the small scale of the equipment proposed, the measures to reduce the visual impact of the equipment, and the

installation of the equipment on an existing utility pole, thus reducing the need for additional structures within the public right-of-way.

In sum, there is sufficient evidence for the Planning Commission to find that the establishment, maintenance, and operation of the proposed wireless communications facility will not, under the circumstances of the particular case, be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.

3. Where applicable, that the use or building applied for is consistent with the City's adopted Design Guidelines.

A. Building Design

- i. Design. *The style and design of new buildings should be in character with that of the surrounding neighborhood. This does not mean that new buildings should be identical to existing buildings on neighboring lots, but that new buildings should complement, enhance, and reinforce the positive characteristics of surrounding development. This can be accomplished by incorporating the dominant architectural features of an area into the design of new development. Such features may include bay windows, chimneys, balconies, porches, roof shapes, and other architectural details and materials.*

Additions to an existing structure should also retain and/or be consistent with the positive architectural features of the original structure.

The Vallemar neighborhood has a predominantly residential character with mature trees throughout the neighborhood. Electrical and telecommunications utilities are provided via above-ground utility poles and associated wires. The project involves construction of a wireless communications facility on an existing utility pole with no ground-mounted equipment or removal of trees required. Electricity and telecommunications connections will be made from existing wires on the utility pole. The proposed antenna mounting will be made on a bracket mounted to the face of the utility pole which will extend at a 90-degree angle from the pole in the same manner as typical utility pole cross-members. The prominent vertical mast and smaller perpendicular cross-members are the dominant architectural themes of the utility poles in the Vallemar neighborhood. By designing the project in this manner, it will be in character with the surrounding neighborhood.

- ii. *Scale. An important aspect of design compatibility is scale. Scale is the measure of the relationship of the relative overall size of one structure with one or more other structures. Scale is also used to refer to a group of buildings, a neighborhood, or an entire city. A development can be “out of scale” with its surroundings due to its relative height, bulk, mass, or density.*

A structure which is out of scale with its site and neighborhood threatens the integrity of the overall streetscape, and residential projects, particularly single-family dwellings, which are much larger than neighboring structures are therefore discouraged. The City’s height limitation is a maximum only, and the maximum height may often be inappropriate when considered in the context of surrounding development and topography. The “carrying capacity” of a given site is also an important factor in determining appropriate scale and lot coverage. As with the height limitation, the City’s lot coverage limitation is a maximum only.

The project will locate on an existing utility pole and will not increase the height of the utility pole. By maintaining the existing height, the project will preserve the most noticeable factor that could impact the project scale. The project will result in a new horizontal projection from the utility pole, but the projection will be 2’-0””, which is a minor increase. By staying within the existing vertical envelope of the utility pole and by creating a very small new horizontal projection, the proposed wireless communications facility will remain in scale with the existing utility pole and the surrounding neighborhood.

- iii. *Color. Building color should be compatible with the neighborhood and should reinforce and complement the visual character of the building’s environment. Multiple colors applied to a single building should relate to changes of material or form.*

The existing utility pole onto which the project will locate is made of wood. The project will include painting the antennas and equipment brown to achieve a similar color to the utility pole which will result in an installation that blends into the utility pole. Painting the wireless communications facility brown will be compatible with the neighborhood.

The Design Guidelines are drafted primarily to address construction of residential and commercial buildings. Few guidelines directly address the construction of utility poles in rights-of-way. However, based upon those guidelines which are applicable to this project type, the Planning Commission determines that there is a sufficient

basis to find that the proposed project is consistent with the City's adopted Design Guidelines.

4. That the project will not cause localized interference with reception of area television or radio broadcasts or other signal transmission or reception.
 - A. The Planning Commission considered evidence submitted by the applicant and prepared by a qualified professional engineer which assessed the communications technologies involved in the wireless communications facility. The analysis indicated that the technologies involved will not cause the type of interference described in this finding. Based upon the applicant's analysis prepared by a qualified professional engineer, the Planning Commission finds that the project will not cause localized interference with reception of area television or radio broadcasts or other signal transmission or reception.
5. That the information submitted proves that a feasible alternate site that would result in fewer visual impacts does not provide reasonable signal coverage.
 - A. The applicant prepared an alternative site assessment describing the feasibility and desirability of several sites. The analysis relied on a presumption that construction of a new support structure (i.e. pole) would result in greater visual impacts than locating on an existing support structure, whether a utility pole or the existing macro pole at the Pacifica Police Department. Therefore, the analysis did not consider any specific locations for new poles within the Vallemar neighborhood but did consider a new macro pole up to 200 feet in height at the Pacifica Police Department.
 - B. Based on its presumption that new support structure construction would be undesirable, a presumption accepted by the Planning Commission, the applicant considered other existing utility poles in the vicinity of the project site. All of the other utility poles were more visually prominent and impactful; were unavailable for installation (due to all quadrants being occupied); and/or, did not meet the applicant's coverage objectives. Therefore, the Planning Commission finds that the information submitted by the applicant proves that a feasible alternate site that would result in fewer visual impacts does not provide reasonable signal coverage.
6. That the application meets all applicable requirements of Section 9-4.2608 of the Pacifica Municipal Code.
 - A. Article 26 of the Zoning Regulations sets for the standards for wireless communications facilities. Subsections (a), (b), and (e) include the development standards applicable to the subject project. As set forth in the staff report, namely in Section 3.C, the Planning Commission finds that project meets or exceeds all applicable requirements of Section 9-4.2608, including but not limited to

requirements for height and width, placement, equipment facilities, radiofrequency emissions standards, localized interference, lighting, concealment, colors and materials, fencing and walls, and landscaping.

7. That the project is exempt from the California Environmental Quality Act (CEQA) as a Class 3 exemption provided in Section 15303 of the CEQA Guidelines.
 - A. Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure.
 - B. The project involves construction of a wireless communications facility on an existing utility pole, which fits within the scope of a Class 3 categorical exemption. Specifically, the project includes installation of two small antennas measuring 7.7-inches wide by 1.1-inches tall and mounted on an antenna bracket projecting 2-feet from an existing utility pole, with associated small equipment cabinets mounted on the pole and involving no disturbance to the ground.
 - C. The project, while being undertaken concurrently with 11 other similar projects within the Vallemar neighborhood, is an independent project under CEQA and its impacts are not cumulative. According to information provided by the applicant, the wireless communications facility can operate independently of the other facilities proposed in the area. The facility provides coverage to a small area surrounding the facility and is connected to existing electrical and telecommunications lines on an existing utility pole. There is no direct site-to-site communication between this facility and other facilities proposed in the area.
 - D. As to the visual impact of the facility, there are several factors that result in a negligible visual impact from the project. The wireless communications facility will be visible to passersby and observers from nearby buildings, but it will not be so visually prominent that it will necessarily be noticed. The applicant will paint the antennas and associated equipment a dark brown color to minimize the contrast between the antennas and equipment and the utility pole on which they are mounted. The subdued paint color will minimize the visual prominence of the facility. The facility will be observed in the context of the existing utility pole and associated utility lines and equipment already installed on the subject and surrounding utility poles. Utility poles and equipment of this sort are common throughout Pacifica's urbanized environment, including in the vicinity of the project site. The visual effect of the facility will be further minimized by its isolation from the other facilities. No other proposed facility is visible from the subject site, meaning any minor visual impact resulting from the project will not

be cumulative. The result is a minimal incremental visual effect from the installation of this particular facility.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission of the City of Pacifica does hereby approve Use Permit UP-64-15 for construction of a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 139 Berendos Avenue (APN 018-114-120), subject to conditions of approval included as Exhibit A to this resolution.

* * * * *

Passed and adopted at a regular meeting of the Planning Commission of the City of Pacifica, California, held on the 7th day of December 2015.

AYES, Commissioner:

NOES, Commissioner:

ABSENT, Commissioner:

ABSTAIN, Commissioner:

Richard Campbell, Chair

ATTEST:

APPROVED AS TO FORM:

Tina Wehrmeister, Planning Director

Michelle Kenyon, City Attorney

Exhibit A

Conditions of Approval: Use Permit UP-64-15 for construction of a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 139 Berendos Avenue (APN 018-114-120)

Planning Commission Meeting of December 7, 2015

Planning Division of the Planning Department

1. Development shall be substantially in accord with the plans entitled "Small Cell - ZD," dated July 13, 2015, except as modified by the following conditions.
2. That the approval or approvals is/are valid for a period of two years from the date of final determination. If the use or uses approved is/are not established within such period of time, the approval(s) shall expire unless Applicant submits a written request for an extension and applicable fee prior to the expiration date, and the Planning Director or Planning Commission approves the extension request as provided below. The Planning Director may administratively grant a single, one year extension provided, in the Planning Director's sole discretion, the circumstances considered during the initial project approval have not materially changed. Otherwise, the Planning Commission shall consider a request for a single, one year extension.
3. Prior to the issuance of a building permit, Applicant shall submit information on exterior finishes, including colors and materials, subject to approval of the Planning Director.
4. Prior to final inspection, and where technically feasible (as determined by the Planning Director), paint all equipment, conduit, antennas, and other appurtenances of the facility dark brown to blend in with the utility pole and to reduce visual obtrusiveness. Painted surfaces shall be maintained in a uniform condition substantially free of peeling, chipping, or other paint defects except normal fading, to the satisfaction of the Planning Director.
5. The project shall not include any ground-mounted equipment or trenching.
6. Applicant shall maintain its site in a fashion that does not constitute a public nuisance and that does not violate any provision of the Pacifica Municipal Code.
7. All outstanding and applicable fees associated with the processing of this project shall be paid prior to the issuance of a building permit.
8. Prior to issuance of a building permit, Applicant shall clearly indicate compliance with all conditions of approval on the plans and/or provide written explanations to the Planning Director's satisfaction.

9. The applicant shall indemnify, defend and hold harmless the City, its Council, Planning Commission, advisory boards, officers, employees, consultants and agents (hereinafter "City") from any claim, action or proceeding (hereinafter "Proceeding") brought against the City to attack, set aside, void or annul the City's actions regarding any development or land use permit, application, license, denial, approval or authorization, including, but not limited to, variances, use permits, developments plans, specific plans, general plan amendments, zoning amendments, approvals and certifications pursuant to the California Environmental Quality Act, and/or any mitigation monitoring program, or brought against the City due to actions or omissions in any way connected to the applicant's project, but excluding any approvals governed by California Government Code Section 66474.9. This indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and costs of suit, attorneys fees and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, City, and/or parties initiating or bringing such Proceeding. If the applicant is required to defend the City as set forth above, the City shall retain the right to select the counsel who shall defend the City.

Building Division of the Planning Department

10. The project requires review and approval of a building permit by the Building Official. Applicant shall apply for and receive approval of a building permit prior to commencing any construction activity.
11. Prior to issuance of a building permit, the City shall assign the site a unique address.
12. Prior to final inspection, the applicant shall provide evidence that Pacific Gas & Electric (PG&E) has approved the location of the proposed meter.
13. All mounting hardware shall be made of corrosion resistant materials, to the satisfaction of the Building Official and City Engineer.

Engineering Division of Public Works Department

14. Construction shall be in conformance with the San Mateo Countywide Storm Water Pollution Prevention Program. Best Management Practices shall be implemented.
15. Roadways shall be maintained clear of construction materials and debris, especially mud and dirt tracked onto Beaumont Boulevard. Dust control and daily road cleanup will be strictly enforced.
16. Prior to the issuance of a building permit, add a note on the Site Plan that says, "Any damage to improvements within the city right-of-way or to any private property, whether adjacent to subject property or not, that is determined by the City Engineer to have resulted from construction activities related to this project shall be repaired or replaced as directed by the City Engineer."

17. Applicant shall locate all equipment to the greatest extent possible so that the meter cabinets are not directly over sidewalks (including the decomposed granite public walkways) in order to reduce the future possibility of deteriorated equipment falling on a person.
18. Applicant shall, if some point in the future the utility pole on which the subject wireless communications facility is installed is no longer needed for carrying electrical power or communications wires, apply to the City for alternate options for providing wireless communications service to its customers in the vicinity of the project.
19. Prior to issuance of a building permit, Applicant shall apply for and receive approval of a City of Pacifica Encroachment Permit for all work undertaken in the public right-of-way. All work shall be performed in accordance with City Standards, Standard Specifications for Public Works Construction (Green Book) or Caltrans Standard Specifications, Pacifica Municipal Code, Administrative Policies and to the satisfaction of the City Engineer or his designee. Permit fees shall be determined per the current adopted fee schedule.
20. All recorded survey points, monuments, railroad spikes, pins, cross cuts on top of sidewalks and tags on top of culvert headwalls or end walls whether within private property or public right-of-way shall be protected and preserved. If survey point/s are altered, removed or destroyed, the applicant shall be responsible for obtaining the services of a licensed surveyor or qualified Civil Engineer to restore or replace the survey points and record the required map prior to occupancy of the first unit.

END



2600 CAMINO RAMON
SAN FRANCISCO, CA 94133

BLACK & VEATCH
2595 OAK ROAD
WALNUT CREEK, CA 94697
(925) 357-0743
WWW.BLACKANDVEATCH.COM

PROJECT NO:	129092
DRAWN BY:	LEW
CHECKED BY:	RAE

REV	DATE	DESCRIPTION
B	07/17/15	ISSUED FOR ZONING
A	06/29/15	ISSUED FOR REVIEW

IT IS A VIOLATION OF LAW FOR ANY PERSON TO REPRODUCE THESE DRAWINGS WITHOUT THE WRITTEN PERMISSION OF A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT.

SCC-CC0004-14
PACIFICA
139 BERENDOS AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-14
TITLE SHEET

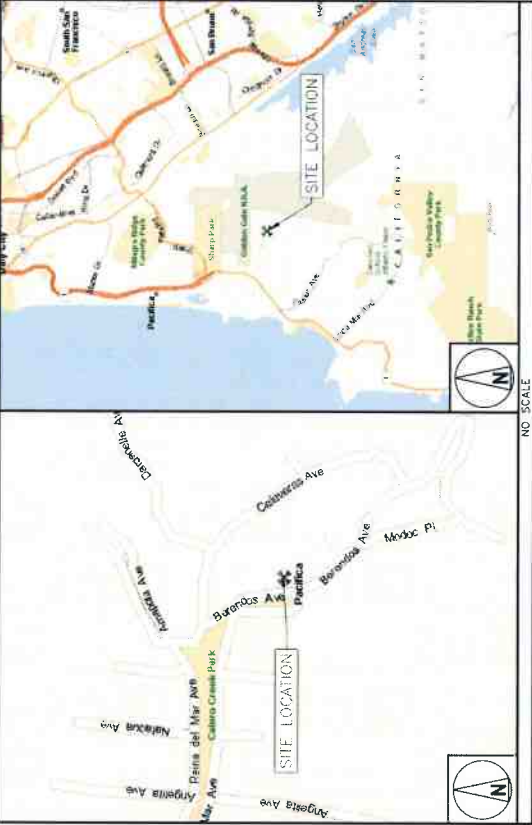
SHEET NUMBER
T-1

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	SCC-CC0004-14 TITLE SHEET
PL-1.1	SCC-CC0004-14 LOCATION MAP
PL-2.1	SCC-CC0004-14 INFORMATION DATASHEET
AP14-1	SCC-CC0004-14 ELEVATIONS
AP14-2	SCC-CC0004-14 ISOMETRIC ELEVATIONS
AP14-3	SCC-CC0004-14 OVERALL SITE PLAN
C-1.0	EQUIPMENT DETAILS AND SPECIFICATIONS

at&t
SCC-CC0004-14
PACIFICA
139 BERENDOS AVE
SMALL CELL - ZD

LOCATION MAPS



DRIVING DIRECTIONS

DIRECTIONS FROM LOCAL AT&T OFFICE: FROM 2600 CAMINO RAMON, HEAD SOUTHEAST ON CAMINO RAMON TOWARD BISHOP DR. TAKE THE SOUTH RIGHT ONTO BOLLINGER CANTON RD. MERGE ONTO I-880 N. VIA THE RAMP TO SACRAMENTO. TAKE THE STATE ROUTE 24 AT THE FORK. FOLLOW SIGNS FOR I-80 W/SAN FRANCISCO AND MERGE ONTO I-80 W. KEEP LEFT AT THE FORK. FOLLOW SIGNS FOR SAN JOSE/US-101 S/AIRPORT AND MERGE ONTO US-101 S. TAKE THE INTERSTATE 280 S EXIT TOWARD DAILY CITY. MERGE ONTO I-280 S. TURN RIGHT ONTO CA-1 S (SIGNS FOR PACIFICA). TURN LEFT ONTO REINA DEL MAR AVE. TURN LEFT ONTO HIWATHA AVE. THE SITE WILL BE ON YOUR LEFT.

STATEMENT OF SPECIAL INSPECTION
THE ENGINEER OF RECORD, BEING FULLY ADVISED OF THE REQUIREMENTS OF THE STATE ELECTRICAL CODE, LOCAL ORDINANCES AND THE NATIONAL ELECTRICAL CODE, HAS CONDUCTED A VISUAL INSPECTION OF THE SUBJECT WORK IN CONFORMANCE WITH THE 2012 CEC 1700-11.6. THE RECORD DRAWINGS AND ALL ATTACHED INFORMATION SHOWING THE ATTACHMENTS IN THE DESIGN AND SEALING THE WORK SHALL BE THE RESPONSIBILITY OF THE APPLICANT. THE AS-BUILT REVISIONS PREPARED BY THE CONSTRUCTION MANAGER, THE AS-BUILTS SHALL BE MADE AVAILABLE TO THE ENGINEER OF RECORD WITHIN TWO WEEKS OF RECEIPT OF REQUEST (PER 17942.5).

ENGINEERING
2013 CALIFORNIA BUILDING CODE OR ADOPTED CODE
2013 CALIFORNIA ELECTRIC CODE OR ADOPTED CODE
TIA/EIA-222-G OR ADOPTED CODE NESC
CONSTRUCTION - C0885 AS OVERHEAD ELECTRIC LINE

GENERAL NOTES
THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE AND REPAIRS.
SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE, NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

PROJECT DESCRIPTION
THE PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF ANTENNAS AND ASSOCIATED EQUIPMENT CABINETS FOR AT&T'S WIRELESS TELECOMMUNICATIONS NETWORK.

PROJECT INFORMATION
COUNTY: SAN MATEO
CITY OF PACIFICA
PUBLIC RIGHT-OF-WAY
OCCUPANCY GROUP: U
CONSTRUCTION TYPE: V-B
CONSTRUCTION MANAGER: AARON INGRAM
SITE ACQUISITION MANAGER: ANA GOMEZ-SABIDO
RF ENGINEER: BRIAN WILLIAMS
APPLICANT: ALEX WARDLBY
DAPRR PTR: -
FA LOCATION: -

CONTACT INFORMATION
ENGINEER: BLACK & VEATCH
2595 OAK ROAD
WALNUT CREEK, CA 94697
CONTACT: CHRIS WIRTH
PHONE: (913) 458-4521



2500 GARDEN AVENUE
SAN RAMON, CA 94583



BLACK & VEATCH

2599 OAK ROAD
WALNUT CREEK, CA 94597
(925) 327-0243
WWW.BV.COM
AN EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION EMPLOYER

PROJECT NO: 128092

DRAWN BY: LEM

CHECKED BY: RAE

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR CONING
A	06/29/15	ISSUED FOR REVIEW

IF YOU ARE A PROVIDER OF LABOR FOR ANY PERSON, FIRM OR COMPANY, YOU MUST BE A LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR LANDSCAPE ARCHITECT.

SCC-CC0004-14
PACIFICA
139 BERENDOS AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-14
INFORMATION DATASHEET

SHEET NUMBER
PL-2.1

Site Number	Site Name	USDP (UMTS)	USDP (LTE)	E911 Address	County	Latitude	Longitude	Pole ID	Structure Type	Structure Height	Rad Center
SCC-CC0004-14	Pacifica	165297	165300	139 Berendos Ave, 94044	San Mateo	37.511427	-122.473925	110066039	Utility Pole	29'-7"	37'-5"



2895 OAK ROAD
SAN BERNARDINO, CA 92403



BLACK & VEATCH

2895 OAK ROAD
SUITE 400
WALNUT, CA 94697
(925) 337-3043
FACILITY DESIGN DEPARTMENT

PROJECT NO: 126892
DRAWN BY: LEW
CHECKED BY: RAE

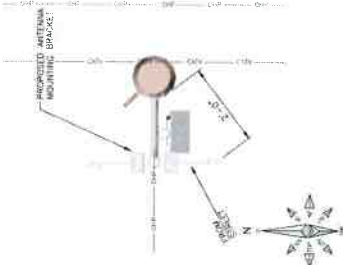
REV	DATE	DESCRIPTION
A	06/27/15	ISSUED FOR PERMITS
B	07/15/15	ISSUED FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON, OTHER THAN A LICENSED PROFESSIONAL ENGINEER, TO REPRODUCE THIS DOCUMENT.

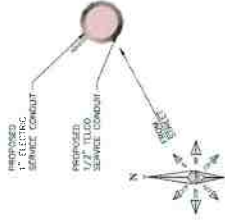
SCC-CC0004-14
PACIFICA
139 BERENDOS AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
**SCC-CC0004-14
ELEVATIONS**

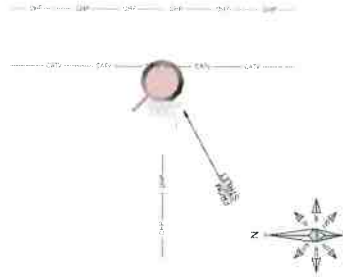
SHEET NUMBER
AP14-1



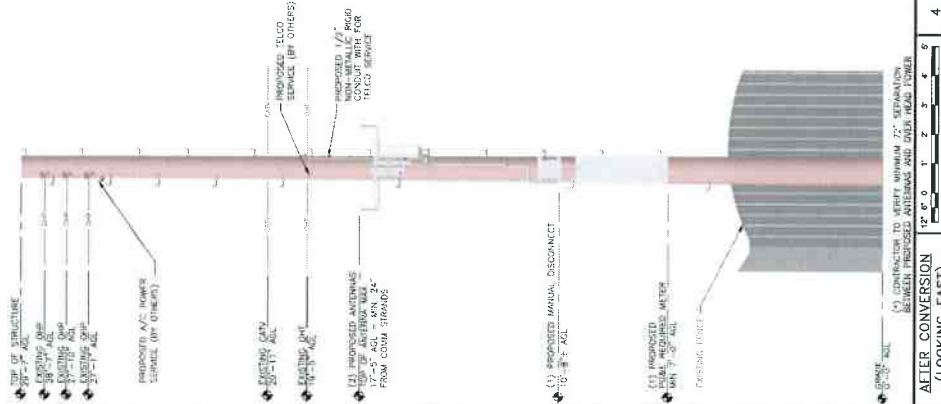
PLAN VIEW - ANTENNA LEVEL



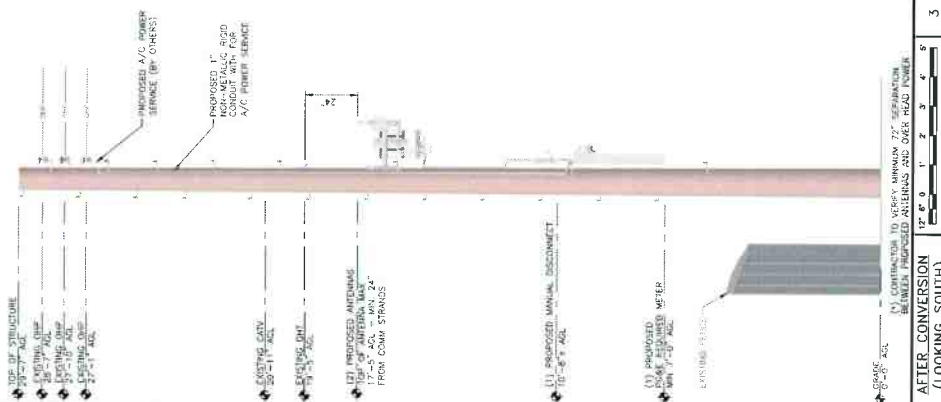
PLAN VIEW - RISER DETAIL



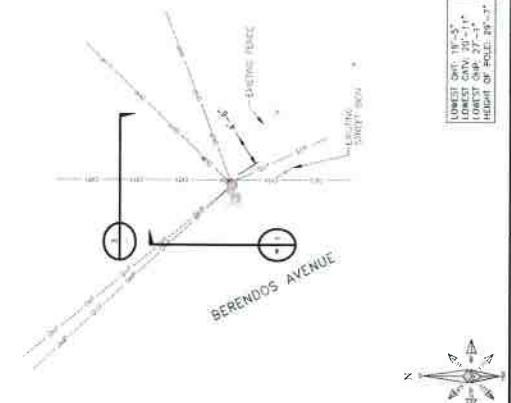
PLAN VIEW - EQUIPMENT LEVEL



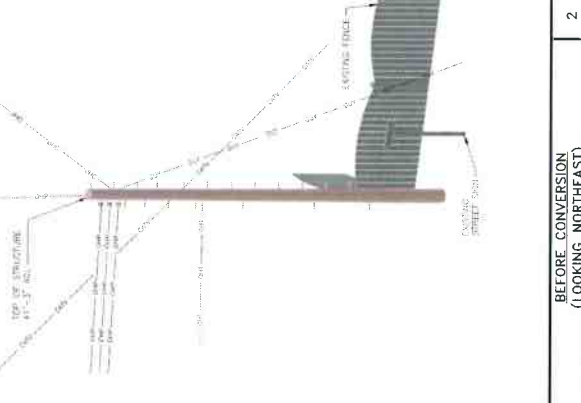
ELEVATION (LOOKING EAST)



ELEVATION (LOOKING SOUTH)



AERIAL ORIENTATION VIEW



ELEVATION (LOOKING NORTHEAST)

BEFORE CONVERSION (LOOKING NORTHEAST)

AFTER CONVERSION (LOOKING SOUTH)

AFTER CONVERSION (LOOKING EAST)

4

3

2



2999 OAK ROAD
SUITE 400
SAN BRUNO, CA 94068



BLACK & VEATCH

2999 OAK ROAD
SUITE 400
SAN BRUNO, CA 94068
(925) 357-0243
FAX (925) 357-0243
WWW.BK&V.COM

PROJECT NO: 12902
DRAWN BY: LEW
CHECKED BY: BAE

REV	DATE	DESCRIPTION
B	07/15/15	ISSUED FOR BIDDING
A	04/29/15	ISSUED FOR REVIEW

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ORGANIZATION OR BUSINESS ENTERPRISE TO
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TO AT&T THIS DOCUMENT.

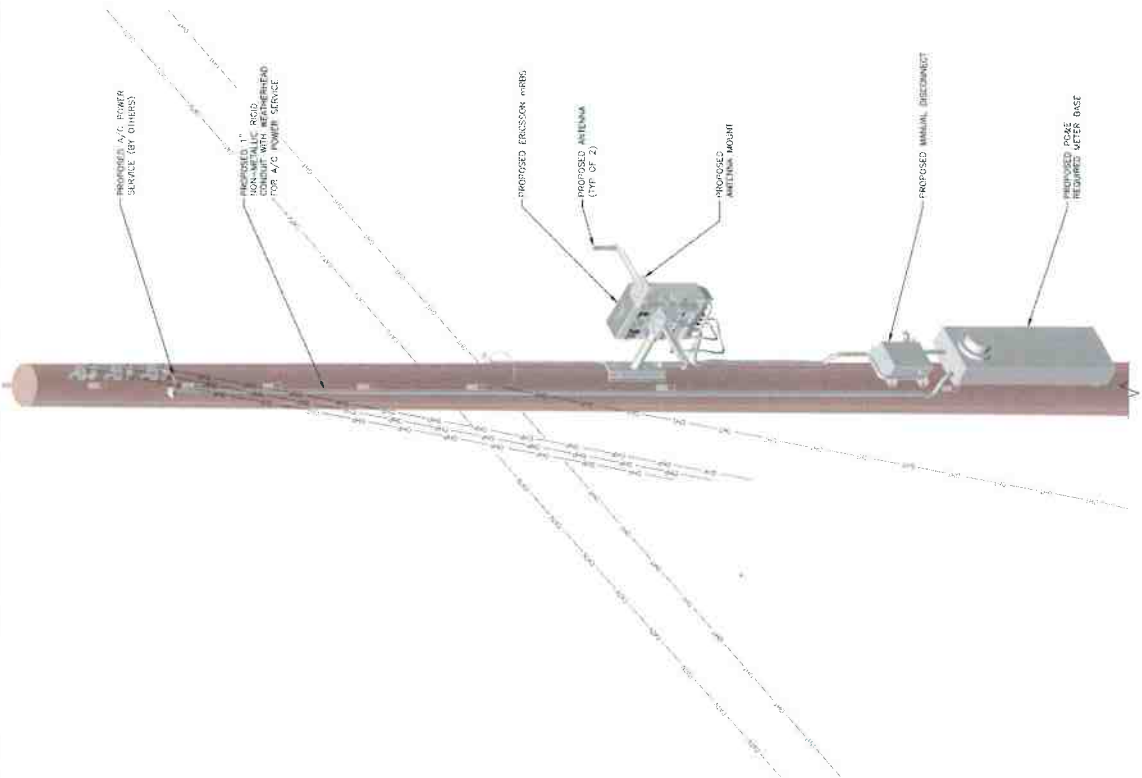
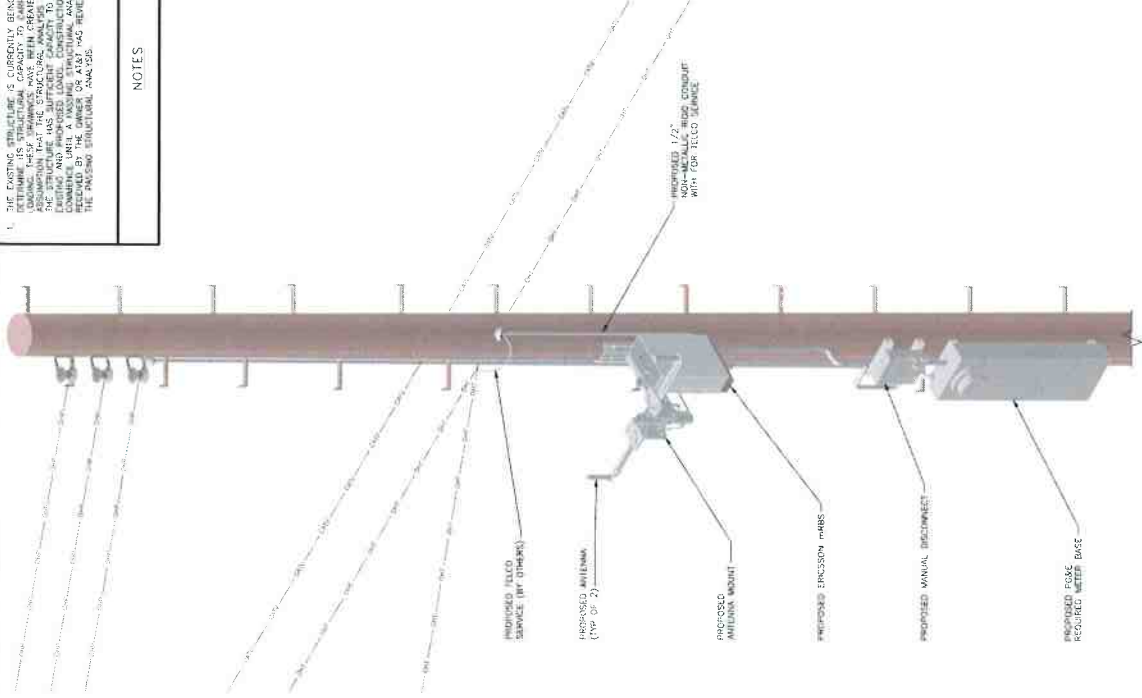
SCC-CC0004-14
PACIFICA
139 BERENDOS AVE
PACIFICA, CA 94044
SMALL CELL - 7D

SHEET TITLE
SCC-CC0004-14
ISOMETRIC ELEVATIONS

SHEET NUMBER
AP14-2

1. THE EXISTING STRUCTURE IS CURRENTLY BEING ANALYZED TO
DETERMINE ITS STRUCTURAL CAPACITY TO SUPPORT THE PROPOSED
EQUIPMENT. THE STRUCTURAL ANALYSIS WILL BE BASED ON THE
ASSUMPTION THAT THE STRUCTURAL ANALYSIS WILL SHOW THAT
THE EXISTING STRUCTURE IS CAPABLE OF SUPPORTING THE
EXISTING AND PROPOSED LOADS. CONSTRUCTION SHALL NOT
COMMENCE UNTIL A PASSING STRUCTURAL ANALYSIS HAS BEEN
OBTAINED. THE ANALYSIS WILL BE REVIEWED AND APPROVED
BY THE PROJECT ENGINEER AND APPROVED.

NOTES



ISOMETRIC EQUIPMENT ELEVATION (LOOKING NORTHEAST)

ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHEAST)

2

1

THIS DRAWING IS NOT A SITE SURVEY. THE PURPOSE OF THIS DRAWING IS TO SHOW HOW THE DEVELOPED SITE RELATES TO THE PARENT PARCEL AND ADJACENT PROPERTIES.



BLACK & VEATCH
 2959 OAK ROAD
 WASHINGTON FIELD OFFICE
 (925) 337-0243
 10000 STATE ST. SUITE 400, DUBLIN, CA 94568

PROJECT NO: 129052
 DRAWN BY: LEW
 CHECKED BY: BAE

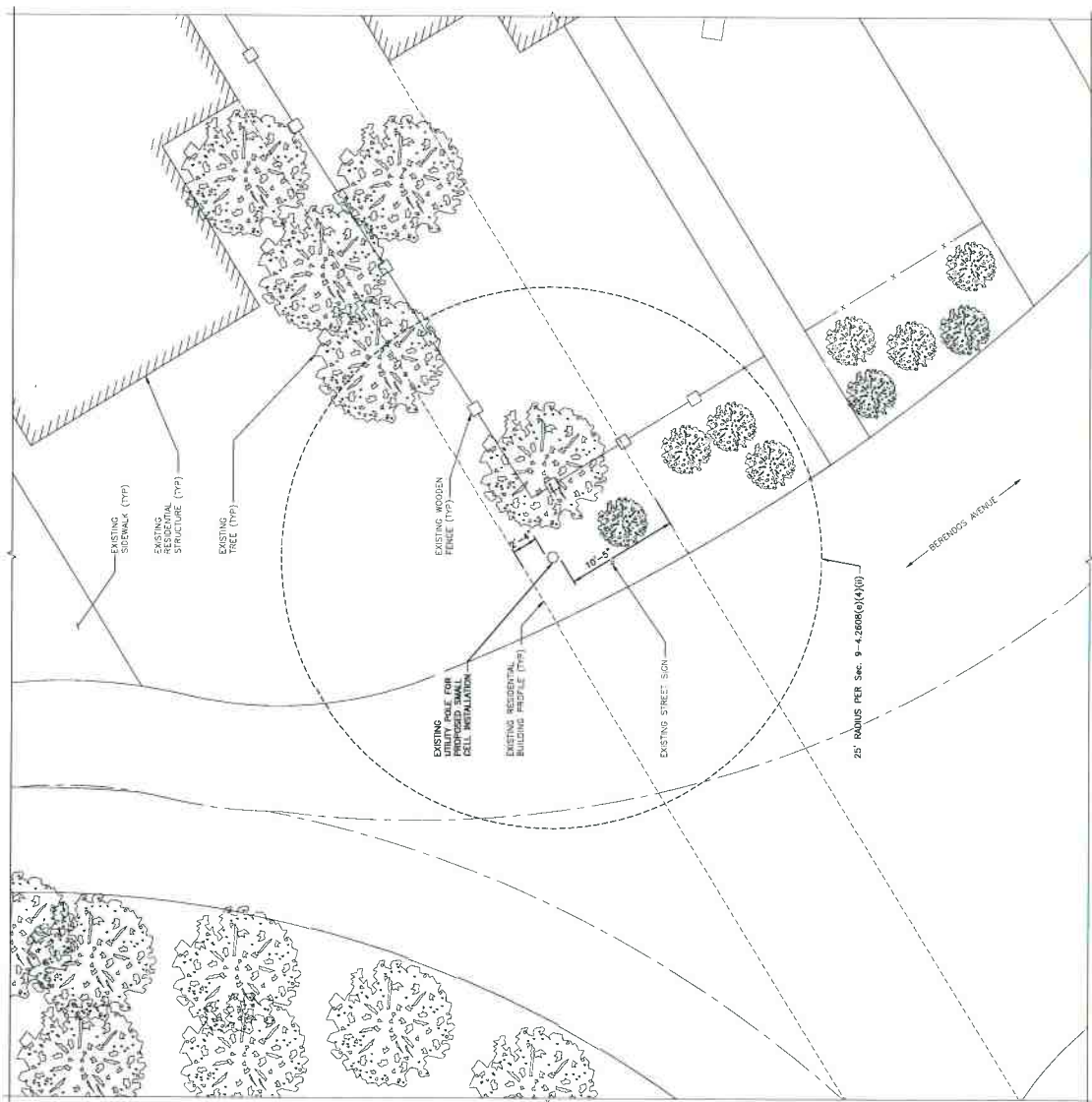
REV	DATE	DESCRIPTION
B	07/17/15	ISSUED FOR ZONING
A	04/29/15	ISSUED FOR REVIEW

IT IS A VIOLATION OF LAW FOR ANY PERSON, COMPANY OR ORGANIZATION TO REPRODUCE OR TRANSMIT THIS DOCUMENT.

SCC-CC0004-14
 PACIFICA
 139 BERENDOS AVE
 PACIFICA, CA 94044
 SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-14
 OVERALL SITE PLAN

SHEET NUMBER
AP14-3



OVERALL SITE PLAN

1



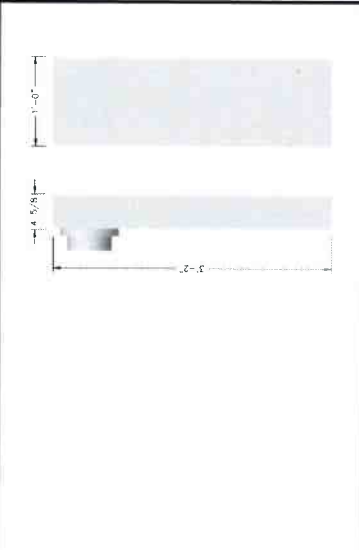
PROJECT NO:	129892	
DRAWN BY:	LEW	
CHECKED BY:	BAE	
REV	DATE	DESCRIPTION
A	07/26/13	ISSUED FOR REVIEW
B	07/26/13	ISSUED FOR WORK

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SCC-CC0004-14
PACIFICA
139 BERENDOS AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
EQUIPMENT DETAILS
AND SPECIFICATIONS

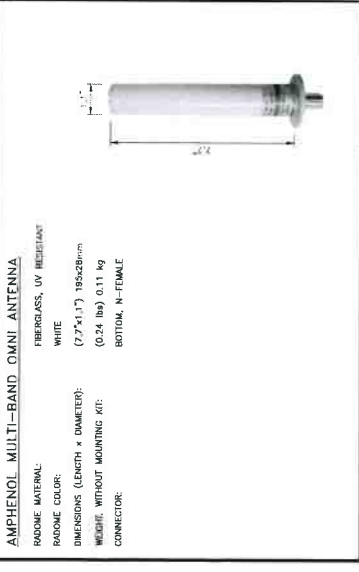
SHEET NUMBER
C-10



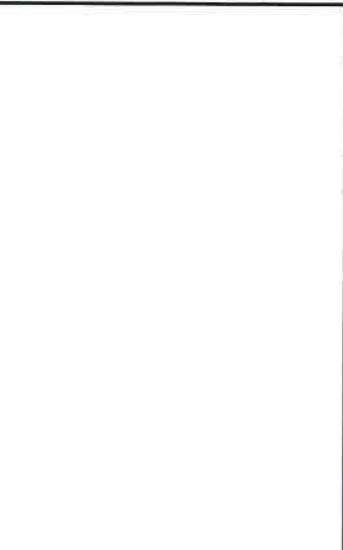
PROPOSED POWER METER C
NO SCALE



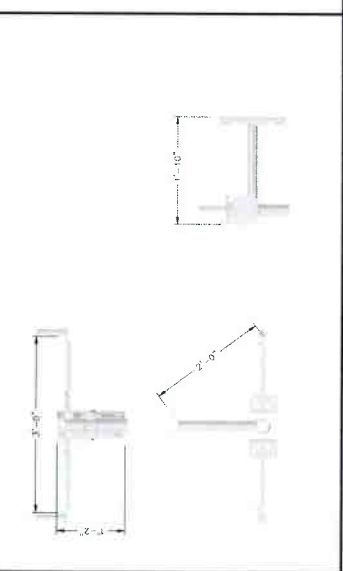
PROPOSED MICRO_RBS B
NO SCALE



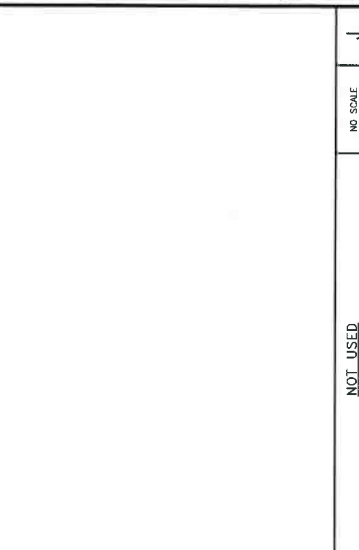
PROPOSED ANTENNA SPECIFICATIONS A
NO SCALE



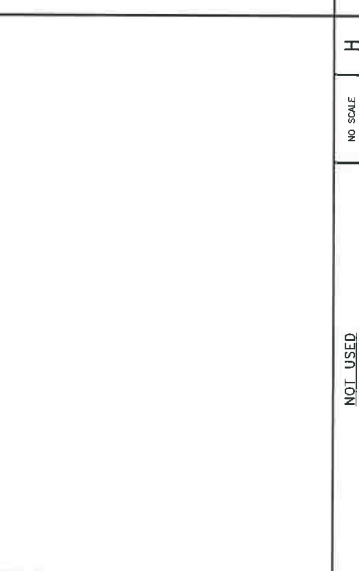
PROPOSED BRACKET MOUNT E
NO SCALE



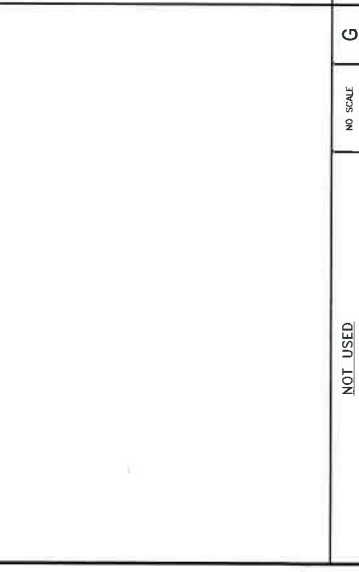
PROPOSED MANUAL DISCONNECT D
NO SCALE



PROPOSED MANUAL DISCONNECT F
NO SCALE



PROPOSED MANUAL DISCONNECT H
NO SCALE



PROPOSED MANUAL DISCONNECT J
NO SCALE

AMPHENOL MULTI-BAND OMNI ANTENNA
 FIBERGLASS, UV RESISTANT
 RADIOME COLOR: WHITE
 DIMENSIONS (LENGTH x DIAMETER): (77"x1.7") 1952280mm
 WEIGHT, WITHOUT MOUNTING KIT: (0.24 lbs) 0.11 kg
 CONNECTOR: BOTTOM, N-FEMALE

PROPOSED ANTENNA SPECIFICATIONS

ITEM	DESCRIPTION	QTY	UNIT
1	AMPHENOL MULTI-BAND OMNI ANTENNA	1	EA
2	AMPHENOL 1/2 WAVE	1	EA
3	AMPHENOL 1/4 WAVE	1	EA
4	AMPHENOL 1/8 WAVE	1	EA
5	AMPHENOL 1/16 WAVE	1	EA
6	AMPHENOL 1/32 WAVE	1	EA
7	AMPHENOL 1/64 WAVE	1	EA
8	AMPHENOL 1/128 WAVE	1	EA
9	AMPHENOL 1/256 WAVE	1	EA
10	AMPHENOL 1/512 WAVE	1	EA
11	AMPHENOL 1/1024 WAVE	1	EA
12	AMPHENOL 1/2048 WAVE	1	EA
13	AMPHENOL 1/4096 WAVE	1	EA
14	AMPHENOL 1/8192 WAVE	1	EA
15	AMPHENOL 1/16384 WAVE	1	EA
16	AMPHENOL 1/32768 WAVE	1	EA
17	AMPHENOL 1/65536 WAVE	1	EA
18	AMPHENOL 1/131072 WAVE	1	EA
19	AMPHENOL 1/262144 WAVE	1	EA
20	AMPHENOL 1/524288 WAVE	1	EA
21	AMPHENOL 1/1048576 WAVE	1	EA
22	AMPHENOL 1/2097152 WAVE	1	EA
23	AMPHENOL 1/4194304 WAVE	1	EA
24	AMPHENOL 1/8388608 WAVE	1	EA
25	AMPHENOL 1/16777216 WAVE	1	EA
26	AMPHENOL 1/33554432 WAVE	1	EA
27	AMPHENOL 1/67108864 WAVE	1	EA
28	AMPHENOL 1/134217728 WAVE	1	EA
29	AMPHENOL 1/268435456 WAVE	1	EA
30	AMPHENOL 1/536870912 WAVE	1	EA
31	AMPHENOL 1/1073741824 WAVE	1	EA
32	AMPHENOL 1/2147483648 WAVE	1	EA
33	AMPHENOL 1/4294967296 WAVE	1	EA
34	AMPHENOL 1/8589934592 WAVE	1	EA
35	AMPHENOL 1/17179869184 WAVE	1	EA
36	AMPHENOL 1/34359738368 WAVE	1	EA
37	AMPHENOL 1/68719476736 WAVE	1	EA
38	AMPHENOL 1/137438953472 WAVE	1	EA
39	AMPHENOL 1/274877906944 WAVE	1	EA
40	AMPHENOL 1/549755813888 WAVE	1	EA
41	AMPHENOL 1/1099511627776 WAVE	1	EA
42	AMPHENOL 1/2199023255552 WAVE	1	EA
43	AMPHENOL 1/4398046511104 WAVE	1	EA
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46	AMPHENOL 1/35184372888832 WAVE	1	EA
47	AMPHENOL 1/70368745777664 WAVE	1	EA
48	AMPHENOL 1/140737491555328 WAVE	1	EA
49	AMPHENOL 1/281474983110656 WAVE	1	EA
50	AMPHENOL 1/562949966221312 WAVE	1	EA
51	AMPHENOL 1/1125899932442624 WAVE	1	EA
52	AMPHENOL 1/2251799864885248 WAVE	1	EA
53	AMPHENOL 1/4503599729770496 WAVE	1	EA
54	AMPHENOL 1/9007199459540992 WAVE	1	EA
55	AMPHENOL 1/18014398919081984 WAVE	1	EA
56	AMPHENOL 1/36028797838163968 WAVE	1	EA
57	AMPHENOL 1/72057595676327936 WAVE	1	EA
58	AMPHENOL 1/14411519135265584 WAVE	1	EA
59	AMPHENOL 1/28823038270531168 WAVE	1	EA
60	AMPHENOL 1/57646076541062336 WAVE	1	EA
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63	AMPHENOL 1/461168612328498688 WAVE	1	EA
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65	AMPHENOL 1/1844674449313994752 WAVE	1	EA
66	AMPHENOL 1/3689348898627989504 WAVE	1	EA
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69	AMPHENOL 1/29514791169023916032 WAVE	1	EA
70	AMPHENOL 1/59029582338047832064 WAVE	1	EA
71	AMPHENOL 1/118059164676095664128 WAVE	1	EA
72	AMPHENOL 1/236118329352191328256 WAVE	1	EA
73	AMPHENOL 1/472236658704382656512 WAVE	1	EA
74	AMPHENOL 1/944473317408765313024 WAVE	1	EA
75	AMPHENOL 1/1888946634817530626048 WAVE	1	EA
76	AMPHENOL 1/3777893269635061252096 WAVE	1	EA
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78	AMPHENOL 1/15111573078540245008384 WAVE	1	EA
79	AMPHENOL 1/30223146157080490016768 WAVE	1	EA
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92	AMPHENOL 1/2475880133085633742173568 WAVE	1	EA
93	AMPHENOL 1/4951760266171267484347136 WAVE	1	EA
94	AMPHENOL 1/9903520532342534968694304 WAVE	1	EA
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96	AMPHENOL 1/3961408212937013987477536 WAVE	1	EA
97	AMPHENOL 1/7922816425874027974955072 WAVE	1	EA
98	AMPHENOL 1/15845632851748055949910144 WAVE	1	EA
99	AMPHENOL 1/31691265703496111899820288 WAVE	1	EA
100	AMPHENOL 1/63382531406992223799640576 WAVE	1	EA

PROPOSED MANUAL DISCONNECT

NO SCALE

NOT USED G
NO SCALE



ANA GOMEZ-ABARCA
 Sr. Site Acquisition Manager, Telecom Division
 2999 Oak Road, Suite 490
 Walnut Creek, CA 94598
 +1 913-458-9148 | GomezAbarcaA@bv.com@BV.com

July 24, 2015

Tina Wehrmeister
 Planning Director
 City of Pacifica Planning Department
 1800 Francisco Blvd
 Pacifica, CA 94044

RECEIVED
 JUL 24 2015
 City of Pacifica

Re: Proposed AT&T Mobility Small Cell Installation
Applicant: New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)
Site Address: 139 Berendos Avenue
Site ID: SCC-CC0004-14
Latitude/Longitude: 37.611427, -122.473925

Dear Tina Wehrmeister,

On behalf of New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility ("AT&T"), this letter and attached materials are to apply for a Conditional Use Permit, to install a small cell in the public right-of-way on 139 Berendos Avenue (Small Cell SCC-CC0004-14).¹ The following is an explanation of the existing site, a project description of the facility, the project purpose and justifications in support of this proposal.

A. Project Description.

The existing site consists of an approximate 29 feet seven inch tall wooden utility pole in the public right-of-way on the southwest side of 139 Berendos Avenue. Primary power lines are attached to a cross arm at about 28 feet seven inches and 27 feet ten inches high and the secondary power line is attached to a cross-arm at about 27 feet one inch high. Communication lines are attached to the pole at 20 feet eleven inches and 19 feet five inches above ground.

AT&T proposes to install two Amphenol omni antennas (7.7" x 1.1") and one remote radio head (17.7"x11.9"x5.3") 17'5" high on the pole. Below that at about 8' AT&T will place a small safety shut-off switch and electricity meter. The equipment will be connected to power and telecommunications lines already on the pole, extended through one-inch conduit. AT&T's proposal is depicted in the attached design drawings and photographic simulation.

This is an unmanned facility that will operate at all times (24 hours per day, 7 days per week) and will be serviced about once per month by an AT&T technician. AT&T's proposal will greatly benefit the area by closing an existing service coverage gap in the area.

B. Project Purpose.

¹ AT&T expressly reserves all rights concerning the city's jurisdiction to assert regulation over the placement of wireless facilities in the public rights-of-way.



The purpose of this project is to provide wireless voice and data coverage to an area where there is currently a significant gap in wireless service coverage. These wireless services include 4G LTE mobile telephone, wireless broadband, emergency 911, data transfers, electronic mail, Internet, web browsing, wireless applications, wireless mapping and video streaming. As explained in the attached Radio Frequency Statement, which includes propagation maps depicting existing and proposed coverage in the vicinity of the proposed small cell, AT&T network engineers have identified a gap in wireless service in the area generally surrounding Reina Del Mar Ave. in Pacifica. The gap is significant because it stretches approximately one mile along the densely populated neighborhoods surrounding Reina Del Mar Avenue, which includes approximately 230 homes and one park. The traffic data available from Google Earth Pro (dated 2004) for Reina del Mar Avenue, which runs through most of the gap area, counts approximately 6,038 vehicles per day. There is inadequate in-building signal strength within this area to provide reliable wireless service, which affect AT&T customers' ability to place and receive voice and data calls within their homes.

To close this significant service coverage gap, AT&T seeks to deploy 12 small cells on existing utility poles within the neighborhood. A small cell is a low-powered cell site, which, when grouped with other small cells, can provide coverage in areas that are otherwise very difficult to cover using traditional macro wireless facilities due to the local topography and mature vegetation. As illustrated in the attached zoning drawings, each small cell consists of low mounted, low profile antennas that will provide 4G LTE service. Although the signal propagated from a small cell antenna spans over a shorter range than a conventional macro site, small cells can be an effective tool to close service coverage gaps in traditionally hard to serve areas, and do with so with a minimal environmental and aesthetic footprint. The proposed small cell subject to this application is a critical part of the 12 small cells needed to close the existing service coverage gap.

C. Project Justification, Design and Placement.

Small Cell SCC-CC0004-14 is an integral part of the overall small cell solution to close the service coverage gap. It is located in a difficult coverage area because of its winding roads and plentiful trees. The coverage area consists of a Pacifica neighborhood off of Berendos Avenue, Aurora Court and surrounding areas. Small Cell SCC-CC0004-14 will cover transient traffic along the roadways and provide in-building service to the surrounding residences as depicted in the propagation maps, which are exhibits to the attached Radio Frequency Statement.

Small Cell SCC-CC0004-14 is the least intrusive means to provide coverage to this area because it uses existing utility infrastructure, adding small equipment without disturbing the character of the neighborhoods served. Deploying a small cell onto this existing pole minimizes any visual impact by utilizing an inconspicuous location. By installing antennas and equipment onto this existing pole, AT&T does not need to propose any new infrastructure in this coverage area.

The small cell RF emissions are also much lower than the typical macro site and appropriate for the area, and they are fully compliant with the FCC's requirements for limiting human exposure to radio frequency energy. The attached radio frequency engineering analysis provided by Hammett & Edison, Inc., Consulting Engineers, confirms that the proposed equipment will operate well within (and actually far below) all applicable FCC public exposure limits. The facility will also comply with California Public Utility Commission (CPUC) General Orders 95 (concerning overhead line design, construction and maintenance) and 170 (CEQA review) that govern utility use in the public right-of-way.



As proposed, Small Cell SCC-CC0004-14 is the least intrusive option because the antennas are nestled amidst the backdrop of large trees and situated so as to minimize any view impact. Also the proposed location is a good coverage option because it sits at a location from which point AT&T can adequately propagate its wireless signal.

The proposed location is approximately equidistant from other small cells that AT&T plans to place in surrounding hard-to-reach areas, so that service coverage can be evenly distributed. There are a number of trees near the proposed site that will allow the installation to blend in with the backdrop of foliage. AT&T identified potential alternate locations and performed a comprehensive alternative site analysis on other utility poles in this area. As set forth in the Alternative Site Analysis, none of these sites are as viable from a construction and/or coverage perspective to meet AT&T's project objectives or from an aesthetics perspective to meet the City's Guidelines. The Alternative Site Analysis is included within the application materials for the Use Permit.

Drawings, an AT&T Radio Frequency Statement, propagation maps, a photographic simulation, and a radio-frequency engineering analysis are included with this packet.

As this application seeks authority to install a wireless telecommunication facility, the FCC's Shot Clock Order² requires the city to issue its final decision on AT&T's application within 150 days. We respectfully request expedited review and approval of this application. Feel free to contact me if you have any questions. Thank you.

Best Regards,

Ana Gomez-Abarca

Sr. Site Acquisition Manager
For AT&T Mobility

² See Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B), WT Docket No. 08-165, Declaratory Ruling, 24 F.C.C.R. 13994 (2009).

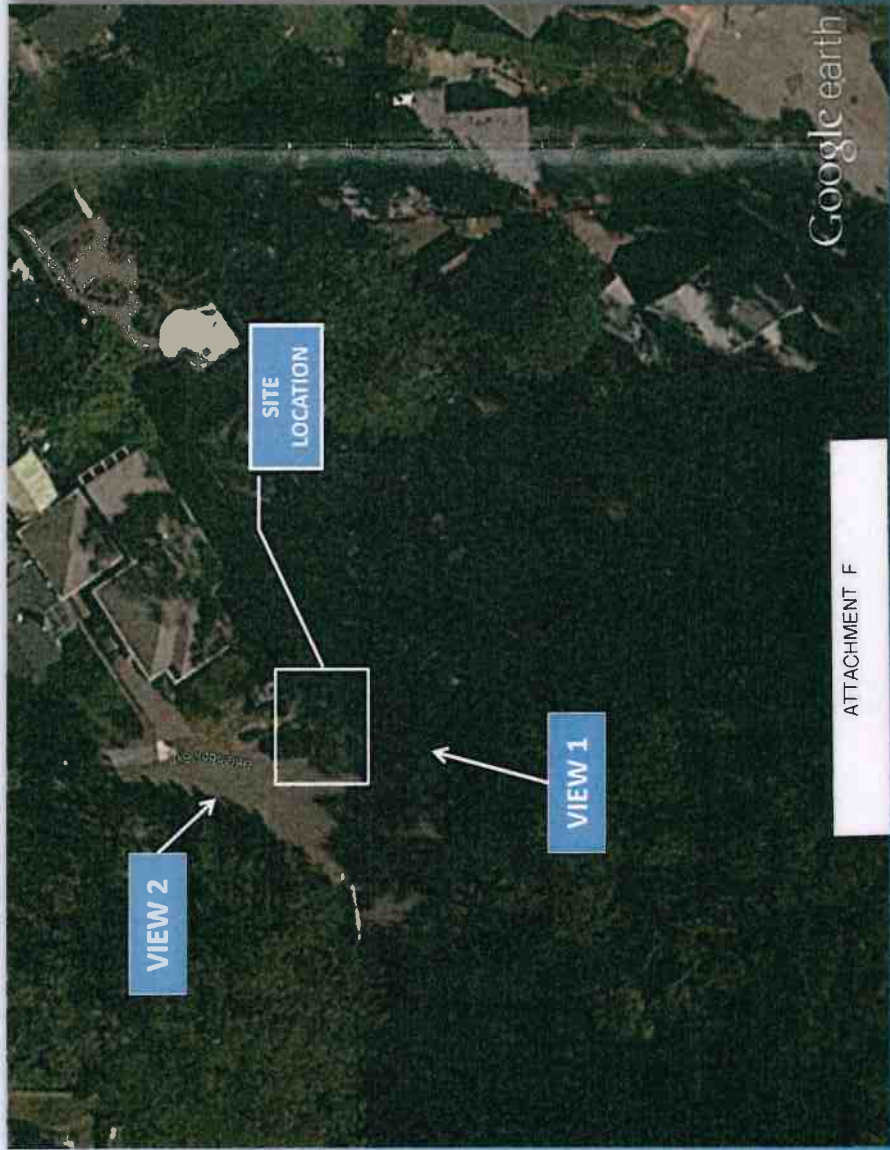


PHOTOGRAPHIC SIMULATION

JUL 24 2015
City of Pacifica

PROPOSED SMALL CELL SITE

SITE NUMBER:	SCC-CC0004-14
SITE NAME:	PACIFICA
SITE ADDRESS:	139 BERENDOS AVE PACIFICA, CA 94044
DATE:	07/24/15
APPLICANT:	AT&T WIRELESS
CONTACT:	ANA GOMEZ-ABARCA BLACK & VEATCH (913) 458-9148



ATTACHMENT F

The included Photographic Simulation(s) are intended as visual representations only and should not be used for construction purposes. The materials represented within the included Photographic Simulation(s) are subject to change.



at&t

VIEW 1



EXISTING CONDITIONS



PROPOSED AT&T
SMALL CELL
EQUIPMENT

PROPOSED PG&E
METER AND SERVICE
DISCONNECT

PHOTOGRAPHIC SIMULATION

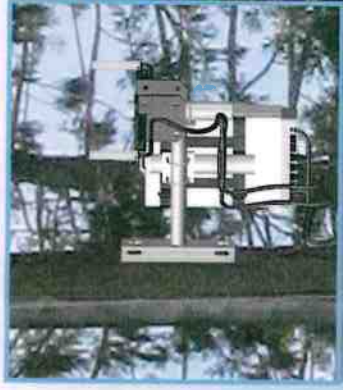


at&t

VIEW 2



EXISTING CONDITIONS



PROPOSED AT&T
SMALL CELL
EQUIPMENT

PROPOSED PG&E
METER AND SERVICE
DISCONNECT

PHOTOGRAPHIC SIMULATION

**AT&T Mobility • Small Cell No. SCC-CC0004-14
139 Berendos Avenue • Pacifica, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 139 Berendos Avenue in Pacifica, California, for compliance with appropriate guidelines limiting sound levels from the installation.

Executive Summary

AT&T proposes to install a new small cell on the utility pole located near 139 Berendos Avenue in Pacifica, consisting of two antennas and four equipment boxes on the pole. Noise from the proposed operations will comply with the pertinent noise limits.

Prevailing Standard

The City of Pacifica identifies several prohibited noise sources in Title 5 Chapter 10 of its Municipal Code, though fan noise such as is emitted from wireless telecommunications base stations is not included. Title 9 Chapter 4 Article 26 of the Pacifica Municipal Code addresses the siting of such base stations, “to minimize the potential health, safety, and aesthetic impacts of wireless communications facilities,” but does not address or limit noise levels. Therefore, for the purpose of this study, the limits set forth in the County of San Mateo General Plan are referenced. Chapter 16 Section II.A.I.a (“Noise Limitations”) reads in pertinent part, “State standards have set ... 70 CNEL from multiple sources as the maximum external noise level compatible with ordinary residential use.”

The composite Community Noise Equivalent Level (“CNEL”) to be used for evaluation of noise is an average over 24 hours, with a 5 dBA penalty applied to noise levels during evening hours (7 pm to 10 pm) and a 10 dBA penalty at night (10 pm to 7 am) to reflect typical residential conditions, where noise is more readily heard during evening and nighttime hours. By definition, CNEL will be 6.7 dBA higher than the constant level of a continuous noise source.

Figure 1 describes the calculation methodology used to determine applicable noise levels for evaluation against the prevailing standard.

General Facility Requirements

Wireless telecommunications facilities (“cell sites”) typically consist of two distinct parts: the electronic base transceivers, that are connected to traditional wired telephone lines, and the antennas, that send wireless signals created by the transceivers out to be received by individual subscriber units.

**AT&T Mobility • Small Cell No. SCC-CC0004-14
139 Berendos Avenue • Pacifica, California**

The cabinets are often located outdoors and are connected to the antennas by coaxial cables. Some cabinets require fans to cool the electronics inside; such cooling is often integrated into the cabinets.

Site & Facility Description

According to information provided by AT&T, including zoning drawings by Black and Veatch, dated July 6, 2015, and to additional information provided by AT&T, four cabinets are to be mounted on the side of the utility pole located near 139 Berendos Avenue in Pacifica. Beginning at least 7 feet above ground on the pole would be a meter, and about 3½ feet above it, a disconnect and breaker panel. Higher up on the pole, at about 17 feet above ground, would be a Ciena Model 3931 Service Delivery Switch and Ericsson Model RBS 6501 cabinet; this cabinet is the transceiver described above, that handles the conversions of signal format between wired and wireless.

Study Results

Three of the equipment cabinets do not emit noise, including the Ciena Model 3931 Service Delivery Switch, which is passively cooled by the natural convective flow of air across its cooling fins; no fans or other moving elements are installed. For the fourth cabinet, Ericsson reports that the maximum noise level is 27 dB[A] at normal temperatures and, when the temperature is above 122°F, the noise level is 47 dB[A], both measured at a reference distance of 1.7 meters.

The County's most restrictive limit of 70 dBA CNEL is reached only within 1.1 inches of the cabinets at normal temperatures, and within 11 inches at temperatures above 122°F. Considering the heights of the cabinets on the pole and their distance from the nearest property lines, the noise level at any receiving property would be well below the County's limits.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of this AT&T Mobility small cell to be located near 139 Berendos Avenue in Pacifica, California, will comply with the pertinent standards limiting acoustic noise emission levels.

**AT&T Mobility • Small Cell No. SCC-CC0004-14
139 Berendos Avenue • Pacifica, California**

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. 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.



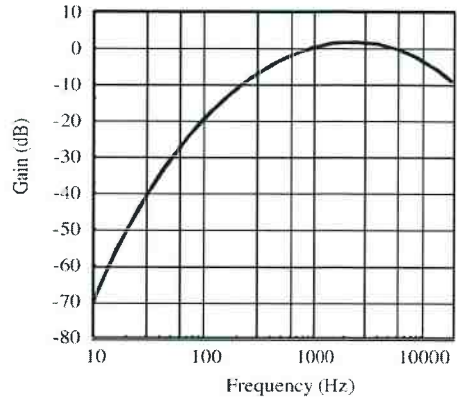


William F. Hammett, P.E.
707/996-5200

July 28, 2015

Noise Level Calculation Methodology

Most municipalities and other agencies specify noise limits in units of dBA, which is intended to mimic the reduced receptivity of the human ear to Sound Pressure (“L_P”) at particularly low or high frequencies. This frequency-sensitive filter shape, shown in the graph to the right as defined in the International Electrotechnical Commission Standard No. 179, the American National Standards Institute Standard No. 5.1, and various other standards, is also incorporated into most calibrated field test equipment for measuring noise levels.



30 dBA	library
40 dBA	rural background
50 dBA	office space
60 dBA	conversation
70 dBA	car radio
80 dBA	traffic corner
90 dBA	lawnmower

The dBA units of measure are referenced to a pressure of 20 μPa (micropascals), which is the threshold of normal hearing. Although noise levels vary greatly by location and noise source, representative levels are shown in the box to the left.

Manufacturers of many types of equipment, such as air conditioners, generators, and telecommunications devices, often test their products in various configurations to determine the acoustical emissions at certain distances. This data, normally expressed in dBA at a known reference distance, can be used to determine the corresponding sound pressure level at any particular distance, such as at a nearby building or property line. The sound pressure drops as the square of the increase in distance, according to the formula:

$$L_P = L_K + 20 \log(D_K/D_P),$$

where L_P is the sound pressure level at distance D_P and L_K is the known sound pressure level at distance D_K.

Individual sound pressure levels at a particular point from several different noise sources cannot be combined directly in units of dBA. Rather, the units need to be converted to scalar sound intensity units in order to be added together, then converted back to decibel units, according to the formula:

where L_T is the total sound pressure level and L₁, L₂, etc are individual sound pressure levels.

$$L_T = 10 \log (10^{L_1/10} + 10^{L_2/10} + \dots),$$

Certain equipment installations may include the placement of barriers and/or absorptive materials to reduce transmission of noise beyond the site. Noise Reduction Coefficients (“NRC”) are published for many different materials, expressed as unitless power factors, with 0 being perfect reflection and 1 being perfect absorption. Unpainted concrete block, for instance, can have an NRC as high as 0.35. However, a barrier’s effectiveness depends on its specific configuration, as well as the materials used and their surface treatment.



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City of Pacifica

Small Cell SCC-CC0004-14 – In front of 139 Berendos Ave. Pacifica, California Alternative Site Analysis Conditional Use Permit Request

ATTACHMENT H



On the map above, the proposed AT&T wireless facility in the public right-of-way in front of 139 Berendos Avenue (37.611427204°, -122.473925°) is indicated as Small Cell “SCC-CC0004-14” The 10 alternative locations that AT&T analyzed are marked by pins AP14B, AP14C, AP14D, AP14E, AP14F, AP14G, AP14H, AP14I, AP14J and AP14K.

Small Cell SCC-CC0004-14 – Proposed Location



- The location for AT&T's proposed wireless facility (Small Cell SCC-CC0004-14) is in the public right-of-way at a joint utility pole in front of 139 Berendos Avenue. (37.611427204°, -122.473925°)
- AT&T evaluated this site and nearby alternatives to verify that the selected site is the least intrusive means to close AT&T's significant service coverage gap.
- AT&T carefully selected this location to close a precise section of the service coverage gap. The small cells are related to each other, and if you move one it may affect others.



Small Cell AP14B – Alternative 1



- Small Cell AP14B (Alternative 1) is in the public right-of-way at a joint utility pole located in front of 159 Berendos Avenue. (37.611068°, -122.473716°).
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would likely violate CPUC General Order-95 Regulation because all four quadrants of the pole appear occupied.



Small Cell AP14C – Alternative 2



- Small Cell AP14C (Alternative 2) is in the public right-of-way at a joint utility pole located in front of 203 Berendos Avenue. (37.610712°, -122.473296°)
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would likely violate CPUC General Order-95 Regulation because all four quadrants of the pole appear occupied.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP14D – Alternative 3



- Small Cell AP14D (Alternative 3) is in the public right-of-way at a joint utility pole located across from 203 Berendos Avenue. (37.610752°, -122.473569°)
- This pole is not a viable alternative to close this portion of AT&T's significant service coverage gap because the minimum antenna height needed at this pole would violate CPUC General Order-94 Regulation safety clearances. This configuration does not allow AT&T the proper 6' safety clearance below the power conductor while maintaining 2' of separation from the communication lines.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP14E – Alternative 4



- Small Cell AP14E (Alternative 4) is in the public right-of-way at a joint utility pole located across from 131 Berendos Avenue. (37.611514°, -122.474082°)
- The pole location and height is not optimal to close this portion of the service coverage gap.



Small Cell AP14F – Alternative 5



- Small Cell AP14F (Alternative 5) is in the public right-of-way at a joint utility pole located in front of 225 Winona Avenue. (37.611519°, -122.474340°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4)(i) which prohibits wireless attachments on an existing structure located within the “building profile” of an existing residential structure.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP14G – Alternative 6



- Small Cell AP14G (Alternative 6) is in the public right-of-way at a joint utility pole located in front of 122 Berendos Avenue. (37.611975°, -122.474534°)
- The pole does not close this portion of AT&T's significant service coverage gap because the signal would be blocked by trees.

Small Cell AP14H – Alternative 7



- Small Cell AP14H (Alternative 7) is in the public right-of-way at a joint utility pole located across from 122 Berendos Avenue. (37.612047°, -122.474484°)
- The pole does not achieve the height needed to close this portion of the significant coverage service gap given the signal would be blocked by the adjacent tree.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP14I – Alternative 8



- Small Cell AP14I (Alternative 8) is in the public right-of-way at a joint utility pole located in front of 119 Berendos Avenue. (37.612029°, -122.474120°)
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Minimum antenna height needed at this pole would violate CPUC General Order-94 Regulation safety clearances. This configuration does not allow AT&T the proper 2' of separation from the communication lines.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP14J– Alternative 9



- Small Cell AP14J (Alternative 9) is in the public right-of-way at a joint utility pole located in front of 132 Berendos Avenue. (37.611847°, -122.474352°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4)(i) which prohibits wireless attachments on an existing structure located within the “building profile” of an existing residential structure.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP14K – Alternative 10



- Small Cell AP14K (Alternative 10) is an existing tower located at the Pacifica Police Department at 2075 Pacific Coast Highway. (37.615393°, -122.484573°)
- Macro Antennas mounted at estimated available heights on the existing telecommunications tower would fail to close the significant service coverage gap, and would therefore require a new taller, more intrusive structure. Further, without a new taller structure, the height of neighboring buildings and trees surrounding this property will block antenna signals contributing to the inability to use this location to close AT&T's significant service coverage gap.



Small Cell SCC-CC0004-14 – Alternative Site

Analysis Conclusion

Based on AT&T's analysis of alternative sites, and per the City of Pacifica Zoning Ordinance Article 26, qualifying the installation as a "minor antenna", the proposed location in front of 139 Berendos Avenue (Small Cell SCC-CC0004-14) is the least intrusive means to close AT&T's significant service coverage gap.



SCC-CC0004-14: 37.611427204°, -122.473925° (Proposed Site)

- AP14B: 37.611068°, -122.473716°**
- AP14C: 37.610712°, -122.473296°**
- AP14D: 37.610752°, -122.473569°**
- AP14E: 37.611514°, -122.474082°**
- AP14F: 37.611519°, -122.474340°**
- AP14G: 37.611975°, -122.474534°**
- AP14H: 37.612047°, -122.474484°**
- AP14I: 37.612029°, -122.474120°**
- AP14J: 37.611847°, -122.474352°**
- AP14K: 37.615393°, -122.484573°**



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

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 139 Berendos Avenue in Pacifica, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

AT&T proposes to install two omnidirectional antennas on a tall utility pole located near 139 Berendos Avenue in Pacifica. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.35	0.47
[most restrictive frequency range]	30–300	1.00	0.20

Power line frequencies (60 Hz) are well below the applicable range of these standards, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables.

**AT&T Mobility • Small Cell No. SCC-CC0004-14
139 Berendos Avenue • Pacifica, California**

A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation,” dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna’s radiation pattern is not fully formed at locations very close by (the “near-field” effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the “inverse square law”). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by AT&T, including drawings by Black and Veatch, dated July 6, 2015, that carrier proposes to install a new small cell on the existing 29½-foot utility pole sited in the public right-of-way in front of the residence located at 139 Berendos Avenue in Pacifica. Two Amphenol Model 7825700 omnidirectional antennas would be mounted with no downtilt at an effective height of about 17 feet above ground. The maximum effective radiated power in any direction would be 10 watts in the 700 MHz frequency band.

Study Results

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed AT&T operation is calculated to be 0.0075 mW/cm², which is 1.6% of the applicable public exposure limit. The maximum calculated level at any nearby residence is 0.036 mW/cm², which is 7.4% of the applicable public limit.

Recommended Mitigation Measures

Due to their mounting location and height, the AT&T antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. RF exposure levels are calculated to exceed the occupational limit out to less than 18 inches in front of the antennas, and so can be considered intrinsically compliant with FCC



**AT&T Mobility • Small Cell No. SCC-CC0004-14
139 Berendos Avenue • Pacifica, California**

occupational exposure guidelines. To prevent exposures in excess of FCC guidelines, it is recommended that training be provided to all authorized personnel needing to work within 3 feet directly in front of the antennas, including employees and contractors of AT&T and of the utility company, and that explanatory signs* be posted on the pole at or below the antennas, readily visible from any angle of approach to such persons needing to work within that distance.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of this AT&T small cell near 139 Berendos Avenue in Pacifica, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Training authorized personnel and posting explanatory signs is recommended to establish compliance with occupational exposure limits.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-20309, which expires on March 31, 2017. This work has been carried out under her direction, and all statements are true and correct of her own knowledge except, where noted, when data has been supplied by others, which data she believes to be correct.



Andrea L. Bright

Andrea L. Bright, P.E.
707/996-5200

July 24, 2015

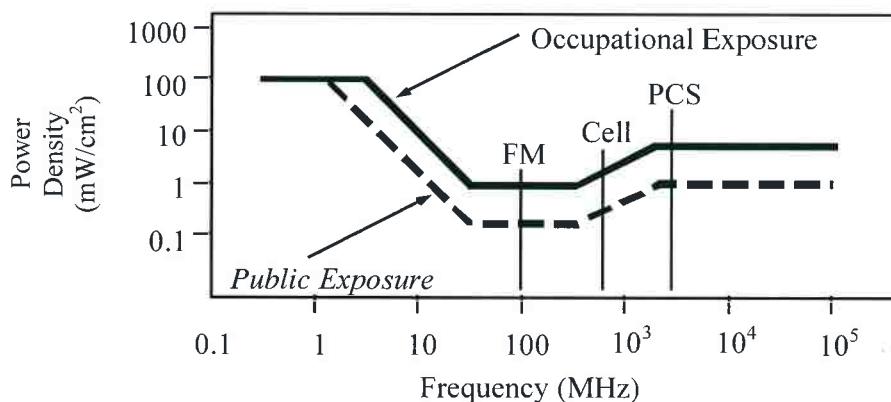
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (<i>f</i> is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/ <i>f</i>	<i>823.8/f</i>	4.89/ <i>f</i>	<i>2.19/f</i>	900/ <i>f²</i>	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√ <i>f</i>	<i>1.59√f</i>	√ <i>f</i> /106	<i>√f/238</i>	<i>f/300</i>	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and

P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.





BLACK & VEATCH
Building a world of difference.

ANA GOMEZ-ABARCA
Sr. Site Acquisition Manager, Telecom Division
2999 Oak Road, Suite 490
Walnut Creek, CA 94597
+1 913-458-9148 | GomezAbarcaA@BV.com

November 19, 2015

Christian Murdock, AICP
Associate Planner
City of Pacifica Planning Department
1800 Francisco Blvd
Pacifica, CA 94044

Re: **Proposed AT&T Mobility Small Cell Installation**
Applicant: New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)
Planning Application: UP-64-15
Site Address: 139 Berendos Avenue
Site ID: SCC-CC0004-14
Latitude/Longitude: 37.611427, -122.473925

Dear Mr. Murdock,

This letter is written on behalf of New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility) in response to your email dated November 18, 2015 requesting a written explanation of how we are complying with the requirements of Pacifica Municipal Code Sec. 9-4.2608(b)(1), quoted below:

Pacifica Municipal Code Sec. 9-4.2608(b)(1):

“(b) Design-related standards.

- (1) All wireless communication facilities shall, to the maximum extent practicable, incorporate best practices to achieve concealment and stealth of antennas, equipment, and support structures. Further, all wireless communications facilities shall be screened to the fullest extent possible and located to minimize visibility from surrounding areas and private or public rights-of-way. In addition to the requirements of this subsection, wireless communications facilities within a private or public right-of-way shall conform to the standards of subsection (e).”

The two proposed 7.7” omni antennas and micro RBS will be placed on a proposed bracket mount on an existing utility pole. The bracket mount will be placed above line of sight. This equipment will be painted brown to blend in with the existing utility pole. The proposed PG&E meter will be placed with the required 7’ clearance.

At the time of building permit submittal the construction drawings will include a note reflecting AT&T’s commitment to paint the equipment brown.

Painting the equipment brown is less intrusive and visible than alternative concealment options such as a radome or a slimline monopole. A radome, or metal canister, would need to be wide enough to surround the

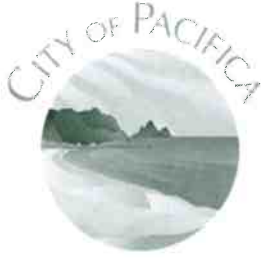


pole and cover the proposed bracket, omni antennas and RRU. This radome would extend past the maximum 2' from the point of attachment limit set in Sec. 9-4.2608(e)(1). In addition, a slimline monopole would require placement of a new pole adjacent to an existing utility pole. This would be more visually intrusive than the current proposal.

Feel free to contact me if you have any questions. Thank you.

Best Regards,

Ana Gomez-Abarca
Sr. Site Acquisition Manager
For AT&T Mobility



Scenic Pacifica
Incorporated Nov. 22, 1957

PLANNING COMMISSION Staff Report

DATE: December 7, 2015

FILE: UP-65-15

ITEM: 2.j

PUBLIC NOTICE: Notice of Public Hearing was published in the Pacifica Tribune on November 25, 2015, was mailed to 1,258 property owners and occupants within the Vallemar neighborhood, and was posted at the project site.

APPLICANT: Ana Gomez, agent for New Cingular Wireless (d.b.a. AT&T Mobility)
2999 Oak Road, Suite 490
Walnut Creek, CA 94597
(913) 458-9148

OWNER: Pole: Joint ownership through Northern California Joint Pole Association (NCJPA)
Site: Public right-of-way

PROJECT LOCATION: Utility pole within the public right-of-way adjacent to 217 Hillside Drive (APN 018-071-170) – Vallemar

PROJECT DESCRIPTION: Construct a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way.

SITE DESIGNATIONS: General Plan: Low Density Residential (LDR)
Zoning: R-1 (Single-Family Residential)

RECOMMENDED CEQA STATUS: Class 3 Categorical Exemption, Section 15303.

ADDITIONAL REQUIRED APPROVALS: None. Subject to appeal to the City Council.

RECOMMENDED ACTION: Approve as conditioned.

PREPARED BY: Christian Murdock, Associate Planner

PROJECT SUMMARY, RECOMMENDATION, AND FINDINGS

PROJECT SUMMARY

1. General Plan, Zoning, and Surrounding Land Uses

Section 1 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

2. Municipal Code

Section 2 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

3. Project Description

A. Antennas and Equipment

The applicant proposes to install a WCF on an existing utility pole adjacent to a single-family residence. The utility pole is 38'-0" tall and contains electrical, cable, and telephone utility wires. The antenna mounting bracket, antennas, and remote radio unit (RRU) will be located approximately 19'-7" above ground while the electrical meter and disconnect will be located approximately 7'-0" above ground. The proposed antennas and equipment will be connected via nonmetallic conduit installed along the pole face. The antenna mounting bracket will mount on the face of the utility pole and the mounting arm, which holds the antennas, will project perpendicular from the pole by 2'-0". Full details of the proposed facility are shown in Attachment D and described in the applicant's letter of explanation, Attachment E. Photosimulation renderings providing a visual approximation of the scale and design of the proposed facility are included in Attachment F.

The facility type proposed by the applicant is a new design which features a highly-compact form factor. Unlike traditional facilities featuring multiple large panel antennas up to six feet in height with large ground-mounted equipment enclosures, the proposed facility will include two cylindrical antennas measuring 7.7"-tall by 1.1"-wide. The facility will include no ground-mounted equipment; rather, one small equipment cabinet measuring 17.7"-tall by 11.9" wide by 5.3" deep will be installed on the pole along with one 3'-2"-tall by 1'-0" wide by 4'-1" deep electrical meter. Electrical and telecommunications connections will be made through existing services on the pole, and will require no trenching on the ground. The small size of the facilities also means there is no need for large equipment cabinets with air conditioners or backup generators, which can often generate noise in the immediate vicinity. The applicant has prepared a noise analysis to demonstrate the very low levels of noise generated by the proposed WCF (Attachment G).

The facility type proposed by the applicant incorporates a low power antenna design which services a small area in the immediate vicinity of the site. The lower power results in a smaller facility form factor, but also requires a greater number of sites throughout the coverage area. The applicant has proposed a total of 12 sites throughout the Vallemar neighborhood, inclusive of the subject site, which are being processed as individual use permit applications given the independent function of each site and the unique characteristics of each proposed location.

B. Alternative Site Analysis

The applicant assessed several alternatives before deciding to pursue the development of the subject site (Attachment H). The alternative sites assessed included other utility poles in the vicinity of the project site as well as an existing “macro site,” or large-scale tower, located at the west end of the Vallemar neighborhood at the Pacifica Police Department (2075 Coast Highway). None of the alternative utility poles were suitable candidates due to one or more of the following reasons: increased visibility based on their location; unavailability due to all pole quadrants being occupied by existing utility equipment; violation of a zoning standard; pole height will not meet coverage objectives; and/or, the location of the pole not meeting the applicant’s coverage objective for filling-in a service gap.

The existing macro site at the Pacifica Police Department also was an unsuitable candidate for facility construction due to the challenging topography of the Vallemar neighborhood. There are a number of elevation changes within the neighborhood which result in obstructions in the line-of-sight between the macro site and the coverage objectives. The applicant’s modeling showed that even a new tower of 200 feet in height could not achieve the desired coverage objectives.

Based upon the location of other existing utility poles available for mounting, the impact of neighborhood topography on line-of-sight to the existing macro site at the Pacifica Police Department, and an assumption that construction of a new pole anywhere in the Vallemar neighborhood would be undesirable, the applicant concluded that locating on the subject utility pole was the least visually obtrusive facility design which could also meet its coverage objectives.

C. Article 26 Wireless Communications Facility Standards

Section 3.C of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

4. Required Findings

Section 4 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

5. Public Comments Received

Section 5 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

6. CEQA Recommendation

Section 6 of the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, is hereby incorporated by reference.

7. Staff Analysis

The topography of the Vallemar neighborhood is the dominant factor driving the applicant's siting decisions. Existing wireless telephone and data communications coverage is poor throughout much of the neighborhood. The result is that wireless communications service is nonexistent within many homes and is marginally better outdoors. Access to reliable wireless telephone and data communications is an essential component of modern neighborhoods as technological trends continue away from wired communications devices toward the greater flexibility and mobility of wireless communications solutions.

The applicant's chosen facility design – locating on an existing utility pole support structure – is the least visually obtrusive design alternative available. In addition, the antenna and equipment configuration proposed by the applicant are very small, further limiting visual impacts. The applicant will also paint the antennas and equipment to closely match the existing utility pole. Combined, these measures have resulted in a facility design which meets the applicant's coverage objectives while respecting and preserving the existing neighborhood character. Based on the evidence contained in the record and analyzed by staff, it is staff's opinion that the Planning Commission can make all findings required for project approval.

8. Summary:

Staff has determined that, as conditioned, the project will satisfy all zoning regulations and applicable development standards, will be consistent with the General Plan, and which, on balance, is consistent with the Design Guidelines. The project will result in the least impactful project design which will also meet the applicant's coverage objectives. The proposed project will retain and enhance the character of the Vallemar neighborhood and provide an important communications link to City information, emergency services, and commerce. Thus, staff recommends approval of the project subject to the conditions in Exhibit A of the Resolution.

COMMISSION ACTION

MOTION FOR APPROVAL:

Move that the Planning Commission find the project is exempt from the California Environmental Quality Act; **APPROVE** Use Permit UP-65-15 by adopting the attached resolution, including conditions of approval in Exhibit A; and, incorporate all maps and testimony into the record by reference.

Attachments:

- A. Land Use and Zoning Exhibit
- B. Resolution of Approval
- C. Exhibit A to Resolution of Approval – Conditions of Approval
- D. Site Plan, Floor Plan, and Elevations
- E. Applicant's letter of explanation
- F. Photosimulation renderings
- G. Noise analysis
- H. Alternative site analysis
- I. Radiofrequency (RF) emissions calculations
- J. Alternatives for concealment and stealth of antennas, equipment, and support structure
- K. Reference Attachment K to the staff report for Item 1.a on the agenda for the Planning Commission meeting of December 7, 2015, which is hereby incorporated by reference

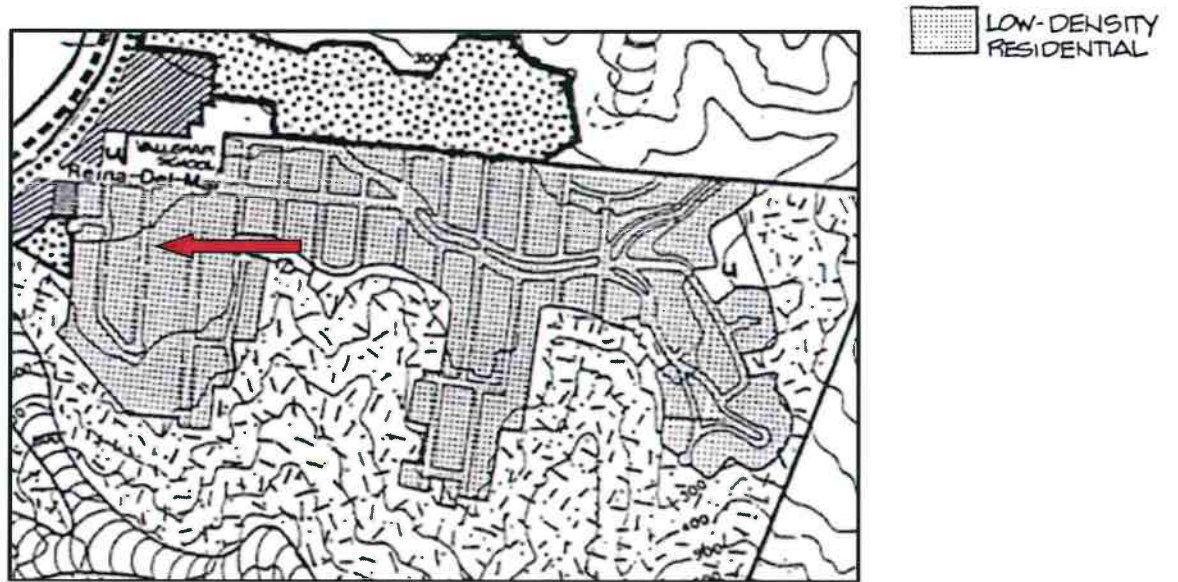
Land Use & Zoning Exhibit

City of Pacifica Planning Department

General Plan Diagram

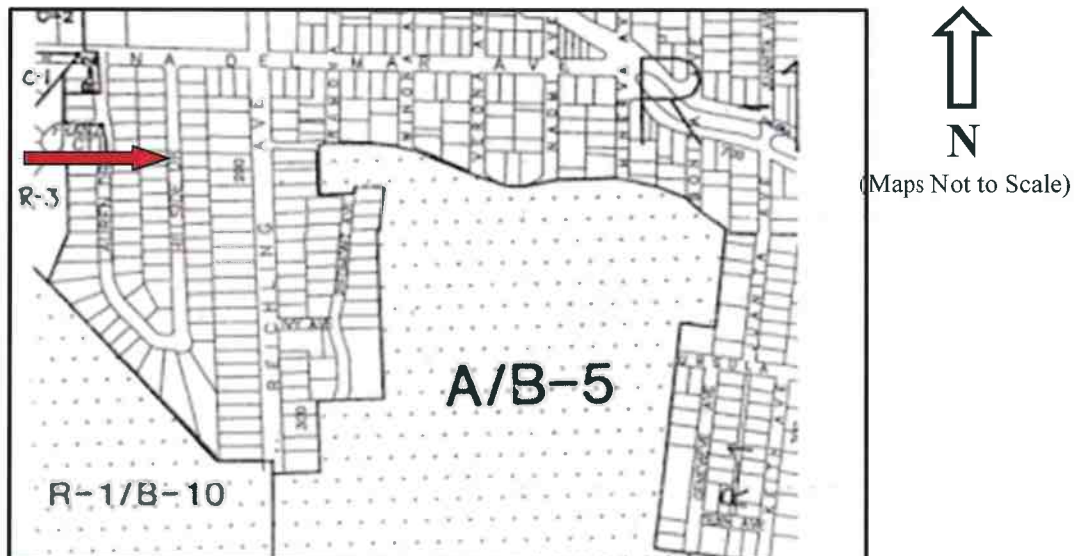
Neighborhood: Vallemar

Land Use Designation: Low Density Residential



Zoning Map Diagram

Zoning District: R-1 (Single-Family Residential)



RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PACIFICA APPROVING USE PERMIT UP-65-15, SUBJECT TO CONDITIONS, FOR A WIRELESS COMMUNICATIONS FACILITY ON AN EXISTING UTILITY POLE IN THE PUBLIC RIGHT-OF-WAY WITHHIN THE R-1 (SINGLE-FAMILY RESIDENTIAL) ZONING DISTRICT ADJACENT TO 217 HILLSIDE DRIVE (APN 018-071-170), AND FINDING THE PROJECT EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA).

Initiated by: Ana Gomez, agent for New Cingular Wireless (d.b.a. AT&T Mobility)
("Applicant").

WHEREAS, an application has been submitted to construct a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 217 Hillside Drive (APN 018-071-170); and

WHEREAS, construction of the proposed wireless communications facility requires approval of a use permit prior to the issuance of a building permit because the project site is within the public right-of-way; and

WHEREAS, the Planning Commission of the City of Pacifica did hold a duly noticed public hearing on December 7, 2015, at which time it considered all oral and documentary evidence presented, and incorporated all testimony and documents into the record by reference.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Pacifica does hereby make the following findings pertaining to Use Permit UP-65-15:

1. That the establishment, maintenance, or operation of the use or building applied for will not, under the circumstances of the particular case, be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.
 - A. The project will require a building permit prior to construction. The building permit process includes a detailed plan review for building and electrical code compliance, as well as field inspections of the work prescribed in the approved project plans to verify proper performance of the work. This will ensure safe installation of the proposed wireless communications facility. The project approval contains a condition of approval which requires the applicant to obtain a building permit prior to installation of the wireless communications facility.
 - B. The applicant has demonstrated its facility will comply with radiofrequency (RF) emissions standards established by the Federal Communications Commission

(FCC). Since the applicant has provided relevant information prepared by a qualified professional engineer to demonstrate compliance with FCC RF emissions standards, the project must be considered safe for the public in terms of RF emissions.

- C. The applicant has submitted an analysis prepared by a qualified professional engineer demonstrating that the proposed wireless communications facility will not generate noise that is objectionable or harmful to persons in the vicinity of the facility. Therefore, any noise generated by the facility will be safe for the public.
 - D. Based on the information provided by the applicant, City staff's analysis of that and other information, and the conditions of approval proposed for this project, the project will not be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.
2. That the use or building applied for is consistent with the applicable provisions of the General Plan and other applicable laws of the City and, where applicable, the local Coastal Plan.
- A. The proposed project is consistent with the following provisions of the General Plan and other laws of the City. Since the project is not within the Coastal Zone, the provisions of the Local Coastal Plan do not apply.
 - i. Noise Element, Policy No. 2: Establish and enforce noise emission standards for Pacifica which are consistent with the residential character of the City and environmental, health, and safety needs of the residents.

The project has been designed to emit minimal noise, as demonstrated in the applicant's noise analysis. The limited noise generation by the project will result it in being compatible and consistent with the residential character of the city and environmental, health, and safety needs of the residents.

- ii. Community Design Element, Policy No. 1: Preserve the unique qualities of the City's neighborhoods.

The Vallemar neighborhood has a predominantly residential character with mature trees throughout the neighborhood. Electrical and telecommunications utilities are provided via above-ground utility poles. The project involves construction of a wireless communications facility on an existing utility pole with no ground-mounted equipment or removal of trees required. By designing the project in this manner, it will preserve the unique qualities of the Vallemar neighborhood which include above-ground utility service and mature tree coverage.

iii. Community Design Element, Policy No. 2: *Encourage the upgrading and maintenance of existing neighborhoods.*

Public comments received from residents of the Vallemar neighborhood and analysis provided by the applicant indicate that wireless telephone and data coverage is poor throughout much of the Vallemar neighborhood. In many cases residents have no coverage within their homes and unreliable coverage outdoors. The project involves construction of a wireless communications facility to improve wireless telephone and data coverage. Improving service availability and reliability will allow residents to contact emergency services, family, and business contacts as needed. Additionally, high-speed wireless data connectivity is an increasingly important part of modern home life and commerce for home-based and mobile businesses. The project will increase the quality and reliability of wireless telephone and data service with the subject project, which will result in an upgrade to the existing neighborhood.

iv. Community Facilities Element, Policy No. 4: *Meet basic social needs of City residents, such as transportation, housing, health, information and referral services, and safety, consistent with financial constraints.*

Public comments received from residents of the Vallemar neighborhood and analysis provided by the applicant indicate that wireless telephone and data coverage is poor throughout much of the Vallemar neighborhood. In many cases residents have no coverage within their homes and unreliable coverage outdoors. The project involves construction of a wireless communications facility to improve wireless telephone and data coverage. Improving service availability and reliability will allow residents to obtain information on City services and to request emergency services more reliably. A reliable means of contacting police and fire emergency services from all locations within the Vallemar neighborhood, as improved by the project, is essential to meeting residents' basic social needs, including safety.

v. Land Use Element, Policy No. 4: *Continue to cooperate with other public agencies and utilities in applying compatible uses for their lands, rights-of-way and easements.*

The project will occur within the public right-of-way. The City cooperated with the applicant, AT&T Mobility, a communications service provider, in processing its application for the subject wireless communications facility. The coordination between the City and AT&T Mobility has resulted in a proposed project which is a compatible use for the public right-of-way in the Vallemar neighborhood. This is evidenced by the small scale of the equipment proposed, the measures to reduce the visual impact of the equipment, and the

installation of the equipment on an existing utility pole, thus reducing the need for additional structures within the public right-of-way.

In sum, there is sufficient evidence for the Planning Commission to find that the establishment, maintenance, and operation of the proposed wireless communications facility will not, under the circumstances of the particular case, be detrimental to the health, safety, and welfare of the persons residing or working in the neighborhood or to the general welfare of the City.

3. Where applicable, that the use or building applied for is consistent with the City's adopted Design Guidelines.

A. Building Design

- i. Design. *The style and design of new buildings should be in character with that of the surrounding neighborhood. This does not mean that new buildings should be identical to existing buildings on neighboring lots, but that new buildings should complement, enhance, and reinforce the positive characteristics of surrounding development. This can be accomplished by incorporating the dominant architectural features of an area into the design of new development. Such features may include bay windows, chimneys, balconies, porches, roof shapes, and other architectural details and materials.*

Additions to an existing structure should also retain and/or be consistent with the positive architectural features of the original structure.

The Vallemar neighborhood has a predominantly residential character with mature trees throughout the neighborhood. Electrical and telecommunications utilities are provided via above-ground utility poles and associated wires. The project involves construction of a wireless communications facility on an existing utility pole with no ground-mounted equipment or removal of trees required. Electricity and telecommunications connections will be made from existing wires on the utility pole. The proposed antenna mounting will be made on a bracket mounted to the face of the utility pole which will extend at a 90-degree angle from the pole in the same manner as typical utility pole cross-members. The prominent vertical mast and smaller perpendicular cross-members are the dominant architectural themes of the utility poles in the Vallemar neighborhood. By designing the project in this manner, it will be in character with the surrounding neighborhood.

- ii. *Scale. An important aspect of design compatibility is scale. Scale is the measure of the relationship of the relative overall size of one structure with one or more other structures. Scale is also used to refer to a group of buildings, a neighborhood, or an entire city. A development can be “out of scale” with its surroundings due to its relative height, bulk, mass, or density.*

A structure which is out of scale with its site and neighborhood threatens the integrity of the overall streetscape, and residential projects, particularly single-family dwellings, which are much larger than neighboring structures are therefore discouraged. The City’s height limitation is a maximum only, and the maximum height may often be inappropriate when considered in the context of surrounding development and topography. The “carrying capacity” of a given site is also an important factor in determining appropriate scale and lot coverage. As with the height limitation, the City’s lot coverage limitation is a maximum only.

The project will locate on an existing utility pole and will not increase the height of the utility pole. By maintaining the existing height, the project will preserve the most noticeable factor that could impact the project scale. The project will result in a new horizontal projection from the utility pole, but the projection will be 2’-0”, which is a minor increase. By staying within the existing vertical envelope of the utility pole and by creating a very small new horizontal projection, the proposed wireless communications facility will remain in scale with the existing utility pole and the surrounding neighborhood.

- iii. *Color. Building color should be compatible with the neighborhood and should reinforce and complement the visual character of the building’s environment. Multiple colors applied to a single building should relate to changes of material or form.*

The existing utility pole onto which the project will locate is made of wood. The project will include painting the antennas and equipment brown to achieve a similar color to the utility pole which will result in an installation that blends into the utility pole. Painting the wireless communications facility brown will be compatible with the neighborhood.

The Design Guidelines are drafted primarily to address construction of residential and commercial buildings. Few guidelines directly address the construction of utility poles in rights-of-way. However, based upon those guidelines which are applicable to this project type, the Planning Commission determines that there is a sufficient

basis to find that the proposed project is consistent with the City's adopted Design Guidelines.

4. That the project will not cause localized interference with reception of area television or radio broadcasts or other signal transmission or reception.
 - A. The Planning Commission considered evidence submitted by the applicant and prepared by a qualified professional engineer which assessed the communications technologies involved in the wireless communications facility. The analysis indicated that the technologies involved will not cause the type of interference described in this finding. Based upon the applicant's analysis prepared by a qualified professional engineer, the Planning Commission finds that the project will not cause localized interference with reception of area television or radio broadcasts or other signal transmission or reception.
5. That the information submitted proves that a feasible alternate site that would result in fewer visual impacts does not provide reasonable signal coverage.
 - A. The applicant prepared an alternative site assessment describing the feasibility and desirability of several sites. The analysis relied on a presumption that construction of a new support structure (i.e. pole) would result in greater visual impacts than locating on an existing support structure, whether a utility pole or the existing macro pole at the Pacifica Police Department. Therefore, the analysis did not consider any specific locations for new poles within the Vallemar neighborhood but did consider a new macro pole up to 200 feet in height at the Pacifica Police Department.
 - B. Based on its presumption that new support structure construction would be undesirable, a presumption accepted by the Planning Commission, the applicant considered other existing utility poles in the vicinity of the project site. All of the other utility poles were more visually prominent and impactful; were unavailable for installation (due to all quadrants being occupied); and/or, did not meet the applicant's coverage objectives. Therefore, the Planning Commission finds that the information submitted by the applicant proves that a feasible alternate site that would result in fewer visual impacts does not provide reasonable signal coverage.
6. That the application meets all applicable requirements of Section 9-4.2608 of the Pacifica Municipal Code.
 - A. Article 26 of the Zoning Regulations sets for the standards for wireless communications facilities. Subsections (a), (b), and (e) include the development standards applicable to the subject project. As set forth in the staff report, namely in Section 3.C, the Planning Commission finds that project meets or exceeds all applicable requirements of Section 9-4.2608, including but not limited to

requirements for height and width, placement, equipment facilities, radiofrequency emissions standards, localized interference, lighting, concealment, colors and materials, fencing and walls, and landscaping.

7. That the project is exempt from the California Environmental Quality Act (CEQA) as a Class 3 exemption provided in Section 15303 of the CEQA Guidelines.
 - A. Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure.
 - B. The project involves construction of a wireless communications facility on an existing utility pole, which fits within the scope of a Class 3 categorical exemption. Specifically, the project includes installation of two small antennas measuring 7.7-inches wide by 1.1-inches tall and mounted on an antenna bracket projecting 2-feet from an existing utility pole, with associated small equipment cabinets mounted on the pole and involving no disturbance to the ground.
 - C. The project, while being undertaken concurrently with 11 other similar projects within the Vallemar neighborhood, is an independent project under CEQA and its impacts are not cumulative. According to information provided by the applicant, the wireless communications facility can operate independently of the other facilities proposed in the area. The facility provides coverage to a small area surrounding the facility and is connected to existing electrical and telecommunications lines on an existing utility pole. There is no direct site-to-site communication between this facility and other facilities proposed in the area.
 - D. As to the visual impact of the facility, there are several factors that result in a negligible visual impact from the project. The wireless communications facility will be visible to passersby and observers from nearby buildings, but it will not be so visually prominent that it will necessarily be noticed. The applicant will paint the antennas and associated equipment a dark brown color to minimize the contrast between the antennas and equipment and the utility pole on which they are mounted. The subdued paint color will minimize the visual prominence of the facility. The facility will be observed in the context of the existing utility pole and associated utility lines and equipment already installed on the subject and surrounding utility poles. Utility poles and equipment of this sort are common throughout Pacifica's urbanized environment, including in the vicinity of the project site. The visual effect of the facility will be further minimized by its isolation from the other facilities. No other proposed facility is visible from the subject site, meaning any minor visual impact resulting from the project will not

be cumulative. The result is a minimal incremental visual effect from the installation of this particular facility.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission of the City of Pacifica does hereby approve Use Permit UP-65-15 for construction of a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 217 Hillside Drive (APN 018-071-170), subject to conditions of approval included as Exhibit A to this resolution.

* * * * *

Passed and adopted at a regular meeting of the Planning Commission of the City of Pacifica, California, held on the 7th day of December 2015.

AYES, Commissioner:

NOES, Commissioner:

ABSENT, Commissioner:

ABSTAIN, Commissioner:

Richard Campbell, Chair

ATTEST:

APPROVED AS TO FORM:

Tina Wehrmeister, Planning Director

Michelle Kenyon, City Attorney

Exhibit A

Conditions of Approval: Use Permit UP-65-15 for construction of a new wireless communications facility consisting of two 7.7-inch tall by 1.1-inch wide antennas and associated pole-mounted equipment on an existing utility pole within the public right-of-way adjacent to 217 Hillside Drive (APN 018-071-170)

Planning Commission Meeting of December 7, 2015

Planning Division of the Planning Department

1. Development shall be substantially in accord with the plans entitled "Small Cell - ZD," dated July 13, 2015, except as modified by the following conditions.
2. That the approval or approvals is/are valid for a period of two years from the date of final determination. If the use or uses approved is/are not established within such period of time, the approval(s) shall expire unless Applicant submits a written request for an extension and applicable fee prior to the expiration date, and the Planning Director or Planning Commission approves the extension request as provided below. The Planning Director may administratively grant a single, one year extension provided, in the Planning Director's sole discretion, the circumstances considered during the initial project approval have not materially changed. Otherwise, the Planning Commission shall consider a request for a single, one year extension.
3. Prior to the issuance of a building permit, Applicant shall submit information on exterior finishes, including colors and materials, subject to approval of the Planning Director.
4. Prior to final inspection, and where technically feasible (as determined by the Planning Director), paint all equipment, conduit, antennas, and other appurtenances of the facility dark brown to blend in with the utility pole and to reduce visual obtrusiveness. Painted surfaces shall be maintained in a uniform condition substantially free of peeling, chipping, or other paint defects except normal fading, to the satisfaction of the Planning Director.
5. The project shall not include any ground-mounted equipment or trenching.
6. Applicant shall maintain its site in a fashion that does not constitute a public nuisance and that does not violate any provision of the Pacifica Municipal Code.
7. All outstanding and applicable fees associated with the processing of this project shall be paid prior to the issuance of a building permit.
8. Prior to issuance of a building permit, Applicant shall clearly indicate compliance with all conditions of approval on the plans and/or provide written explanations to the Planning Director's satisfaction.

9. The applicant shall indemnify, defend and hold harmless the City, its Council, Planning Commission, advisory boards, officers, employees, consultants and agents (hereinafter "City") from any claim, action or proceeding (hereinafter "Proceeding") brought against the City to attack, set aside, void or annul the City's actions regarding any development or land use permit, application, license, denial, approval or authorization, including, but not limited to, variances, use permits, developments plans, specific plans, general plan amendments, zoning amendments, approvals and certifications pursuant to the California Environmental Quality Act, and/or any mitigation monitoring program, or brought against the City due to actions or omissions in any way connected to the applicant's project, but excluding any approvals governed by California Government Code Section 66474.9. This indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and costs of suit, attorneys fees and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, City, and/or parties initiating or bringing such Proceeding. If the applicant is required to defend the City as set forth above, the City shall retain the right to select the counsel who shall defend the City.

Building Division of the Planning Department

10. The project requires review and approval of a building permit by the Building Official. Applicant shall apply for and receive approval of a building permit prior to commencing any construction activity.
11. Prior to issuance of a building permit, the City shall assign the site a unique address.
12. Prior to final inspection, the applicant shall provide evidence that Pacific Gas & Electric (PG&E) has approved the location of the proposed meter.
13. All mounting hardware shall be made of corrosion resistant materials, to the satisfaction of the Building Official and City Engineer.

Engineering Division of Public Works Department

14. Construction shall be in conformance with the San Mateo Countywide Storm Water Pollution Prevention Program. Best Management Practices shall be implemented.
15. Roadways shall be maintained clear of construction materials and debris, especially mud and dirt tracked onto Beaumont Boulevard. Dust control and daily road cleanup will be strictly enforced.
16. Prior to the issuance of a building permit, add a note on the Site Plan that says, "Any damage to improvements within the city right-of-way or to any private property, whether adjacent to subject property or not, that is determined by the City Engineer to have resulted from construction activities related to this project shall be repaired or replaced as directed by the City Engineer."

17. Applicant shall locate all equipment to the greatest extent possible so that the meter cabinets are not directly over sidewalks (including the decomposed granite public walkways) in order to reduce the future possibility of deteriorated equipment falling on a person.
18. Applicant shall, if some point in the future the utility pole on which the subject wireless communications facility is installed is no longer needed for carrying electrical power or communications wires, apply to the City for alternate options for providing wireless communications service to its customers in the vicinity of the project.
19. Prior to issuance of a building permit, Applicant shall apply for and receive approval of a City of Pacifica Encroachment Permit for all work undertaken in the public right-of-way. All work shall be performed in accordance with City Standards, Standard Specifications for Public Works Construction (Green Book) or Caltrans Standard Specifications, Pacifica Municipal Code, Administrative Policies and to the satisfaction of the City Engineer or his designee. Permit fees shall be determined per the current adopted fee schedule.
20. All recorded survey points, monuments, railroad spikes, pins, cross cuts on top of sidewalks and tags on top of culvert headwalls or end walls whether within private property or public right-of-way shall be protected and preserved. If survey point/s are altered, removed or destroyed, the applicant shall be responsible for obtaining the services of a licensed surveyor or qualified Civil Engineer to restore or replace the survey points and record the required map prior to occupancy of the first unit.

END

STATEMENT OF SPECIAL INSPECTION

THE ENGINEER OF RECORD, BEING FULLY ADVISED OF THE CODE AND SCOPE OF THE SUBJECT PROJECT, STATES SPECIAL INSPECTION IS REQUIRED FOR THE WORK IN CONFORMANCE WITH THE 2013 CBC 1705.11.6. THE SPECIAL INSPECTION PLAN CONSISTS OF THE ENGINEER OF RECORD'S SPECIAL INSPECTION REPORT AND SEALING THE DESIGN DOCUMENTS. THE SPECIAL INSPECTION REPORT SHALL BE AVAILABLE TO THE BUILDING OFFICIAL WITHIN TWO WEEKS OF RECEIPT OF REQUEST (CBC 1704.2.4).

ENGINEERING

2013 CALIFORNIA BUILDING CODE OR ADOPTED CODE
 2013 CALIFORNIA ELECTRICAL CODE OR ADOPTED CODE
 TIA/EIA-222-G OR ADOPTED CODE
 CALIFORNIA RULES FOR OVERHEAD ELECTRIC LINE CONSTRUCTION - G059

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF ANTENNA AND ASSOCIATED EQUIPMENT CABINETS FOR AT&T'S WIRELESS TELECOMMUNICATIONS NETWORK.

PROJECT INFORMATION

COUNTY: SAN MATEO
 ZONING JURISDICTION: CITY OF PACIFICA
 ZONING DISTRICT: PUBLIC RIGHT-OF-WAY
 OCCUPANCY GROUP: U
 CONSTRUCTION TYPE: V-B
 CONSTRUCTION MANAGER: ARNOLD NEWMAN (913) 458-9683
 HEINEMANN@PACIFICRIGHTS.COM
 GUILDFORD@PACIFICRIGHTS.COM
 SITE ACQUISITION MANAGER: ANA GOMEZ-ABARCA (913) 458-9148
 GOMEZ@PACIFICRIGHTS.COM
 RF ENGINEER: JONAS WOLFF (913) 458-9148
 BMS30@pacbell.com
 APPLICANT: AT&T MOBILITY
 TASHA STACK (913) 458-9148
 TSTACK@att.com
 CORP P/N: 2401676313
 FA LOCATION: 13023004

CONTACT INFORMATION

ENGINEER: BLACK & VEATCH
 2999 OAK ROAD, SUITE 400
 WALKLET CHECK, CA 94597
 CONTACT: CHRIS WIRTH
 PHONE: (913) 458-4321

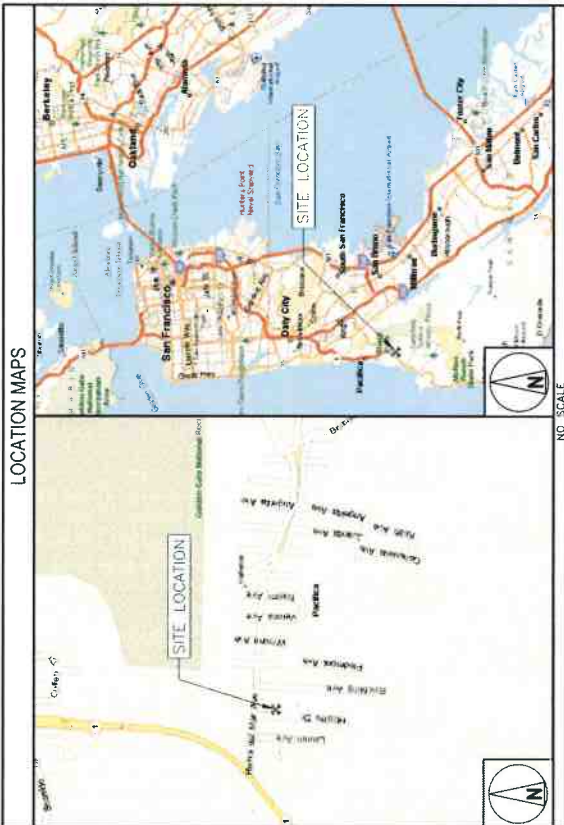
at&t

SCC-CC0004-15

PACIFICA

BETWEEN 217 & 221 HILLSIDE DR

SMALL CELL - ZD



DRIVING DIRECTIONS

DIRECTIONS FROM LOCAL AT&T OFFICE: FROM 2800 CAMINO RAMON, GO NORTH TO CROW CANYON ROAD. TURN WEST. GO TO 2800 CAMINO RAMON. TURN WEST. GO TO CA-1. TURN SOUTH. GO TO REINA DEL MAR AVENUE. TURN EAST. GO TO HILLSIDE DRIVE. TURN SOUTH TO SITE ON EAST SIDE OF HILLSIDE DRIVE.

DRAWING INDEX

SHEET NO.	SHEET TITLE
T-1	SCC-CC0004-15 TITLE SHEET
R-1-1	SCC-CC0004-15 LOCATION MAP
R-2-1	SCC-CC0004-15 INFORMATION DATASHEET
AP15-1	SCC-CC0004-15 ELEVATIONS
AP15-2	SCC-CC0004-15 GEOMETRIC ELEVATIONS
AP15-3	SCC-CC0004-15 SIGNAL SITE PLAN
C-1-0	EQUIPMENT DETAILS AND SPECIFICATIONS



BLACK & VEATCH

2999 OAK ROAD
 SUITE 400
 WALKLET CHECK, CA 94597
 (925) 337-0243
 WWW.BLACKANDVEATCH.COM

PROJECT NO: 129092
 DRAWN BY: LEW
 CHECKED BY: BAE

REV	DATE	DESCRIPTION
B	8/7/15	ISSUED FOR CONING
A	8/7/15	ISSUED FOR REVIEW

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HE OR SHE IS A LICENSED PROFESSIONAL ENGINEER, TO SEAL THIS DOCUMENT.

SCC-CC0004-15
 PACIFICA
 BETWEEN 217 & 221
 HILLSIDE DR
 PACIFICA, CA 94044
 SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-15
 TITLE SHEET

SHEET NUMBER
T-1

DO NOT SCALE DRAWINGS

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

UNDERGROUND UTILITIES PROTECTION CENTER, INC.
 811
 48 HOUR SERVICE, YOU DESERVE IT



PROJECT NO.	150802
DRAWN BY:	LR
CHECKED BY:	RAE

REV	DATE	DESCRIPTION
E	07/15/15	ISSUE FOR PERMITS
A	06/23/15	ISSUE FOR REVIEW

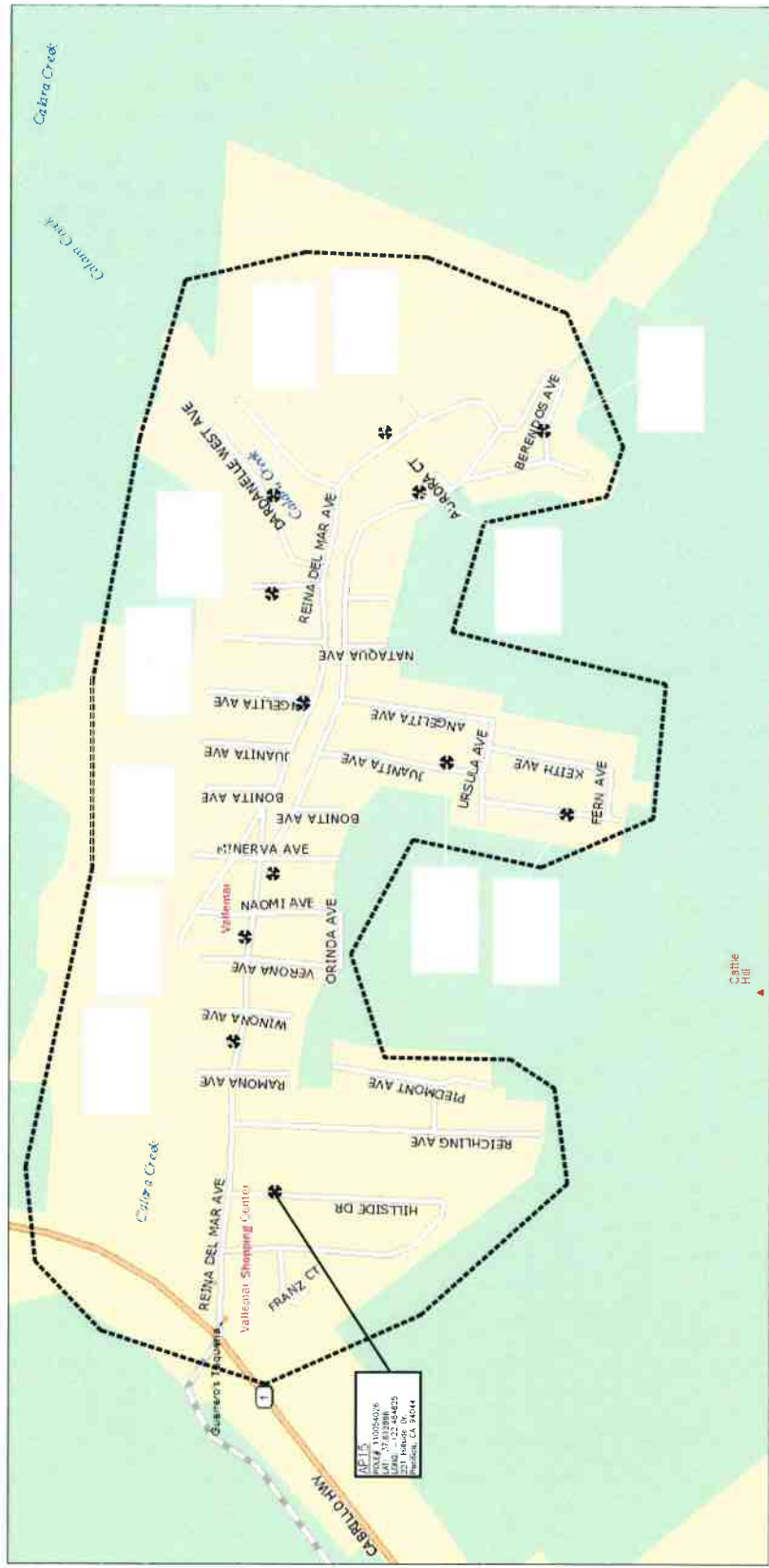
IT IS A VIOLATION OF LAW FOR ANY PERSON, OTHER THAN AN EMPLOYEE OF BLACK & VEATCH, TO ALTER THIS DOCUMENT.

SCC-CC0004-15
BETWEEN 217 & 221
HILLSIDE DR
PACIFICA, CA 94044
SMALL CELL - ZD

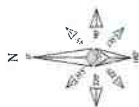
SHEET TITLE
SCC-CC0004-15
LOCATION MAP

SHEET NUMBER
PL-1.1

THIS DRAWING IS NOT A SITE SURVEY
THIS DRAWING IS TO BE USED FOR INFORMATION PURPOSES ONLY. IT DOES NOT REPRESENT A FIELD SURVEY. ANY INFORMATION SHOWN HEREON IS BASED ON THE INFORMATION PROVIDED TO BLACK & VEATCH BY THE CLIENT.



APR 15 2015 08:56:06
AUT 17:18:00
DATE 15-04-05
PROJECT 150802
DRAWN BY: LR
CHECKED BY: RAE



POLYGON MAP



3RD FLOOR, 1000 MARIN BLVD
SAN RAFAEL, CA 94903



BLACK & VEATCH

2995 OAK ROAD
SUITE 400
WALNUT CREEK, CA 94597
(925) 337-0243
FAX (925) 337-0243
WWW.BLACKANDVEATCH.COM

PROJECT NO: 120002
DRAWN BY: LEW
CHECKED BY: RAE

REV	DATE	DESCRIPTION
B	07/17/13	ISSUED FOR BIDDING
A	06/22/13	ISSUED FOR REVIEW

IT IS A VIOLATION OF LAW FOR ANY PERSON,
OTHER THAN THE REGISTERED PROFESSIONAL ENGINEER,
TO SEAL THIS DOCUMENT.

SCC-CC0004-15
PACIFICA
BETWEEN 217 & 221
HILLSIDE DR
PACIFICA, CA 94044
SMALL CELL -- ZD

SHEET TITLE

SCC-CC0004-15
INFORMATION DATASHEET

SHEET NUMBER

PL-2.1

Site Number	Site Name	USD (UMTS)	USD (LTE)	ES11 Address	County	Latitude	Longitude	Pole ID	Structure Type	Structure Height	Road Center
SCC-CC0004-15	Pacifica	165117	165299	Between 217 & 221 Hillside Dr, 94044	San Mateo	37.612846	-122.404825	110054026	Utility Pole	38'-0"	19'-7"



1000 CENTRAL EXPRESS BL, FOSBEE
SAN RAFAEL, CA 94923



BLACK & VEATCH

3850 AVE. ROAD
SUITE 400
94114 SAN FRANCISCO, CA 94131
SAN FRANCISCO OFFICE: 415.774.1977
SAN RAFAEL OFFICE: 415.453.1977
WWW.BV.COM

PROJECT NO: 129892
DRAWN BY: LEW
CHECKED BY: BAE

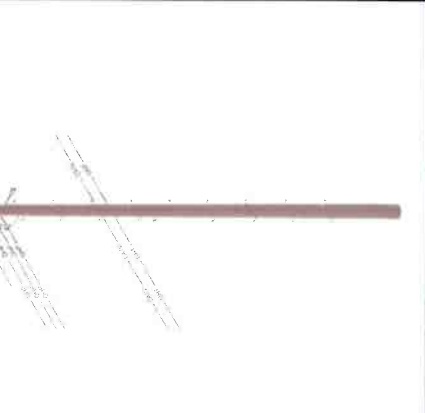
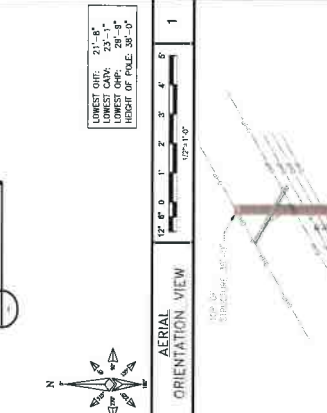
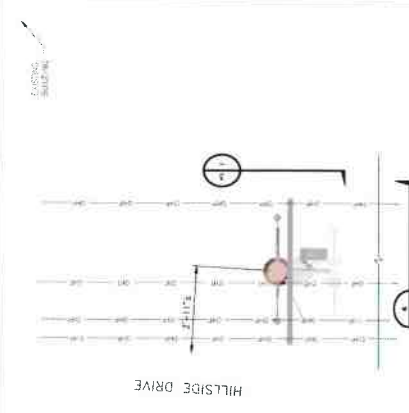
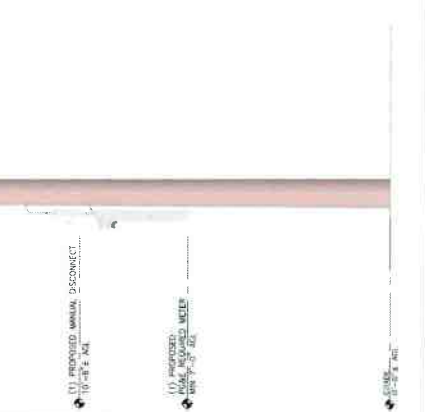
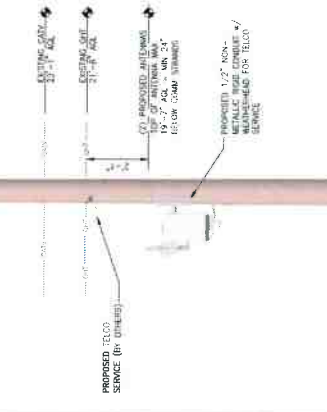
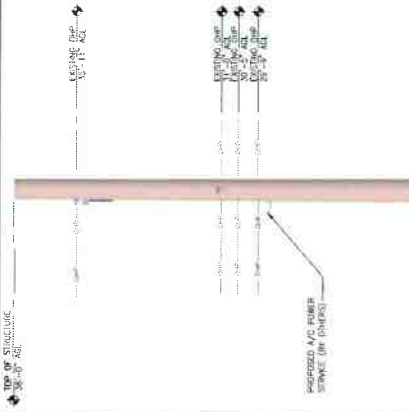
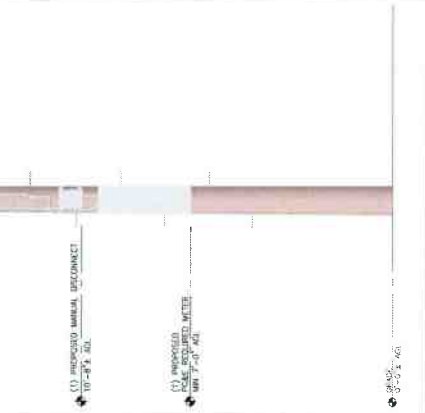
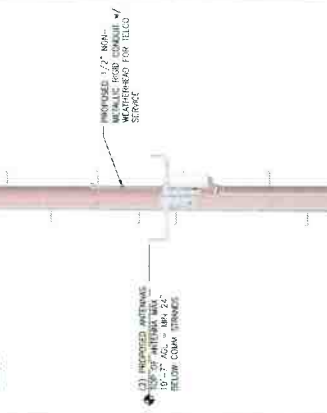
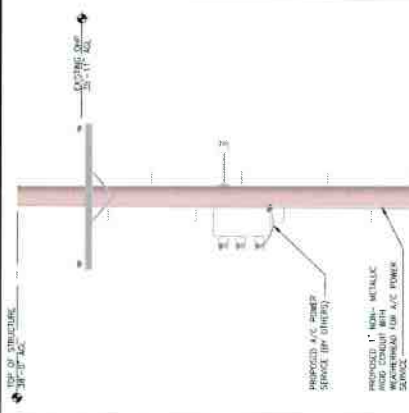
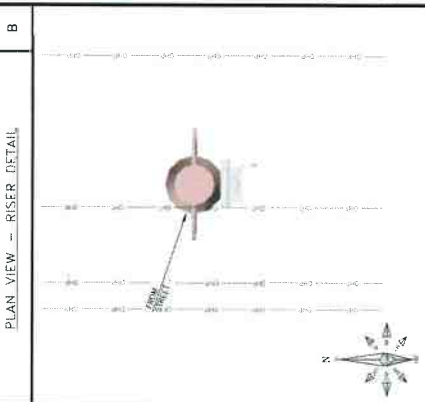
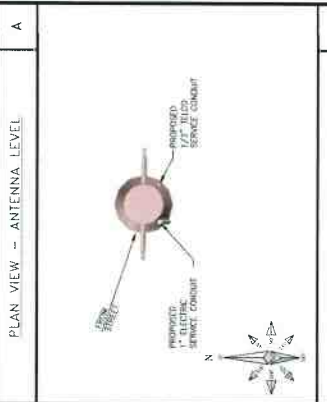
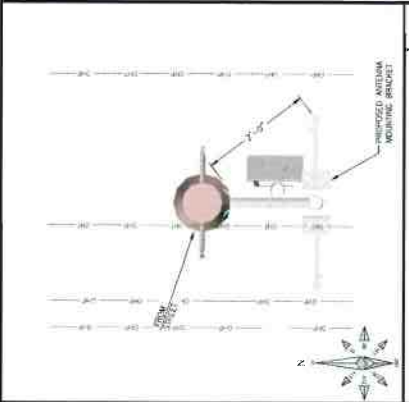
REV	DATE	DESCRIPTION
B	02/17/15	FIELD FOR STAKING
A	04/22/15	SOUD FOR REVIEW

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SCC-CC0004-15
PACIFICA
BETWEEN 217 & 221
HILLSIDE DR
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-15
ELEVATIONS

SHEET NUMBER
AP15-1



SECTION	DESCRIPTION	SCALE
1	BEFORE CONVERSION (LOOKING NORTHWEST)	1/2" = 1'-0"
2	AFTER CONVERSION (LOOKING WEST)	1/2" = 1'-0"
3	AFTER CONVERSION (LOOKING NORTH)	1/2" = 1'-0"
4	AFTER CONVERSION (LOOKING NORTH)	1/2" = 1'-0"



2900 LARKINS BLVD. #7500EE
SAN JOSE, CA 94133



BLACK & VEATCH

2999 OAK ROAD
SUITE 400
WALNUT CREEK, CA 94597
(925) 357-0243
FAX: (925) 357-0243
WWW.BV.COM
A BLACK & VEATCH COMPANY

PROJECT NO: 128092
DRAWN BY: LEV
CHECKED BY: BAE

REV	DATE	DESCRIPTION
B	07/17/15	ISSUED FOR BIDDING
A	06/23/15	ISSUED FOR REVIEW

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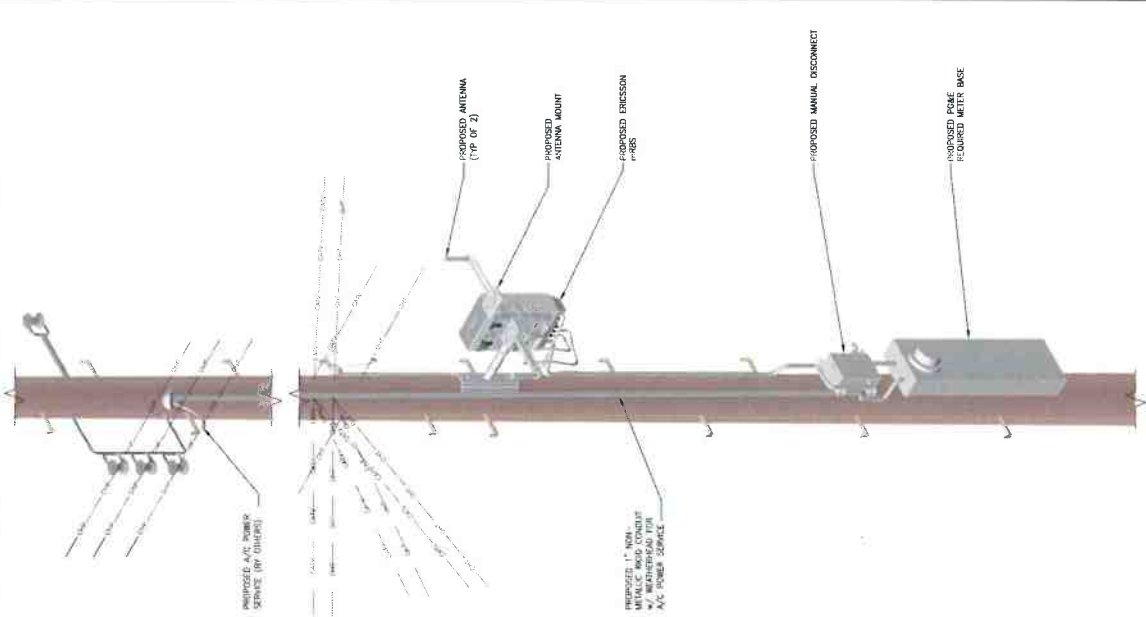
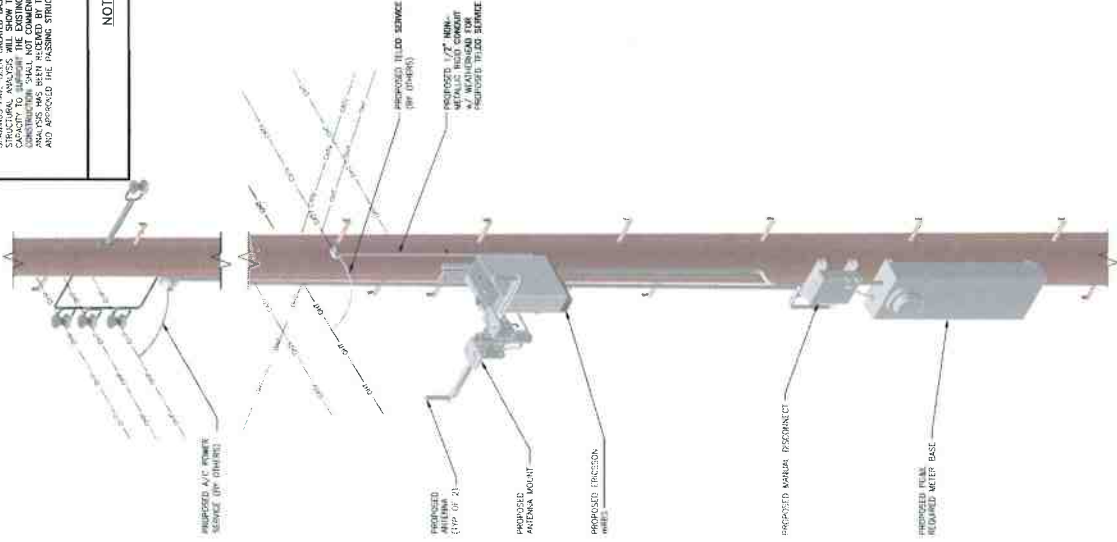
SCC-CC0004-15
PACIFICA
BETWEEN 217 & 221
HILLSIDE DR
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-15
ISOMETRIC VIEWS

SHEET NUMBER
AP15-2

1. THE EXISTING STRUCTURE IS CURRENTLY BEING ANALYZED TO DETERMINE IF THE EXISTING STRUCTURE CAN SUPPORT THE PROPOSED EQUIPMENT. THE STRUCTURAL ANALYSIS WILL SHOW THAT THE STRUCTURE HAS SUFFICIENT CAPACITY TO SUPPORT THE PROPOSED EQUIPMENT. THE STRUCTURAL ANALYSIS SHALL NOT COMMENCE UNTIL A PENDING STRUCTURAL ANALYSIS HAS BEEN RECEIVED BY THE OWNER OR A/E/T HAS REVIEWED AND APPROVED THE PENDING STRUCTURAL ANALYSIS.

NOTES



ISOMETRIC ELEVATION (LOOKING NORTHWEST)

ISOMETRIC ELEVATION (LOOKING NORTHEAST)



3810 GAMING BLVD. #7500E
SAN RAMON, CA 94583



BLACK & VEATCH

2999 OAK ROAD
SUITE 450
WALNUT
(925) 327-0243
WWW.BV.COM
REGISTERED PROFESSIONAL ENGINEERS & ARCHITECTS
STATE OF CALIFORNIA

PROJECT NO: 128092
DRAWN BY: LEW
CHECKED BY: RAE

REV	DATE	DESCRIPTION
B	07/23/15	ISSUED FOR ZONING
A	06/23/15	ISSUED FOR REVIEW

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SCC-CC0004-15
PACIFICA
BETWEEN HILLSIDE & 221
PACIFICA, CA 94044
SMALL CELL - ZD

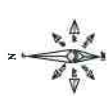
SHEET TITLE
SCC-CC0004-15
OVERALL SITE PLAN

SHEET NUMBER
AP15-3

THIS DRAWING IS
NOT A SITE SURVEY
THE PURPOSE OF THIS DRAWING IS TO
SHOW HOW THE PROPOSED SITE
RELATES TO THE PARENT PARCEL AND
ADJACENT PROPERTIES.



OVERALL SITE PLAN





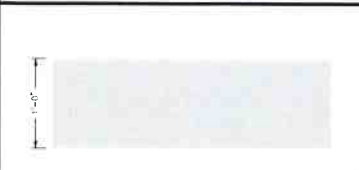
PROJECT NO: 129892
 DRAWN BY: LEW
 CHECKED BY: RAE

REV	DATE	DESCRIPTION
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A	06/23/13	ISSUED FOR ROOMS

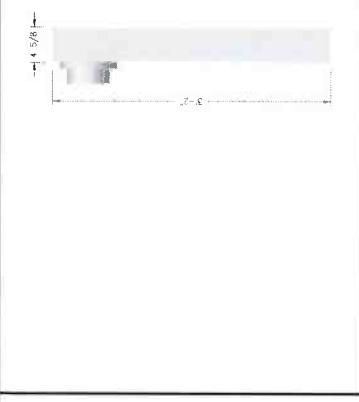
SCC-CC0004-15
 PACIFICA
 BETWEEN 217 & 221
 HILLSIDE DR
 PACIFICA, CA 94044
 SMALL CELL - ZD

SHEET TITLE
 EQUIPMENT DETAILS
 AND SPECIFICATIONS

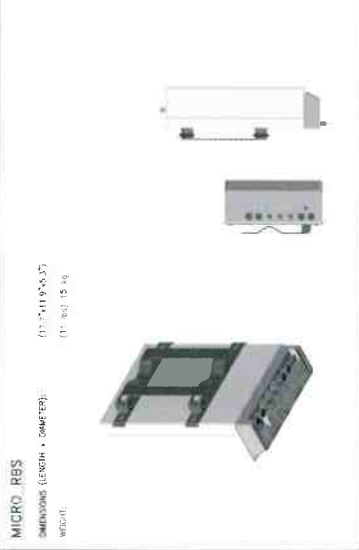
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C-10



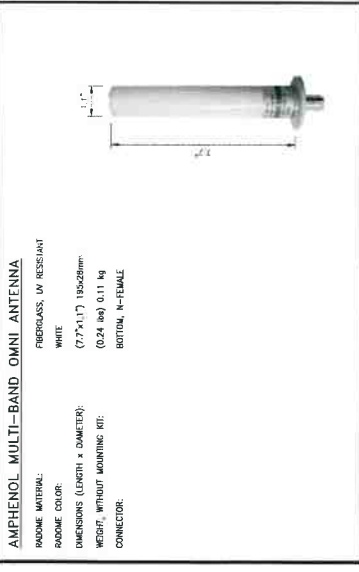
PROPOSED POWER METER C
 NO SCALE



PROPOSED MICRO_RBS B
 NO SCALE



PROPOSED BRACKET MOUNT E
 NO SCALE



PROPOSED MANUAL DISCONNECT D
 NO SCALE

AMPHENOL MULTI-BAND OMNI ANTENNA
 FIBERGLASS, UV RESISTANT
 WHITE
 DIMENSIONS (LENGTH x DIAMETER):
 (7.7"x1.7") 190x2mm
 WEIGHT: (0.24 lbs) 0.11 kg
 BOTTOM, M-FEMALE CONNECTION

MICRO_RBS
 DIMENSIONS (LENGTH x DIAMETER):
 (11.6") 15 kg

PROPOSED ANTENNA SPECIFICATIONS
 (Detailed technical specifications and diagrams for the antenna system, including mounting and connection details.)

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NO SCALE

NO SCALE

NO SCALE

NO SCALE

NOT USED

NOT USED

NOT USED

NOT USED

July 24, 2015

Tina Wehrmeister
Planning Director
City of Pacifica Planning Department
1800 Francisco Blvd
Pacifica, CA 94044

RECEIVED
JUL 24 2015
City of Pacifica

Re: **Proposed AT&T Mobility Small Cell Installation**
Applicant: New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)
Site Address: Between 217 & 221 Hillside Drive
Site ID: SCC-CC0004-15
Latitude/Longitude: 37.612886, -122.484825

Dear Tina Wehrmeister,

On behalf of New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility ("AT&T"), this letter and attached materials are to apply for a Conditional Use Permit, to install a small cell in the public right-of-way between 217 & 221 Hillside Drive (Small Cell SCC-CC0004-15).¹ The following is an explanation of the existing site, a project description of the facility, the project purpose and justifications in support of this proposal.

A. Project Description.

The existing site consists of an approximate 38 feet tall wooden utility pole in the public right-of-way on the southwest side of 217 Hillside Drive. Primary power lines are attached to a cross arm at about 35 feet eleven inches, 31 feet and 30 feet 5 inches high. Secondary power lines are attached to a cross-arm at about 30 feet 5 inches and 29 feet nine inches high. Communication lines are attached to the pole at 23 feet one inch and 21 feet eight inches above ground.

AT&T proposes to two Amphenol omni antennas (7.7" x 1.1") and one remote radio head (17.7"x11.9"x5.3") 19'7" high on the pole. Below that at about 8' AT&T will place a small safety shut-off switch and electricity meter. The equipment will be connected to power and telecommunications lines already on the pole, extended through one-inch conduit. AT&T's proposal is depicted in the attached design drawings and photographic simulation.

This is an unmanned facility that will operate at all times (24 hours per day, 7 days per week) and will be serviced about once per month by an AT&T technician. AT&T's proposal will greatly benefit the area by closing an existing service coverage gap in the area.

B. Project Purpose.

¹ AT&T expressly reserves all rights concerning the city's jurisdiction to assert regulation over the placement of wireless facilities in the public rights-of-way.



The purpose of this project is to provide wireless voice and data coverage to an area where there is currently a significant gap in wireless service coverage. These wireless services include 4G LTE mobile telephone, wireless broadband, emergency 911, data transfers, electronic mail, Internet, web browsing, wireless applications, wireless mapping and video streaming. As explained in the attached Radio Frequency Statement, which includes propagation maps depicting existing and proposed coverage in the vicinity of the proposed small cell, AT&T network engineers have identified a gap in wireless service in the area generally surrounding Reina Del Mar Ave. in Pacifica. The gap is significant because it stretches approximately one mile along the densely populated neighborhoods surrounding Reina Del Mar Avenue, which includes approximately 230 homes and one park. The traffic data available from Google Earth Pro (dated 2004) for Reina del Mar Avenue, which runs through most of the gap area, counts approximately 6,038 vehicles per day. There is inadequate in-building signal strength within this area to provide reliable wireless service, which affect AT&T customers' ability to place and receive voice and data calls within their homes.

To close this significant service coverage gap, AT&T seeks to deploy 12 small cells on existing utility poles within the neighborhood. A small cell is a low-powered cell site, which, when grouped with other small cells, can provide coverage in areas that are otherwise very difficult to cover using traditional macro wireless facilities due to the local topography and mature vegetation. As illustrated in the attached zoning drawings, each small cell consists of low mounted, low profile antennas that will provide 4G LTE service. Although the signal propagated from a small cell antenna spans over a shorter range than a conventional macro site, small cells can be an effective tool to close service coverage gaps in traditionally hard to serve areas, and do with so with a minimal environmental and aesthetic footprint. The proposed small cell subject to this application is a critical part of the 12 small cells needed to close the existing service coverage gap.

C. Project Justification, Design and Placement.

Small Cell SCC-CC0004-15 is an integral part of the overall small cell solution to close the service coverage gap. It is located in a difficult coverage area because of its winding roads and plentiful trees. The coverage area consists of a Pacifica neighborhood off of Hillside Drive and Reina del Mar Avenue and surrounding areas. Small Cell SCC-CC0004-15 will cover transient traffic along the roadways and provide in-building service to the surrounding residences as depicted in the propagation maps, which are exhibits to the attached Radio Frequency Statement.

Small Cell SCC-CC0004-15 is the least intrusive means to provide coverage to this area because it uses existing utility infrastructure, adding small equipment without disturbing the character of the neighborhoods served. Deploying a small cell onto this existing pole minimizes any visual impact by utilizing an inconspicuous location. By installing antennas and equipment onto this existing pole, AT&T does not need to propose any new infrastructure in this coverage area.

The small cell RF emissions are also much lower than the typical macro site and appropriate for the area, and they are fully compliant with the FCC's requirements for limiting human exposure to radio frequency energy. The attached radio frequency engineering analysis provided by Hammett & Edison, Inc., Consulting Engineers, confirms that the proposed equipment will operate well within (and actually far below) all applicable FCC public exposure limits. The facility will also comply with California Public Utility Commission (CPUC) General Orders 95 (concerning overhead line design, construction and maintenance) and 170 (CEQA review) that govern utility use in the public right-of-way.



As proposed, Small Cell SCC-CC0004-15 is the least intrusive option because the antennas are nestled amidst the backdrop of large trees and situated so as to minimize any view impact. Also the proposed location is a good coverage option because it sits at a location from which point AT&T can adequately propagate its wireless signal.

The proposed location is approximately equidistant from other small cells that AT&T plans to place in surrounding hard-to-reach areas, so that service coverage can be evenly distributed. There are a number of trees near the proposed site that will allow the installation to blend in with the backdrop of foliage. AT&T identified potential alternate locations and performed a comprehensive alternative site analysis on other utility poles in this area. As set forth in the Alternative Site Analysis, none of these sites are as viable from a construction and/or coverage perspective to meet AT&T's project objectives or from an aesthetics perspective to meet the City's Guidelines. The Alternative Site Analysis is included within the application materials for the Use Permit.

Drawings, an AT&T Radio Frequency Statement, propagation maps, a photographic simulation, and a radio-frequency engineering analysis are included with this packet.

As this application seeks authority to install a wireless telecommunication facility, the FCC's Shot Clock Order² requires the city to issue its final decision on AT&T's application within 150 days. We respectfully request expedited review and approval of this application. Feel free to contact me if you have any questions. Thank you.

Best Regards,

Ana Gomez-Abarca
Sr. Site Acquisition Manager
For AT&T Mobility

² See Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B), WT Docket No. 08-165, Declaratory Ruling, 24 F.C.C.R. 13994 (2009).



at&t



Building a world of difference.

PHOTOGRAPHIC SIMULATION

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JUL 24 2015

PROPOSED SMALL CELL SITE

SITE NUMBER: SCC-CC0004-P1

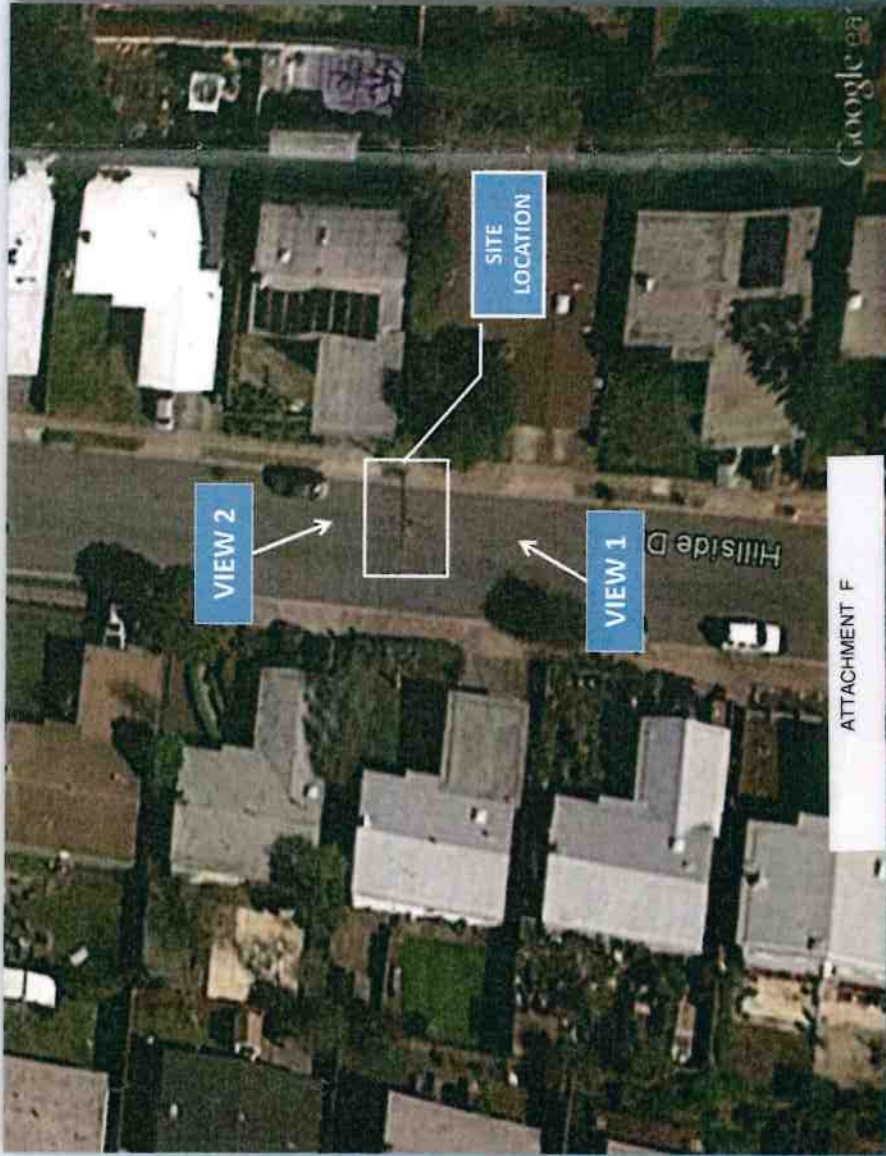
SITE NAME: PACIFICA

SITE ADDRESS: 217-221 HILLSIDE DRIVE
PACIFICA, CA 94044

DATE: 07/24/15

APPLICANT: AT&T WIRELESS

CONTACT: ANA GOMEZ-ABARCA
BLACK & VEATCH
(913) 458-9148



ATTACHMENT F

The included Photographic Simulation(s) are intended as visual representations only and should not be used for construction purposes. The materials represented within the included Photographic Simulation(s) are subject to change.



at&t

VIEW 1



EXISTING CONDITIONS



PROPOSED AT&T
SMALL CELL
EQUIPMENT

PROPOSED PG&E
METER AND SERVICE
DISCONNECT

PHOTOGRAPHIC SIMULATION



at&t

VIEW 2



EXISTING CONDITIONS



PHOTOGRAPHIC SIMULATION

PROPOSED AT&T
SMALL CELL
EQUIPMENT

PROPOSED PG&E
METER AND SERVICE
DISCONNECT

**AT&T Mobility • Small Cell No. SCC-CC0004-15
217 and 221 Hillside Drive • Pacifica, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 217 and 221 Hillside Drive in Pacifica, California, for compliance with appropriate guidelines limiting sound levels from the installation.

Executive Summary

AT&T proposes to install a new small cell on the utility pole located near 217 and 221 Hillside Drive in Pacifica, consisting of two antennas and four equipment boxes on the pole. Noise from the proposed operations will comply with the pertinent noise limits.

Prevailing Standard

The City of Pacifica identifies several prohibited noise sources in Title 5 Chapter 10 of its Municipal Code, though fan noise such as is emitted from wireless telecommunications base stations is not included. Title 9 Chapter 4 Article 26 of the Pacifica Municipal Code addresses the siting of such base stations, “to minimize the potential health, safety, and aesthetic impacts of wireless communications facilities,” but does not address or limit noise levels. Therefore, for the purpose of this study, the limits set forth in the County of San Mateo General Plan are referenced. Chapter 16 Section II.A.I.a (“Noise Limitations”) reads in pertinent part, “State standards have set ... 70 CNEL from multiple sources as the maximum external noise level compatible with ordinary residential use.”

The composite Community Noise Equivalent Level (“CNEL”) to be used for evaluation of noise is an average over 24 hours, with a 5 dBA penalty applied to noise levels during evening hours (7 pm to 10 pm) and a 10 dBA penalty at night (10 pm to 7 am) to reflect typical residential conditions, where noise is more readily heard during evening and nighttime hours. By definition, CNEL will be 6.7 dBA higher than the constant level of a continuous noise source.

Figure 1 describes the calculation methodology used to determine applicable noise levels for evaluation against the prevailing standard.

General Facility Requirements

Wireless telecommunications facilities (“cell sites”) typically consist of two distinct parts: the electronic base transceivers, that are connected to traditional wired telephone lines, and the antennas, that send wireless signals created by the transceivers out to be received by individual subscriber units.



**AT&T Mobility • Small Cell No. SCC-CC0004-15
217 and 221 Hillside Drive • Pacifica, California**

The cabinets are often located outdoors and are connected to the antennas by coaxial cables. Some cabinets require fans to cool the electronics inside; such cooling is often integrated into the cabinets.

Site & Facility Description

According to information provided by AT&T, including zoning drawings by Black and Veatch, dated July 6, 2015, and to additional information provided by AT&T, four cabinets are to be mounted on the side of the utility pole located near 217 and 221 Hillside Drive in Pacifica. Beginning at least 7 feet above ground on the pole would be a meter, and about 3½ feet above it, a disconnect and breaker panel. Higher up on the pole, at about 19 feet above ground, would be a Ciena Model 3931 Service Delivery Switch and Ericsson Model RBS 6501 cabinet; this cabinet is the transceiver described above, that handles the conversions of signal format between wired and wireless.

Study Results

Three of the equipment cabinets do not emit noise, including the Ciena Model 3931 Service Delivery Switch, which is passively cooled by the natural convective flow of air across its cooling fins; no fans or other moving elements are installed. For the fourth cabinet, Ericsson reports that the maximum noise level is 27 dB[A] at normal temperatures and, when the temperature is above 122°F, the noise level is 47 dB[A], both measured at a reference distance of 1.7 meters.

The County's most restrictive limit of 70 dBA CNEL is reached only within 1.1 inches of the cabinets at normal temperatures, and within 11 inches at temperatures above 122°F. Considering the heights of the cabinets on the pole and their distance from the nearest property lines, the noise level at any receiving property would be well below the County's limits.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of this AT&T Mobility small cell to be located near 217 and 221 Hillside Drive in Pacifica, California, will comply with the pertinent standards limiting acoustic noise emission levels.

**AT&T Mobility • Small Cell No. SCC-CC0004-15
217 and 221 Hillside Drive • Pacifica, California**

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. 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.



William F. Hammett

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

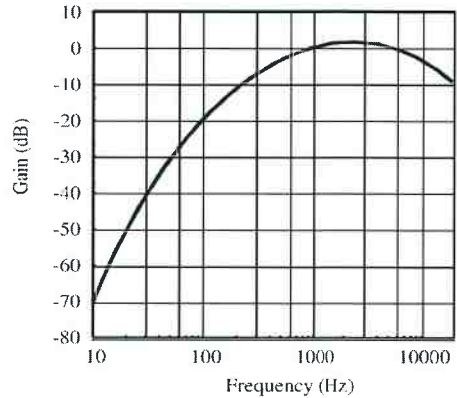
July 28, 2015



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Noise Level Calculation Methodology

Most municipalities and other agencies specify noise limits in units of dBA, which is intended to mimic the reduced receptivity of the human ear to Sound Pressure (“L_p”) at particularly low or high frequencies. This frequency-sensitive filter shape, shown in the graph to the right as defined in the International Electrotechnical Commission Standard No. 179, the American National Standards Institute Standard No. 5.1, and various other standards, is also incorporated into most calibrated field test equipment for measuring noise levels.



30 dBA	library
40 dBA	rural background
50 dBA	office space
60 dBA	conversation
70 dBA	car radio
80 dBA	traffic corner
90 dBA	lawnmower

The dBA units of measure are referenced to a pressure of 20 μPa (micropascals), which is the threshold of normal hearing. Although noise levels vary greatly by location and noise source, representative levels are shown in the box to the left.

Manufacturers of many types of equipment, such as air conditioners, generators, and telecommunications devices, often test their products in various configurations to determine the acoustical emissions at certain distances. This data, normally expressed in dBA at a known reference distance, can be used to determine the corresponding sound pressure level at any particular distance, such as at a nearby building or property line. The sound pressure drops as the square of the increase in distance, according to the formula:

$$L_P = L_K + 20 \log(D_K/D_P),$$

where L_P is the sound pressure level at distance D_P and L_K is the known sound pressure level at distance D_K.

Individual sound pressure levels at a particular point from several different noise sources cannot be combined directly in units of dBA. Rather, the units need to be converted to scalar sound intensity units in order to be added together, then converted back to decibel units, according to the formula:

where L_T is the total sound pressure level and L₁, L₂, etc are individual sound pressure levels.

$$L_T = 10 \log (10^{L_1/10} + 10^{L_2/10} + \dots),$$

Certain equipment installations may include the placement of barriers and/or absorptive materials to reduce transmission of noise beyond the site. Noise Reduction Coefficients (“NRC”) are published for many different materials, expressed as unitless power factors, with 0 being perfect reflection and 1 being perfect absorption. Unpainted concrete block, for instance, can have an NRC as high as 0.35. However, a barrier’s effectiveness depends on its specific configuration, as well as the materials used and their surface treatment.



Rethink Possible®

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JUL 24 2015

City of Pacifica

Small Cell SCC-CC0004-15 – In front of 221 Hillside Dr. Pacifica, California Alternative Site Analysis Conditional Use Permit Request

ATTACHMENT H



On the map above, the proposed AT&T wireless facility in the public right-of-way in front of 221 Hillside Drive (37.612886°, -122.484825°) is indicated as Small Cell “SCC-CC0004-15” The 7 alternative locations that AT&T analyzed are marked by pins AP15B, AP15C, AP15D, AP15E, AP15F, AP15G and AP15H.

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Small Cell SCC-CC0004-15 – Proposed Location



- The location for AT&T's proposed wireless facility (Small Cell SCC-CC0004-15) is in the public right-of-way at a joint utility pole identified by pole number 110054026 in front of 221 Hillside Drive. (37.612886°, -122.484825°)
- AT&T evaluated this site and nearby alternatives to verify that the selected site is the least intrusive means to close AT&T's significant service coverage gap.
- AT&T carefully selected this location to close a precise section of the service coverage gap. The small cells are related to each other, and if you move one it may affect others.



Small Cell AP15B – Alternative 1



- Small Cell AP15B (Alternative 1) is in the public right-of-way at a joint utility pole located in front of 205 Hillside Drive. (37.613397°, -122.484815°)
- The pole does not achieve the height needed to close this portion of the significant coverage service gap.



Small Cell AP15C – Alternative 2



- Small Cell AP15C (Alternative 2) is in the public right-of-way at a joint utility pole located in front of 209 Hillside Drive. (37.613351° , -122.484816°)
- This pole is not a viable alternative to close AT&T’s significant service coverage gap. Placing wireless equipment on this pole would likely violate CPUC General Order-95 Regulation because all four quadrants of the pole appear occupied.
- Further, placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4)(i) which prohibits wireless attachments on an existing structure located within the “building profile” of an existing residential structure.



Small Cell AP15D – Alternative 3



- Small Cell AP15D (Alternative 3) is in the public right-of-way at a joint utility pole located in front of 229 Hillside Drive. (37.612533°, -122.484845°)
- This pole is not a viable alternative to close this portion of AT&T's significant service coverage gap because the minimum antenna height needed at this pole would violate CPUC General Order-94 Regulation safety clearances. This configuration does not allow AT&T the proper 6' safety clearance below the power conductor while maintaining 2' of separation from the communication lines.



Small Cell AP15E – Alternative 4



- Small Cell AP15E (Alternative 4) is in the public right-of-way at a joint utility pole located between 241 and 245 Hillside Drive. (37.612135°, -122.484857°)
- The pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP15F – Alternative 5



- Small Cell AP15F (Alternative 5) is in the public right-of-way at a joint utility pole located between 208 and 210 Reichling Avenue. (37.613353°, -122.483833°)
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would likely violate CPUC General Order-95 Regulation because all four quadrants of the pole appear occupied.
- Further, the pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP15G – Alternative 6



- Small Cell AP15G (Alternative 6) is in the public right-of-way at a joint utility pole located in front of 219 Reichling Avenue. (37.612965° , -122.483834°)
- The pole location is not optimal to close this portion of the service coverage gap.



Small Cell AP15H – Alternative 7



- Small Cell AP15H (Alternative 7) is an existing tower located at the Pacifica Police Department at 2075 Pacific Coast Highway. (37.615393°, -122.484573°)
- Macro Antennas mounted at estimated available heights on the existing telecommunications tower would fail to close the significant service coverage gap, and would therefore require a new taller, more intrusive structure. Further, without a new taller structure, the height of neighboring buildings and trees surrounding this property will block antenna signals contributing to the inability to use this location to close AT&T's significant service coverage gap.



Small Cell SCC-CC0004-15 – Alternative Site

Analysis Conclusion

Based on AT&T's analysis of alternative sites, and per the City of Pacifica Zoning Ordinance Article 26, qualifying the installation as a "minor antenna", the proposed location in front of 221 Hillside Drive (Small Cell SCC-CC0004-15) is the least intrusive means to close AT&T's significant service coverage gap.



SCC-CC0004-15: 37.612886°, -122.484825° (Proposed Site)

AP15B: 37.613397°, -122.484815°

AP15C: 37.613351°, -122.484816°

AP15D: 37.612533°, -122.484845°

AP15E: 37.612135°, -122.484857°

AP15F: 37.613353°, -122.483833°

AP15G: 37.612965°, -122.483834°

AP15H: 37.615393°, -122.484573°



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Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 217 and 221 Hillside Drive in Pacifica, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

AT&T proposes to install two omnidirectional antennas on a tall utility pole located near 217 and 221 Hillside Drive in Pacifica. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.35	0.47
[most restrictive frequency range]	30–300	1.00	0.20

Power line frequencies (60 Hz) are well below the applicable range of these standards, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables.

**AT&T Mobility • Small Cell No. SCC-CC0004-15
217 and 221 Hillside Drive • Pacifica, California**

A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by AT&T, including drawings by Black and Veatch, dated June 23, 2015, that carrier proposes to install a new small cell on the existing 38-foot utility pole sited in the public right-of-way in front of the residences located at 217 and 221 Hillside Drive in Pacifica. Two Amphenol Model 7825700 omnidirectional antennas would be mounted with no downtilt at an effective height of about 19 feet above ground. The maximum effective radiated power in any direction would be 10 watts in the 700 MHz frequency band.

Study Results

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed AT&T operation is calculated to be 0.0049 mW/cm², which is 1.0% of the applicable public exposure limit. The maximum calculated level at any nearby residence is 0.0085 mW/cm², which is 1.8% of the applicable public limit.

Recommended Mitigation Measures

Due to their mounting location and height, the AT&T antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. RF exposure levels are calculated to exceed the occupational limit out to less than 18 inches in front of the antennas, and so can be considered intrinsically compliant with FCC

**AT&T Mobility • Small Cell No. SCC-CC0004-15
217 and 221 Hillside Drive • Pacifica, California**

occupational exposure guidelines. To prevent exposures in excess of FCC guidelines, it is recommended that training be provided to all authorized personnel needing to work within 3 feet directly in front of the antennas, including employees and contractors of AT&T and of the utility company, and that explanatory signs* be posted on the pole at or below the antennas, readily visible from any angle of approach to such persons needing to work within that distance.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of this AT&T small cell near 217 and 221 Hillside Drive in Pacifica, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Training authorized personnel and posting explanatory signs is recommended to establish compliance with occupational exposure limits.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-20309, which expires on March 31, 2017. This work has been carried out under her direction, and all statements are true and correct of her own knowledge except, where noted, when data has been supplied by others, which data she believes to be correct.



Andrea L. Bright

Andrea L. Bright, P.E.
707/996-5200

July 24, 2015

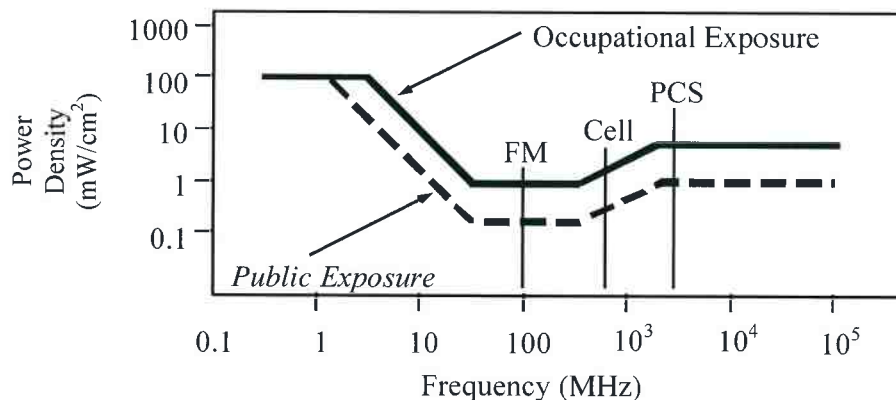
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (<i>f</i> is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√ <i>f</i>	<i>1.59√f</i>	√ <i>f</i> /106	<i>√f/238</i>	<i>f/300</i>	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and

P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.



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November 19, 2015

Christian Murdock, AICP
Associate Planner
City of Pacifica Planning Department
1800 Francisco Blvd
Pacifica, CA 94044

Re: **Proposed AT&T Mobility Small Cell Installation**
Applicant: **New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)**
Planning Application: **UP-65-15**
Site Address: **Between 217 & 221 Hillside Drive**
Site ID: **SCC-CC0004-15**
Latitude/Longitude: **37.612886, -122.484825**

Dear Mr. Murdock,

This letter is written on behalf of New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility) in response to your email dated November 18, 2015 requesting a written explanation of how we are complying with the requirements of Pacifica Municipal Code Sec. 9-4.2608(b)(1), quoted below:

Pacifica Municipal Code Sec. 9-4.2608(b)(1):

“(b) Design-related standards.

- (1) All wireless communication facilities shall, to the maximum extent practicable, incorporate best practices to achieve concealment and stealth of antennas, equipment, and support structures. Further, all wireless communications facilities shall be screened to the fullest extent possible and located to minimize visibility from surrounding areas and private or public rights-of-way. In addition to the requirements of this subsection, wireless communications facilities within a private or public right-of-way shall conform to the standards of subsection (e).”

The two proposed 7.7” omni antennas and micro RBS will be placed on a proposed bracket mount on an existing utility pole. The bracket mount will be placed above line of sight. This equipment will be painted brown to blend in with the existing utility pole. The proposed PG&E meter will be placed with the required 7’ clearance.

At the time of building permit submittal the construction drawings will include a note reflecting AT&T’s commitment to paint the equipment brown.

Painting the equipment brown is less intrusive and visible than alternative concealment options such as a radome or a slimline monopole. A radome, or metal canister, would need to be wide enough to surround the



pole and cover the proposed bracket, omni antennas and RRU. This radome would extend past the maximum 2' from the point of attachment limit set in Sec. 9-4.2608(e)(1). In addition, a slimline monopole would require placement of a new pole adjacent to an existing utility pole. This would be more visually intrusive than the current proposal.

Feel free to contact me if you have any questions. Thank you.

Best Regards,

Ana Gomez-Abarca
Sr. Site Acquisition Manager
For AT&T Mobility