COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: March 7, 2024

TO: Zoning Hearing Officer
FROM: Planning Staff
SUBJECT: Consideration of a Use Permit Renewal, pursuant to Section 6500 of the County Zoning Regulations, to allow the continued operation of a wireless telecommunications facility, located at 1000 Bean Hollow Road, in the unincorporated Pescadero area of San Mateo County.

County File Number: PLN2004-00498 (Verizon Wireless)

PROPOSAL

The applicant, American Tower LLC, is applying for a Use Permit Renewal to allow for the continued operation of an existing cellular communications facility located on the 74.27-acre property in the unincorporated Pescadero area of San Mateo County. The facility consists of a 64-foot-tall monopole with three panel antennas mounted at its 45-foot midsection and three panel antennas mounted at the 64-foot top. The monopole is located within a 1,000-square foot equipment lease area that is enclosed by 6-foot-tall wood fencing. The equipment lease area also includes a 230-square foot equipment shelter, a diesel generator, and a transformer. In addition, outside of but adjacent to the lease area is a water tank that is to support the facility for fire suppression purposes.

RECOMMENDATION

That the Zoning Hearing Officer approve the Use Permit Renewal, County File Number PLN2004-00498, by adopting the required findings and conditions of approval identified in Attachment A.

BACKGROUND

Report Prepared By: Jonathan Bruns. Project Planner. Email: jbruns@smcgov.org

Applicant: American Tower LLC on behalf of Verizon Wireless

Owner: Rabo Agrifinance, LLC
Public Notification: Ten (10) calendar day advanced notification for the hearing was mailed to property owners within 300 feet of the project parcel and a notice for the hearing posted in a newspaper (San Mateo County Times) of general public circulation.

Location: 1000 Bean Hollow Road, Pescadero

APN: 086-260-010

Size: 74 acres

Existing Zoning: PAD/CD (Planned Agricultural District/Coastal Development District)

General Plan Designation: Agriculture

Local Coastal Plan Designation: Agriculture

Existing Land Use: Agriculture-Flower/Plant Nursery/Wireless Telecommunications Facility

Water Supply: N/A for proposed renewal


Environmental Evaluation: Exempt under provisions of Section 15301, Class 1 of the California Environmental Quality Act Guidelines, as a continued operation of an existing facility.

Setting: The project parcel is located approximately 1.8 miles southwest of the town of Pescadero on Bean Hollow Road. The Verizon Wireless facility is located at the northeast corner of Rabo Agrifinance LLC property, along Bean Hollow Road. The majority of the existing property is developed for agricultural use. Mature cypress and pine trees line the road fronting the property line and provide screening of the facility from Bean Hollow Road. Parcels across Bean Hollow Road from the project site are occupied by row crop farming and an open-air reservoir.

Chronology:

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<tr>
<td>September 28, 2004</td>
<td>Planning application, PLN2004-00498, received to establish a new Verizon Wireless cellular facility at 1000 Bean Hollow Road.</td>
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March 29, 2007 - Approval of a Coastal Development Permit, Planned Agricultural District Permit, Use Permit and Certification of a Mitigated Negative Declaration for a new Verizon Wireless cellular facility consisting of a 45-foot-0-inch-tall monopole with six panel antennas and an equipment lease area, PLN2004-00498.

August 1, 2008 - Building permit, BLD2007-00362, finalized to construct a new Verizon Wireless cellular facility consisting of a 45-foot-0-inch-tall monopole, six panel antennas, equipment shelter, water tank and diesel fuel tank.

May 5, 2009 - Use Permit Administrative Review, PLN2004-00498, approved. Planning staff site inspection noted only three panel antennas installed on monopole.

April 29, 2011 - Application for building permit, BLD2011-00548, received to add three panel antennas to existing monopole (per original planning approval).

December 23, 2011 - Received Use Permit Renewal application for Verizon Wireless facility, PLN2004-00498.

August 2, 2012 - Approval of Use Permit Renewal, PLN2004-00498, by Zoning Hearing Officer.

April 24, 2020 - Minor modification approved to extend existing tower height by 20 feet and add three additional antennas, BLD2020-00559. Project qualified as minor under the federal preemption criteria.

September 1, 2020 - Building permit for approved modifications finalized (BLD2020-00559).

February 16, 2023 - Building permit application received to allow a minor modification of the existing facility to add two microwave dishes to the equipment enclosure building (BLD2023-00374). Unable to approve modification outright as Use Permit Renewal was due. Applicant has since indicated this Minor modification permit will be withdrawn.

May 15, 2023 - Minor modification received (BLD2023-01223) to allow the removal of nine remote radio units (RRUs) to be replaced with six new RRUs, addition of three new antennas, and installation of new cabling. Unable to approve modification outright as Use Permit Renewal was due.
August 8, 2023  -  Use Permit Renewal application submitted.

November 2023  -  Approved minor modifications under building permits: BLD2023-01223.

January 18, 2024  -  Use Permit Renewal application deemed complete.

March 7, 2024  -  Zoning Hearing Officer public hearing.

**DISCUSSION**

A. **KEY ISSUES**

1. **Conformance with General Plan**

   The project continues to conform with the applicable General Plan policies included in Vegetative, Water, Fish, and Wildlife Resources, Soil Resources, Visual Quality, Historical and Archaeological, Rural Land Use, and Geotechnical Hazards sections. The project was constructed in accordance with its last Use Permit Renewal and subsequent minor modifications. There are no physical changes to the existing facility that are proposed at this time.

2. **Conformance with Zoning Regulations**

   The project parcel is zoned PAD/CD (Planned Agricultural District/Coastal Development) and is designated as “Lands Suitable for Agriculture” by the County General Plan. The existing wireless telecommunication facility is operating under a previously approved Use Permit and the project was constructed in accordance with approved plans. No physical changes or expansions of the footprint are proposed as part of this renewal application.

3. **Compliance with Wireless Telecommunications Facilities Ordinance (WTF)**

   The project continues to conform with the applicable standards of the Wireless Telecommunication Facilities (WTF) Ordinance, as discussed below:

   a. **Development and Design Standards.** Section 6512.2 of the WTF ordinance discusses location, minimizing visual impacts, maximum height, and future co-location of wireless facilities. This project is not located within a scenic corridor. The visual impacts of the site are mitigated by the trees that have been planted along Bean Hollow Road which obstruct full view from public roadways. The equipment associated with the site has also been painted a light brown paint color
which aids in blending it in with the planted trees along the roadway. The height of the facility will remain unchanged from its current 64 feet. Based on the Radio Frequency emissions analysis completed by Adam Carlson of Tower Engineering Professionals, composite exposure levels will be a maximum of 2.75%.

b. **Performance Standards**

The existing facility continues to be compliant with the required performance standards of Section 6512.3 for lighting, licensing, provision of a permanent power source, timely removal of the facility, visual resource protection, and generator use and maintenance. There is no lighting proposed, proper licenses have been obtained from both the Federal Communications Commission (FCC) and CPUC, power for the facility is provided by PG&E, there is minimal visual impact, and conditions of approval included in Attachment A of this report, continue to require maintenance and/or removal of the facility when necessary.

4. **Use Permit Findings**

In order to approve this Use Permit renewal to allow the continued operation of this facility, the Zoning Hearing Officer must make the following findings:

a. *That the establishment, maintenance and/or conducting of the use will not, under the circumstances of the particular case, result in significant impacts to coastal resources or be detrimental to the public welfare or injurious to property or improvements in said neighborhood.*

This subject wireless facility has been in operation since 2007 and has not resulted in any adverse impacts to the surrounding area. No complaints have been received on this project. The radio frequency analysis submitted by the applicant indicates that the facility continues to comply with the FCC’s current prevailing standards for limiting human exposure to RF energy. As this is an unmanned communication facility, the operation does not create additional traffic, noise, or intensity of use of the property.

b. *That the telecommunication facility is necessary for the public health, safety, convenience or welfare of the community.*

The continued operation of the cellular facility at this location allows for continued cellular communication coverage for residents, visitors, businesses, and emergency responders. The existing wireless telecommunication facility has been in existence for many years and the community has come to rely on the coverage provided by this site.
The site facilitates both routine daily conversation but also provides communication services in emergency situations.

5. Conformance with Conditions of Last Use Permit Approval

Staff has reviewed the previous Use Permit conditions of approval associated with this site (last approved in 2012) and has determined that the project is in compliance with all previous conditions. Pictures taken in June 2023, submitted with the renewal application, show the required mitigation paint scheme has been maintained. The pictures also show tree coverage maintained that mitigates the view of the site from Bean Hollow Road. Previous conditions that remain relevant are included in Attachment A of this staff report. Two minor modification permits were applied for prior to the Use Permit renewal application. Both minor modifications were approved by Planning during the renewal process. Minor modifications include the removal and replacement of existing antenna and radio equipment, and the addition of two new microwave antenna dishes with mounts on the existing small shelter rooftop. No physical changes are proposed as part of this renewal proposal.

B. ENVIRONMENTAL REVIEW

The project is categorically exempt pursuant per Section 15301, Class 1, of the CEQA Guidelines for the continued operation of existing public or private facilities involving no alterations or expansion of use as no physical changes are proposed.

C. REVIEWING AGENCIES

Department of Public Works
Coastside Fire Protection District

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Location Map
C. Plans
D. Approved Plans for Minor Modification under BLD2023-01223
E. Non-Ionizing Electromagnetic Radiation (NIER) Study
F. 2012 Letter of Decision

20240307_PLN2004-00498_ZHO_WPC_FINAL
RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN2004-00498        Hearing Date: March 7, 2024

Prepared By: Jonathan Bruns, Project Planner        For Adoption By: Zoning Hearing Officer

RECOMMENDED FINDINGS

Regarding the Environmental Review:

1. That the project is categorically exempt under provisions of Class 1, Section 15301 of the California Environmental Quality Act Guidelines, Existing Facilities. The proposed project includes the continued operation of an existing facility.

Regarding the Use Permit:

2. That this personal telecommunications facility is necessary for the public health, safety, convenience or welfare of the community because the FCC has established the desirability and need for mobile and wireless telephone service to facilitate enhanced communication between mobile units. The range of personal communication services provided by this facility enhances telephone services in the area and is a necessary component of public health, safety, convenience and welfare.

3. That the establishment, maintenance and conducting of the use, as proposed and conditioned, will not result in significant impacts to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in the neighborhood and will not be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood as staff has reviewed the project file, referred the project to appropriate parties for comments, and reviewed previous conditions of approval and finds no issues concerning noncompliance with Current Planning Section requirements or issues from neighboring parcels in the vicinity. In addition, staff has reviewed the Radio Frequency report, and has found that the continued use of the existing facility is in full conformance with the requirements of the Federal Communications Commission. The required findings for this project can be made.
RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. This approval applies only to the proposal, documents and plans described in this report as submitted and approved by the Zoning Hearing Officer on March 7, 2024. Minor modifications to the project may be approved by the Director of Planning and Building if they are consistent with the intent of, and in substantial conformance with, this approval.

2. The Use Permit Renewal shall be valid for ten (10) years from the date of final approval. The applicant shall apply for renewal of the Use Permit and pay applicable renewal fees six (6) months prior to expiration.

3. Any change in use or intensity not already approved shall require an amendment to the Use Permit. Amendment to this Use Permit requires an application for amendment, payment of applicable fees, and consideration at a public hearing.

4. The applicant shall receive and maintain all necessary licenses and registrations from the FCC and any other applicable regulatory bodies for the operation of the subject facility at this site. The applicant shall supply the Planning Department with evidence of such licenses and registrations. If any required license is ever revoked, the applicant shall inform the Planning Department of the revocation within ten (10) days of receiving notice of such revocation.

5. If a less visually obtrusive and/or reduced height antennas become available for use prior to the issuance of a building permit, the applicant shall present a redesign incorporating this technology into the project and shall present this to the Director of Planning and Building for review.

6. The applicant shall not enter into a contract with the landowner or lessee which reserves for one company exclusive use of structures on this site for telecommunications facilities.

7. This facility and all equipment associated with it shall be removed in its entirety by the applicant within ninety (90) days if the FCC license and registration are revoked or if the facility is abandoned or no longer needed. The owner and/or operator of the facility shall notify the Planning Department upon abandonment of the facility.

8. Any new antennas shall be painted a non-reflective brown color to match the existing monopole and antennas. Any new equipment shall be painted to match the existing equipment.
9. There shall be no external lighting associated with this use. Wireless telecommunication facilities shall not be lighted or marked unless required by the FCC or Federal Aviation Administration (FAA).

10. The applicant shall comply with all future requirements of the Department of Public Works and Building Inspection Section and the Fire Marshal.

11. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo County Ordinance Code Section 4.88.360).

12. All existing and any future required on-site vegetation which serves as the effective screening and softening mechanism shall be maintained for the life of the project. Should any of the vegetation on-site die or become diseased or hazardous, the applicant shall replace the vegetation with similar trees of substantial size consistent with vegetation in the area and to the satisfaction of the Director of Planning and Building.

13. The Property Owner is responsible for maintaining the property in a manner consistent with all County regulations, including conditions of approval applied to permits (i.e., use permits) for on-site wireless telecommunication facilities. All use permits shall be maintained in an “active,” non-expired status. Non-compliance with any applicable County regulations may result in the initiation of a violation case and referral of the case to the Planning and Building’s Department’s Code Compliance Section. Per Section 6105.1 (Zoning and Building Violation) of the County Zoning Regulations, except as provided in Sections 6105.2 and 6105.3, no permit for development shall be issued for any lot that has an existing zoning or building violation.

14. The applicant shall provide the name, title, phone number, mailing address, and email address of one or more contact persons at Verizon, to which future correspondences from the County should be addressed. These person(s) will serve as the long-term contact person(s) for this project for the purposes of permit renewal. Should the long-term contact person(s) change, the property owner is responsible for contacting the County to establish new long-term contact person(s).

Cal-Fire

15. Access to property to be maintained, with a knox padlock if necessary. To be verified by Fire Official.
16. Pursuant to CFC 2022 Section 4907.2, buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management practices as listed in California Code PRC 4291:
   
a. All unincorporated lands designated by the State Board of Forestry and Fire Protection as a State Responsibility Area (SRA).
   
b. Land designated as a Very High Fire Hazard Severity Zone by the Director.
   
c. Land designated in ordinance by local agencies as a Very High Fire Hazard Severity Zone pursuant to Government Code Section 51179.

17. Vegetation clearance to be verified by Fire Code Official upon inspection.
THE LEFT IN 1.2 MILES.

before you dig.

WOBURN, MA 01801
10 PRESIDENTIAL WAY
AMERICAN TOWER
3500 REGENCY PARKWAY SUITE 100
CARY, NC 27518
SUITE 100

REVISION:
SHEET NUMBER:

TITLE SHEET

SITE NUMBER:
411577

PROJECT LOCATION DIRECTIONS

PROJECT NOTES

PROJECT TEAM

UTILITY COMPANIES

POWER COMPANY: PACIFIC GAS AND ELECTRIC
PHONE: (800) 743-5000
TELEPHONE COMPANY: N/A
PHONE: (800) 505-0000

Scott Fletcher
Digitally signed by
Scott Fletcher
Date: 2023.06.23
13:20:54 -04'00'

TITLE SHEET

G-001

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NOTES:
1. THIS SET OF DRAWINGS IS INTENDED TO DEPICT EXISTING SITE CONDITIONS ONLY. THE PROJECT WILL NOT RESULT IN ANY PROPOSED WORK.
2. FIELD SURVEY DATE: 06/23/2005
3. BOUNDARY INFORMATION OBTAINED FROM PHIL AUER SURVEYING

OVERALL SITE PLAN

SCALE: 1"=200' (11X17) 1"=100' (22X34)

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**ATC SITE NUMBER:** 411577

**ATC SITE NAME:** PESCADERO CA

**SITE ADDRESS:** 1000 BEAN HOLLOW ROAD PESCADERO, CA 94060

**PHONE:** (800) 448-4112

**COA:** P-1177

**THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OR SERVICE ARE THE EXCLUSIVE PROPERTY OF AMERICAN TOWER. THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. TITLE TO THESE DOCUMENTS SHALL REMAIN THE PROPERTY OF AMERICAN TOWER WHETHER OR NOT THE PROJECT IS EXECUTED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION ON FILE WITH AMERICAN TOWER.

**SIGNAGE**

**REPLACEMENT OF SIGNAGE:** As signage becomes stolen, damaged, brittle or faded, it should be replaced with signage per this specification. Any accrued site should have new signs posted within 60 days unless otherwise specified. Any site sold should have the ATC signs removed within 30 days unless otherwise specified. All FCC or regulatory signage must be installed or replaced as required to meet our standards. Signs should be replaced on normal, quarterly maintenance visits by contractors or site managers, unless otherwise required on a case-by-case basis.

**NOTE:** Exterior signs are not proposed except as required by the FCC. All existing signage and any future signage will be compliant with Statute 164-43.4 NO HIGH-VOLTAGE SIGNAGE is necessary. NO HIGH-VOLTAGE EQUIPMENT PRESENT.

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VZW SITE NAME: PESCADERO
VZW SITE ID#: 463574

PROJECT NAME:
5G L-SUB6 - CARRIER ADD

PROJECT #:
16285798

LOCATION CODE:
123537

SITE ADDRESS:
1000 BEAN HOLLOW RD
PESCADERO, CA 94060

65' MONOPOLE MODIFICATION

SITE INFORMATION

CONTACT INFORMATION

DRIVING DIRECTIONS

SCOPE OF WORK

APPLICABLE CODES

VERIZON
SITE NAME: PESCADERO
SITE#: 463574

AMERICAN TOWER
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SITE INFORMATION

SITE PHOTO

SITE ADDRESS:
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37.239108°, -122.401144°

T-1
TITLE SHEET

ON-1
GENERAL NOTES

A-1
OVERALL SITE PLAN

A-2
SITE PLAN

A-3
ELEVATIONS

A-3.1
ANTENNA PLANS & SCHEDULE

A-4
SITE INFORMATION

A-5
EQUIPMENT DETAILS

A-5.1
EQUIPMENT DETAILS

A-5.2
EQUIPMENT DETAILS

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VERIZONE
1. CONTRACTOR TO VERIFY ALL EQUIPMENT MODELS, LOCATIONS AND CONFIGURATIONS WITH CURRENT VERIZON SWML.
2. CONTRACTOR TO FIELD VERIFY ALL CABLE LENGTHS PRIOR TO ORDERING MATERIALS.
3. CONTRACTOR TO INSTALL ANTENNAS MAINTAINING MINIMUM REQUIRED SEPARATION DISTANCES FROM EXISTING APPURTENANCES AND TO AVOID INTERFERENCE WITH INTENDED PATH.
4. CONTRACTOR TO FIELD VERIFY AZIMUTH, CENTERLINE HEIGHT AND MECHANICAL DOWNMILT. IF INCONSISTENCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARISE, ENGINEER SHALL BE NOTIFIED.
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## Equipment Summary

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**ANTENNA SUMMARY (PROVIDED BY VERIZON)**

---

**VERIZON SITE NAME:** PESCADERO  
**SITE#:** 463574  
**ATC SITE#:** 411577  
**1000 BEAN HOLLOW RD PESCADERO, CA 94060 37.239108°, -122.401144°**

---

**FOR REFERENCE ONLY**

---

**Site Information**

**VERIZON**  
**SITE NAME:** PESCADERO  
**SITE#:** 463574  
**ATC SITE#:** 411577  
**1000 BEAN HOLLOW RD PESCADERO, CA 94060 37.239108°, -122.401144°**  
**REF TEL:**

**RF INFORMATION**

---

**SHEET NUMBER:** A-4
PENDING PLUMBING DIAGRAM
VERIZON SITE NAME: PESCADERO
SITE# 463574
ATC SITE# 411577
1000 BEAN HOLLOW RD
PESCADERO, CA 94060
37.239108°, -122.401144°
A-5.2

MASTERLINE Classic Hybrid (MLCH) 12/24 Low Inductance Hybrid Cable

MLCH product properties

RRH side (Side A)

24x LC uniboot

0.37 to 0.52 meter (14.5 to 20.47 inch)
Fiber optic breakout

0.664 meter (26.14 inch)
Alarm pairs, power pairs, common drain wire

BBU side (Side B)

0.415 meter (16.3 inch)
Alarm pairs, power pairs, common drain wire

0.55 to 0.7 meter (21.65 to 27.65 inch)
Fiber optic breakout

24x LC uniboot

EQUIPMENT DETAILS

Hybrid Cable Information

Hybrid cable characteristics:
- 24 LC uniboots
- 6 pairs + common drain wire
- Fiber optic breakout

Fiber Details:
- Number of fiber optic cables: 1
- Cable type: Glass amendment multi-fiber tube poly-cored
- Jacket material: UPRH
- Jacket color: Black
- Minimum bend radius: 100 mm

Equipment Details:
- Scale: N.T.S.
- Hybrid Cable Information
- Hybrid cable characteristics:
  - 24 LC uniboots
  - 6 pairs + common drain wire
  - Fiber optic breakout

Huber+Suhner Excellence in Connectivity Solutions

American Tower

Site Information

Verizon
Site: 463574
Atc: 411577
1000 Bean Hollow Rd
Pescadero, CA 94060
37.239108°, -122.401144°
Non-Ionizing Electromagnetic Radiation (NIER) Study

American Tower Site Number:
411585

American Tower Site Name:
411577 Pescadero CA

Location:
Pescadero, California

Tenant:
Verizon Wireless & Google Inc.

Prepared For:
American Tower, Inc.
Woburn, Massachusetts

June 22nd, 2023

179593 P-411577

Prepared By:
Adam Carlson MS, CBRE, CPI
Program Manager RF Design & Service
Tower Engineering Professionals

Approved By:
Mark Quakenbush P.E.
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Disclaimer Notice

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TOWER ENGINEERING PROFESSIONALS
RALIEGH, NORTH CAROLINA
Non-Ionizing Electromagnetic Radiation (NIER) Study
411577 Pescadero CA
Clayton, California

INTRODUCTION
Tower Engineering Professionals RF Design & Services Division (TEP-RF) of Raleigh, North Carolina, has been retained by American Tower, Inc. (ATC), of Woburn, Massachusetts to evaluate the RF emissions compared to the Maximum Permissible Exposure (MPE) limit for facilities at this location. This evaluation uses compliance standards as outlined in Federal Communications Commission (FCC) document OET-65.

SITE AND FACILITY CONSIDERATIONS
Site 411577 Pescadero CA is located at 8117 Marsh Creek Rd., in Pescadero, California at coordinates 37.926301, -121.916911. The support structure is a 66’ stealth monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. Tenants include Verizon Wireless (VZW) & Google inc. (Google). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

POWER DENSITY CALCULATIONS
Power densities were calculated based on FCC MPE limits for both General Population/Uncontrolled and Occupational/Controlled environments.

For the purpose of this study, a radius of 100’ from the base of the tower with a height of 6’ above ground level was used, beyond 100’ the MPE levels become di minimus. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.
All data used in this study was collected from one or more of the following sources:

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at 411577 Pescadero CA.RF NIER Study Dated 06/06/23.
- 411577-1-1-COMPOUND20210809_2021_08_09_20_16_07.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

**SITE MITIGATION & CONTROL**

In order to comply with FCC, tenant, & ATC requirements, TEP recommends the placement of signage at the base of the tower and all compound access points to alert workers of potential exposure to RF fields while working on or near the antennae.

TEP recommends that all personnel working on this tower be trained in RF safety procedures and carry a personal RF monitor at all times.

**COMPLIANCE DETERMINATION**

This installation *is* in compliance with current FCC MPE limits as described in FCC OET-65.
APPENDIX 1  Site Photos

Aerial View of Site
### Antenna Inventory

#### 411577 Prescadero CA

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<th>Azimuth (°)</th>
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Appendix 3.1  MPE Limit Study

Maximum Power Density (@60’): 0.0169 mW/cm²
General Population MPE (@60’): 2.7532%
Occupational MPE (@60’): 0.5506%
Appendix 3.2  MPE Limit Study
Appendix 4  Information Pertaining to MPE Studies

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), and, over a wide range of frequencies, the exposure limits were developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist, they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies, whole-body absorption is less efficient, and consequently, the MPE limits are less restrictive.
MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm²), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). The far-field of a transmitting antenna is where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

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

**General population/uncontrolled exposure** limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area. Additional details can be found in FCC OET 65.
Appendix 5  MPE Standards Methodology

This study predicts RF field strength and power density levels that emanate from communications system antennae. It considers all transmitter power levels (less filter and line losses) delivered to each active transmitting antenna at the communications site. Calculations are performed to determine power density and MPE levels for each antenna as well as composite levels from all antennas. The calculated levels are based on where a human (Observer) would be standing at various locations at the site. The point of interest where the MPE level is predicted is based on the height of the Observer.

Compliance with the FCC limits on RF emissions are determined by spatially averaging a person’s exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. This means that exposure is averaged over an identifiable time interval. It is 30 minutes for the general population/uncontrolled RF environment and 6 minutes for the occupational/controlled RF environment. However, in the case of the general public, time averaging should not be applied because the general public is typically not aware of RF exposure, and they do not have control of their exposure time. Therefore, it should be assumed that any RF exposure to the general public will be continuous.
The FCC’s limits for exposure at different frequencies are shown in the following Tables.

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm²) | Averaging Time $|E|^2$, $|H|^2$ or $S$ (minutes) |
|-----------------------|----------------------------------|----------------------------------|-----------------------------|---------------------------------|
| 0.3 - 3.0             | 614                              | 1.63                             | 100*                        | 6                               |
| 3.0 - 30              | 1842/f                           | 4.89/f                           | 900/f²                      | 6                               |
| 30 - 300              | 61.4                             | 0.163                            | 1.0                         | 6                               |
| 300 - 1500            | --                               | --                               | f/300                       | 6                               |
| 1500 - 100,000        | --                               | --                               | 5                           | 6                               |

f = frequency

* = Plane-wave equivalent power density
Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm²) | Averaging Time |\( |E|^2, |H|^2 \text{ or } S \) (minutes) |
|---------------------|----------------------------------|----------------------------------|---------------------------|---------------|--------------------------------|
| 0.3 - 1.34          | 614                              | 1.63                             | 100*                      | 30            |                                |
| 1.34 - 30           | 824/f                            | 2.19/f                           | 180/F²                    | 30            |                                |
| 30 - 300            | 27.5                             | 0.073                            | 0.2                       | 30            |                                |
| 300 - 1500          | --                               | --                               | f/1500                    | 30            |                                |
| 1500 - 100,000      | --                               | --                               | 1.0                       | 30            |                                |

\( f = \text{frequency} \)

\( * = \text{Plane-wave equivalent power density} \)

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.
The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex, and the wave front is extremely curved. As you move further from the antenna, the wave front has less curvature and becomes planar. The wave front still has a curvature, but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field.

Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65.

**Cylindrical Model (Near Field Predictions)**

Spatially averaged plane-wave equivalent power densities parallel to the antenna may be estimated by dividing the antenna input power by the surface area of an imaginary cylinder surrounding the length of the radiating antenna. While the actual power density will vary along the height of the antenna, the average value along its length will closely follow the relation given by the following equation:

\[
S = \frac{P}{2 \pi RL}
\]

Where:

- \( S \) = Power Density
- \( P \) = Total Power into antenna
- \( R \) = Distance from the antenna
- \( L \) = Antenna aperture length
For directional-type antennas, power densities can be estimated by dividing the input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. For example, for the case of a 120-degree azimuthal beam width, the surface area should correspond to 1/3 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. Mathematically, this can be represented by the following formula:

\[ S = \frac{(180 / \theta_{BW}) \times P}{\pi RL} \]

Where:
- \( S \) = Power Density
- \( \theta_{BW} \) = Beam width of antenna in degrees (3 dB half-power point)
- \( P \) = Total Power into antenna
- \( R \) = Distance from the antenna
- \( L \) = Antenna aperture length

If the antenna is a 360-degree omni-directional antenna, this formula would be equivalent to the previous formula.
Spherical Model (Far Field Predictions)

Spatially averaged plane-wave power densities in the Far Field of an antenna may be estimated by considering the additional factors of antenna gain and reflective waves that would contribute to exposure.

The radiation pattern of an antenna has developed in the Far Field region and the power gain needs to be considered in exposure predictions. Also, if the vertical radiation pattern of the antenna is considered, the exposure predictions would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential four-fold increase in power density.

These additional factors are considered, and the Far Field prediction model is determined by the following equation:

\[ S = EIRP \times Rc \div 4\pi R^2 \]

Where:

- \( S \) = Power Density
- \( EIRP \) = Effective Radiated Power from antenna
- \( Rc \) = Reflection Coefficient (2.56)
- \( R \) = Distance from the antenna

The EIRP includes the antenna gain. If the antenna pattern is considered, the antenna gain is relative based on the horizontal and vertical pattern gain values at that particular location in space, on a rooftop or on the ground. However, it is recommended that the antenna radiation pattern characteristics not be considered to provide a conservative "worst case" prediction. This is the equation is utilized for the Far Field exposure predictions herein.
August 2, 2012

Epic Wireless
c/o Greg Brown
8700 Auburn Folsom Road, #400
Granite Bay, CA 95746

Dear Mr. Brown:

Location: 1000 Bean Hollow Road, Pescadero
APN: 086-260-010
File Number: PLN2004-00498

On August 2, 2012, the Zoning Hearing Officer considered your request for a Use Permit Renewal, pursuant to Section 6512.6 of the San Mateo County Zoning Regulations, to allow the continued operation of a wireless telecommunications facility located on the Bay City Flower Company property at 1000 Bean Hollow Road in the unincorporated Pescadero area of San Mateo County.

The Zoning Hearing Officer made the findings and approved this project subject to the conditions of approval as attached.

Any interested party aggrieved by the determination of the Zoning Hearing Officer may appeal this decision to the Planning Commission within ten (10) working days from such date of determination. The appeal period for this project will end on August 16, 2012, at 5:00 p.m.

If you have any questions concerning this item please contact PROJECT PLANNER, Summer Burlison at 650-363-1815 or by e-mail at sburlison@smcgov.org.

Very truly yours,

Matthew Seubert
Zoning Hearing Officer
Zhd0802w_6_dr

cc: Assessor’s Office
    CalFire
    Bay City Flower Company
    Building Inspection Section
    Public Works Department

Enclosure: San Mateo County Survey
An online version of our Customer Survey is also available at: http://www.co.sanmateo.ca.us/planning/survey
County of San Mateo  
Planning and Building Department  

FINDINGS AND CONDITIONS OF APPROVAL  

Permit or Project File Number: PLN2004-00498  
Hearing Date: August 2, 2012  

Prepared By: Summer Burlison  
Project Planner  

Adopted By: Zoning Hearing Officer  

FINDINGS  

For the Environmental Review, Found:  

1. That the project is exempt from environmental review, per Section 15301, Class 1, of the California Environmental Quality Act, as a continued operation of the existing facility with no expansion of use from what has already been approved. A Categorical Exemption will be filed, upon final approval of the project.  

For the Use Permit, Found:  

2. That the establishment, maintenance and/or conducting of the use will not, under the circumstances of the particular case, be detrimental to the public welfare or injurious to property or improvements in said neighborhood, since the site meets emission criteria as required by the Federal Communications Commission. In addition, the non-staffed facility only requires maintenance visits on an “as needed” basis and otherwise does not generate significant traffic or intensify the use of the property.  

3. That the continued operation is necessary for the public health, safety, convenience or welfare, since the facility will continue to allow for cellular communications coverage for private citizens and public agencies that have come to rely on coverage provided by this site to facilitate daily conversation and to provide assistance in emergency situations. Furthermore, there is no evidence to suggest that the operation of this facility has caused a detriment to the public health or safety since its establishment.  

CONDITIONS OF APPROVAL  

Current Planning Section  

1. This approval applies only to the proposal, documents and plans described in this report as submitted and approved by the Zoning Hearing Officer on August 2, 2012. Minor modifications to the project may be approved by the Community Development Director if they are consistent with the intent of, and in substantial conformance with, this approval.
2. The use permit renewal shall be valid for ten (10) years from the date of final approval, and shall expire on August 2, 2022. The applicant shall apply for renewal of the use permit and pay applicable renewal fees six (6) months prior to expiration.

3. Any change in use or intensity not already approved shall require an amendment to the use permit. Amendment to this use permit requires an application for amendment, payment of applicable fees, and consideration at a public hearing.

4. The applicant shall receive and maintain all necessary licenses and registrations from the Federal Communications Commission (FCC) and any other applicable regulatory bodies for the operation of the subject facility at this site. The applicant shall supply the Planning Department with evidence of such licenses and registrations. If any required license is ever revoked, the applicant shall inform the Planning Department of the revocation within ten (10) days of receiving notice of such revocation.

5. If a less visually obtrusive and/or reduced height antennas become available for use prior to the issuance of a building permit, the applicant shall present a redesign incorporating this technology into the project and shall present this to the Community Development Director for review.

6. The applicant shall not enter into a contract with the landowner or lessee which reserves for one company exclusive use of structures on this site for telecommunications facilities.

7. This facility and all equipment associated with it shall be removed in its entirety by the applicant within ninety (90) days if the FCC license and registration are revoked or if the facility is abandoned or no longer needed. The owner and/or operator of the facility shall notify the Planning Department upon abandonment of the facility.

8. A total of six (6) antennas are allowed for this facility pursuant to the original Use Permit approval. A building permit shall be issued prior to the installation of any new antennas to meet the maximum approved buildout of this facility. Any new antennas shall be painted a non-reflective brown color to match the existing monopole and antennas.

9. There shall be no external lighting associated with this use. Wireless telecommunication facilities shall not be lighted or marked unless required by the FCC or Federal Aviation Administration (FAA).

10. The applicant shall comply with all future requirements of the Department of Public Works and Building Inspection Section and the Fire Marshal.

11. Noise levels produced by any construction activities shall not exceed the 80-dBA level at any one moment. Construction activities shall be limited to the hours from 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. Construction operations shall be prohibited on Sunday and any national holiday.
12. All existing and any future required on-site vegetation which serves as the effective screening and softening mechanism shall be maintained for the life of the project. Should any of the vegetation on-site die or become diseased or hazardous, the applicant shall replace the vegetation with similar trees of substantial size consistent with vegetation in the area and to the satisfaction of the Community Development Director.

13. The Property Owner is responsible for maintaining the property in a manner consistent with all County regulations, including conditions of approval applied to permits (i.e., use permits) for on-site wireless telecommunication facilities. All use permits shall be maintained in an "active," non-expired status. Non-compliance with any applicable County regulations may result in the initiation of a violation case and referral of the case to the Planning and Building’s Department’s Code Compliance Section. Per Section 6105.1 (Zoning and Building Violation) of the County Zoning Regulations, except as provided in Sections 6105.2 and 6105.3, no permit for development shall be issued for any lot that has an existing zoning or building violation.

14. The applicant shall provide the name, title, phone number, mailing address, and email address of one or more contact persons at Verizon, to which future correspondences from the County should be addressed. These person(s) will serve as the long-term contact person(s) for this project for the purposes of permit renewal. Should the long-term contact person(s) change, the property owner is responsible for contacting the County to establish new long-term contact person(s).

San Mateo County Fire Department

15. Portable fire extinguishers with a minimum rating of 2A-10BC are required to be placed throughout the project. Contact a licensed/certified fire extinguisher company for proper placement of the required extinguishers.

16. Because of limited access into the property, the San Mateo County Fire Department is requiring the installation of a Knox Box, Knox Key Switch, or Knox Padlock to allow rapid response of emergency vehicles onto the property in case of a fire or medical emergency. For an application or further information, please contact the San Mateo County Fire Marshal’s Office at 650/573-3846.