Scenic Pacifica
Incorporated Nov. 22, 1957

PLANNING COMMISSION
Staff Report

DATE: December 7, 2015 **FILE:** UP-59-15

ITEM: 2.e

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 648 Reina Del Mar Avenue (APN 018-086-190) – 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 34'-4" tall and contains electrical, cable, telephone utility wires. The antenna mounting bracket, antennas, and remote radio unit (RRU) will be located approximately 25'-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; pole height cannot 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-59-15 by adopting the attached resolution, including conditions of approval in Exhibit A; and, incorporate all maps and testimony into the record by reference.

Attachments:

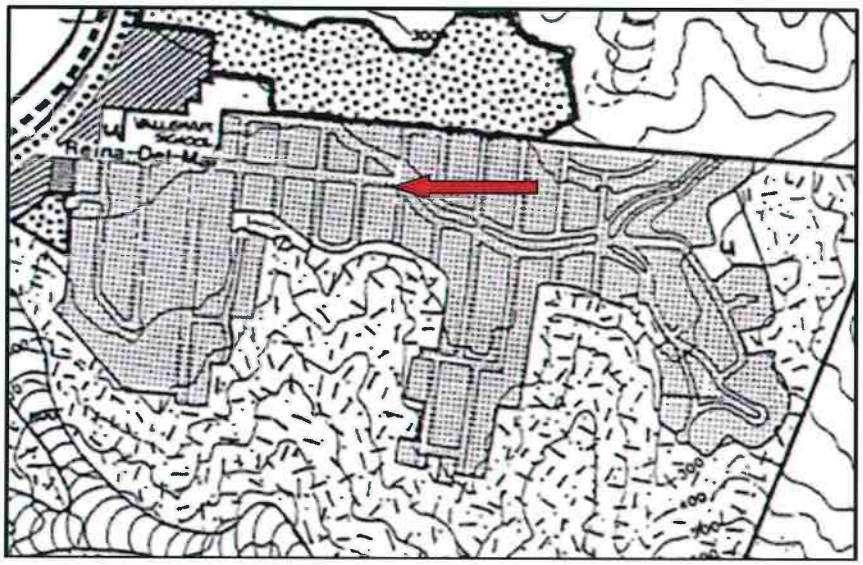
A. Land Use and Zoning Exhibit
B. Resolution of Approval
C. Exhibit A to Resolution of Approval – Conditions of Approval
D. Site Plan, Floor Plan, and Elevations
E. Applicant's letter of explanation
F. Photosimulation renderings
G. Noise analysis
H. Alternative site analysis
I. Radiofrequency (RF) emissions 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

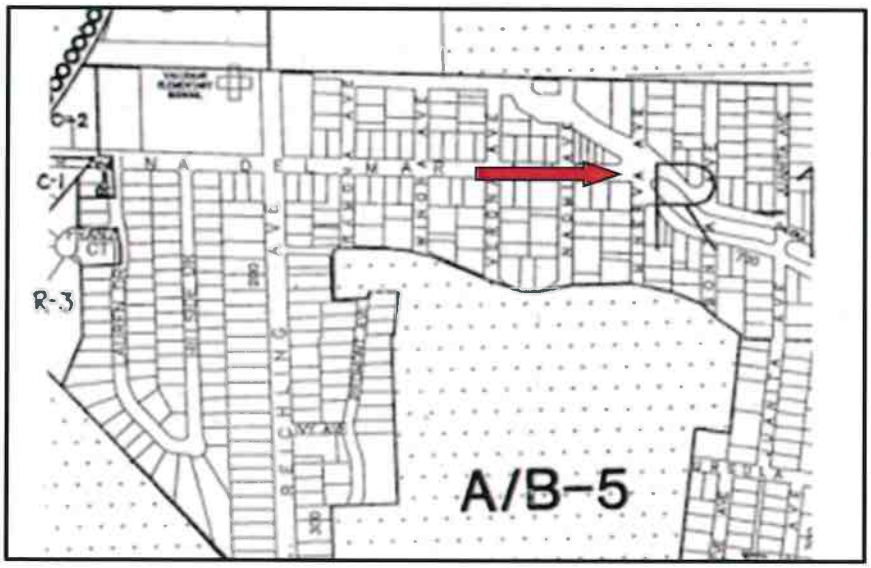
General Plan Diagram

Neighborhood: Vallemar
Land Use Designation: Low Density Residential



Zoning Map Diagram

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



Attachment A

RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PACIFICA APPROVING USE PERMIT UP-59-15, 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 648 REINA DEL MAR AVENUE (APN 018-086-190), 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 648 Reina Del Mar Avenue (APN 018-086-190); 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-59-15:

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-59-15 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 648 Reina Del Mar Avenue (APN 018-086-190), 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:

_____
Tina Wehrmeister, Planning Director

APPROVED AS TO FORM:

_____
Michelle Kenyon, City Attorney

Exhibit A

Conditions of Approval: Use Permit UP-59-15 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 648 Reina Del Mar Avenue (APN 018-086-190)

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

ATTACHMENT D

STATEMENT OF SPECIAL INSPECTION

THE ENGINEER OF RECORD, BEING FULLY ADVISED OF THE CODE AND SCOPE OF THE SUBJECT PROJECT, STATES SPECIAL INSPECTIONS SHALL BE PERFORMED FOR THE SUBJECT WORK IN CONFORMANCE WITH THE 2013 CBC 1705.11.6. THE SPECIAL INSPECTION PLAN CONSISTS OF THE ENGINEER OF RECORD DESIGNING THE ELECTRICAL COMPONENT ATTACHMENTS, SHOWING THE ATTACHMENTS ON THE DESIGN AND SEALING THE DESIGN DOCUMENTS. THE SPECIAL INSPECTION REPORT SHALL BE THE AS-BUILT REDLINED DRAWINGS PREPARED BY THE CONSTRUCTION MANAGER. THE AS-BUILTS SHALL BE MADE 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 ELECTRIC CODE OR ADOPTED CODE
TIA/EIA-222-G OR ADOPTED CODE NESC
CALIFORNIA RULES FOR OVERHEAD ELECTRIC LINE CONSTRUCTION – GO95

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 SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO 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 ANTENNAS 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:	AARON INGRAM (913) 458-9693 INGRAMANDOVERLANDCONTRACTING.COM
SITE ACQUISITION MANAGER:	ANA GOMEZ-ABARCA (913) 458-9148 GOMEZABARCAA@bv.com
RF ENGINEER:	BRIAN WILLIAMS (925) 582-8349 BW8320@att.com
APPLICANT:	AT&T MOBILITY TASHA STACK (925) 998-6547 TS670x@ATT.COM
CASPR PTN:	–
FA LOCATION:	–

CONTACT INFORMATION

ENGINEER:	BLACK & VEATCH 2999 OAK ROAD SUITE 490 WALNUT CREEK, CA 94597
CONTACT:	CHRIS WIRTH
PHONE:	(913) 458-4521

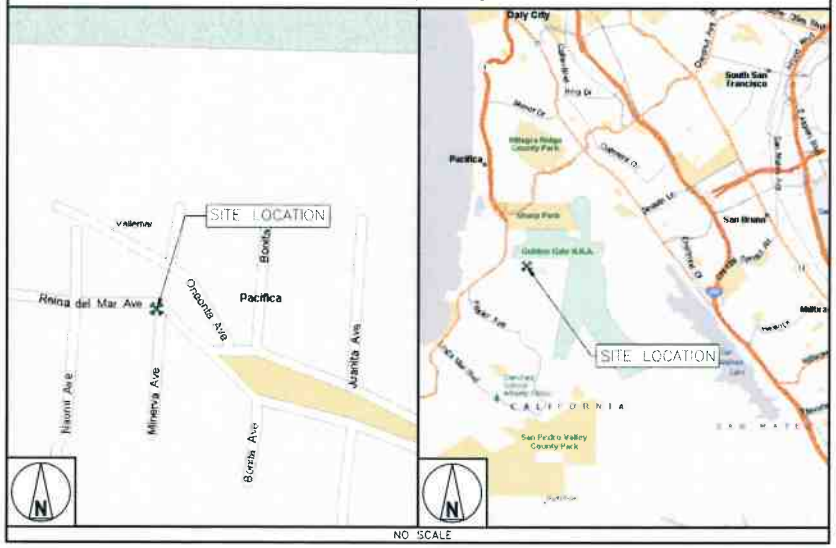
at&t

SCC-CC0004-6
PACIFICA

648 REINA DEL MAR AVE.

SMALL CELL - ZD

LOCATION MAPS



NO SCALE

DRIVING DIRECTIONS

DIRECTIONS FROM LOCAL AT&T OFFICE: FROM 2600 CAMINO RAMON, HEAD SOUTHEAST ON CAMINO RAMON TOWARD BISHOP DR. TAKE THE 3RD RIGHT ONTO BOLLINGER CANYON RD. MERGE ONTO I-680 N VIA THE RAMP TO SACRAMENTO. TAKE THE STATE ROUTE 24 EXIT TOWARD OAKLAND/LAFAYETTE. MERGE ONTO CA-24 W. TAKE THE INTERSTATE 580 W EXIT. MERGE ONTO I-580 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/US-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. TURN LEFT ONTO HIAWATHA AVE. THE SITE WILL BE ON YOUR LEFT.

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	SCC-CC0004-6 TITLE SHEET
PL-1.1	SCC-CC0004-6 LOCATION MAP
PL-2.1	SCC-CC0004-6 INFORMATION DATASHEET
AP6-1	SCC-CC0004-6 ELEVATIONS
AP6-2	SCC-CC0004-6 ISOMETRIC ELEVATIONS
AP6-3	SCC-CC0004-6 OVERALL SITE PLAN
C-1.0	EQUIPMENT DETAILS AND SPECIFICATIONS

JUL 24 2015
City of Pacifica

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 SERVICE ALERT
UTILITIES PROTECTION CENTER, INC.
811
48 HOURS BEFORE YOU DIG

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SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C06364

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

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

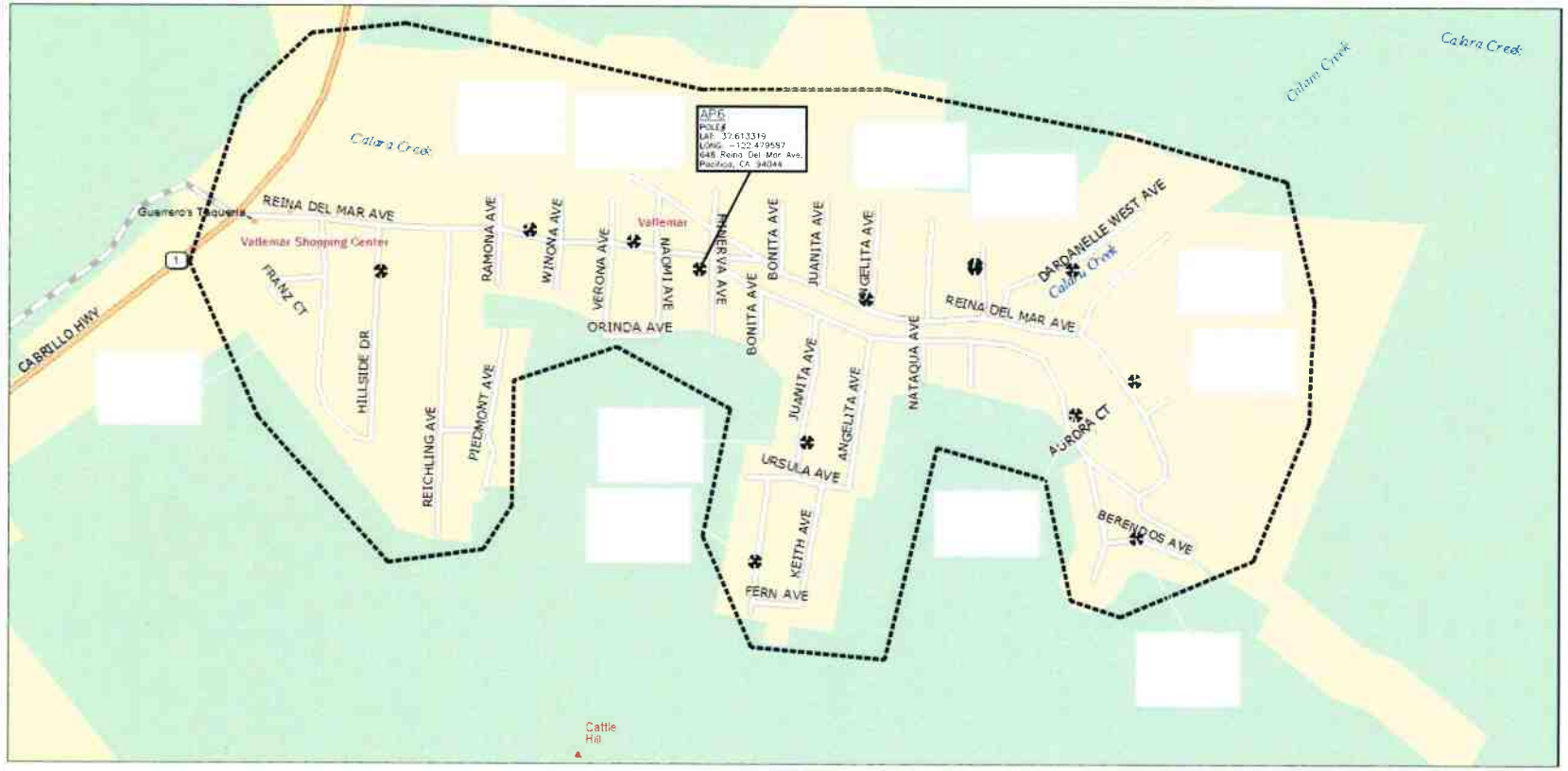
SCC-CC0004-6
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC-CC0004-6
TITLE SHEET

SHEET NUMBER
T-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.



POLYGON MAP

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2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0213

PROJECT NO:	129092
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CHECKED BY:	RAE

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SCC-CC0004-6
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE

SCC-CC0004-6
LOCATION MAP

SHEET NUMBER

PL-1.1

Site Number	Site Name	USID (UMTS)	USID (LTE)	E911 Address	County	Latitude	Longitude	Pole ID	Structure Type	Structure Height	Rad Center
SCC-CC0004-6	Pacifica	165288	165293	648 Reina Del Mar Ave, 94044	San Mateo	37.613319	-122.479587	n/a	Utility Pole	34'-4"	25'-0"

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BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C26364

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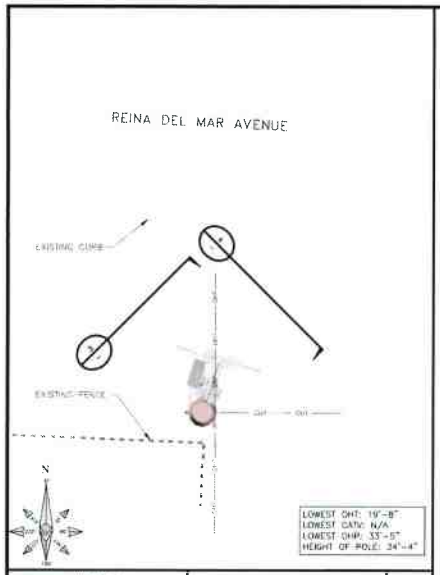
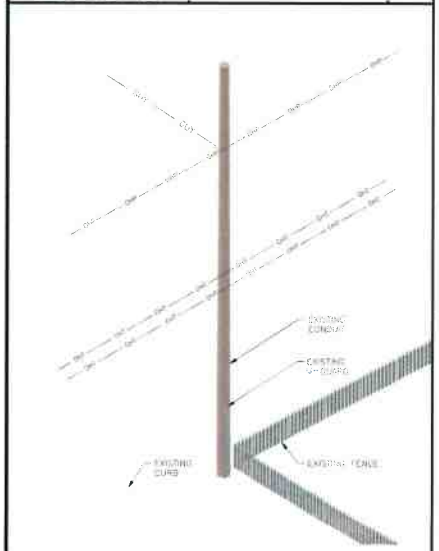
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-6
INFORMATION DATASHEET

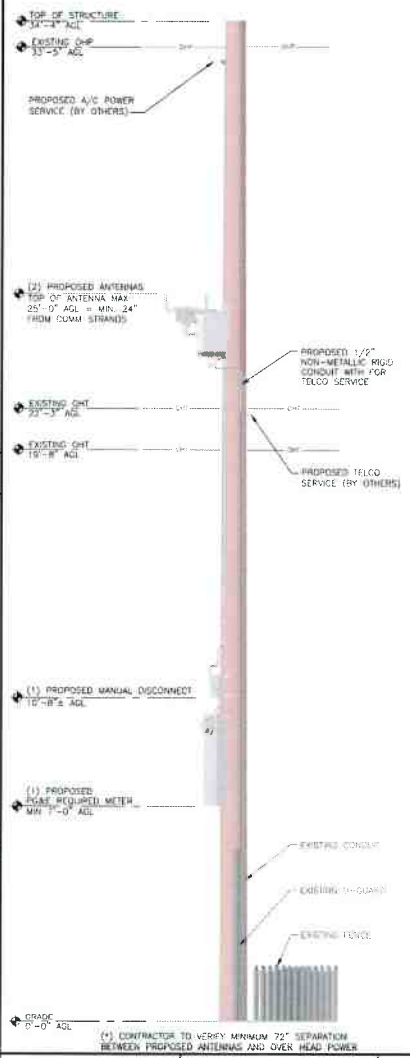
SHEET NUMBER
PL-2.1



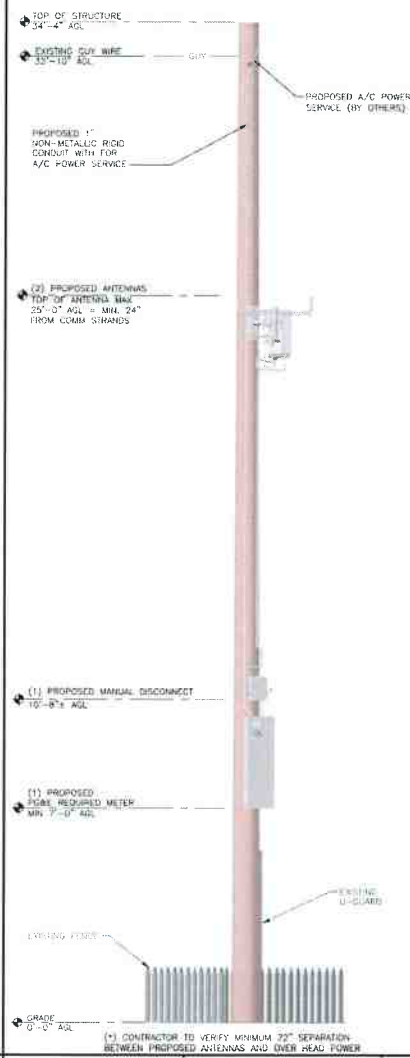
AERIAL ORIENTATION VIEW | 1



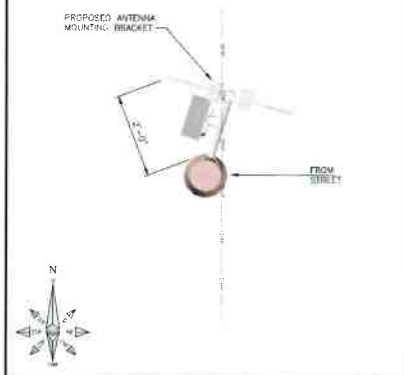
BEFORE CONVERSION (LOOKING SOUTHEAST) | 2



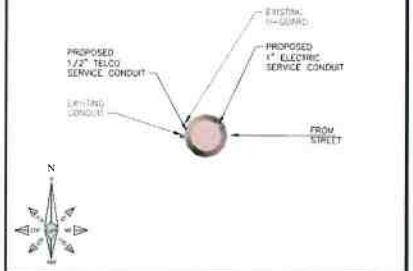
AFTER CONVERSION (LOOKING SOUTHEAST) | 3



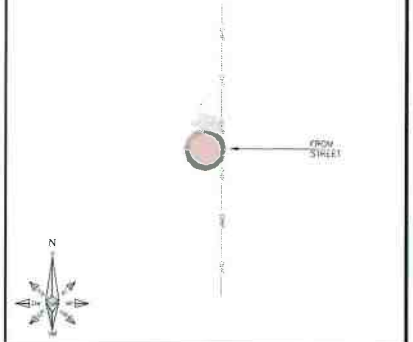
AFTER CONVERSION (LOOKING SOUTHWEST) | 4



PLAN VIEW – ANTENNA LEVEL | A



PLAN VIEW – RISER DETAIL | B



PLAN VIEW – EQUIPMENT LEVEL | C

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(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50364

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
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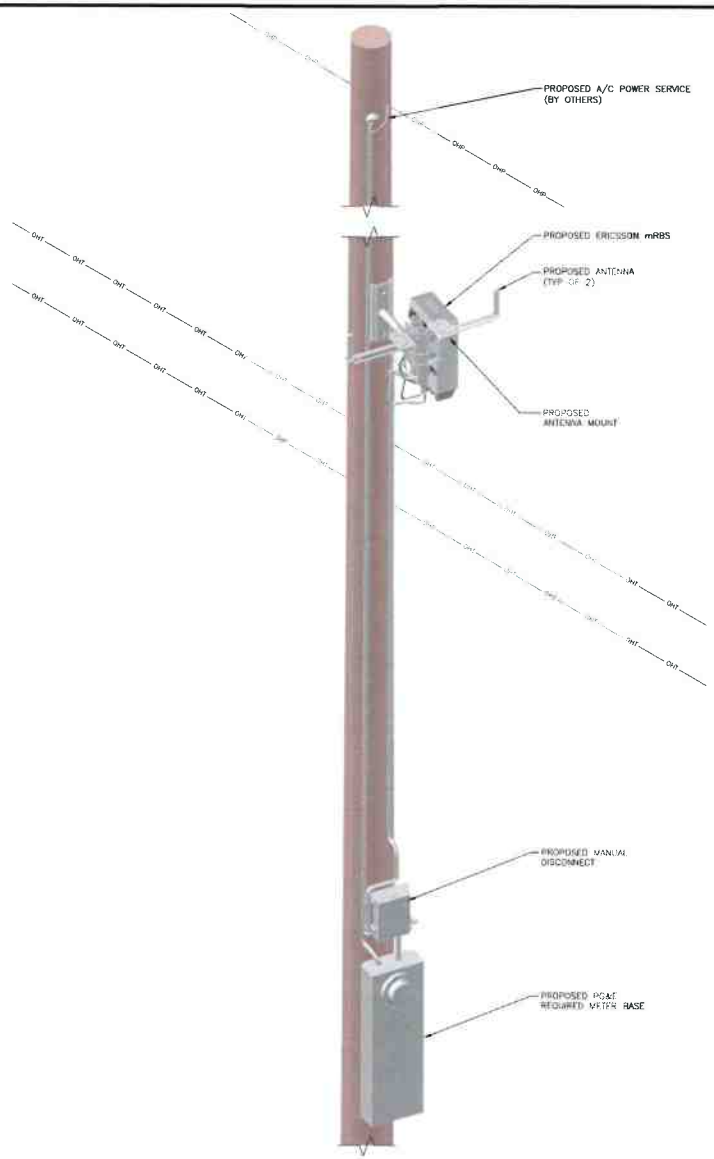
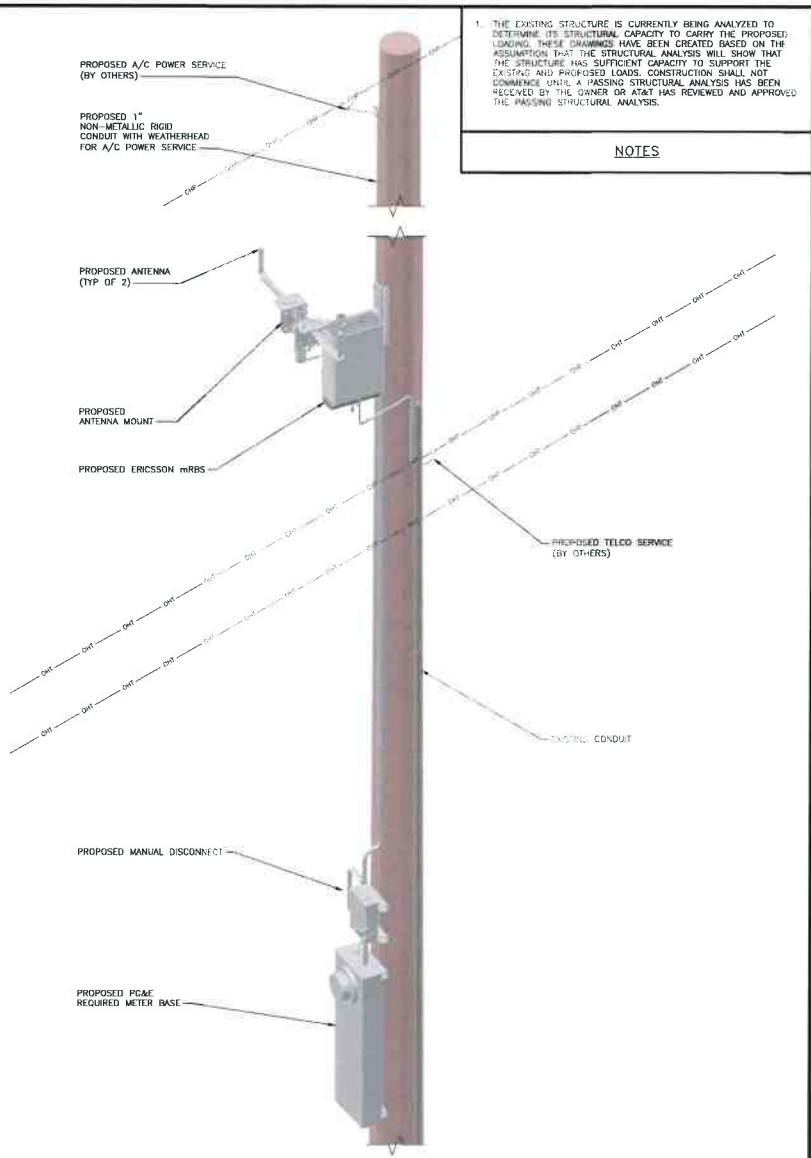
SCC-CC0004-6
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC-CC0004-6
ELEVATIONS

SHEET NUMBER
AP6-1



ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHWEST) | 1



ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHEAST) | 2

1. THE EXISTING STRUCTURE IS CURRENTLY BEING ANALYZED TO DETERMINE ITS STRUCTURAL CAPACITY TO CARRY THE PROPOSED LOADING. THESE DRAWINGS HAVE BEEN CREATED BASED ON THE ASSUMPTION THAT THE STRUCTURAL ANALYSIS WILL SHOW THAT THE STRUCTURE HAS SUFFICIENT CAPACITY TO SUPPORT THE EXISTING AND PROPOSED LOADS. CONSTRUCTION SHALL NOT COMMENCE UNTIL A PASSING STRUCTURAL ANALYSIS HAS BEEN RECEIVED BY THE OWNER OR AT&T HAS REVIEWED AND APPROVED THE PASSING STRUCTURAL ANALYSIS.

NOTES

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BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50384

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CHECKED BY:	RAE

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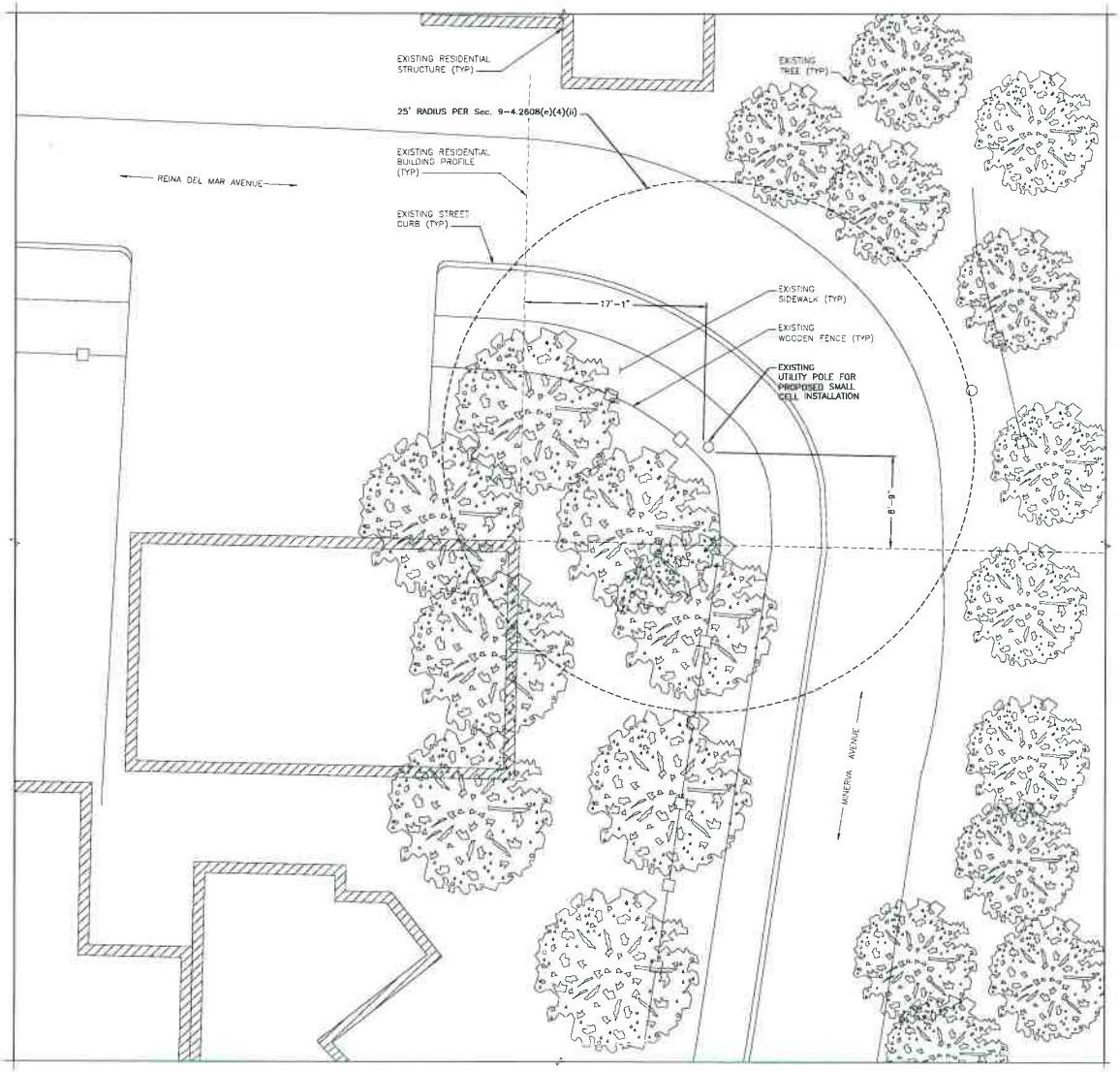
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC-CC0004-6
ISOMETRIC ELEVATIONS

SHEET NUMBER
AP6-2



OVERALL SITE PLAN

6' 4' 2' 0 5' 10'
3/16"=1'-0"

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.

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SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243

BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50364

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SCC-CC0004-6
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE

SCC-CC0004-6
OVERALL SITE PLAN

SHEET NUMBER

AP6-3

AMPHENOL MULTI-BAND OMNI ANTENNA

RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	WHITE
DIMENSIONS (LENGTH x DIAMETER):	(7.7"x1.1") 195x28mm
WEIGHT, WITHOUT MOUNTING KIT:	(0.24 lbs) 0.11 kg
CONNECTOR:	BOTTOM, N-FEMALE

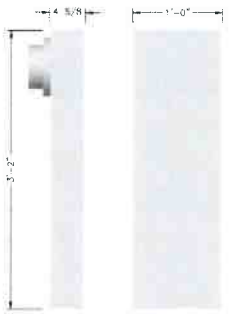
PROPOSED ANTENNA SPECIFICATIONS | NO SCALE | A

MICRO RBS

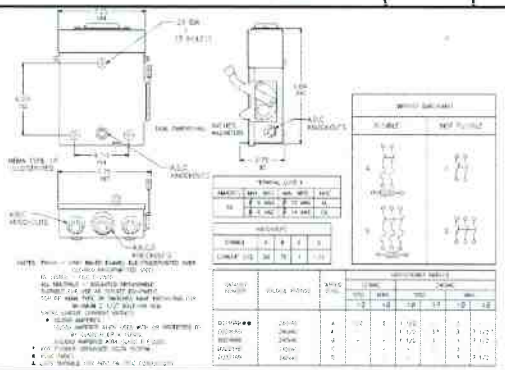
DIMENSIONS (LENGTH x DIAMETER): (17.7"x11.9"x5.3")

WEIGHT: (11 lbs) 15 kg

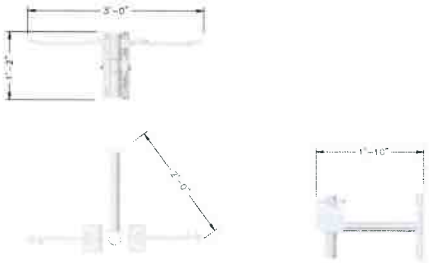
PROPOSED MICRO RBS | NO SCALE | B



PROPOSED POWER METER | NO SCALE | C



PROPOSED MANUAL DISCONNECT | NO SCALE | D



PROPOSED BRACKET MOUNT | NO SCALE | E

	NO SCALE	F

	NO SCALE	G

	NO SCALE	H

	NO SCALE	J

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12707 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 337-2043

BLACK & VEATCH CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50364

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

REV	DATE	DESCRIPTION
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SCC-CC0004-6
PACIFICA
648 REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE

EQUIPMENT DETAILS AND SPECIFICATIONS

SHEET NUMBER

C-1.0

BLACK & VEATCH
Building a world of difference.

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

Re: Proposed AT&T Mobility Small Cell Installation

Applicant:	**New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)**
Site Address:	**648 Reina del Mar Avenue**
Site ID:	**SCC-CC0004-6**
Latitude/Longitude:	**37.61336, -122.479535**

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 near 648 Reina del Mar Avenue (Small Cell SCC-CC0004-6).[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 34 feet four inch tall wooden utility pole in the public right-of-way on the northeast side of 648 Reina del Mar Avenue. A primary power lines is attached to a cross-arm at about 33 feet five inches high. Communication lines are attached to the pole at 22 feet three inches and 19 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") 25'0" 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-CC0004-6 is an integral part of the overall small cell, and 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, Minerva Avenues and surrounding areas. SCC-CC0004-6 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-CC0004-6 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-CC0004-6 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.

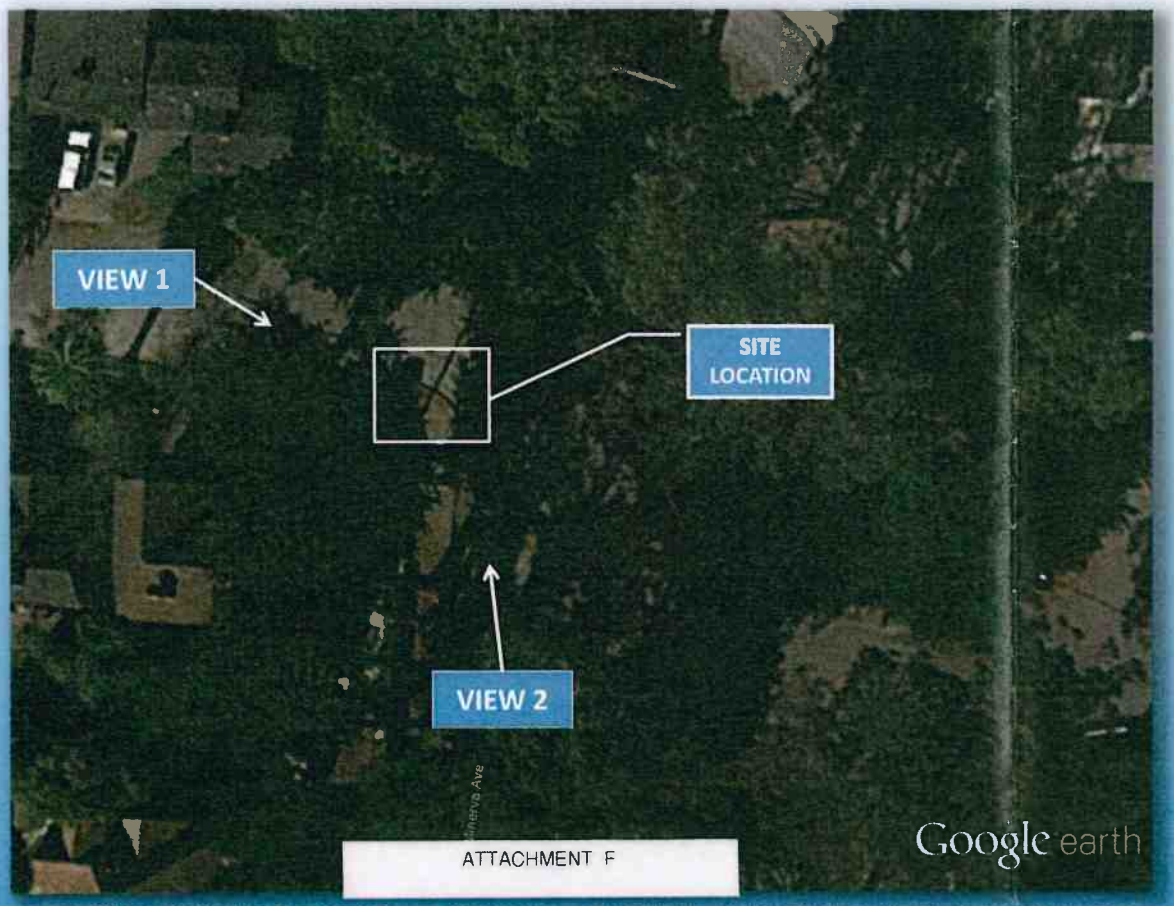
As this application seeks authority to install a wireless telecommunication facility, the FCC's Shot Clock Order[2] requires the city to issue its final decision on AT&T's application within 150 days. We respectfully request expedited review and approval of this application. Feel free to contact me if 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



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.

PROPOSED SMALL CELL SITE

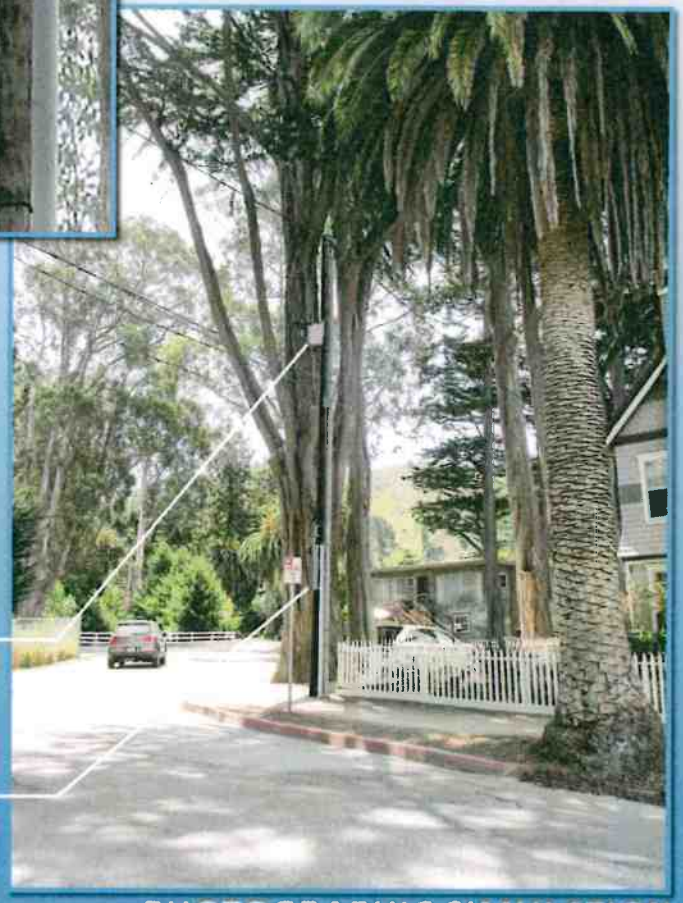
SITE NUMBER:	SCC-CC0004-6
SITE NAME:	PACIFICA
SITE ADDRESS:	648 REINA DEL MAR AVE PACIFICA, CA 94044
DATE:	07/23/15
APPLICANT:	AT&T WIRELESS
CONTACT:	ANA GOMEZ-ABARCA BLACK & VEATCH (913) 458-9148

VIEW 1

EXISTING CONDITIONS

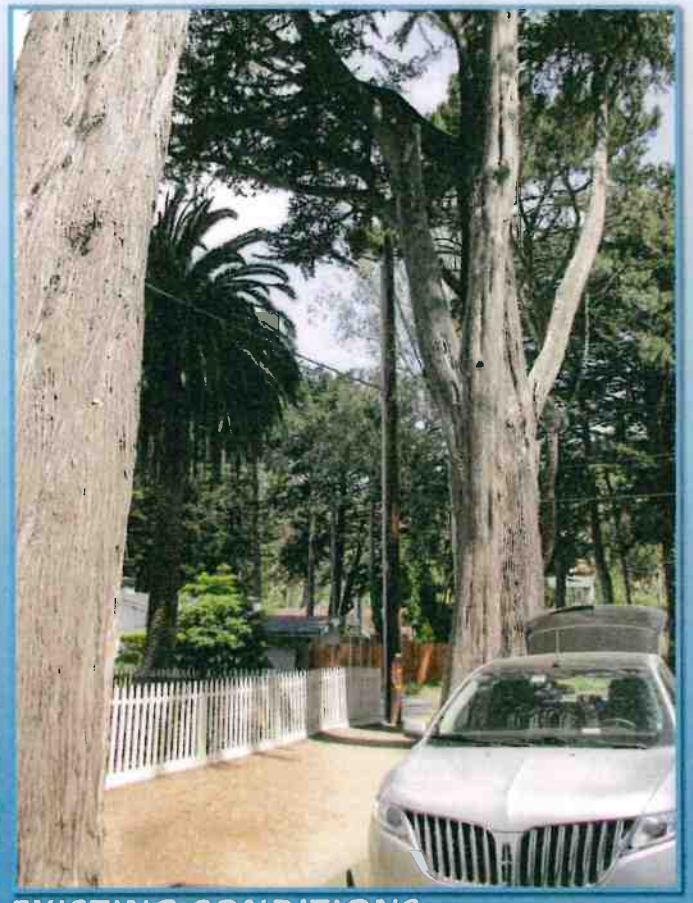
PROPOSED AT&T SMALL CELL EQUIPMENT

PROPOSED PG&E METER AND SERVICE DISCONNECT



PHOTOGRAPHIC SIMULATION

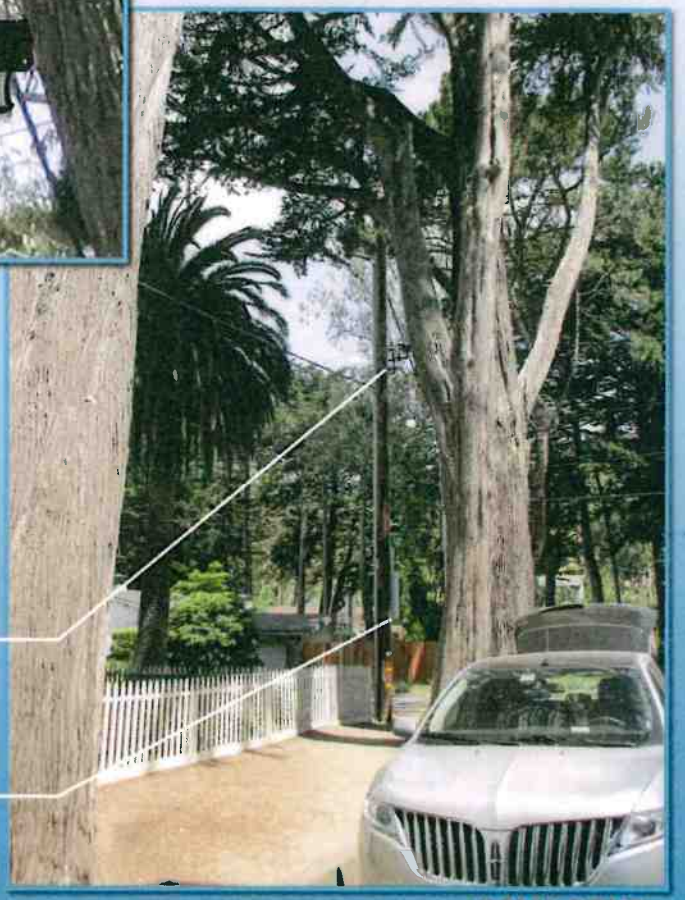
VIEW 2



EXISTING CONDITIONS

PROPOSED AT&T SMALL CELL EQUIPMENT

PROPOSED PG&E METER AND SERVICE DISCONNECT



PHOTOGRAPHIC SIMULATION

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 648 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 648 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.

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 8, 2015, and to additional information provided by AT&T, four cabinets are to be mounted on the side of the utility pole located near 648 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 25 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 648 Reina Del Mar Avenue in Pacifica, California, will comply with the pertinent standards limiting acoustic noise emission levels.

Authorship

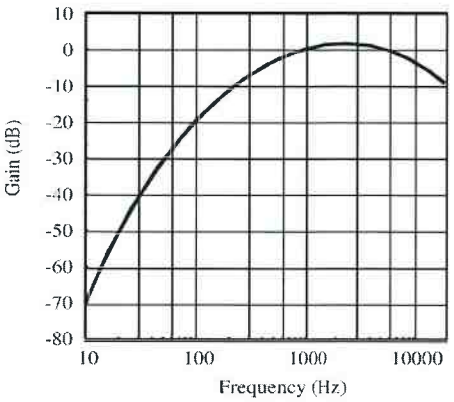
The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, 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 L_1, L_2, etc are individual sound pressure levels.

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

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.

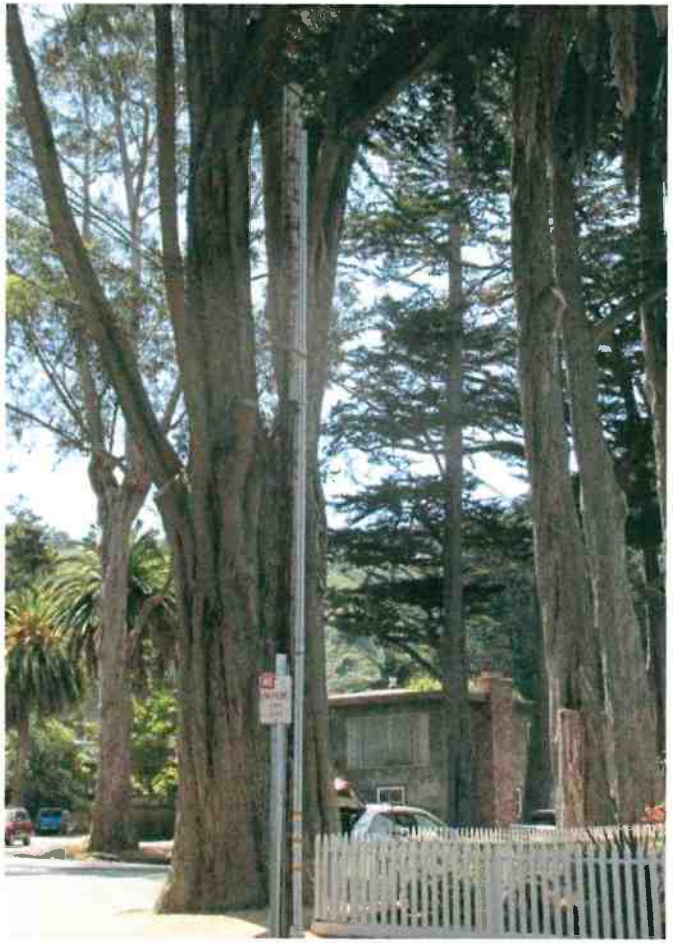
Rethink Possible®

ATTACHMENT H

Small Cell SCC-CC0004-6 – In front of 648 Reina Del Ave.
Pacifica, California
Alternative Site Analysis
Conditional Use Permit Request

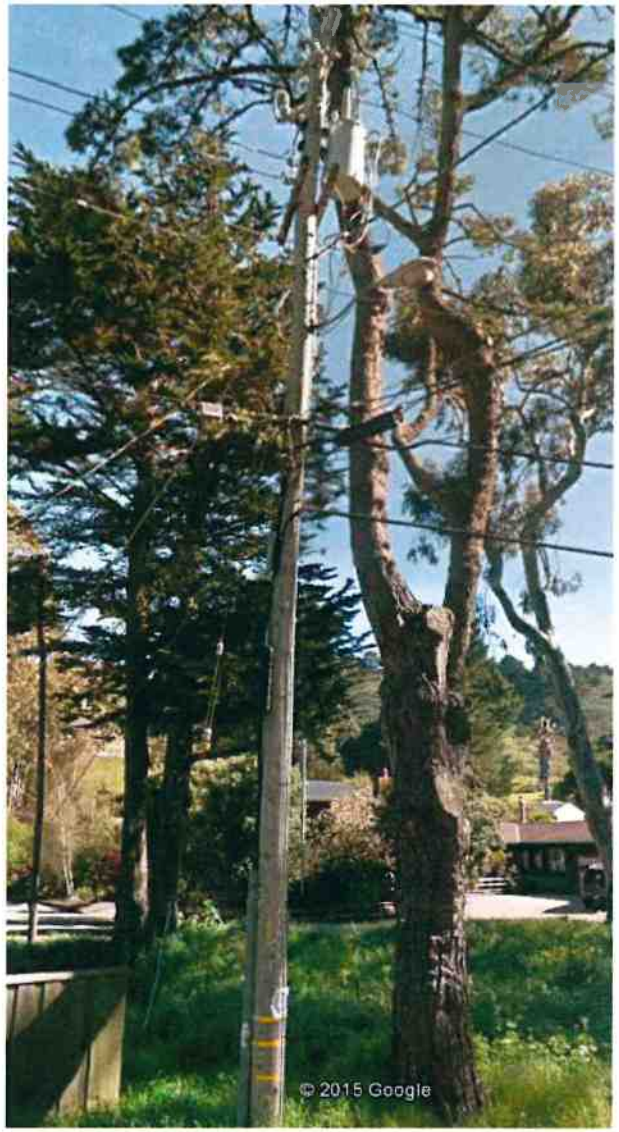
On the map above, the proposed AT&T wireless facility in the public right-of-way in front of 648 Reina Del Mar Avenue (37.613319°, -122.479587°) is indicated as Small Cell "SCC-CC0004-6" The six alternative locations that AT&T analyzed are marked by pins AP6B, AP6C, AP6D, AP6E, AP6F and AP6G.

Small Cell SCC-CC0004-6 – Proposed Location



- The location for AT&T's proposed wireless facility (Small Cell SCC-CC0004-6) is in the public right-of-way at a joint utility pole in front of 648 Reina Del Mar Avenue. (37.613319°, -122.479587°)
- 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 AP6B – Alternative 1



- Small Cell AP6B (Alternative 1) is in the public right-of-way at a joint utility pole located across the street from 648 Reina Del Mar Avenue and Winona Avenue. (37.613485°, -122.479565°)
- 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.

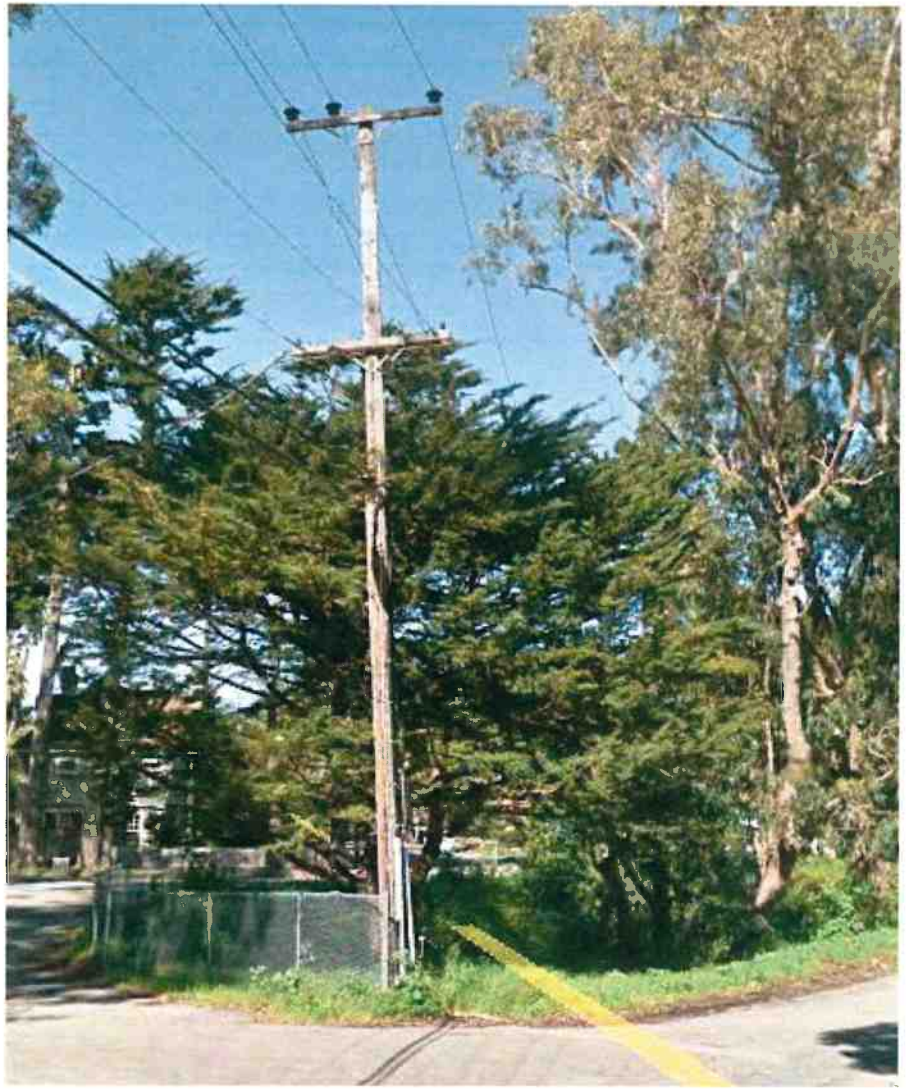
Small Cell AP6C – Alternative 2

- Small Cell AP6C (Alternative 2) is in the public right-of-way at a joint utility pole located at the intersection of Bonita Avenue and Reina Del Mar Avenue. (37.612994°, -122.478452°)
- 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 AP6D – Alternative 3

- Small Cell AP6D (Alternative 3) is in the public right-of-way at a joint utility pole located at the intersection of Oneonta Avenue and Reina Del Mar Avenue. (37.613108°, -122.479072°)
- 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 AP6E – Alternative 4



- Small Cell AP6E (Alternative 4) is in the public right-of-way at a joint utility pole located across the street from 164 Bonita Avenue. (37.613105°, -122.478959°)
- 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 AP6F – Alternative 5

- Small Cell AP6F (Alternative 5) is in the public right-of-way at a joint utility pole located in front of 225 Winona Avenue. (37.612643°, -122.478324°)
- The pole location and pole height is not optimal to close this portion of the service coverage gap.

Small Cell AP6G – Alternative 6

- Small Cell AP6G (Alternative 6) 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-CC0004-6 – 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 648 Reina Del Mar Avenue (Small Cell SCC-CC0004-6) is the least intrusive means to close AT&T's significant service coverage gap.

SCC-CC0004-6: 37.613319°, -122.479587° (Proposed Site)

AP6B: 37.613485°, -122.479565°

AP6C: 37.612994°, -122.478452°

AP6D: 37.613108°, -122.479072°

AP6E: 37.613105°, -122.478959°

AP6F: 37.612643°, -122.478324°

AP6G: 37.615393°, -122.484573°

AT&T Mobility • Small Cell No. SCC-CC0004-6
648 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, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 648 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 648 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.

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 8, 2015, that carrier proposes to install a new small cell on the existing 34½-foot utility pole sited in the public right-of-way in front of the residence located at 648 Reina Del Mar Avenue in Pacifica. Two Amphenol Model 7825700 omnidirectional antennas would be mounted with no downtilt at an effective height of about 25 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 0.0024 mW/cm^2, which is 0.50% of the applicable public exposure limit. The maximum calculated level at any nearby residence is 0.0060 mW/cm^2, which is 1.2% 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

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 648 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, P.E.
707/996-5200

July 24, 2015

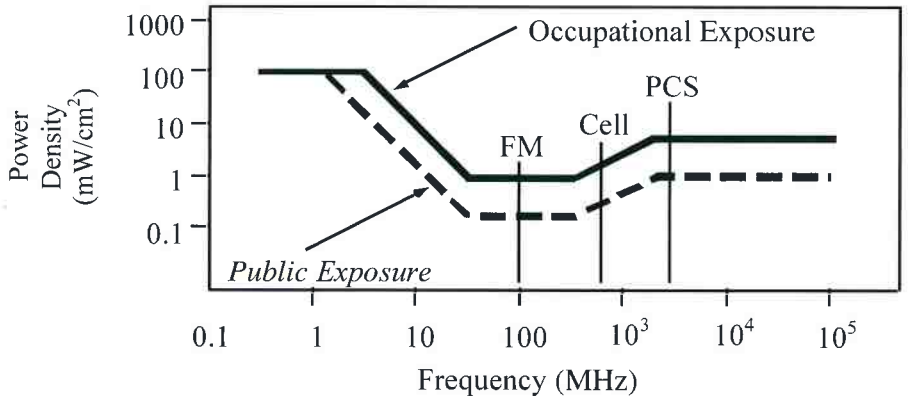
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health 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	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 – 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/ f	*823.8/f*	4.89/ f	*2.19/f*	900/ f^2	*180/f^2*
30 – 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	*$1.59\sqrt{f}$*	$\sqrt{f}/106$	*$\sqrt{f}/238$*	f/300	*f/1500*
1,500 – 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



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/cm^2,

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/cm^2,

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:

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

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-59-15**
Site Address:	**648 Reina del Mar Avenue**
Site ID:	**SCC-CC0004-6**
Latitude/Longitude:	**37.613319, -122.479587**

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-61-15

ITEM: 2.f

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 351 Genevieve Avenue (APN 018-124-120) – 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'-6" tall and contains electrical, cable, and telephone utility wires. The antenna mounting bracket, antennas, and remote radio unit (RRU) will be located approximately 18'-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 cannot 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-61-15 by adopting the attached resolution, including conditions of approval in Exhibit A; and, incorporate all maps and testimony into the record by reference.

Attachments:

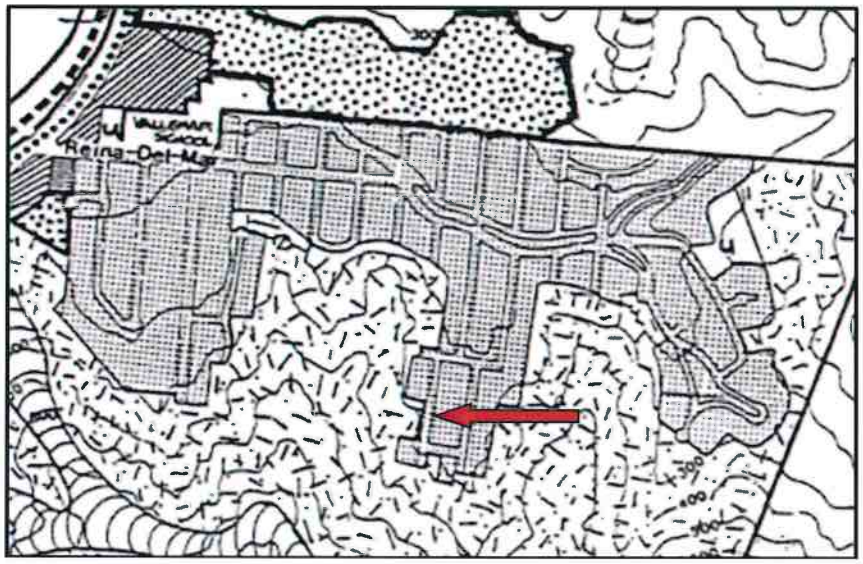
A. Land Use and Zoning Exhibit
B. Resolution of Approval
C. Exhibit A to Resolution of Approval – Conditions of Approval
D. Site Plan, Floor Plan, and Elevations
E. Applicant's letter of explanation
F. Photosimulation renderings
G. Noise analysis
H. Alternative site analysis
I. Radiofrequency (RF) emissions 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

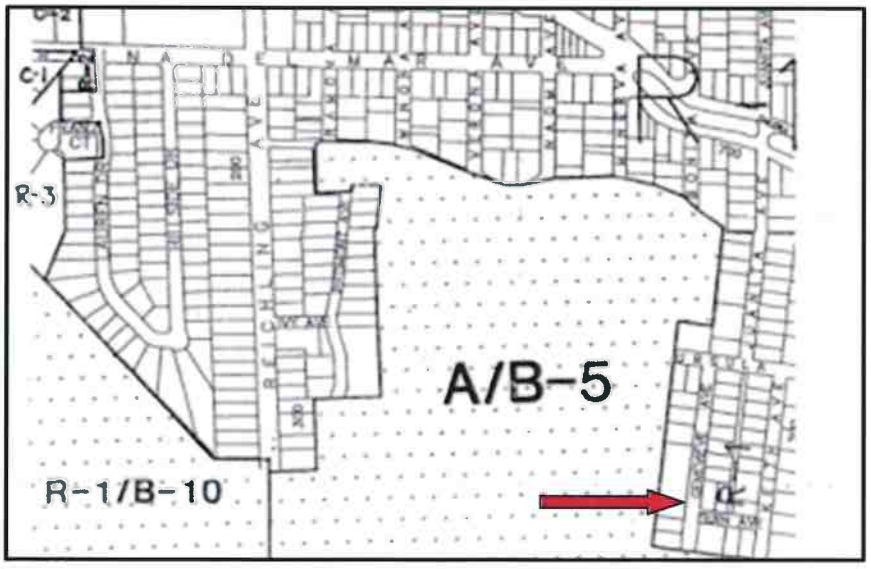
General Plan Diagram

Neighborhood: Vallemar
Land Use Designation: Low Density Residential



Zoning Map Diagram

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



Attachment A

RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PACIFICA APPROVING USE PERMIT UP-61-15, 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 351 GENEVIEVE AVENUE (APN 018-124-120), 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 351 Genevieve Avenue (APN 018-124-120); 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-61-15:

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-61-15 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 351 Genevieve Avenue (APN 018-124-120), 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:

_____
Tina Wehrmeister, Planning Director

APPROVED AS TO FORM:

_____
Michelle Kenyon, City Attorney

Exhibit A

Conditions of Approval: Use Permit UP-61-15 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 351 Genevieve Avenue (APN 018-124-120)

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

ATTACHMENT D

STATEMENT OF SPECIAL INSPECTION

THE ENGINEER OF RECORD, BEING FULLY ADVISED OF THE CODE AND SCOPE OF THE SUBJECT PROJECT, STATES SPECIAL INSPECTIONS SHALL BE PERFORMED FOR THE SUBJECT WORK IN CONFORMANCE WITH THE 2013 CBC 1705.11.8. THE SPECIAL INSPECTION PLAN CONSISTS OF THE ENGINEER OF RECORD DESIGNING THE ELECTRICAL COMPONENT ATTACHMENTS, SHOWING THE ATTACHMENTS ON THE DESIGN AND SEALING THE DESIGN DOCUMENTS. THE SPECIAL INSPECTION REPORT SHALL BE THE AS-BUILT REDLINED DRAWINGS PREPARED BY THE CONSTRUCTION MANAGER. THE AS-BUILTS SHALL BE MADE AVAILABLE TO THE BUILDING OFFICIAL WITHIN TWO WEEKS OF RECEIPT OF REQUEST (CDC 1704.2.4).

ENGINEERING

2013 CALIFORNIA BUILDING CODE OR ADOPTED CODE
2013 CALIFORNIA ELECTRIC CODE OR ADOPTED CODE
TIA/EIA-222-G OR ADOPTED CODE NESC
CALIFORNIA RULES FOR OVERHEAD ELECTRIC LINE CONSTRUCTION – GO95

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 SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE, NO 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 ANTENNAS 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:	AARON INGRAM (913) 458-9693 INGRAM@OVERLANDCONTRACTING.COM
SITE ACQUISITION MANAGER:	ANA GOMEZ-ABARCA (913) 458-9148 GOMEZABARCAA@bv.com
RF ENGINEER:	BRIAN WILLIAMS (925) 582-8349 BW8320@att.com
APPLICANT:	AT&T MOBILITY TASHA STACK (925) 998-6547 TS670x@ATT.COM
CASPR PTN:	240167631.3
FA LOCATION:	13022004

CONTACT INFORMATION

ENGINEER:	BLACK & VEATCH 2999 OAK ROAD, SUITE 490, WALNUT CREEK, CA 94597
CONTACT:	CHRIS WIRTH
PHONE:	(913) 458-4521

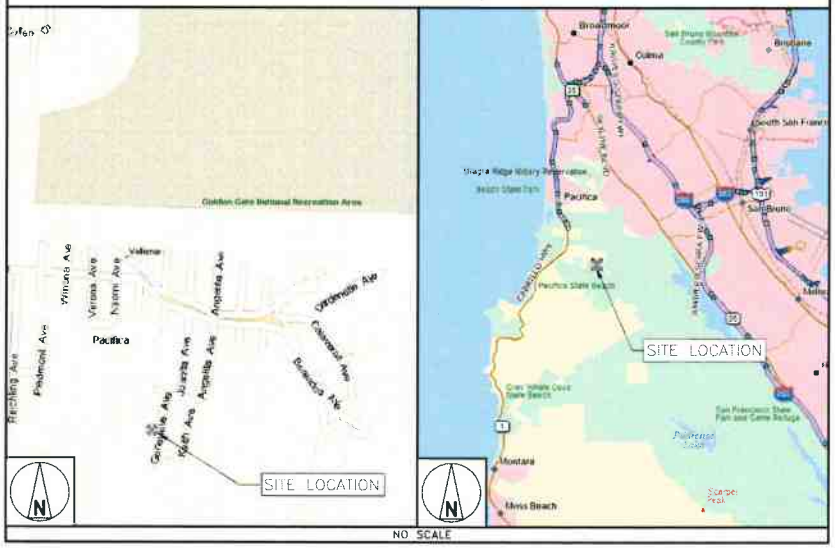
at&t

SCC-CC0004-8
PACIFICA

NEXT TO 351 GENEVIEVE AVE

SMALL CELL - ZD

LOCATION MAPS



NO SCALE

DRIVING DIRECTIONS

DIRECTIONS FROM LOCAL AT&T OFFICE: FROM 2600 CAMINO RAMON, HEAD SOUTHEAST ON CAMINO RAMON TOWARD BISHOP DRIVE. TAKE 3RD RIGHT ONTO BOLLINGER CANYON ROAD. MERGE ONTO I-680 N. TAKE CA-24 EXIT. MERGE ONTO CA-24 W. TAKE I-580 W EXIT. MERGE ONTO I-580 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, MERGE ONTO US-101 S. TAKE I-280 S EXIT. MERGE ONTO I-280 S. TURN RIGHT ONTO CA-1 S. TURN LEFT ONTO REINA DEL MAR AVENUE. TURN RIGHT ONTO S REINA DEL MAR AVENUE. TURN RIGHT ONTO JUANITA AVENUE. TURN RIGHT ONTO URSULA AVENUE. TAKE 1ST LEFT ONTO GENEVIEVE AVENUE. THE SITE WILL BE ON THE LEFT.

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	SCC-CC0004-8 TITLE SHEET
PL-1.1	SCC-CC0004-8 LOCATION MAP
PL-2.1	SCC-CC0004-8 INFORMATION DATASHEET
AP8-1	SCC-CC0004-8 ELEVATIONS
AP8-2	SCC-CC0004-8 ISOMETRIC ELEVATIONS
AP8-3	SCC-CC0004-8 OVERALL SITE PLAN
C-1.0	EQUIPMENT DETAILS AND SPECIFICATIONS

RECEIVED
JUL 24 2015
City of Pacifica

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 SERVICE ALERT
UTILITIES PROTECTION CENTER, INC.
811
48 HOURS BEFORE YOU DIG

at&t
2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK RAOD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C00364

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

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

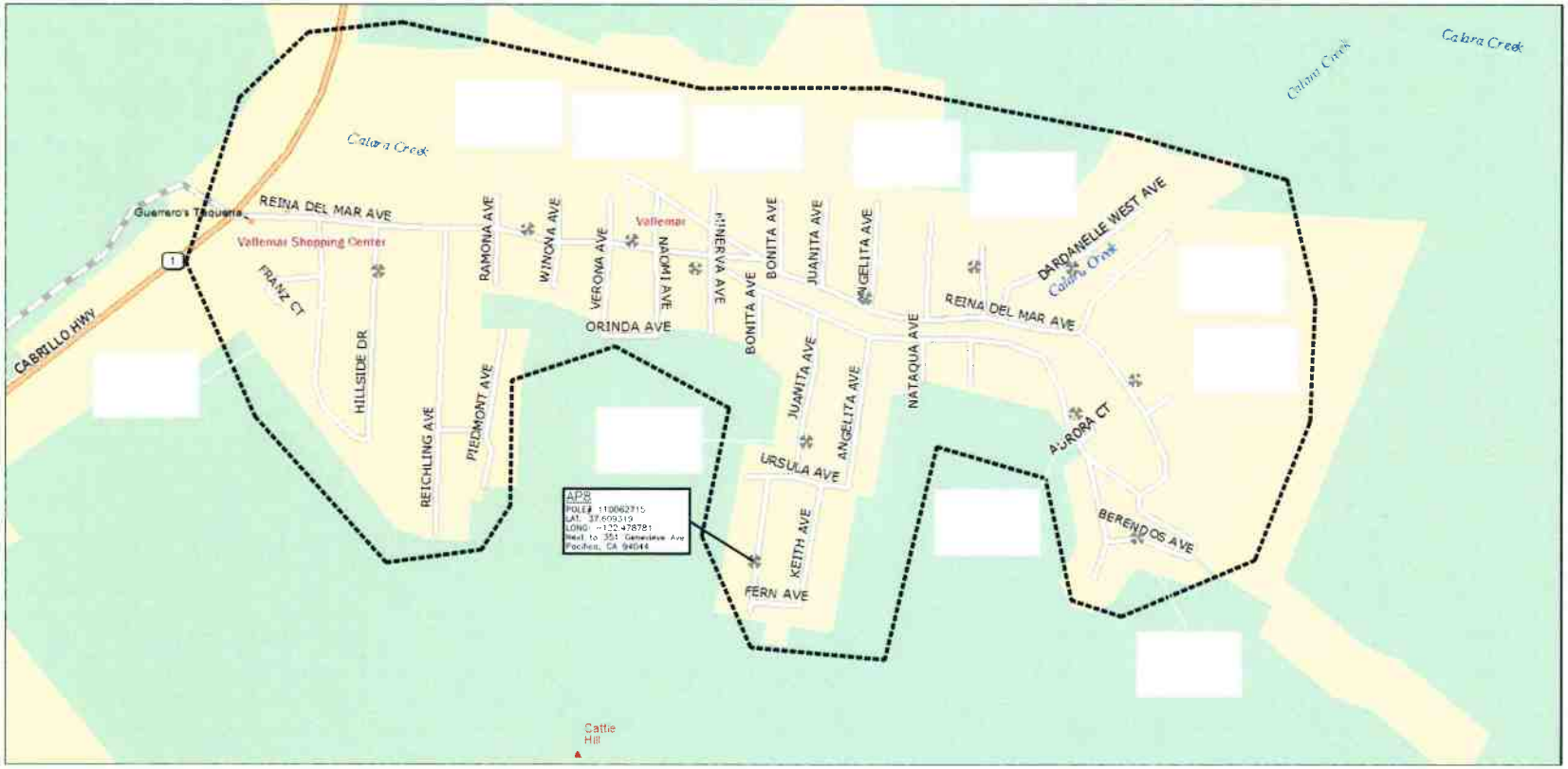
SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC-CC0004-8
TITLE SHEET

SHEET NUMBER
T-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.



N

POLYGON MAP

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2600 CAMINO RAMON
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BLACK & VEATCH
2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C29044

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
A	04/29/15	ISSUED FOR REVIEW

SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-8
LOCATION MAP

SHEET NUMBER
PL-1.1

Site Number	Site Name	USID (UMTS)	USID (LTE)	E911 Address	County	Latitude	Longitude	Pole ID	Structure Type	Structure Height	Rad Center
SCC-CC0004-8	Pacifica	165290	165302	Next to 351 Genevieve Ave, 94044	San Mateo	37.609319	-122.478781	110062715	Utility Pole	29'-5"	18'-0"

at&t

2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243

BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C30384

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

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

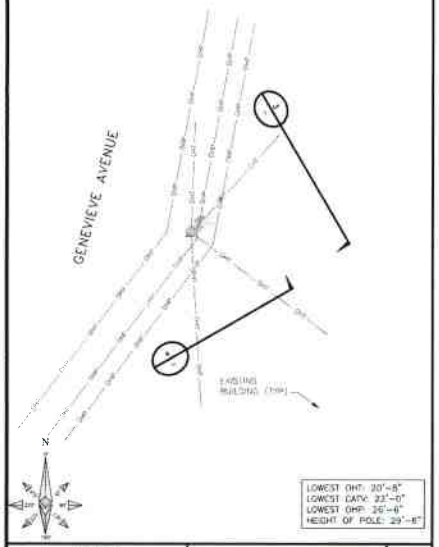
SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE

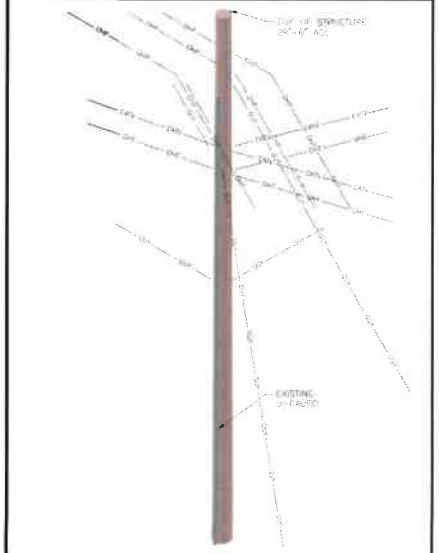
SCC-CC0004-8
INFORMATION DATASHEET

SHEET NUMBER

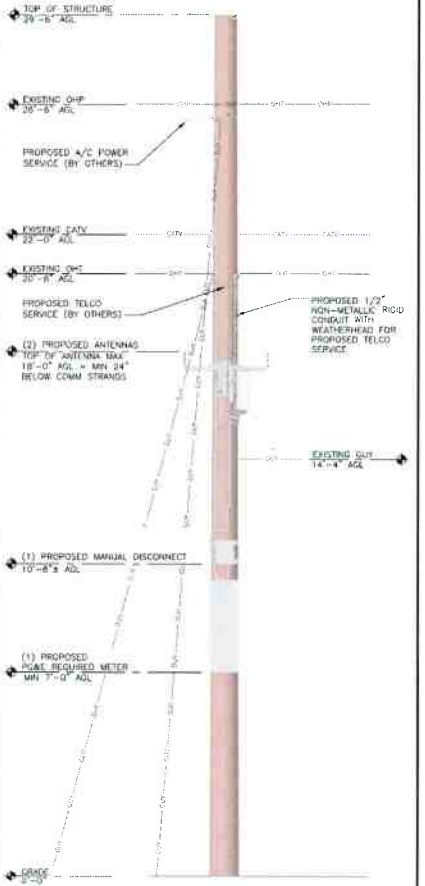
PL-2.1



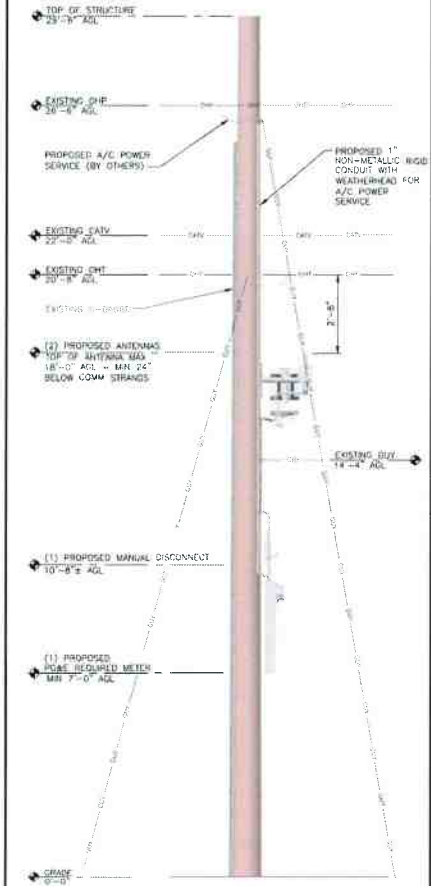
AERIAL ORIENTATION VIEW | 6' 4' 2' 0 5' 10' 3/16"=1'-0" | 1



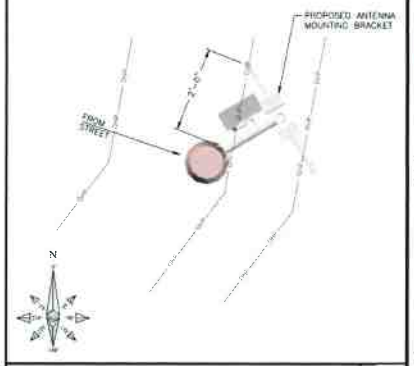
BEFORE CONVERSION (LOOKING NORTH) | 2



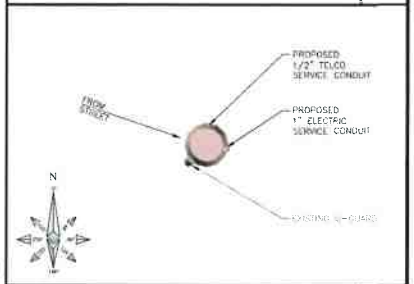
AFTER CONVERSION (LOOKING SOUTHWEST) | 12" 6" 0 1' 2' 3' 4' 6' 1/2"=1'-0" | 3



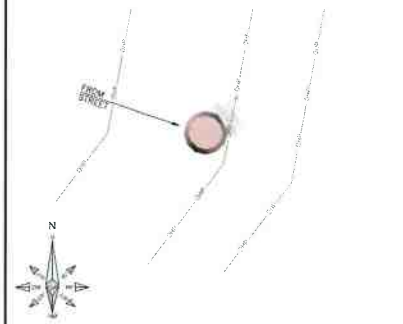
AFTER CONVERSION (LOOKING NORTHWEST) | 12" 6" 0 1' 2' 3' 4' 5' 1/2"=1'-0" | 4



PLAN VIEW – ANTENNA LEVEL | A



PLAN VIEW – RISER DETAIL | B



PLAN VIEW – EQUIPMENT LEVEL | C

at&t
2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C30364

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
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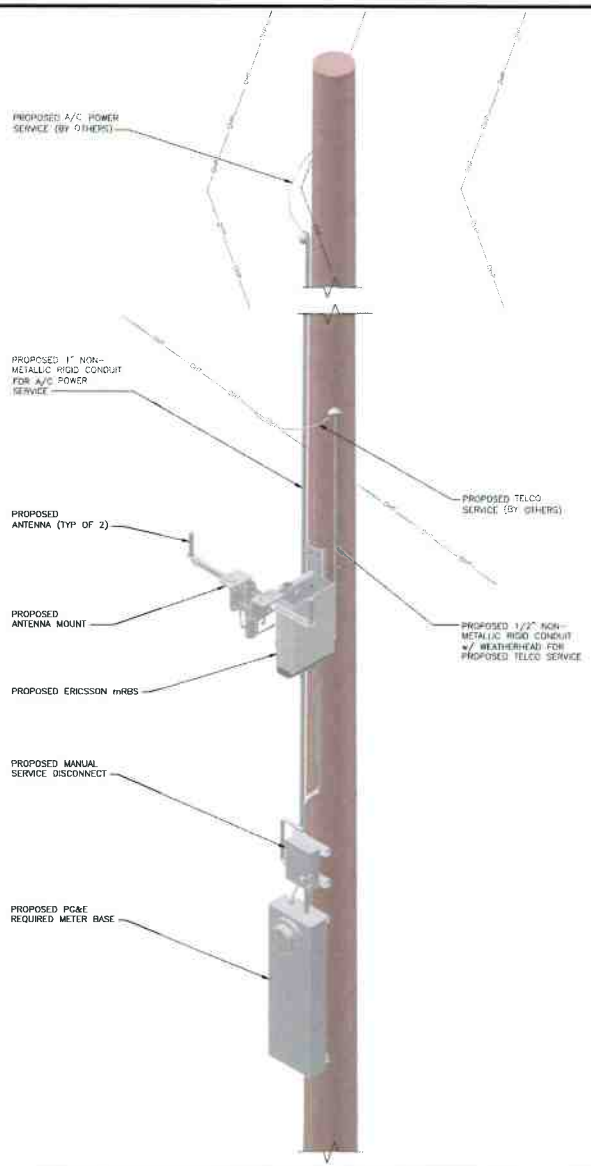
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

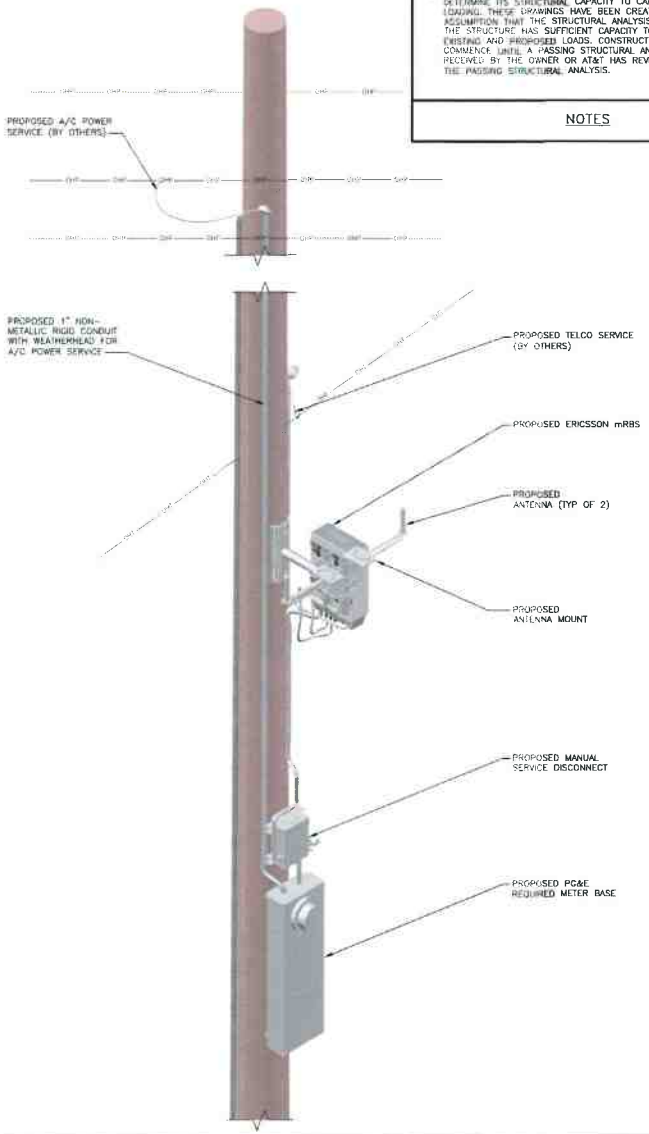
SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
SCC-CC0004-8
ELEVATIONS

SHEET NUMBER
AP8-1



ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHEAST) | 1



ISOMETRIC EQUIPMENT ELEVATION (LOOKING NORTHWEST) | 2

1. THE EXISTING STRUCTURE IS CURRENTLY BEING ANALYZED TO DETERMINE ITS STRUCTURAL CAPACITY TO CARRY THE PROPOSED LOADING. THESE DRAWINGS HAVE BEEN CREATED BASED ON THE ASSUMPTION THAT THE STRUCTURAL ANALYSIS WILL SHOW THAT THE STRUCTURE HAS SUFFICIENT CAPACITY TO SUPPORT THE EXISTING AND PROPOSED LOADS. CONSTRUCTION SHALL NOT COMMENCE UNTIL A PASSING STRUCTURAL ANALYSIS HAS BEEN RECEIVED BY THE OWNER OR AT&T HAS REVIEWED AND APPROVED THE PASSING STRUCTURAL ANALYSIS.

NOTES

at&t
2600 CAMINO RAMON
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2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C30364

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

REV	DATE	DESCRIPTION
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SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC-CC0004-8
ISOMETRIC ELEVATIONS

SHEET NUMBER
AP8-2

OVERALL SITE PLAN

3/16"=1'-0"

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.

at&t

2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243

BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50344

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

REV	DATE	DESCRIPTION
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SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE

SCC-CC0004-8
OVERALL SITE PLAN

SHEET NUMBER

AP8-3

AMPHENOL MULTI-BAND OMNI ANTENNA

RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	WHITE
DIMENSIONS (LENGTH x DIAMETER):	(7.7"x1.1") 195x28mm
WEIGHT, WITHOUT MOUNTING KIT:	(0.24 lbs) 0.11 kg
CONNECTOR:	BOTTOM, N-FEMALE

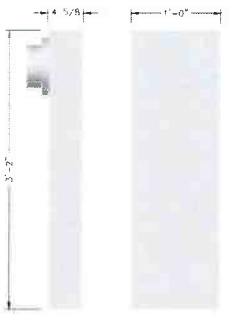
PROPOSED ANTENNA SPECIFICATIONS | NO SCALE | A

MICRO RBS

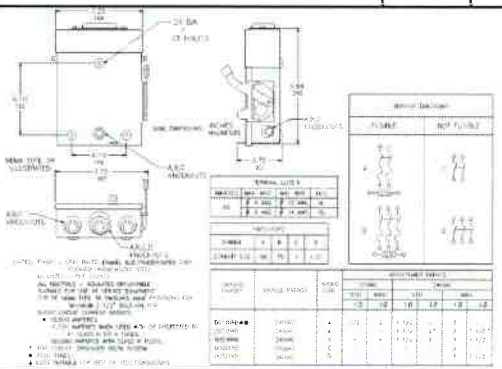
DIMENSIONS (LENGTH x DIAMETER): (17.7"x11.9"x5.3")

WEIGHT: (11 lbs) 15 kg

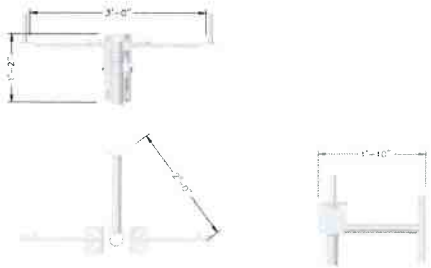
PROPOSED MICRO RBS | NO SCALE | B



PROPOSED POWER METER | NO SCALE | C



PROPOSED MANUAL DISCONNECT | NO SCALE | D



PROPOSED BRACKET MOUNT | NO SCALE | E

NOT USED | NO SCALE | F

NOT USED | NO SCALE | G

NOT USED | NO SCALE | H

NOT USED | NO SCALE | J

at&t
2000 CRAWFORD PLACE
SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK ROAD
SUITE 450
WALNUT CREEK, CA 94597
(925) 317-0243
BLACK & VEATCH HOLDING COMPANY
CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C00384

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

REV	DATE	DESCRIPTION
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A	06/29/15	ISSUED FOR REVIEW

SCC-CC0004-8
PACIFICA
NEXT TO 351 GENEVIEVE AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE
EQUIPMENT DETAILS AND SPECIFICATIONS

SHEET NUMBER
C-1.0

BLACK & VEATCH
Building a world of difference.

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

Re: Proposed AT&T Mobility Small Cell Installation

Applicant:	**New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)**
Site Address:	**Next to 351 Genevieve Avenue**
Site ID:	**SCC-CC0004-8**
Latitude/Longitude:	**37.609319, -122.478781**

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 next to 351 Genevieve Avenue (Small Cell SCC-CC0004-8).[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 six inch tall wooden utility pole in the public right-of-way on the west side of 351 Genevieve Avenue. A primary power line is attached to a cross-arm at about 26 feet six inches high. Communication lines are attached to the pole at 22 feet and 20 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") 18'0" 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-CC0004-8 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 Genevieve, Fern Avenues and surrounding areas. Small Cell CC-CC0004-8 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-CC0004-8 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-CC0004-8 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 Order[2] 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).

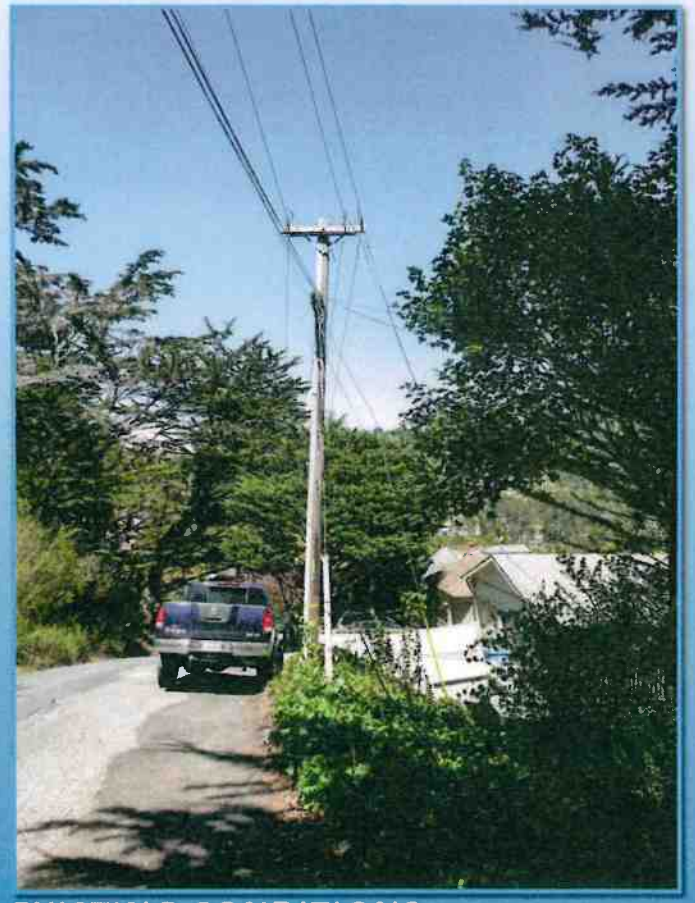
PHOTOGRAPHIC SIMULATION

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.

PROPOSED SMALL CELL SITE

SITE NUMBER:	SCC-CC0004-8
SITE NAME:	PACIFICA
SITE ADDRESS:	NEXT TO 351 GENEVIEVE AVE PACIFICA, CA 94044
DATE:	07/24/15
APPLICANT:	AT&T WIRELESS
CONTACT:	ANA GOMEZ-ABARCA BLACK & VEATCH (913) 458-9148

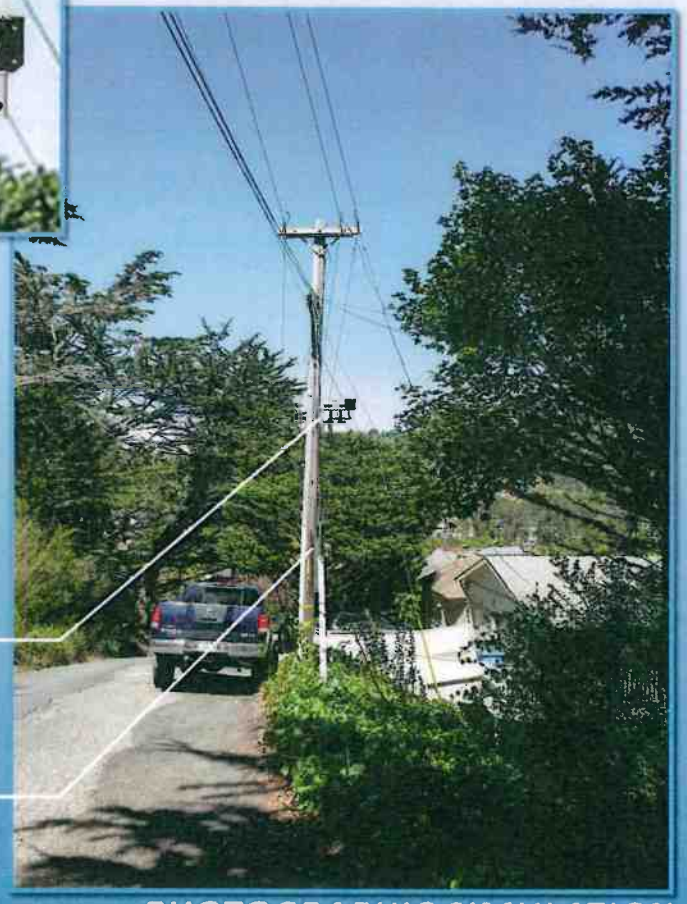
VIEW 1



EXISTING CONDITIONS

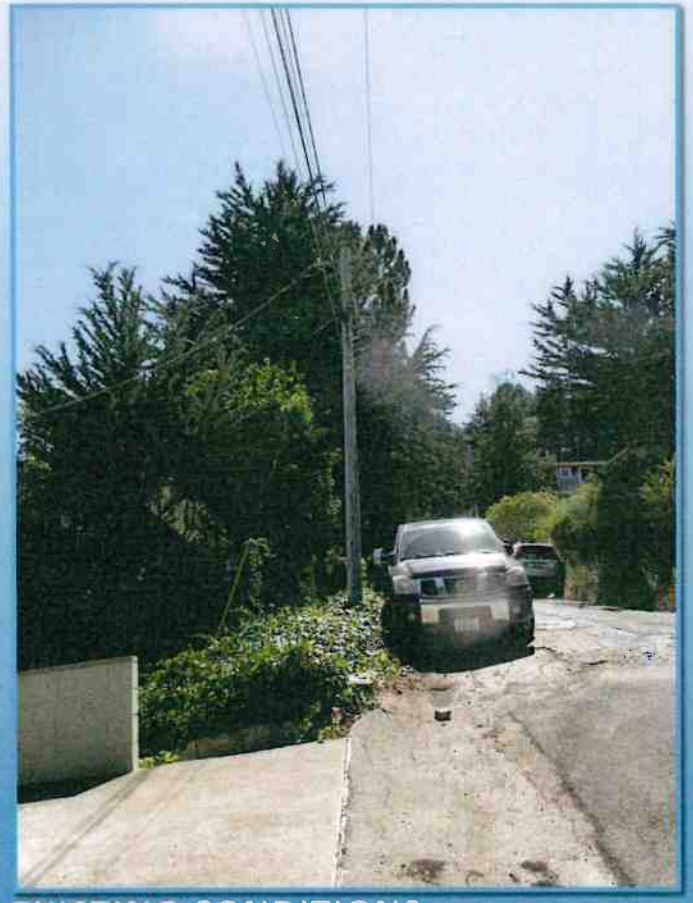
PROPOSED AT&T SMALL CELL EQUIPMENT

PROPOSED PG&E METER AND SERVICE DISCONNECT

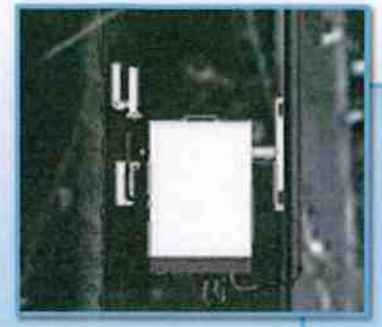


PHOTOGRAPHIC SIMULATION

VIEW 2

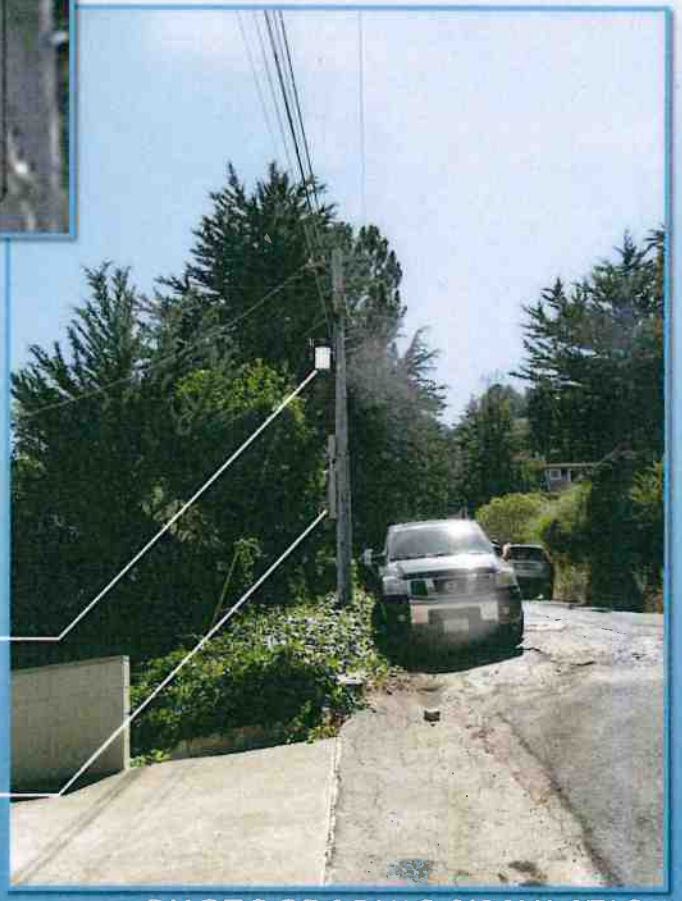


EXISTING CONDITIONS



PROPOSED AT&T SMALL CELL EQUIPMENT

PROPOSED PG&E METER AND SERVICE DISCONNECT



PHOTOGRAPHIC SIMULATION

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 351 Genevieve 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 351 Genevieve 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.

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 351 Genevieve 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 17½ 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 351 Genevieve Avenue in Pacifica, California, will comply with the pertinent standards limiting acoustic noise emission levels.

Authorship

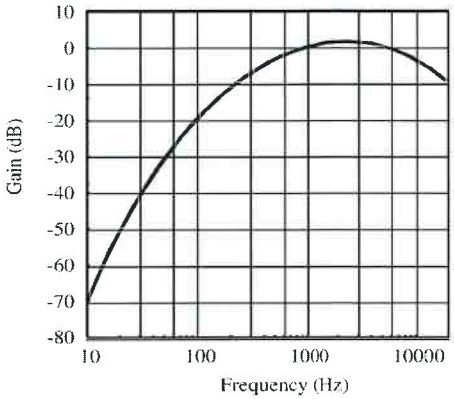
The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, 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 L_1, L_2, etc are individual sound pressure levels.

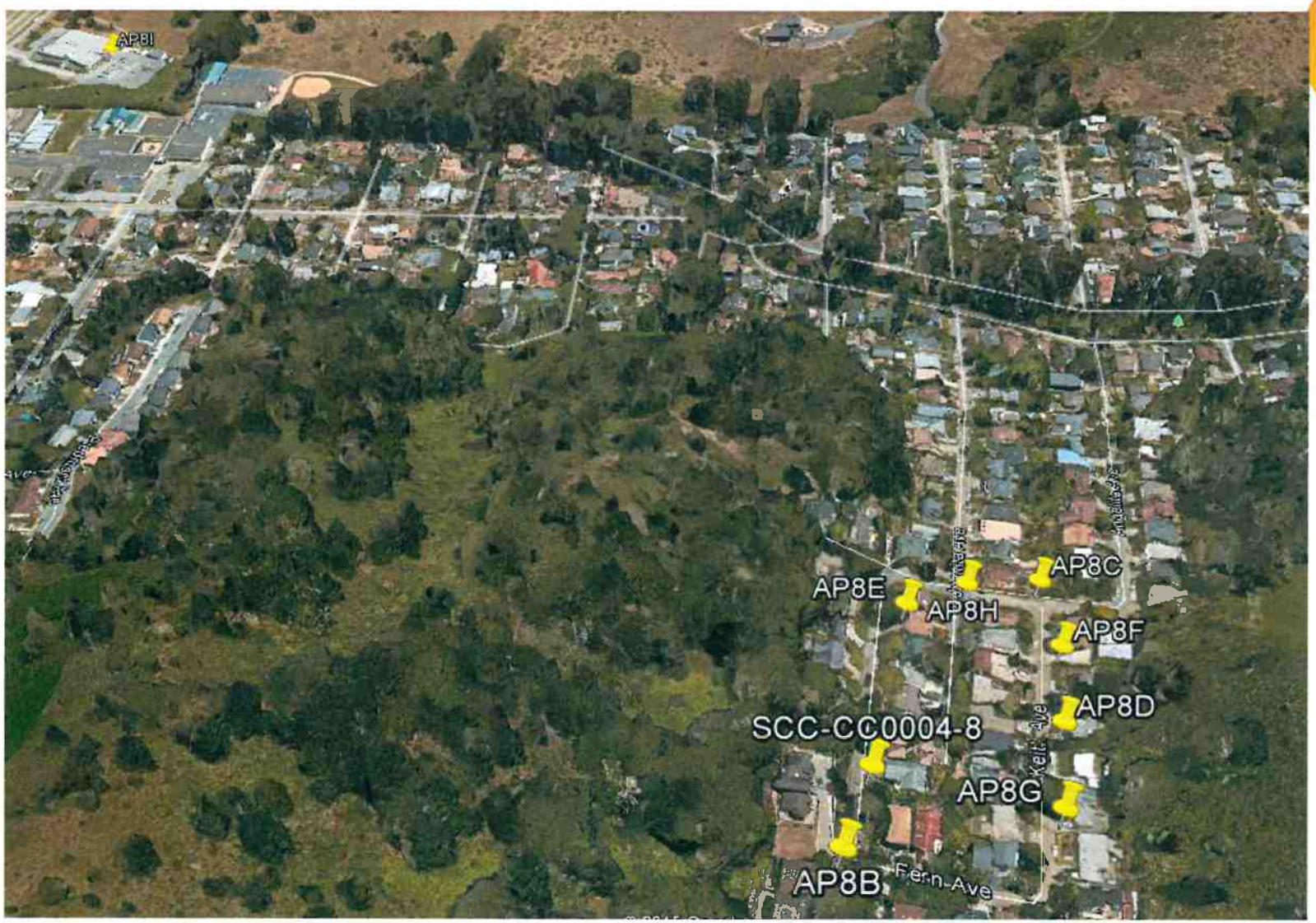
$$L_T = 10 \log \left(10^{L_1/10} + 10^{L_2/10} + \ldots\right),$$

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

ATTACHMENT H

Small Cell SCC-CC0004-8 – In front of 351 Genevieve Ave.
Pacifica, California
Alternative Site Analysis
Conditional Use Permit Request



On the map above, the proposed AT&T wireless facility in the public right-of-way in front of 351 Genevieve Avenue (37.609319°, -122.478781°) is indicated as Small Cell "SCC-CC0004-8" The 8 alternative locations that AT&T analyzed are marked by pins AP8B, AP8C, AP8D, AP8E, AP8F, AP8G, APH and AP8I.

Small Cell SCC-CC0004-8 – Proposed Location

- The location for AT&T's proposed wireless facility (Small Cell SCC-CC0004-8) is in the public right-of-way at a joint utility pole identified by pole number 110062715 in front of 351 Genevieve Avenue. (37.609319°, -122.478781°)
- 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.

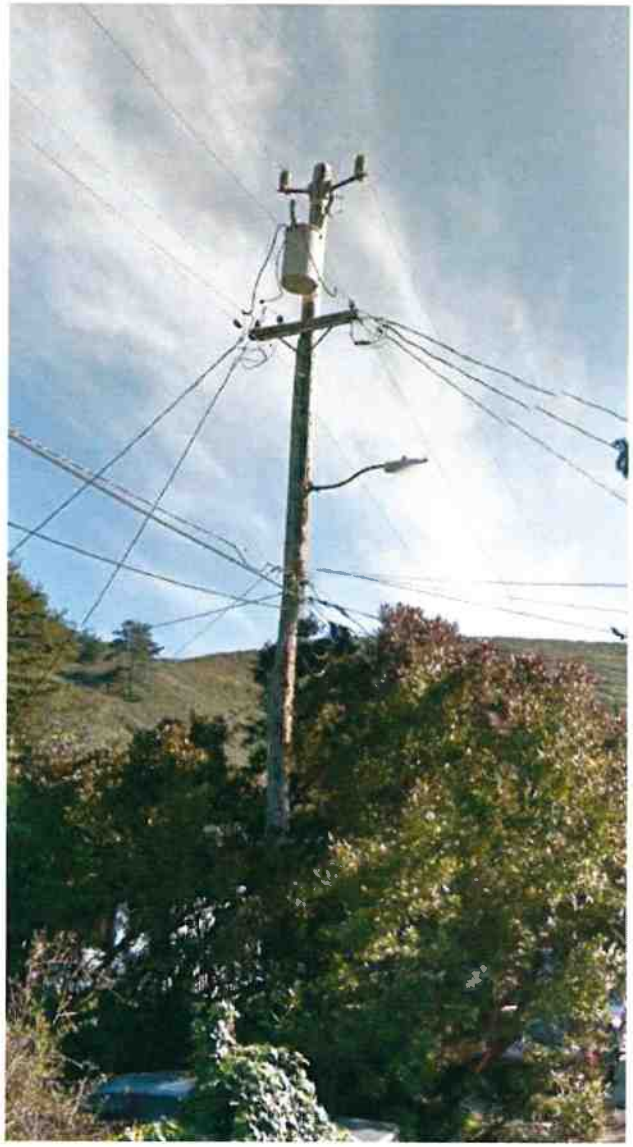
Small Cell AP8B – Alternative 1

- Small Cell AP8B (Alternative 1) is in the public right-of-way at a joint utility pole located at the intersection of Genevieve Avenue and Fern Avenue. (37.608950°, -122.478953°)
- 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 AP8C – Alternative 2

- Small Cell AP8C (Alternative 2) is in the public right-of-way at a joint utility pole located at the intersection of Ursula Avenue and Keith Avenue. (37.610403°, -122.477735°)
- 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, and is more intrusive than the current proposal because the pole is located at an intersection, visually exposed to two streets.

Small Cell AP8D – Alternative 3



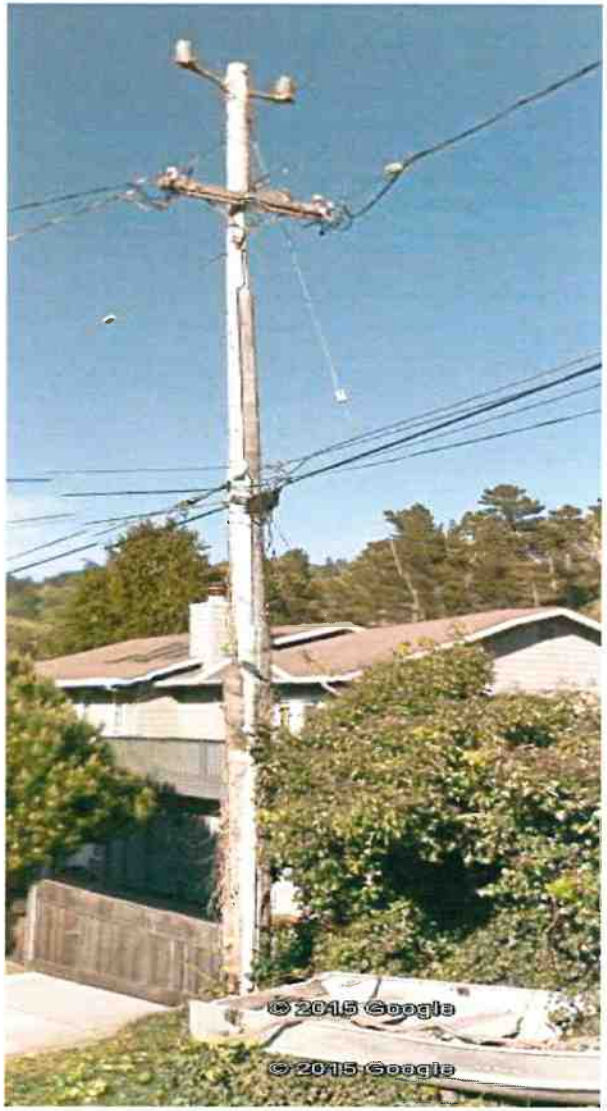
- Small Cell AP8D (Alternative 3) is in the public right-of-way at a joint utility pole located in front of 235 Juanita Avenue. (37.609613°, -122.477811°)

- 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 AP8E – Alternative 4

- Small Cell AP8E (Alternative 4) is a joint utility pole located next to 335 Genevieve Avenue. (37.610138°, -122.478503°)
- The pole location and pole height is not optimal to close this portion of the service coverage gap.

Small Cell AP8F – Alternative 5



- Small Cell AP8F (Alternative 5) is in the public right-of-way at a joint utility pole located between 323 and 339 Keith Avenue. (37.610013°, -122.477719°)
- The pole location is not optimal to close this portion of the service coverage gap.

Small Cell AP8G – Alternative 6

- Small Cell AP8G (Alternative 6) is in the public right-of-way at a joint utility pole located between 375 and 395 Keith Avenue. (37.609216°, -122.477905°)
- 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 AP8H– Alternative 7

- Small Cell AP8H (Alternative 7) is in the public right-of-way at a joint utility pole located at the intersection of Juanita Avenue and Ursula Avenue. (37.610363°, -122.478136°)
- The pole location is not optimal to close this portion of the service coverage gap. Further, the pole is more intrusive than the current proposal because the pole is located at an intersection, visually exposed to two streets.

Small Cell AP8I – Alternative 8

- Small Cell AP8I (Alternative 8) 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-CC0004-8 – 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 351 Genevieve Avenue (Small Cell SCC-CC0004-8) is the least intrusive means to close AT&T's significant service coverage gap.

SCC-CC0004-8: 37.609319°, -122.478781° (Proposed Site)

AP8B: 37.608950°, -122.478953°
AP8C: 37.610403°, -122.477735°
AP8D: 37.609613°, -122.477811°
AP8E: 37.610138°, -122.478503°
AP8F: 37.610013°, -122.477719°
AP8G: 37.609216°, -122.477905°
AP8H: 37.610363°, -122.478136°
API: 37.615393°, -122.484573°

AT&T Mobility • Small Cell No. SCC-CC0004-8
351 Genevieve 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, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 351 Genevieve 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 351 Genevieve 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.

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 29½-foot utility pole sited in the public right-of-way in front of the residence located at 351 Genevieve Avenue in Pacifica. Two Amphenol Model 7825700 omnidirectional antennas would be mounted with no downtilt at an effective height of about 17½ 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 0.0090 mW/cm^2, which is 1.9% of the applicable public exposure limit. The maximum calculated level at any nearby residence is 0.0089 mW/cm^2, 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

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 351 Genevieve 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, P.E.
707/996-5200

July 24, 2015

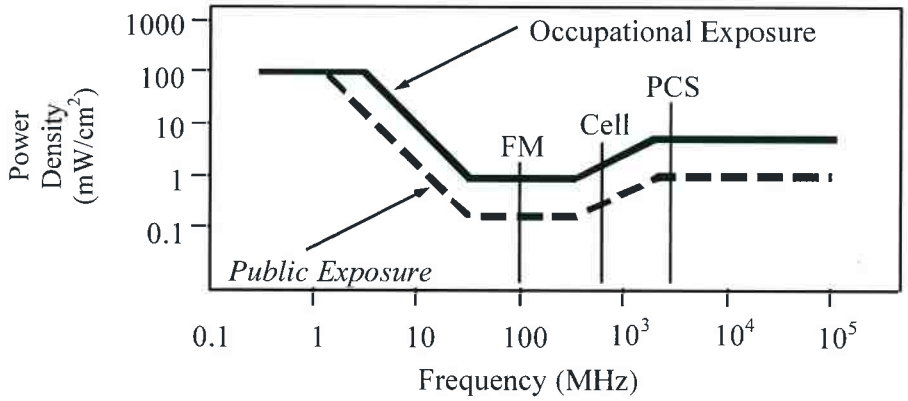
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health 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	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 – 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/ f	*823.8/f*	4.89/ f	*2.19/f*	900/ f^2	*180/f^2*
30 – 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	$1.59\sqrt{f}$	$\sqrt{f}/106$	$\sqrt{f}/238$	f/300	*f/1500*
1,500 – 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



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/cm^2,

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/cm^2,

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/cm^2,

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

BLACK & VEATCH
Building a world of difference.

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-61-15**
Site Address:	**Next to 351 Genevieve Ave**
Site ID:	**SCC-CC0004-8**
Latitude/Longitude:	**37.609319, -122.478781**

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-62-15

ITEM: 2.g

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 571 Reina del Mar Avenue (APN 018-082-060) – 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 58'-7" tall and contains electrical and telephone utility wires. The antenna mounting bracket, antennas, and remote radio unit (RRU) will be located approximately 26'-2" 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 cannot 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-62-15 by adopting the attached resolution, including conditions of approval in Exhibit A; and, incorporate all maps and testimony into the record by reference.

Attachments:

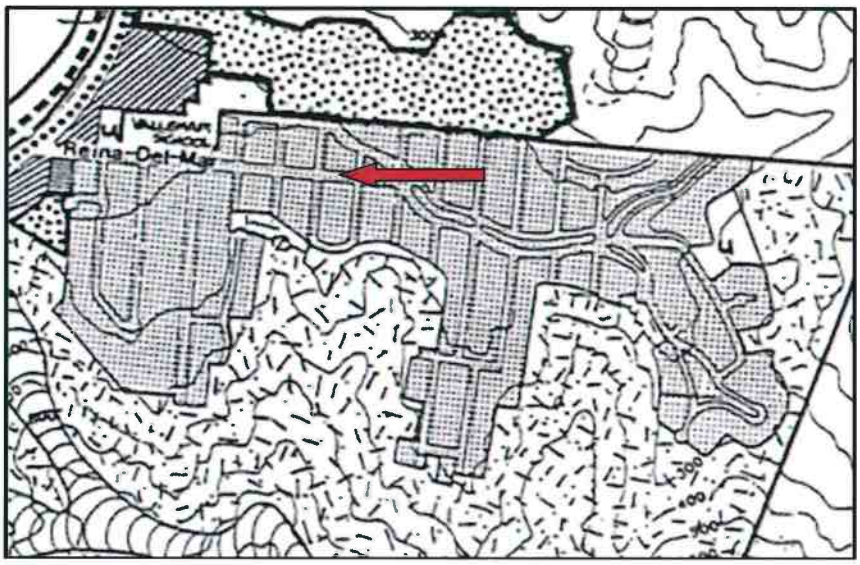
A. Land Use and Zoning Exhibit
B. Resolution of Approval
C. Exhibit A to Resolution of Approval – Conditions of Approval
D. Site Plan, Floor Plan, and Elevations
E. Applicant's letter of explanation
F. Photosimulation renderings
G. Noise analysis
H. Alternative site analysis
I. Radiofrequency (RF) emissions 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

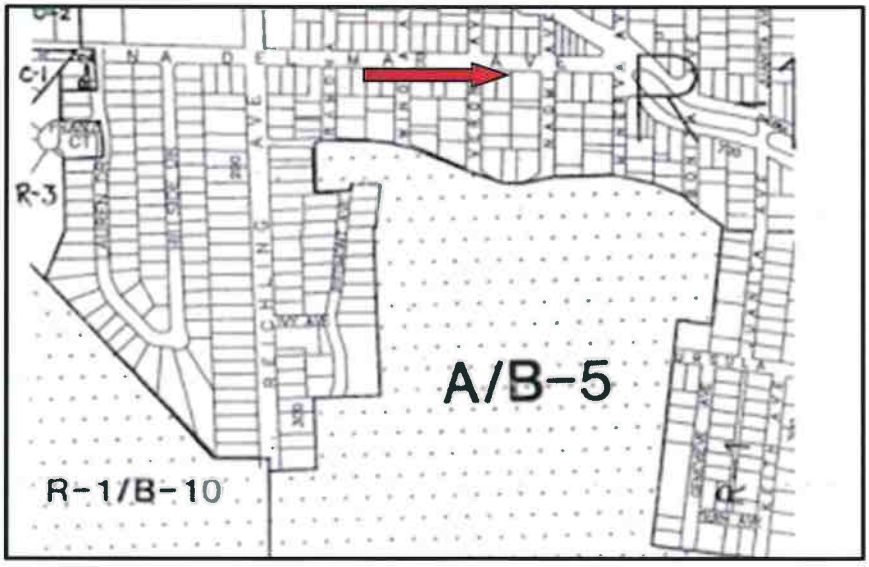
General Plan Diagram

Neighborhood: Vallemar
Land Use Designation: Low Density Residential



Zoning Map Diagram

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



(Maps Not to Scale)

Attachment A

RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PACIFICA APPROVING USE PERMIT UP-62-15, 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 571 REINA DEL MAR AVENUE (APN 018-082-060), 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 571 Reina del Mar Avenue (APN 018-082-060); 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-62-15:

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-62-15 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 571 Reina del Mar Avenue (APN 018-082-060), 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:

_____
Tina Wehrmeister, Planning Director

APPROVED AS TO FORM:

_____
Michelle Kenyon, City Attorney

Exhibit A

Conditions of Approval: Use Permit UP-62-15 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 571 Reina del Mar Avenue (APN 018-082-060)

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

ATTACHMENT D

STATEMENT OF SPECIAL INSPECTION

THE ENGINEER OF RECORD, BEING FULLY ADVISED OF THE CODE AND SCOPE OF THE SUBJECT PROJECT, STATES SPECIAL INSPECTIONS SHALL BE PERFORMED FOR THE SUBJECT WORK IN CONFORMANCE WITH THE 2013 CBC 1705.11.6. THE SPECIAL INSPECTION PLAN CONSISTS OF THE ENGINEER OF RECORD DESIGNING THE ELECTRICAL COMPONENT ATTACHMENTS, SHOWING THE ATTACHMENTS ON THE DESIGN AND SEALING THE DESIGN DOCUMENTS. THE SPECIAL INSPECTION REPORT SHALL BE THE AS-BUILT REDLINED DRAWINGS PREPARED BY THE CONSTRUCTION MANAGER. THE AS-BUILTS SHALL BE MADE 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 ELECTRIC CODE OR ADOPTED CODE
TIA/EIA-222-G OR ADOPTED CODE NESC
CALIFORNIA RULES FOR OVERHEAD ELECTRIC LINE CONSTRUCTION – GO95

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 SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO 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 ANTENNAS 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:	AARON INGRAM (813) 458-9693 INGRAM@OVERLANDCONTRACTING.COM
SITE ACQUISITION MANAGER:	ANA GOMEZ-ABARCA (913) 458-9148 GOMEZABARCAA@bv.com
RF ENGINEER:	BRIAN WILLIAMS (925) 582-8349 BW8320@att.com
APPLICANT:	AT&T MOBILITY TASHA STACK (925) 998-6547 TS670x@ATT.COM
CASPR PTN:	2401676313
FA LOCATION:	13022004

CONTACT INFORMATION

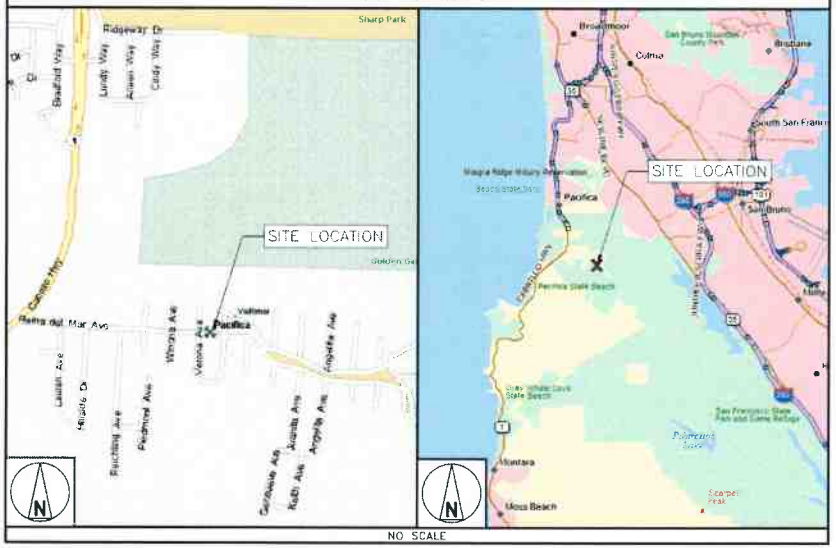
ENGINEER:	BLACK & VEATCH 2999 OAK ROAD, SUITE 490, WALNUT CREEK, CA 94597
CONTACT:	CHRIS WIRTH
PHONE:	(913) 458-4521

SCC-CC0004-9
PACIFICA

BETWEEN 571 & 577 REINA DEL MAR AVE

SMALL CELL - ZD

LOCATION MAPS



NO SCALE

DRIVING DIRECTIONS

DIRECTIONS FROM LOCAL AT&T OFFICE: FROM 2600 CAMINO RAMON, HEAD SOUTHEAST ON CAMINO RAMON TOWARD BISHOP DR. TAKE THE 3RD RIGHT ONTO BOLLINGER CANYON RD. MERGE ONTO I-680 N VIA THE RAMP TO SACRAMENTO. TAKE THE STATE ROUTE 24 EXIT TOWARD OAKLAND/LAFAYETTE. MERGE ONTO CA-24 W. TAKE THE INTERSTATE 580 W EXIT. MERGE ONTO I-580 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-CC0004-9 TITLE SHEET
PL-1.1	SCC-CC0004-9 LOCATION MAP
PL-2.1	SCC-CC0004-9 INFORMATION DATASHEET
AP9-1	SCC-CC0004-9 ELEVATIONS
AP9-2	SCC-CC0004-9 ISOMETRIC ELEVATIONS
AP9-3	SCC-CC0004-9 OVERALL SITE PLAN
C-1.0	EQUIPMENT DETAILS AND SPECIFICATIONS

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 SERVICE ALERT
UTILITIES PROTECTION CENTER, INC.
811
48 HOURS BEFORE YOU DIG

at&t
2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C30044

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
A	06/26/15	ISSUED FOR REVIEW

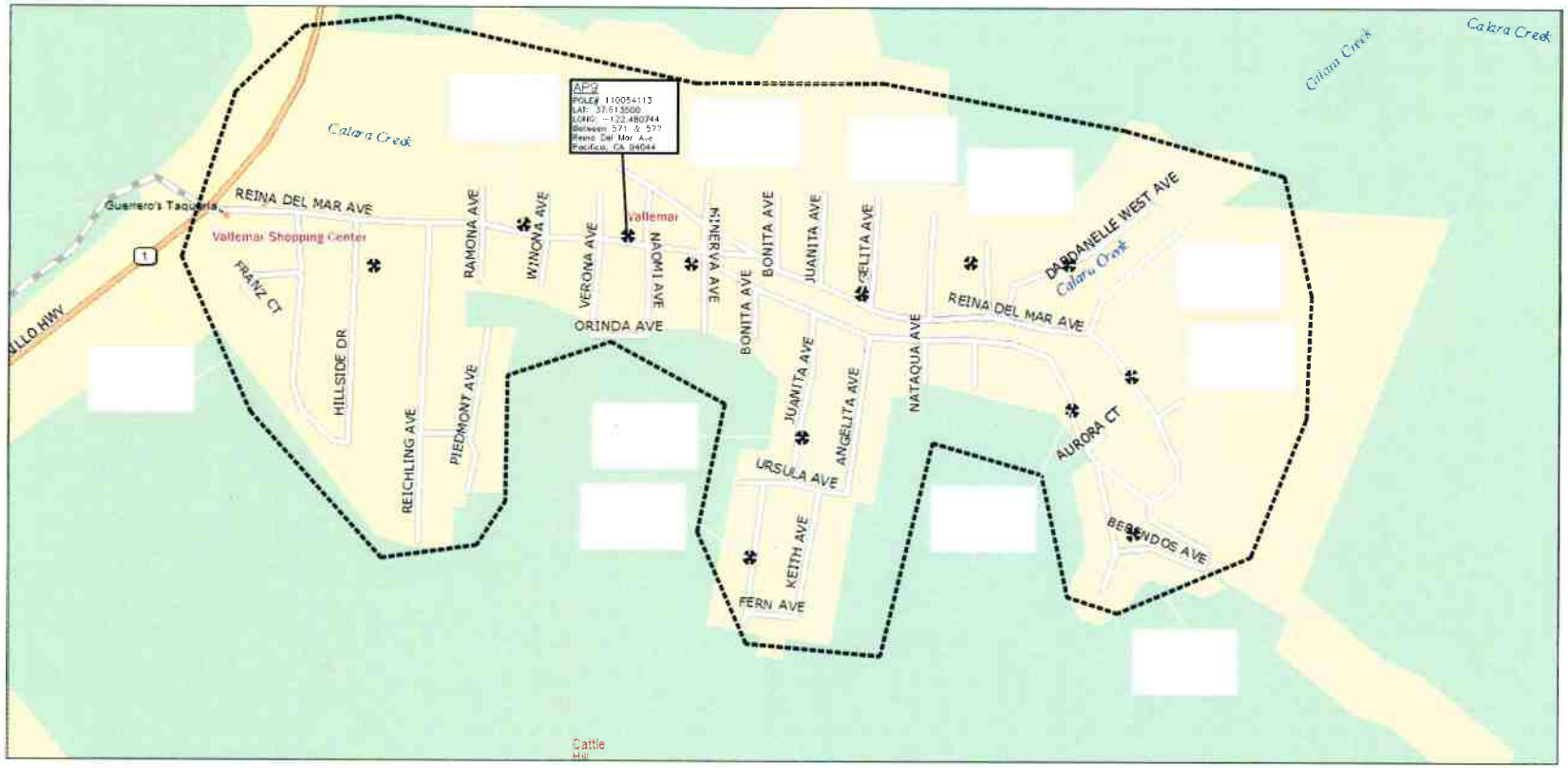
SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC-CC0004-9
TITLE SHEET

SHEET NUMBER
T-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.



N

POLYGON MAP

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.

at&t

2600 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243

BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C-0634

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
A	06/26/15	ISSUED FOR REVIEW

SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE

SCC-CC0004-9
LOCATION MAP

SHEET NUMBER

PL-1.1

Site Number	Site Name	USID (UMTS)	USID (LTE)	E911 Address	County	Latitude	Longitude	Pole ID	Structure Type	Structure Height	Rad Center
SCC-CC0004-9	Pacifica	165294	165306	Between 571 & 577 Reina Del Mar Ave, 94044	San Mateo	37.613500	-122.480744	110054113	Utility Pole	58'-8"	26'-2"

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SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C60364

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

REV	DATE	DESCRIPTION
B	09/13/15	ISSUED FOR ZONING
A	08/28/15	ISSUED FOR REVIEW

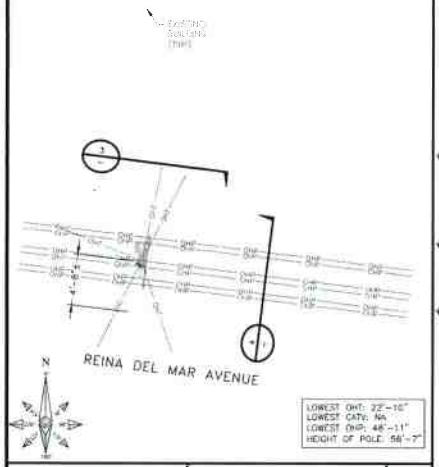
SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL - ZD

SHEET TITLE

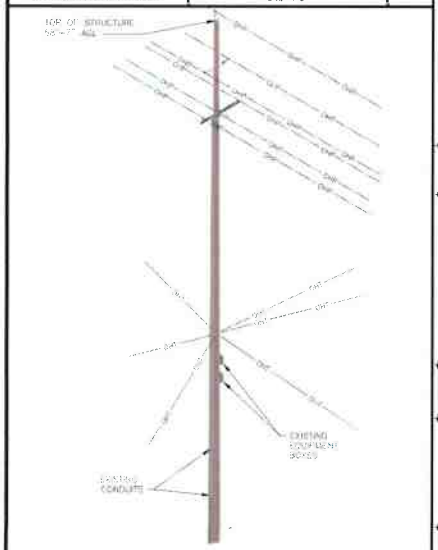
SCC-CC0004-9
INFORMATION DATASHEET

SHEET NUMBER

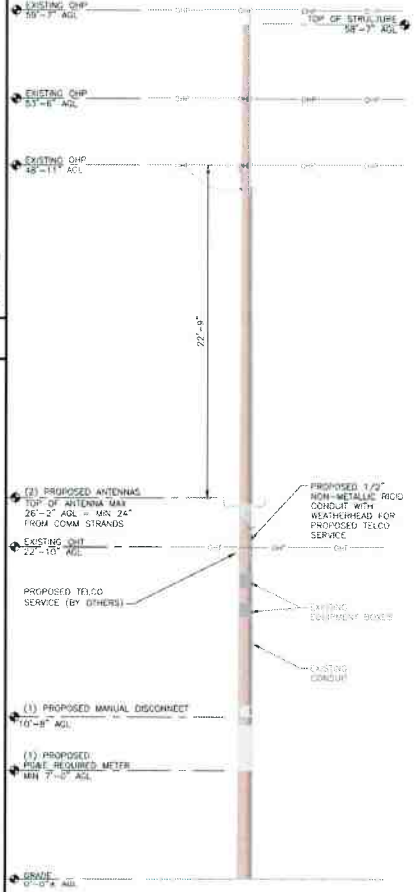
PL-2.1



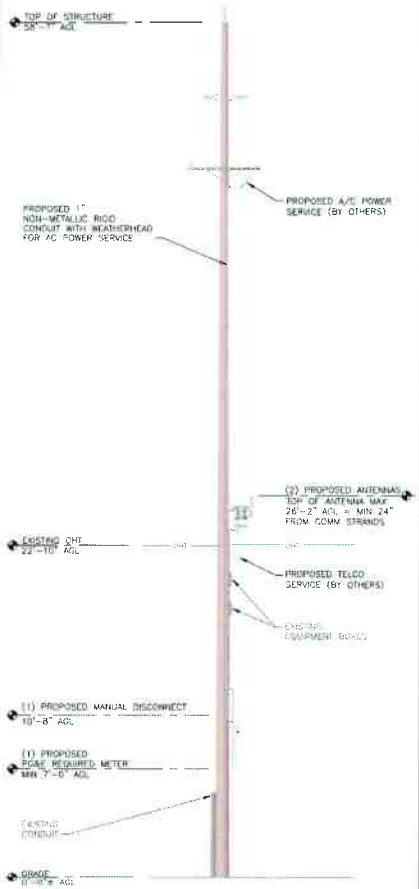
AERIAL ORIENTATION VIEW | 6' 4' 2' 0 5' 10' 3/16"=1'-0" | 1



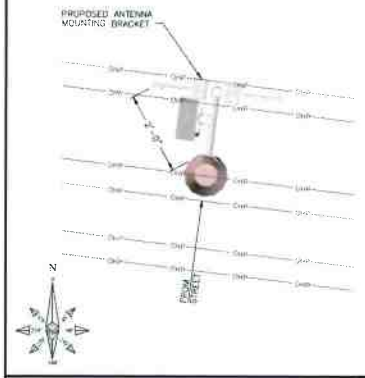
BEFORE CONVERSION (LOOKING NORTHWEST) | 2



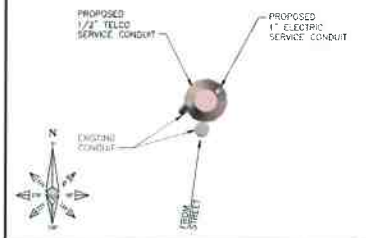
AFTER CONVERSION (LOOKING SOUTH) | 4' 2' 0 4' 8' 1/4"=1'-0" | 3



AFTER CONVERSION (LOOKING WEST) | 4' 2' 0 4' 8' 1/4"=1'-0" | 4



PLAN VIEW – ANTENNA LEVEL | A



PLAN VIEW – RISER DETAIL | B

PLAN VIEW – EQUIPMENT LEVEL | C

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SUITE 490
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BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50364

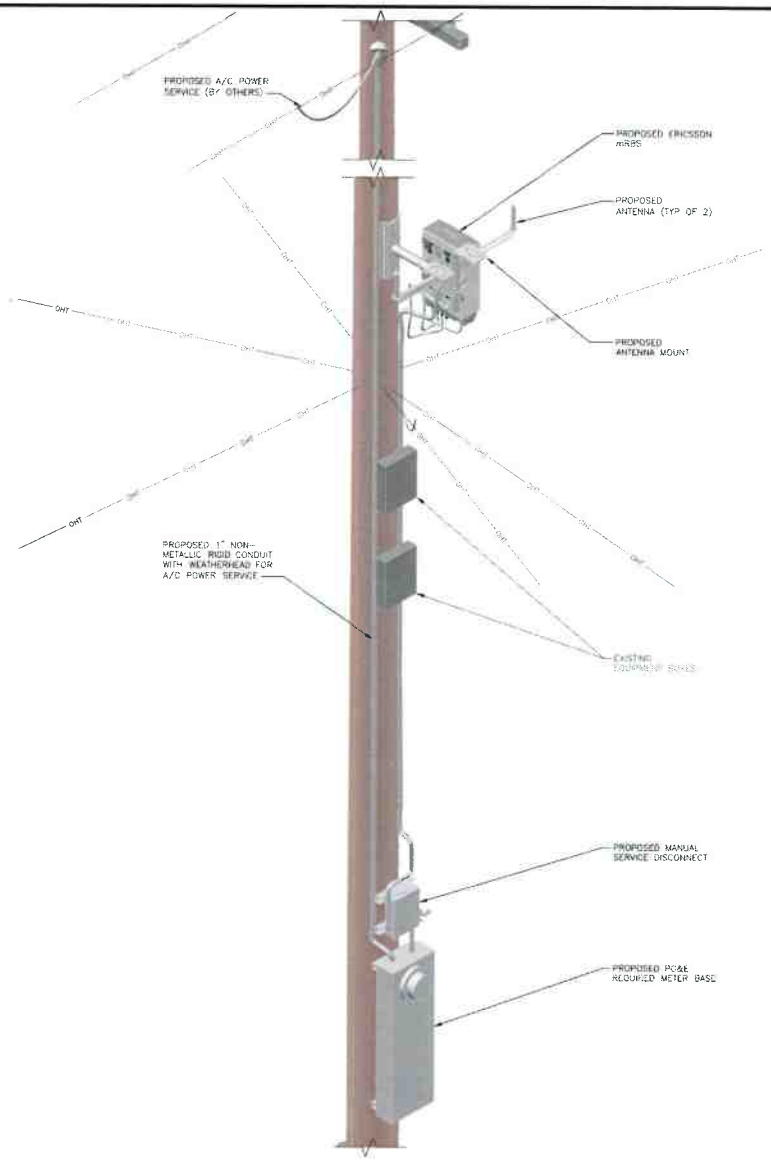
PROJECT NO:	129092
DRAWN BY:	LEW
CHECKED BY:	RAE

REV	DATE	DESCRIPTION
B	11/13/15	ISSUED FOR ZONING
A	06/26/15	ISSUED FOR REVIEW

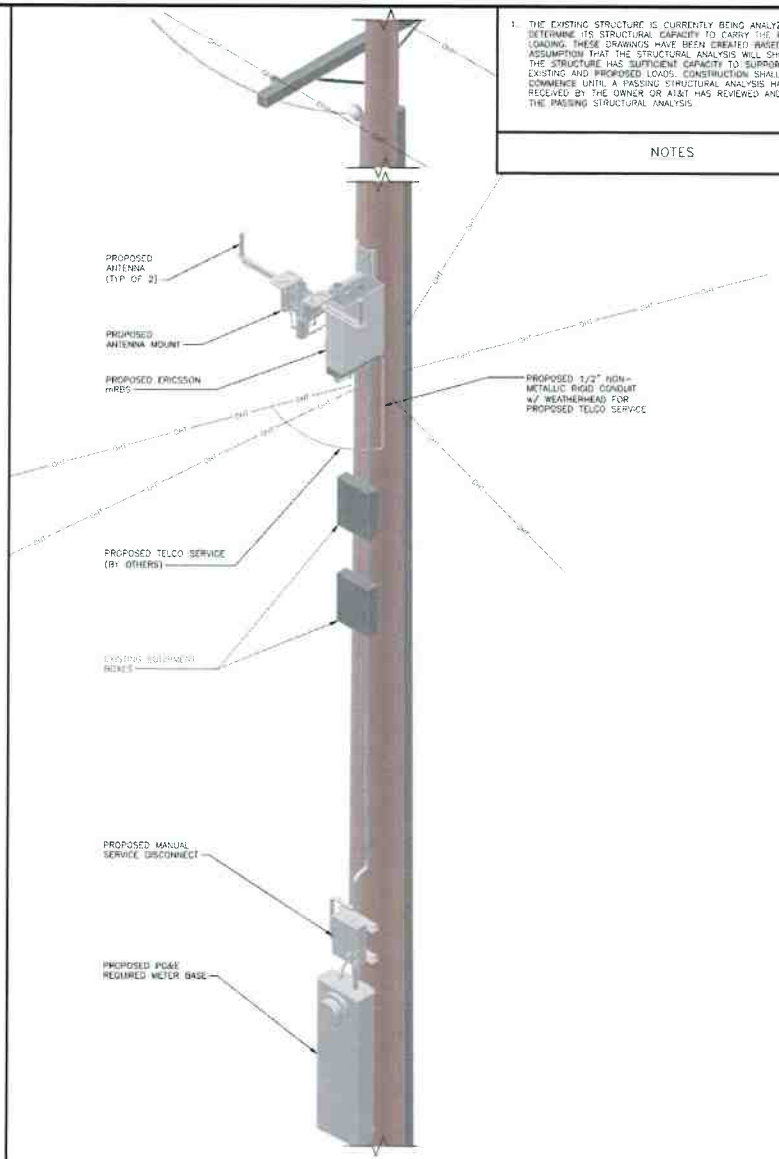
SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC- CC0004-9
ELEVATIONS

SHEET NUMBER
AP9-1



ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHWEST) | 1



ISOMETRIC EQUIPMENT ELEVATION (LOOKING SOUTHEAST) | 2

1. THE EXISTING STRUCTURE IS CURRENTLY BEING ANALYZED TO DETERMINE ITS STRUCTURAL CAPACITY TO CARRY THE PROPOSED LOADING. THESE DRAWINGS HAVE BEEN CREATED BASED ON THE ASSUMPTION THAT THE STRUCTURAL ANALYSIS WILL SHOW THAT THE STRUCTURE HAS SUFFICIENT CAPACITY TO SUPPORT THE EXISTING AND PROPOSED LOADS. CONSTRUCTION SHALL NOT COMMENCE UNTIL A PASSING STRUCTURAL ANALYSIS HAS BEEN RECEIVED BY THE OWNER OR AT&T HAS REVIEWED AND APPROVED THE PASSING STRUCTURAL ANALYSIS.

NOTES

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SAN RAMON, CA 94583

BLACK & VEATCH

2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50364

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
A	06/26/15	ISSUED FOR REVIEW

SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE

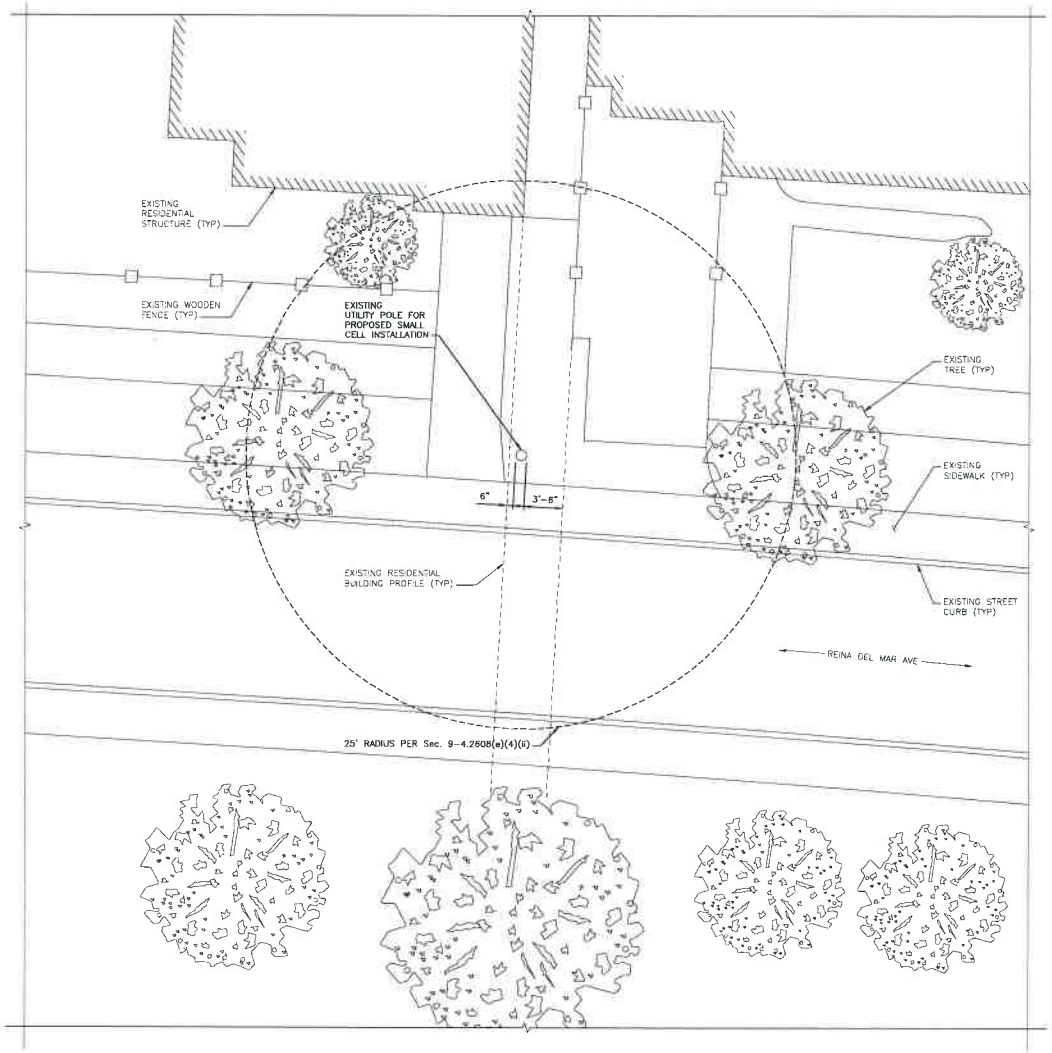
SCC- CC0004-9
ISOMETRIC ELEVATIONS

SHEET NUMBER

AP9-2

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.



N

OVERALL SITE PLAN

6' 4' 2' 0 5' 10'
3/16"=1'-0"

1

at&t

2820 CAMINO RAMON
SAN RAMON, CA 94583

BLACK & VEATCH

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SUITE 490
WALNUT CREEK, CA 94597
(925) 327-0243
BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION
CALIFORNIA STATE CERTIFICATE OF AUTHORITY # C50364

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
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SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
SCC- CC0004-9
OVERALL SITE PLAN

SHEET NUMBER
AP9-3

AMPHENOL MULTI-BAND OMNI ANTENNA

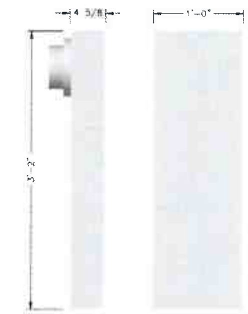
RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	WHITE
DIMENSIONS (LENGTH x DIAMETER):	(7.7"x1.1") 195x28mm
WEIGHT, WITHOUT MOUNTING KIT:	(0.24 lbs) 0.11 kg
CONNECTOR:	BOTTOM, N-FEMALE

PROPOSED ANTENNA SPECIFICATIONS — NO SCALE — A

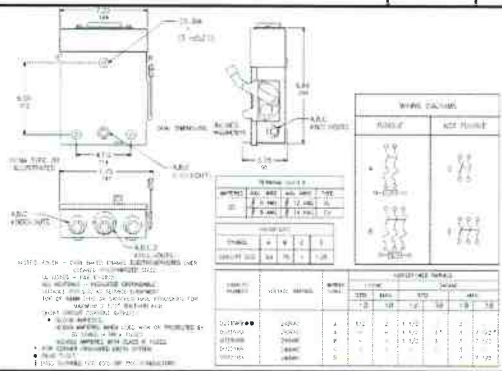
MICRO RBS

DIMENSIONS (LENGTH x DIAMETER):	(17.7"x11.8"x5.3")
WEIGHT:	(11 lbs) 15 kg

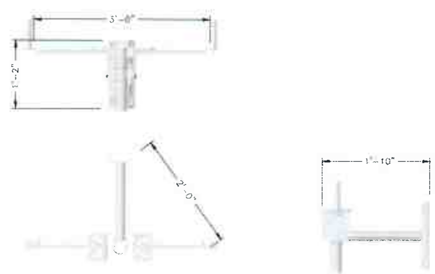
PROPOSED MICRO RBS — NO SCALE — B



PROPOSED POWER METER — NO SCALE — C



PROPOSED MANUAL DISCONNECT — NO SCALE — D



PROPOSED BRACKET MOUNT — NO SCALE — E

NOT USED — NO SCALE — F

NOT USED — NO SCALE — G

NOT USED — NO SCALE — H

NOT USED — NO SCALE — J

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SAN RAMON, CA 94583

BLACK & VEATCH
2999 OAK ROAD
SUITE 490
WALNUT CREEK, CA 94597

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

REV	DATE	DESCRIPTION
B	07/13/15	ISSUED FOR ZONING
A	06/26/15	ISSUED FOR REVIEW

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SCC-CC0004-9
PACIFICA
BETWEEN 571 & 577
REINA DEL MAR AVE
PACIFICA, CA 94044
SMALL CELL – ZD

SHEET TITLE
EQUIPMENT DETAILS AND SPECIFICATIONS

SHEET NUMBER
C-1.0

BLACK & VEATCH
Building a world of difference.

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

Re: Proposed AT&T Mobility Small Cell Installation

Applicant:	**New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)**
Site Address:	**Between 571 & 577 Reina del Mar Avenue**
Site ID:	**SCC-CC0004-9**
Latitude/Longitude:	**37.613500, -122.480744**

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-CC0004-9).[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 58 feet seven inch tall wooden utility pole in the public right-of-way on the west side of between 571 & 577 Reina del Mar Avenue. Primary power lines are attached to a cross arm at about 59 feet seven inches and 53 feet six inches high. The secondary power line is attached to a cross-arm at about 48 feet eleven inches high. The communication line is attached to the pole at 22 feet ten 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") 26'2" 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-CC0004-9 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. Small Cell SCC-CC0004-9 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-CC0004-9 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-CC0004-9 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.

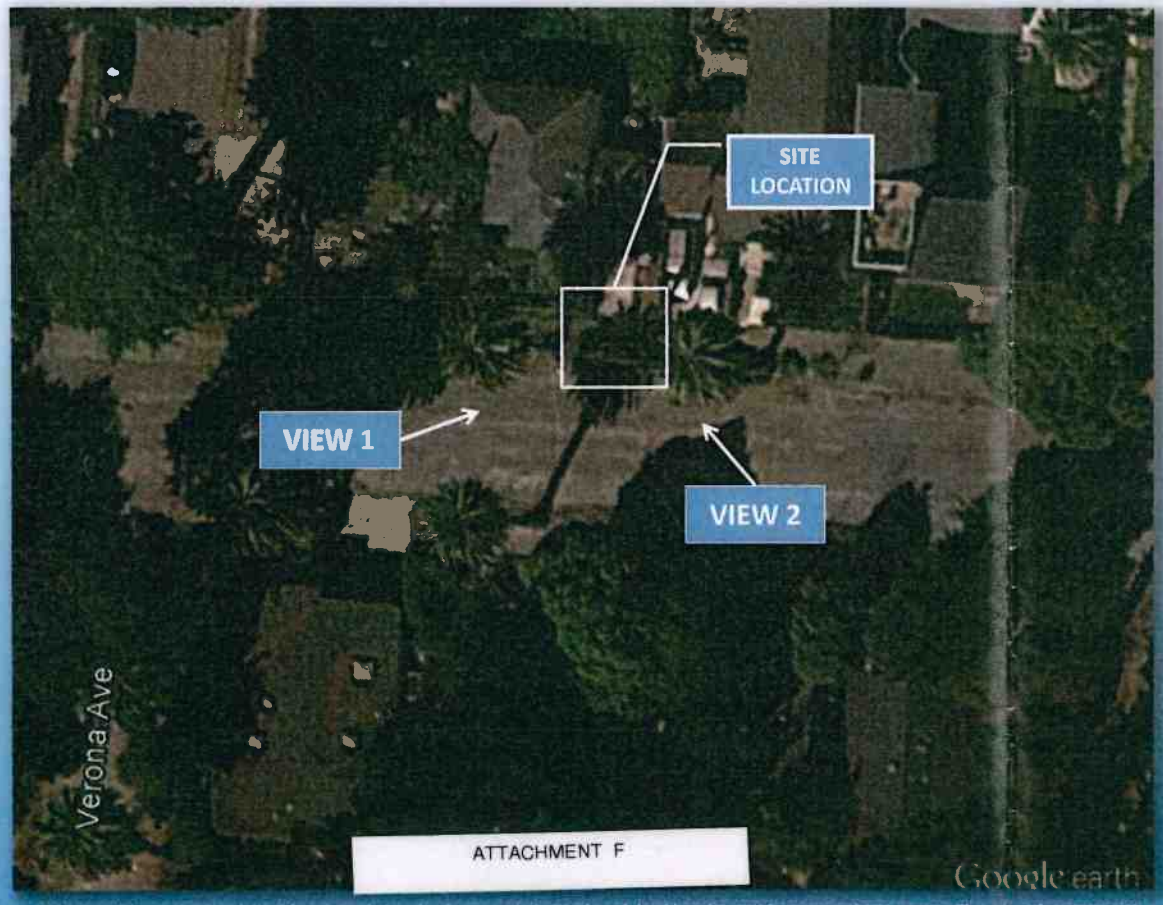
As this application seeks authority to install a wireless telecommunication facility, the FCC's Shot Clock Order[2] requires the city to issue its final decision on AT&T's application within 150 days. We respectfully request expedited review and approval of this application. Feel free to contact me if 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

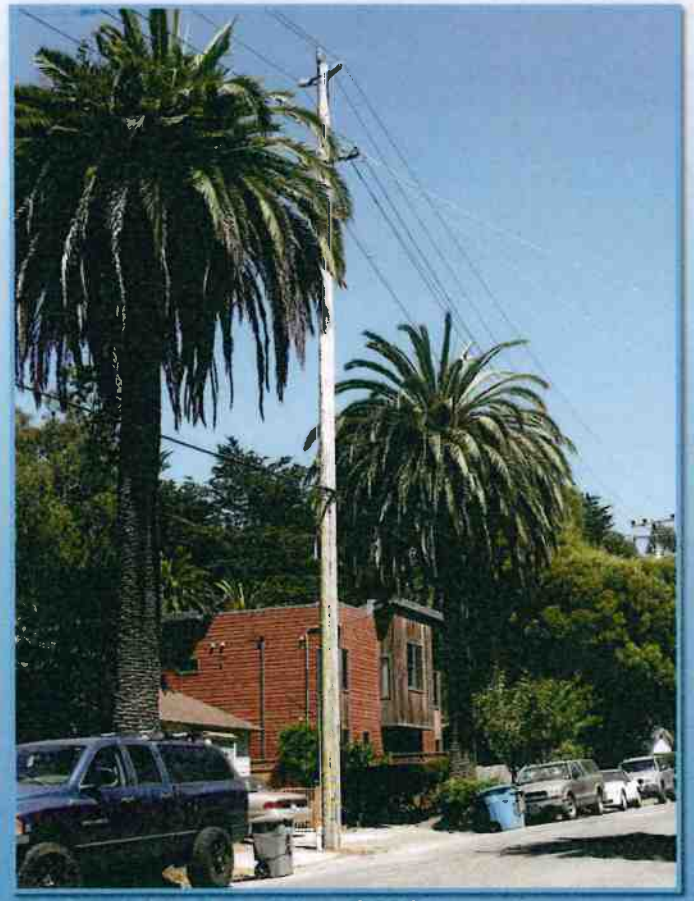


The included Photographic Simulation(s) are intended as visual representations only and should not be used for construction purposes. The materials represented within the included Photographic Simulation(s) are subject to change.

PROPOSED SMALL CELL SITE

SITE NUMBER:	SCC-CC0004-9
SITE NAME:	PACIFICA
SITE ADDRESS:	~~571~~ 577 REINA DEL MAR AVE PACIFICA, CA 94044
DATE:	07/24/15
APPLICANT:	AT&T WIRELESS
CONTACT:	ANA GOMEZ-ABARCA BLACK & VEATCH (913) 458-9148

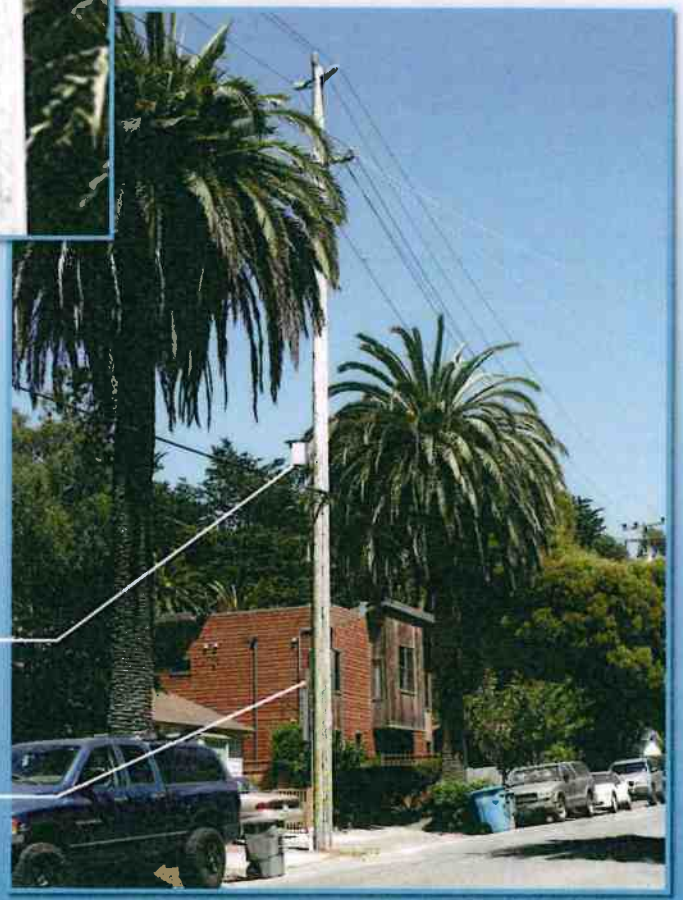
VIEW 1



EXISTING CONDITIONS

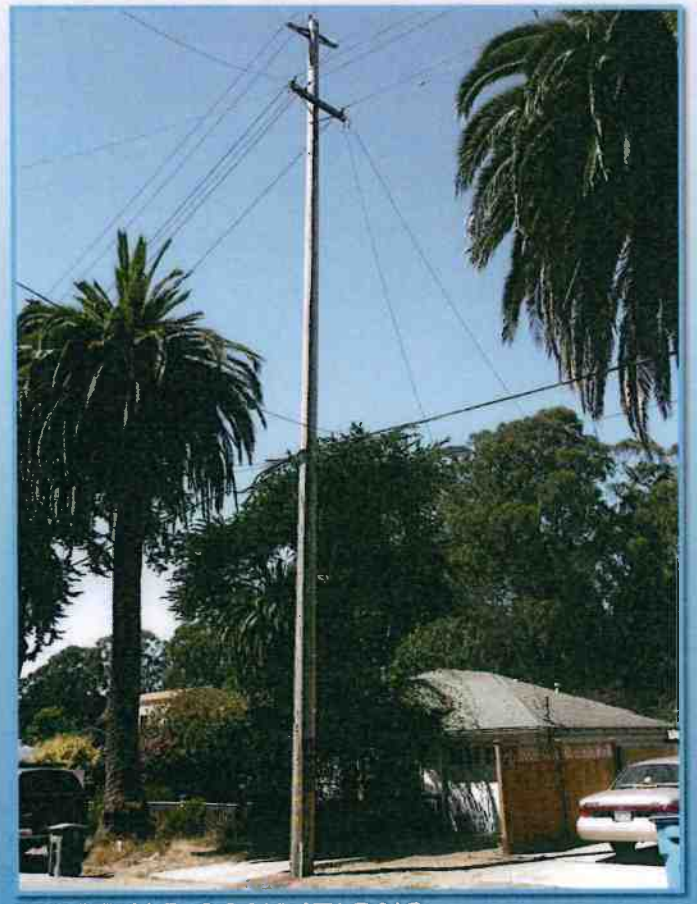
PROPOSED AT&T SMALL CELL EQUIPMENT

PROPOSED PG&E METER AND SERVICE DISCONNECT



PHOTOGRAPHIC SIMULATION

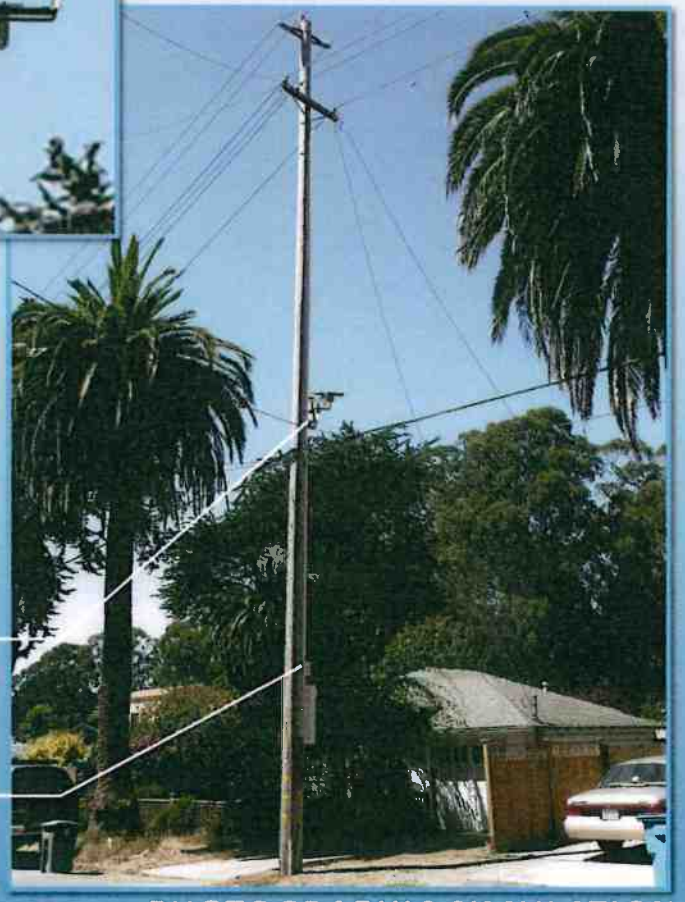
VIEW 2



EXISTING CONDITIONS

PROPOSED AT&T SMALL CELL EQUIPMENT

PROPOSED PG&E METER AND SERVICE DISCONNECT



PHOTOGRAPHIC SIMULATION

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 571 and 577 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 571 and 577 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.

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 571 and 577 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 26 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 571 and 577 Reina Del Mar Avenue in Pacifica, California, will comply with the pertinent standards limiting acoustic noise emission levels.

Authorship

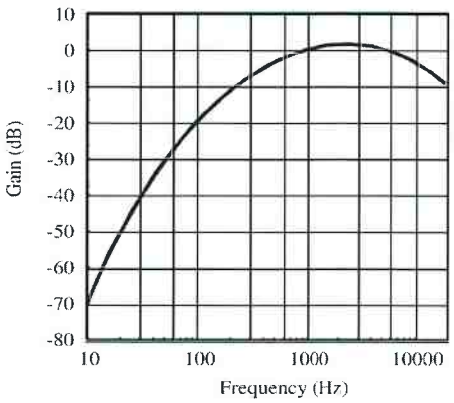
The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, 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 L_1, L_2, etc are individual sound pressure levels.

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

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.

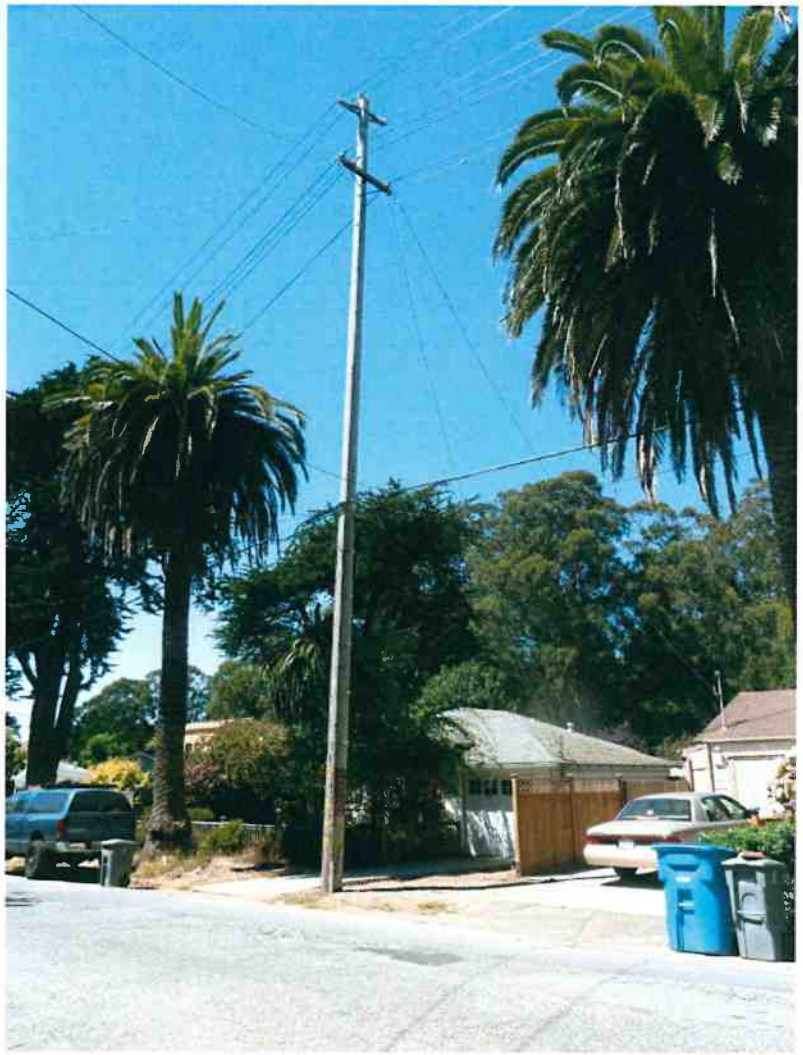
Rethink Possible®

ATTACHMENT H

Small Cell SCC-CC0004-9 – Between 571 and 577 Reina Del Mar Ave.
Pacifica, California
Alternative Site Analysis
Conditional Use Permit Request

On the map above, the proposed AT&T wireless facility in the public right-of-way between 571 and 577 Reina Del Mar Avenue (37.613500°, -122.480744°) is indicated as Small Cell "SCC-CC0004-9" The 8 alternative locations that AT&T analyzed are marked by pins AP9B, AP9C, AP9D, AP9E, AP9F, AP9G, APH and AP9I.

Small Cell SCC-CC0004-9 – Proposed Location

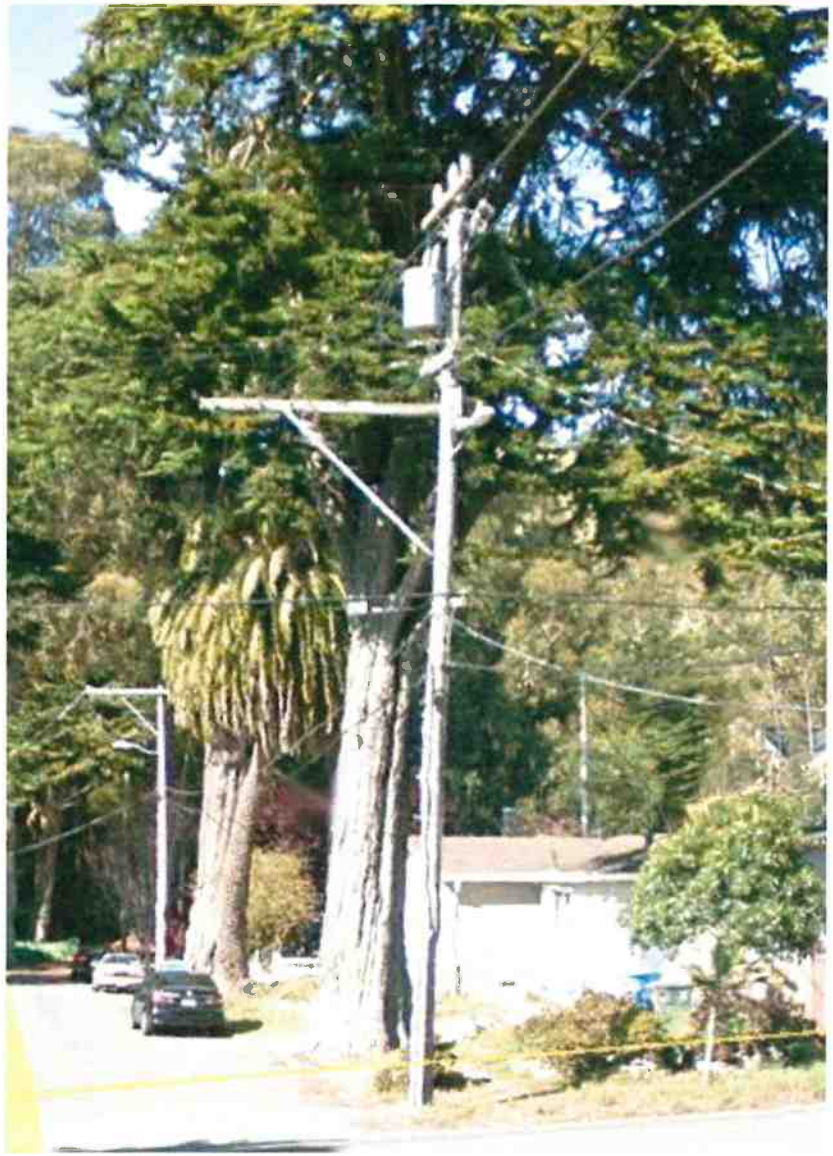


- The location for AT&T's proposed wireless facility (Small Cell SCC-CC0004-9) is in the public right-of-way at a joint utility pole identified by pole number 110054113 between 571 and 577 Reina Del Mar Avenue. (37.613500°, -122.480744°)
- AT&T evaluated this site and nearby alternatives to verify that 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 AP9B – Alternative 1

- Small Cell AP9B (Alternative 1) is in the public right-of-way at a joint utility pole located at the intersection of Reina Del Mar Avenue and Naomi Avenue. (37.613487°, -122.480247°)
- The pole location is not optimal to close this portion of the service coverage gap.

Small Cell AP9C – Alternative 2

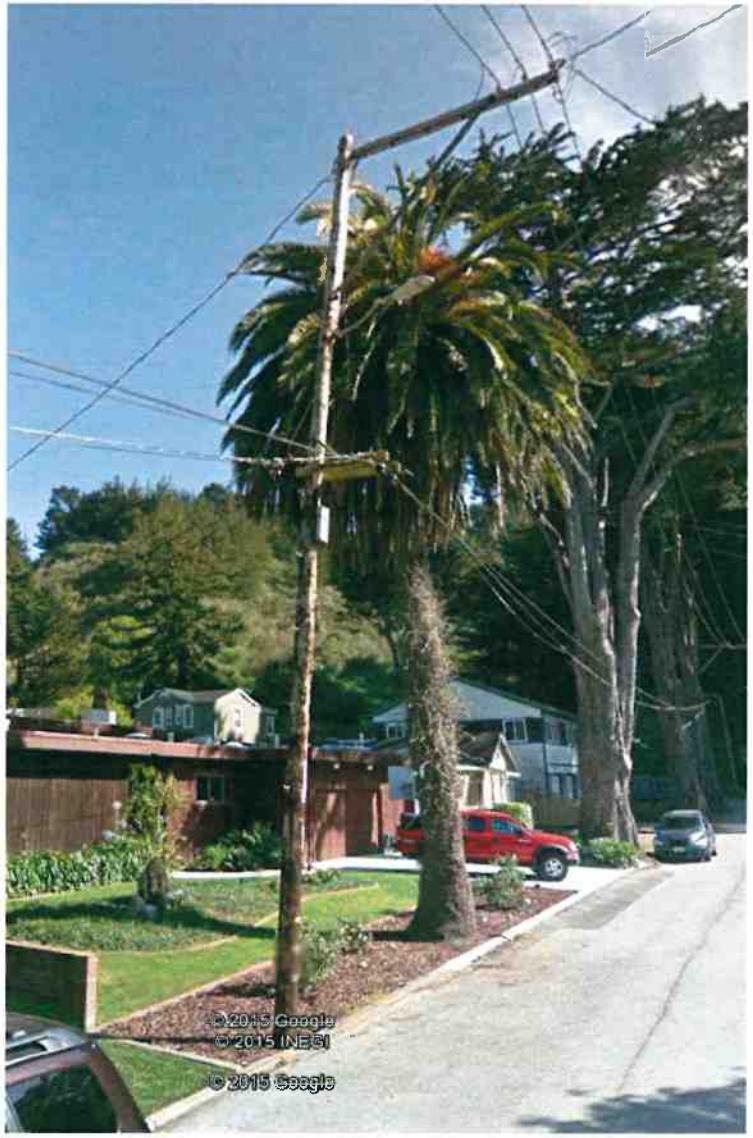


- Small Cell AP9C (Alternative 2) is in the public right-of-way at a joint utility pole located at the intersection of Verona Avenue and Reina Del Mar Avenue. (37.613504°, -122.481121°)
- The pole location is not optimal to close this portion of the service coverage gap.

Small Cell AP9D – Alternative 3

- Small Cell AP9D (Alternative 3) is in the public right-of-way at a joint utility pole located in front of 612 Reina Del Mar Avenue. (37.613296°, -122.480288°)
- 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 AP9E – Alternative 4



- Small Cell AP9E (Alternative 4) is in the public right-of-way at a joint utility pole located in front of 219 Verona Avenue. (37.613014°, -122.481162°)
- The pole location is not optimal to close this portion of the service coverage gap.

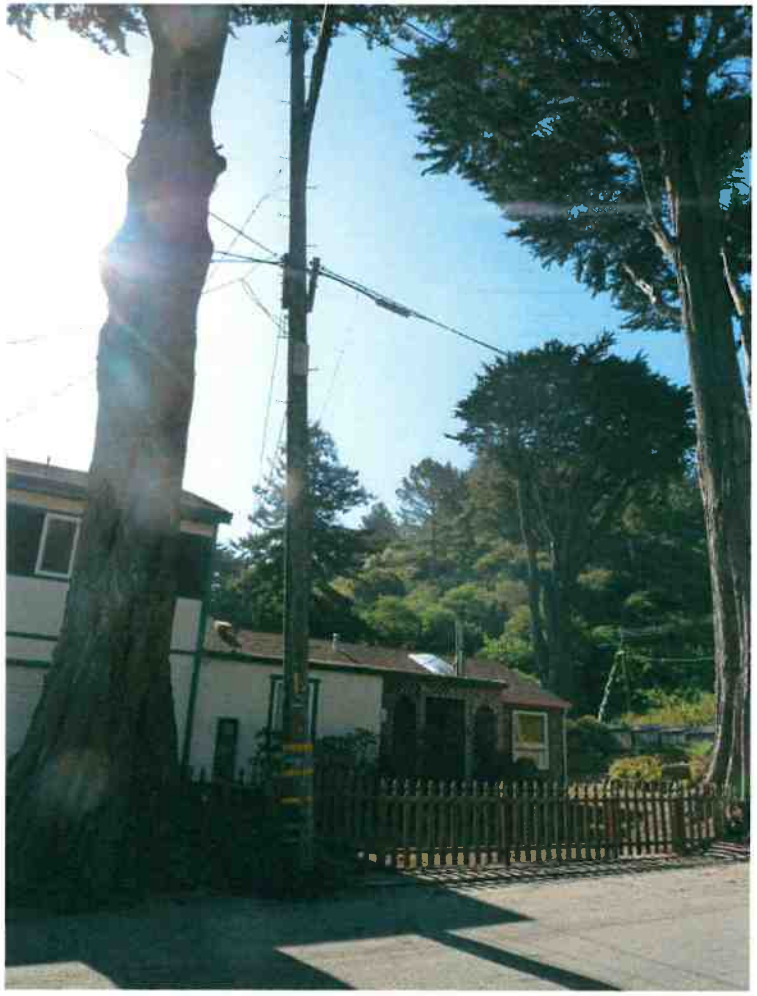
Small Cell AP9F – Alternative 5

- Small Cell AP9F (Alternative 5) is in the public right-of-way at a joint utility pole located next to 177 Verona Avenue. (37.613897°, -122.481061°)
- The pole location is not optimal to close this portion of the service coverage gap.

Small Cell AP9G – Alternative 6

- Small Cell AP9G (Alternative 6) is in the public right-of-way at a joint utility pole located next to 169 Verona Avenue. (37.614044°, -122.481054°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4) 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 AP9H – Alternative 7



- Small Cell AP9H (Alternative 7) is in the public right-of-way at a joint utility pole located in front of 253 Verona Avenue. (37.612576°, -122.481207°)
- Placing wireless equipment on this pole would violate Pacifica Zoning Ordinance Section 9-4.2608(e)(4) 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 AP9I – Alternative 8

- Small Cell AP9I (Alternative 8) 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-CC0004-9 – 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 571 and 577 Reina Del Mar Avenue (Small Cell SCC-CC0004-9) is the least intrusive means to close AT&T's significant service coverage gap.

SCC-CC0004-9: 37.613500°, -122.480744° (Proposed Site)

AP9B: 37.613487°, -122.480247°
AP9C: 37.613504°, -122.481121°
AP9D: 37.613296°, -122.480288°
AP9E: 37.613014°, -122.481162°
AP9F: 37.613897°, -122.481061°
AP9G: 37.614044°, -122.481054°
AP9H: 37.612576°, -122.481207°
AP9I: 37.615393°, -122.484573°

AT&T Mobility • Small Cell No. SCC-CC0004-9
571 and 577 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, a wireless telecommunications service provider, to evaluate a small cell antenna system proposed to be located near 571 and 577 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 571 and 577 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.

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 58½-foot utility pole sited in the public right-of-way in front of the residences located at 571 and 577 Reina Del Mar Avenue in Pacifica. Two Amphenol Model 7825700 omnidirectional antennas would be mounted with no downtilt at an effective height of about 26 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 0.0022 mW/cm^2, which is 0.45% of the applicable public exposure limit. The maximum calculated level at any nearby residence is 0.0055 mW/cm^2, which is 1.1% 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

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 571 and 577 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, P.E.
707/996-5200

July 24, 2015

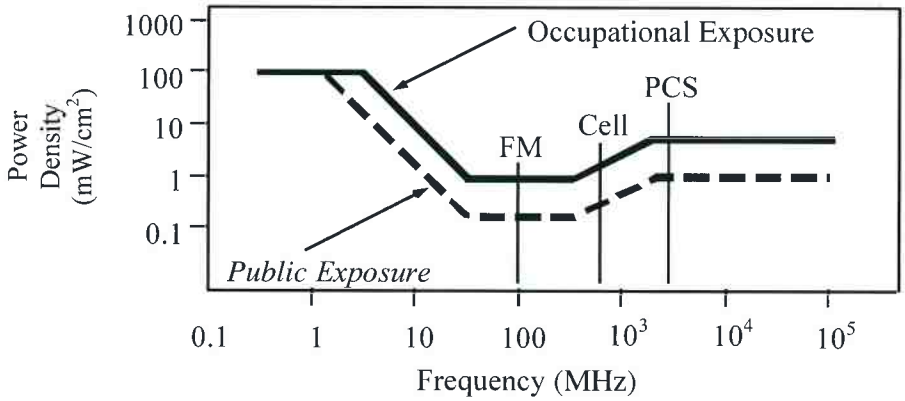
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health 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	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 – 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/ f	*823.8/f*	4.89/ f	*2.19/f*	900/ f^2	*180/f^2*
30 – 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	*$1.59\sqrt{f}$*	$\sqrt{f}/106$	*$\sqrt{f}/238$*	f/300	*f/1500*
1,500 – 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



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/cm^2,

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/cm^2,

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:

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

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
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Walnut Creek, CA 94597
+1 913-458-9148 | GomezAbarcaA@BV.com

BLACK & VEATCH
Building a world of difference.

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-62-15**
Site Address:	**Between 571 & 577 Reina del Mar Avenue**
Site ID:	**SCC-CC0004-9**
Latitude/Longitude:	**37.613500, -122.480744**

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