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|-------------------------------------|---|
| <b>Location:</b>                    | Utility pole in sidewalk adjacent to: 1817 Bridge Avenue  |
| <b>Assessor's Parcel Numbers:</b>   | Adjacent to: 033 2134-010-00  |
| <b>Proposal:</b>                    | To establish a "small cell site" telecommunications facility, in order to enhance existing services, by attaching an antenna and equipment up to 26'-3" on a 43' wooden utility pole located in the public right-of-way (sidewalk).   |
| <b>Applicant /</b>                  | Ana Gomez/Black & Veatch & Extenet (for: T-Mobile)  |
| <b>Phone Number:</b>                | (913) 458-9148  |
| <b>Owner:</b>                       | Extenet et al.  |
| <b>Case File Number:</b>            | PLN16368  |
| <b>Planning Permits Required:</b>   | Regular Design Review with additional findings for Macro Telecommunications Facility  |
| <b>General Plan:</b>                | Mixed Housing Type Residential  |
| <b>Zoning:</b>                      | RM-2 Mixed Housing Type Residential - 2 Zone  |
| <b>Environmental Determination:</b> | Exempt, Section 15301 of the State CEQA Guidelines:<br>Existing Facilities;<br>Exempt, Section 15302:<br>Replacement or Reconstruction;<br>Exempt, Section 15303:<br>New Construction of Small Structures;<br>Section 15183:<br>Projects Consistent with a Community Plan, General Plan or Zoning |
| <b>Historic Status:</b>             | Non historic property   |
| <b>City Council District:</b>       | 5   |
| <b>Date Filed:</b>                  | November 20, 2016   |
| <b>Action to be Taken:</b>          | Decision based on staff report  |
| <b>Finality of Decision:</b>        | <i>Appealable to City Council within 10 days</i>  |
| <b>For Further Information:</b>     | Contact case planner <b>Marilu Garcia</b><br>at (510) 238-5217 or <a href="mailto:mgarcia2@oaklandnet.com">mgarcia2@oaklandnet.com</a>  |

**SUMMARY**

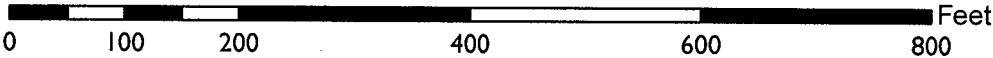
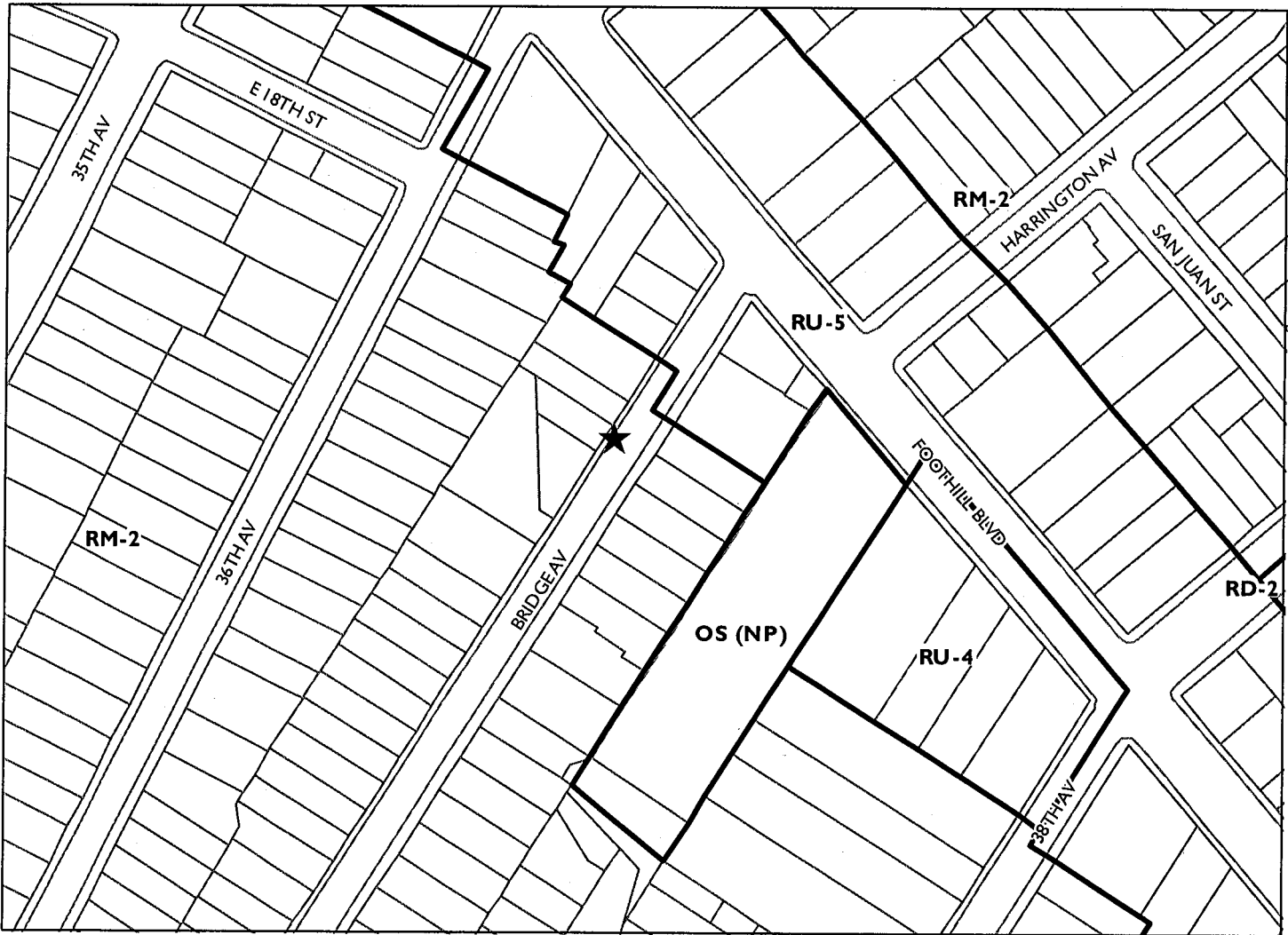
The applicant requests Planning Commission approval of a Regular Design Review with additional findings to establish a Macro Telecommunications Facility ("small cell site"). The purpose is to enhance existing wireless services. The project involves attaching an antenna and equipment to a replacement wooden utility pole located within the sidewalk in the public right-of-way.

Staff recommends approval, subject to conditions, as described in this report.

**BACKGROUND**

For several years in the City of Oakland, telecommunications carriers have proposed facility installation within the public right-of-way, instead of private property. These facilities typically consist of antennas and associated equipment attached to utility poles or street light poles. Poles are often replaced with replicas for technical purposes. The main purpose is to enhance existing service, given increasing technological demands for bandwidth, through new technology and locational advantages. The City exercises zoning jurisdiction over such projects in response to a 2009 State Supreme Court case decision (*Sprint v. Palos Verdes Estates*). Pursuant to the Planning Code, utility or joint pole authority (JPA) sites are classified by staff as "Macro Facilities," and street light pole sites (lamps, not traffic signals) as "Monopole Facilities." For JPA poles, only Design Review approval may be required, as opposed to

# CITY OF OAKLAND PLANNING COMMISSION



Case File: PLN16368  
Applicant: Ana Gomez/Black & Veatch & Extenet (for: T-Mobile)  
Address: Utility pole in sidewalk adjacent to: 1817 Bridge Avenue  
Zone: RM-2

Design Review and a Conditional Use Permit, for example. For non-JPA pole sites, such as City light poles, projects also require review by the City's Public Works Agency (PWA) and Real Estate Division, and involve other considerations such as impacts to historical poles. The PWA may also review projects involving street lights. In either case, the practice has been to refer all such projects to the Planning Commission for decision when located in or near a residential zone.

Several projects for new DAS (distributed antenna services) facilities have come before the Planning Commission for a decision and have been installed throughout the Oakland Hills. Some applications have been denied due to view obstructions or proximity to residences. Improved practices for the processing of all types of sites incorporating Planning Commission direction have been developed as a result. Conditions of approval typically attach requirements such as painting and texturing of approved components to more closely match utility poles in appearance. Approvals do not apply to any replacement project should the poles be removed for any reason. As with sites located on private property, the Federal Government precludes cities from denying an application on the basis of emissions concerns if a satisfactory emissions report is submitted. More recent Federal changes have streamlined the process to service existing facilities.

Currently, telecommunications carriers are in the process of attempting to deploy "small cell sites." These projects also involve attachment of antennas and equipment at public right-of-way facilities such as poles or lights for further enhancement of services. However, components are now somewhat smaller in size than in the past. Also, sites tend to be located in flatland neighborhoods and Downtown where view obstructions are less likely to be an issue. Good design and placement is given full consideration nonetheless, especially with the greater presence of historic structures in Downtown. Additionally, given the sheer multitude of applications, and, out of consideration for Federal requirements for permit processing timelines, staff may develop alternatives to traditional staffing and agendizing.

## **TELECOMMUNICATIONS BACKGROUND**

### **Limitations on Local Government Zoning Authority under the Telecommunications Act of 1996**

Section 704 of the Telecommunications Act of 1996 (TCA) provides federal standards for the siting of "Personal Wireless Services Facilities." "Personal Wireless Services" include all commercial mobile services (including personal communications services (PCS), cellular radio mobile services, and paging); unlicensed wireless services; and common carrier wireless exchange access services. Under Section 704, local zoning authority over personal wireless services is preserved such that the FCC is prevented from preempting local land use decisions; however, local government zoning decisions are still restricted by several provisions of federal law. Specifically:

- Under Section 253 of the TCA, no state or local regulation or other legal requirement can prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.
- Further, Section 704 of the TCA imposes limitations on what local and state governments can do. Section 704 prohibits any state and local government action which unreasonably discriminates among personal wireless providers. Local governments must ensure that its wireless ordinance does not contain requirements in the form of regulatory terms or fees which may have the "effect" of prohibiting the placement, construction, or modification of personal wireless services.
- Section 704 also preempts any local zoning regulation purporting to regulate the placement, construction and modification of personal wireless service facilities on the basis, either directly or indirectly, on the environmental effects of radio frequency emissions (RF) of such facilities, which otherwise comply with Federal Communication Commission (FCC) standards in this regard. (See 47 U.S.C. Section 332(c)(7)(B)(iv) (1996)). This means that local authorities may

not regulate the siting or construction of personal wireless facilities based on RF standards that are more stringent than those promulgated by the FCC.

- Section 704 mandates that local governments act upon personal wireless service facility siting applications to place, construct, or modify a facility within a reasonable time (See 47 U.S.C.332(c)(7)(B)(ii) and FCC Shot Clock ruling setting forth “reasonable time” standards for applications deemed complete).
- Section 704 also mandates that the FCC provide technical support to local governments in order to encourage them to make property, rights-of-way, and easements under their jurisdiction available for the placement of new spectrum-based telecommunications services. This proceeding is currently at the comment stage.

For more information on the FCC’s jurisdiction in this area, consult the following:

Competition & Infrastructure Policy Division (CIPD) of the Wireless Telecommunications Bureau, main division number: (202) 418-1310.

Main division website:

<https://www.fcc.gov/general/competition-infrastructure-policy-division-wireless-telecommunications-bureau>

Tower siting:

<https://www.fcc.gov/general/tower-and-antenna-siting>

## **SITE DESCRIPTION**

The project site consists of a wooden utility pole that measures thirty-eight (38) feet in height and is located in the public right-of-way (sidewalk, towards the curb). The pole hosts power lines on towards its top and a City street light. The pole is located in front of a single story residence towards the left and is not situated directly in front of its living room windows. The next closest property is adjacent to the west and is a two-story single family residence. The pole is not position in front of any part of this structure. Other structures across the street include single story homes and two-story homes. The surrounding neighborhood consists of single family homes, duplexes, multi-family buildings and a park.

## **PROJECT DESCRIPTION**

The proposal is to establish a Macro Telecommunications Facility (“small cell site”). The project would involve attaching an antenna and equipment to a 43-foot tall replacement of the existing 38-foot wooden utility pole. One antenna, measuring 23.5 inches long and 7.9 inches in diameter, would be installed to project over the sidewalk at heights of 23’ to 26’3”. Various equipment would be installed projecting over the sidewalk between 7’-4” to approximately 14-feet in height.

## **GENERAL PLAN ANALYSIS**

The site is located in a Mixed Housing Type Residential area under the General Plan’s Land Use and Transportation Element (LUTE). The intent of the area is: *“to create, maintain, and enhance residential areas typically located near the City’s major arterials and characterized by a mix of single family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate.”* Given residential and other customers increasing reliance upon cellular service for phone and internet, the proposal for a Macro Telecommunications Facility that is not adjacent to a primary living space or historic structure conforms to this intent.

Staff therefore finds the proposal, as conditioned, to conform to the General Plan.



## ZONING ANALYSIS

The site is located within the Mixed Housing Type Residential - 2 Zone (RM-2). The intent of the RM-2 Zone is: *"to create, maintain, and enhance residential areas characterized by a mix of single family homes, duplexes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate."* Macro Telecommunications Facilities on JPA poles require a Regular Design Review with additional findings when located in residential zones. New wireless telecommunications facilities may also be subject to a Site Alternatives Analysis, Site Design Alternatives Analysis, and a satisfactory radio-frequency (RF) emissions report. Staff analyzes the proposal in consideration of these requirements in the 'Key Issues and Impacts' section of this report. Given residential and other customers increasing reliance upon cellular service for phone and Wi-Fi, the proposal for a Macro Telecommunications Facility that is not adjacent to a primary living space or historic structure conforms to this intent.

Staff finds the proposal, as conditioned, to conform to the Planning Code.

## ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines categorically exempts specific types of projects from environmental review. Section 15301 exempts projects involving 'Existing Facilities'; Section 15302 exempts projects involving 'Replacement or Reconstruction'; and, Section 15303 exempts projects involving 'Construction of Small Structures.' The proposal fits all of these descriptions. The project is also subject to Section 15183 for 'Projects consistent with a community plan, general plan or zoning.' The project is therefore exempt from further Environmental Review.

## KEY ISSUES AND IMPACTS

The proposal to establish a Macro Telecommunications Facility is subject to the following Planning Code development standards, which are followed by staff's analysis in relation to this application:

### 17.128.070 Macro Telecommunications Facilities.

#### A. General Development Standards for Macro Telecommunications Facilities.

**1. The Macro Facilities shall be located on existing buildings, poles or other existing support structures, or shall be post mounted.**

The facility involves attachment to the replacement of an existing utility pole hosting power lines and a City street light.

**2. The equipment shelter or cabinet must be concealed from public view or made compatible with the architecture of the surrounding structures or placed underground. The shelter or cabinet must be regularly maintained.**

Recommended conditions of approval require painting and texturing the antenna matte silver and all components matte brown, per Planning Commission direction, to match the appearance of the wooden utility pole and power line posts.

**3. Macro Facilities may exceed the height limitation specified for all zones but may not exceed fifteen (15) feet above the roof line or parapet. Placement of an antenna on a nonconforming structure shall not be considered to be an expansion of the nonconforming structure.**

This standard is inapplicable because the proposal does not involve attachment to a roofed structure. Nonetheless, the facility would not exceed the height of the host facility or maximum height permitted in the zoning district.

**4. Ground post mounted Macro Facilities must not exceed seventeen (17) feet to the top of the antenna.**

This standard is inapplicable because the proposal does not involve ground post mounting.

**5. The applicant shall submit written documentation demonstrating that the emissions from the proposed project are within the limits set by the Federal Communications Commission.**

This standard is met by the proposal; a satisfactory emissions report has been submitted and is attached to this report (Attachment F).

**17.128.110 Site location preferences.**

New wireless facilities shall generally be located on the following properties or facilities in order of preference:

- A. Co-located on an existing structure or facility with existing wireless antennas.
- B. City-owned properties or other public or quasi-public facilities.
- C. Existing commercial or industrial structures in Nonresidential Zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- D. Existing commercial or industrial structures in Residential Zones, HBX Zones, or the DCE-3 or D-CE-4 Zones.
- E. Other Nonresidential uses in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
- F. Residential uses in Nonresidential Zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- G. Residential uses in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.

Facilities locating on an A, B or C ranked preference do not require a site alternatives analysis. Facilities proposing to locate on a D through G ranked preference, inclusive, must submit a site alternatives analysis as part of the required application materials. A site alternatives analysis shall, at a minimum, consist of: a. The identification of all A, B and C ranked preference sites within one thousand (1,000) feet of the proposed location. If more than three (3) sites in each preference order exist, the three such closest to the proposed location shall be required. b. Written evidence indicating why each such identified alternative cannot be used. Such evidence shall be in sufficient detail that independent verification, at the applicant's expense, could be obtained if required by the City of Oakland Zoning Manager. Evidence should indicate if the reason an alternative was rejected was technical (e.g. incorrect height, interference from existing RF sources, inability to cover required area) or for other concerns (e.g. refusal to lease, inability to provide utilities).

A site alternatives analysis is not required because the proposal conforms to 'B' as it would be located on a quasi-public facility (utility pole with power lines and City light). Nonetheless, the applicant has submitted an analysis which is attached to this report (Attachment E).

**17.128.120 Site design preferences.**

New wireless facilities shall generally be designed in the following order of preference:

- A. Building or structure mounted antennas completely concealed from view.
- B. Building or structure mounted antennas set back from roof edge, not visible from public right-of way.
- C. Building or structure mounted antennas below roof line (facade mount, pole mount) visible from public right-of-way, painted to match existing structure.
- D. Building or structure mounted antennas above roof line visible from public right-of-way.
- E. Monopoles.
- F. Towers.

Facilities designed to meet an A or B ranked preference do not require a site design alternatives analysis. Facilities designed to meet a C through F ranked preference, inclusive, must submit a site

design alternatives analysis as part of the required application materials. A site design alternatives analysis shall, at a minimum, consist of: a. Written evidence indicating why each such higher preference design alternative cannot be used. Such evidence shall be in sufficient detail that independent verification could be obtained if required by the City of Oakland Zoning Manager. Evidence should indicate if the reason an alternative was rejected was technical (e.g. incorrect height, interference from existing RF sources, inability to cover required area) or for other concerns (e.g. inability to provide utilities, construction or structural impediments).

The proposal most closely conforms to 'C' (Building or structure mounted antennas below roof line (facade mount, pole mount) visible from public right-of-way, painted to match existing structure), and the applicant has submitted a satisfactory site design alternatives analysis (Attachment E).

#### **17.128.130 Radio frequency emissions standards.**

**The applicant for all wireless facilities, including requests for modifications to existing facilities, shall submit the following verifications:**

- a. With the initial application, a RF emissions report, prepared by a licensed professional engineer or other expert, indicating that the proposed site will operate within the current acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.**
- b. Prior to commencement of construction, a RF emissions report indicating the baseline RF emissions condition at the proposed site.**
- c. Prior to final building permit sign off, an RF emissions report indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.**

A satisfactory report is attached to this report (Attachment F).

#### **Analysis**

The proposed site design would not be situated on a historic pole or structure, create a view obstruction, or be directly adjacent to a primary living space such as a living room or bedroom window. The closest structure is a single story residence which is set back with a front yard. Staff notes that the proposed antenna would project over the sidewalk; staff has inquired whether plans can be revised to feature the antenna projecting over the street for least impact to the closest residences (engineering considerations notwithstanding). The applicant responded that it was possible to reposition the antenna to project over the street in a southerly direction. Staff, therefore, finds the proposal to provide an essential service with a least-intrusive possible design. Draft conditions of approval stipulate that the components be painted and textured to match the wooden utility pole and upper metal posts in appearance for camouflaging.

#### **Outreach**


The applicant held a community meeting open to the public to introduce the technology in Downtown Oakland on February 24, 2017. The applicant has scheduled an additional meeting on April 10, 2017 to conduct outreach in the community.

In conclusion, staff recommends approval subject to recommended Conditions of Approval.

**RECOMMENDATIONS:**

1. Affirm staff's environmental determination.
2. Approve the Regular Design Review subject to the attached Findings and Conditions of Approval.

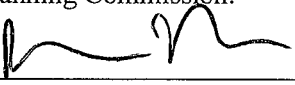
Prepared by:

  
MARILU GARCIA  
Planner I

Approved by:

  
SCOTT MILLER  
Zoning Manager

Approved for forwarding to the  
City Planning Commission:

  
DARIN RANELLETTI, Interim Director  
Planning and Building Department

**ATTACHMENTS:**

- A. Findings
- B. Conditions of Approval
- C. Plans
- D. Applicant's Photo-Simulations
- E. Site Alternatives Analysis/Site Design Alternatives Analysis dated October 28, 2016
- F. RF Emissions Report by Hammett & Edison, Inc. dated October 19, 2016
- G. Applicant's Proof of Public Notification Posting
- H. Telecom Applications Map

**ATTACHMENT A: FINDINGS**

This proposal meets the required findings under Regular Design Review Criteria for Nonresidential Facilities (OMC Sec. 17.136.050(B)) and Telecommunications Regulations/Design Review Criteria for Macro Telecommunications Facilities (OMC Sec. 17.128.070(B)), as set forth below. Required findings are shown in **bold type**; explanations as to why these findings can be made are in normal type.

**REGULAR DESIGN REVIEW CRITERIA FOR NON-RESIDENTIAL FACILITIES (OMC SEC. 17.136.050(B))**

**1. That the proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures:**

The attachment of a small antenna and equipment to a non-historic utility pole, painted and texturized to match the pole and power line posts in appearance for camouflaging, will be the least intrusive design. The antenna will project over the street, away from the closest residences.

**2. That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics;**

The proposal would not create a view obstruction, be directly adjacent to a primary living space such as a living room or bedroom window, or be located on an historic structure.

**3. The project will provide a necessary function without negatively impacting surrounding opens pace and hillside residential properties.**

The proposal will enhance essential services in an urbanized neighborhood.

**4. That the proposed design will be sensitive to the topography and landscape.**

The proposal will not be ground mounted.

**5. That, if situated on a hill, the design and massing of the proposed building relates to the grade of the hill.**

This finding is inapplicable because the site is level.

**6. That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.**

The site is located in a Mixed Housing Type Residential area under the General Plan's Land Use and Transportation Element (LUTE). The intent of the area is: *"to create, maintain, and enhance residential areas typically located near the City's major arterials and characterized by a mix of single family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate."* Given residential and other customers increasing reliance upon cellular service for phone and internet, the proposal for a Macro Telecommunications Facility that is not adjacent to a primary living space or historic structure conforms to this intent.

**TELECOMMUNICATIONS REGULATIONS/DESIGN REVIEW CRITERIA FOR MACRO TELECOMMUNICATIONS FACILITIES (OMC SEC. 17.128.070(B))**

**1. Antennas should be painted and/or textured to match the existing structure.**

The antenna will be painted and textured matte silver to match the power line posts in appearance for camouflaging will be the least intrusive design, as required by conditions of approval.

**2. Antennas mounted on architecturally significant structures or significant architectural detail of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building.**

This finding is inapplicable because the antenna will not be mounted onto an architecturally significant structure but to a replacement wooden utility pole.

**3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging.**

The antenna will be located parallel to the host utility pole below an attached City light and below posts hosting power lines.

**4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or materials and colors consistent with surrounding backdrop or placed underground or inside existing facilities or behind screening fences.**

Conditions of approval require painting and texturing to match the pole in appearance for camouflaging.

**5. Equipment shelters or cabinets shall be consistent with the general character of the area.**

Equipment will be attached to the utility pole with an unobtrusive design.

**6. For antennas attached to the roof, maintain a 1:1 ratio (example: ten (10) feet high antenna requires ten (10) feet setback from facade) for equipment setback; screen the antennas to match existing air conditioning units, stairs, or elevator towers; avoid placing roof mounted antennas in direct line with significant view corridors.**

This finding is inapplicable because the antenna would be attached to a pole and not to a roofed structure.

**7. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices.**

The minimal clearance to the facility will be 7'-4".

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**Attachment B: Conditions of Approval**

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**Approved Use**

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, **staff report** and the approved plans **dated September 12, 2016 and submitted November 20, 2016**, as amended by the following conditions of approval and mitigation measures, if applicable (“Conditions of Approval” or “Conditions”).

**2. Effective Date, Expiration, Extensions and Extinguishment**

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

**3. Compliance with Other Requirements**

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City’s Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

**4. Minor and Major Changes**

- a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning.
- b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

**5. Compliance with Conditions of Approval**

- a. The project applicant and property owner, including successors, (collectively referred to hereafter as the “project applicant” or “applicant”) shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.
- b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant’s expense that the as-built project

conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

- c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

**6. Signed Copy of the Approval/Conditions**

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

**7. Blight/Nuisances**

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

**8. Indemnification**

- a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.
- b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

**9. Severability**

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a



court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

#### **10. Job Site Plans**

*Ongoing throughout demolition, grading, and/or construction*

At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

#### **11. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring**

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

#### **12. Public Improvements**

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement ("p-job") permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

#### **13. Construction Days/Hours**

**Requirement:** The project applicant shall comply with the following restrictions concerning construction days and hours:

- a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.
- b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.
- c. No construction is allowed on Sunday or federal holidays.

Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of

the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

#### **PROJECT-SPECIFIC CONDITIONS**

##### **14. Emissions Report**

Requirement: A RF emissions report shall be submitted to the Planning Bureau indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

Requirement: Prior to a final inspection

When Required: Prior to final building permit inspection sign-off

Initial Approval: N/A

Monitoring/Inspection: N/A

##### **15. Camouflage**

Requirement: The antenna shall be painted, texturized, and maintained matte silver, and the equipment and any other accessory items including cables matte brown, to better camouflage the facility to the utility pole and attached power line posts.

When Required: Prior to a final inspection

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

##### **16. Operational**

Requirement: Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

##### **17. Possible District Undergrounding PG&E Pole**

Requirement: Should the PG &E utility pole be permanently removed for purposes of district undergrounding or otherwise, the telecommunications facility can only be re-established by applying for and receiving approval of a new application to the Oakland Planning Bureau as required by the regulations.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A



**GENERAL NOTES**

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12. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (800) 227-2600, AT LEAST TWO WORKING DAYS PRIOR TO THE START OF ANY EXCAVATION.

**DEFINITIONS**

1. "TYPE" OR "TYPE" MEANS THAT THIS ITEM IS SUBSTANTIALLY THE SAME AS THAT SHOWN ON THESE PLANS, BUT IS SUBJECT TO THE ARCHITECT'S APPROVAL.
2. "OR EQUIVALENT" MEANS THAT THE CONTRACTOR MAY SUBSTITUTE AN EQUIVALENT MATERIAL, EQUIPMENT OR METHOD, PROVIDED THAT IT IS APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
3. "AS SHOWN" MEANS THAT THE CONTRACTOR SHALL INSTALL THE ITEM AS SHOWN ON THESE PLANS, UNLESS OTHERWISE SPECIFIED.
4. "INSTALL" MEANS TO PLACE OR POSITION AN ITEM IN ITS FINAL POSITION.
5. "CONNECTION" MEANS THE POINT OF ATTACHMENT OR JOINT BETWEEN TWO ITEMS.
6. "WELDING" MEANS THE PROCESS OF JOINING TWO METALS BY FUSING THEM TOGETHER WITH OR WITHOUT THE USE OF A FILLER METAL.
7. "FINISH" MEANS THE FINAL SURFACE OF AN ITEM, INCLUDING PAINT, POLISH, OR OTHER FINISHING.

**FIELD WELDING NOTES:**

1. WELDING TO BE PERFORMED BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS AND THE WELDING CODES.
2. ALL WELDS SHALL BE MADE WITH A SLOTTED CHISEL WHEEL SPARK TO REMOVE ALL OXIDE FROM THE SURFACE OF THE METAL TO BE WELDED.
3. WELDING TECHNIQUE MUST MAINTAIN TEMPERATURE RISE ON THE WORK SURFACE OF THE JOINT AND ADEQUATE PENETRATION OF THE WELD METAL INTO THE JOINT.
4. WELDS SHALL BE MADE WITH A SLOTTED CHISEL WHEEL SPARK TO REMOVE ALL OXIDE FROM THE SURFACE OF THE METAL TO BE WELDED.
5. WELDS SHALL BE MADE WITH A SLOTTED CHISEL WHEEL SPARK TO REMOVE ALL OXIDE FROM THE SURFACE OF THE METAL TO BE WELDED.
6. WELDS SHALL BE MADE WITH A SLOTTED CHISEL WHEEL SPARK TO REMOVE ALL OXIDE FROM THE SURFACE OF THE METAL TO BE WELDED.
7. WELDS SHALL BE MADE WITH A SLOTTED CHISEL WHEEL SPARK TO REMOVE ALL OXIDE FROM THE SURFACE OF THE METAL TO BE WELDED.

**ANTENNA MOUNTING**

1. DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO CURRENT AIS/ITU-222 OR APPROVED LOCAL CODES.
2. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A113 (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS, UNLESS NOTED OTHERWISE.
3. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A113 (HOT-DIP GALVANIZED) ON IRON AND STEEL PRODUCTS, UNLESS NOTED OTHERWISE.
4. DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING WITH ASTM A113 GALVANIZING SOLUTION.
5. ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK WASHERS, DOUBLE NUTS AND SHALL BE TORQUED TO SPECIFIED TORQUE.
6. CONTRACTOR SHALL NOTIFY ANTENNA PER MANUFACTURER'S RECOMMENDATION FOR INSTALLATION AND TORQUE.
7. PRIOR TO SETTING ANTENNA ASSEMBLY AND DOMINANT ANTENNA COMPONENTS SHALL CHECK THE ANTENNA FOR PROPERNESS AND ENSURE THAT THEY ARE THE SAME ANTENNA ASSEMBLY SHALL BE SET FROM THE SAME MANUFACTURER. ANTENNA ASSEMBLY SHALL BE SET FROM THE SAME MANUFACTURER AS SHOWN ON THESE PLANS AS DERIVED BY THE PROJ. ANTENNA DOMINANTS SHALL BE WITHIN +/- 0.2% AS DERIVED BY THE PROJ.

**TORQUE REQUIREMENTS**

1. ALL RF CONNECTORS SHALL BE TORQUED BY A TORQUE WRENCH.
2. ALL RF CONNECTORS, INCLUDING HARDWARE AND ANTENNA HARDWARE SHALL HAVE A TORQUE MARK INSTALLED IN ACCORDANCE WITH THE TORQUE WRENCH MANUFACTURER'S RECOMMENDATION.
3. ALL RF CONNECTORS SHALL BE TORQUED TO THE FOLLOWING TORQUE VALUES:
4. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
5. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
6. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
7. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
8. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
9. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
10. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
11. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).
12. ALL RF ANTENNA HARDWARE SHALL BE TORQUED TO 9-10 FT-LB (12 N.M).

**ROW UTILITY POLE CONSTRUCTION NOTES**

1. NO BUTT JOINTS TO BE MADE ON ANY UTILITY POLE.
2. ALL CLAMP STEPS NEXT TO CONDUIT SHALL HAVE ENOUGH STEPS.
3. CABLE NOT TO MORE THAN 15' (4.57M) CLEAR SPACE OFF POLE FACE (1250).
4. NO SHORT SPERS UNDER ANTENNA AND ALL CABLES MUST ONLY TRANSFER ON THE INSIDE OR BOTTOM OF POLE (NO CABLE ON TOP OF POLE).
5. USE 90 DEGREE CONNECTORS AT CABLE CONNECTION TO ANTENNA.
6. USE 1/2" (12.7MM) CABLE ON ANTENNA UNLESS OTHERWISE SPECIFIED.
7. ALL CABLES MUST BE PROTECTED FROM DAMAGE BY THE ANTENNA.
8. ALL CABLES MUST BE PROTECTED FROM DAMAGE BY THE ANTENNA.
9. ALL CABLES MUST BE PROTECTED FROM DAMAGE BY THE ANTENNA.
10. ALL CABLES MUST BE PROTECTED FROM DAMAGE BY THE ANTENNA.
11. ALL CABLES MUST BE PROTECTED FROM DAMAGE BY THE ANTENNA.
12. ALL CABLES MUST BE PROTECTED FROM DAMAGE BY THE ANTENNA.

**NODE SITE POWER SHUT DOWN PROCEDURES**

1. FOR NON EMERGENCY/SCHEDULED POWER SHUT DOWN:
  - A. CALL EXISTENT SYSTEMS (NETWORK OPERATIONS CENTER) (866)822-5277
  - B. 24 HOURS NOTICE TO SCHEDULED POWER SHUT OFF
  - C. PROVIDE THE FOLLOWING INFORMATION:
    - YOUR NAME AND POSITION FOR POWER SHUT OFF
    - PHONE NUMBER OF OFFICE
  - D. UNLOCK DISCONNECT BOX, (IF BOTH BREAKERS TO THE OFF POSITION)
  - E. POWER SHUT OFF VERIFICATION WITH APPROVED POLE PROCEDURES
  - F. NOTIFY EXISTENT NOC UPON COMPLETION OF WORK
  - G. REINSTALL LOCK ON DISCONNECT BOX
  - H. EXISTENT POWER SHUT OFF
2. EMERGENCY POWER SHUT OFF:
  - A. CALL EXISTENT SYSTEMS NOC (NETWORK OPERATIONS CENTER) (866)822-5277
  - B. PROVIDE THE FOLLOWING INFORMATION:
    - NOC SITE NUMBER IDENTIFIED ON SITE MAINTENANCE SHEET
    - YOUR NAME AND POSITION FOR POWER SHUT OFF
    - PHONE NUMBER OF OFFICE
  - C. UNLOCK DISCONNECT BOX, (IF BOTH BREAKERS TO THE OFF POSITION)
  - D. POWER SHUT OFF VERIFICATION WITH APPROVED POLE PROCEDURES
  - E. NOTIFY EXISTENT NOC UPON COMPLETION OF WORK
  - F. REINSTALL LOCK ON DISCONNECT BOX

**LEGEND**

- EXISTING CONNECTION
- MECHANICAL CONNECTION
- CHEMICAL/ELECTROLYTIC GROUNDING SYSTEM
- TEST CHEMICAL/ELECTROLYTIC GROUNDING SYSTEM
- EXISTING WITH INSPECTION SLIDE
- GROUNDING BAR
- GROUND ROD
- TEST GROUND ROD WITH INSPECTION SLIDE
- CHAINLINK FENCE
- WOOD/WOODPILE FROM FENCE
- WALL STRUCTURE
- LEAVE AREA
- PROPERTY LINE (PL)
- SETBACKS
- WATER LINE
- UNDERGROUND POWER
- UNDERGROUND TELCO
- UNDERGROUND FIBER
- OVERHEAD POWER
- OVERHEAD TELCO
- UNDERGROUND TELCO/POWER
- ABOVE GROUND POWER
- ABOVE GROUND TELCO
- ABOVE GROUND TELCO/POWER
- SECTION REFERENCE
- DETAIL REFERENCE

**GENERAL NOTES AND LEGENDS**

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INTERNAL SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONSTRUCTION SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
 RF SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
 FIELD SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_



BLACK & VEATCH CORPORATION  
 2585 OAK ROAD  
 WALNUT CREEK, CA 94597

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|             |             |       |          |            |          |
|-------------|-------------|-------|----------|------------|----------|
| PROJECT NO. | 182417-1131 | BY    | SMN      | CHECKED BY | CMC      |
| DATE        |             | DATE  |          | DATE       |          |
| SCALE       | AS SHOWN    | SCALE | AS SHOWN | SCALE      | AS SHOWN |

**PRELIMINARY**

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EXTENET SYSTEMS (CA) LLC  
 2000 CROW CANYON PLACE  
 SUITE 210  
 SAN RAMON, CA 94583

SITE ADDRESS  
 ADJACENT TO (IN ROW)  
 1817 BRIDGE AVENUE  
 OAKLAND, CA 94601

SHEET TITLE  
**GENERAL NOTES AND LEGEND**  
 SHEET NUMBER  
**GN-1**



APN# 33-2134-12

APN# 33-2134-11

APN# 33-2134-10

APN# 33-2134-9

APN# 33-2134-8

APN# 33-2135-6

APN# 33-2135-5

APN# 33-2135-4

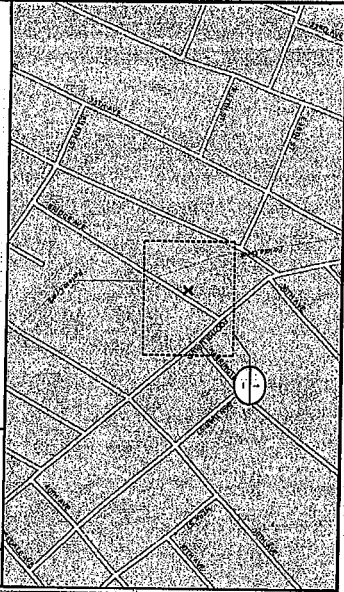
APN# 33-2135-50

OVERALL SITE PLAN

SITE PLAN PHOTO

NO SCALE

A



BRIDGE AVENUE

EXISTING TREE (TYP)

EXISTING ROAD OF WAY (TYP)

EXISTING CENTER LINE OF ROAD (TYP)

EXISTING BUILDING (TYP)

THIS DRAWING IS NOT A SITE SURVEY. THE PURPOSE OF THIS DRAWING IS TO ILLUSTRATE THE PROPOSED PROJECT AND TO RELATE TO THE PROJECT OWNED AND ADJACENT PROPERTIES. R.O.W. MEASUREMENTS ARE APPROXIMATIONS.

16 12 8 4 0 18 32 1

SHEET NUMBER  
**C-1**

SHEET TITLE  
OVERALL SITE PLAN

ADJACENT TO (IN PROJ)  
1817 BRIDGE AVENUE  
OAKLAND, CA 94601

SITE ADDRESS  
EXTENT SYSTEMS (CA) LLC  
2000 CROW CANYON PLACE  
SUITE 210  
SAN RAMON, CA 94583

PRELIMINARY

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| REV | DATE     | DESCRIPTION       |
|-----|----------|-------------------|
| A   | 06/12/16 | ISSUED FOR REVIEW |

PROJECT NO. DRAWN BY CHECKED BY  
193417.4131 SVA GAC

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**BLACK & VEATCH**  
BLACK & VEATCH CORPORATION  
3599 DOW ROAD  
WALWAT CREEK, CA 94597

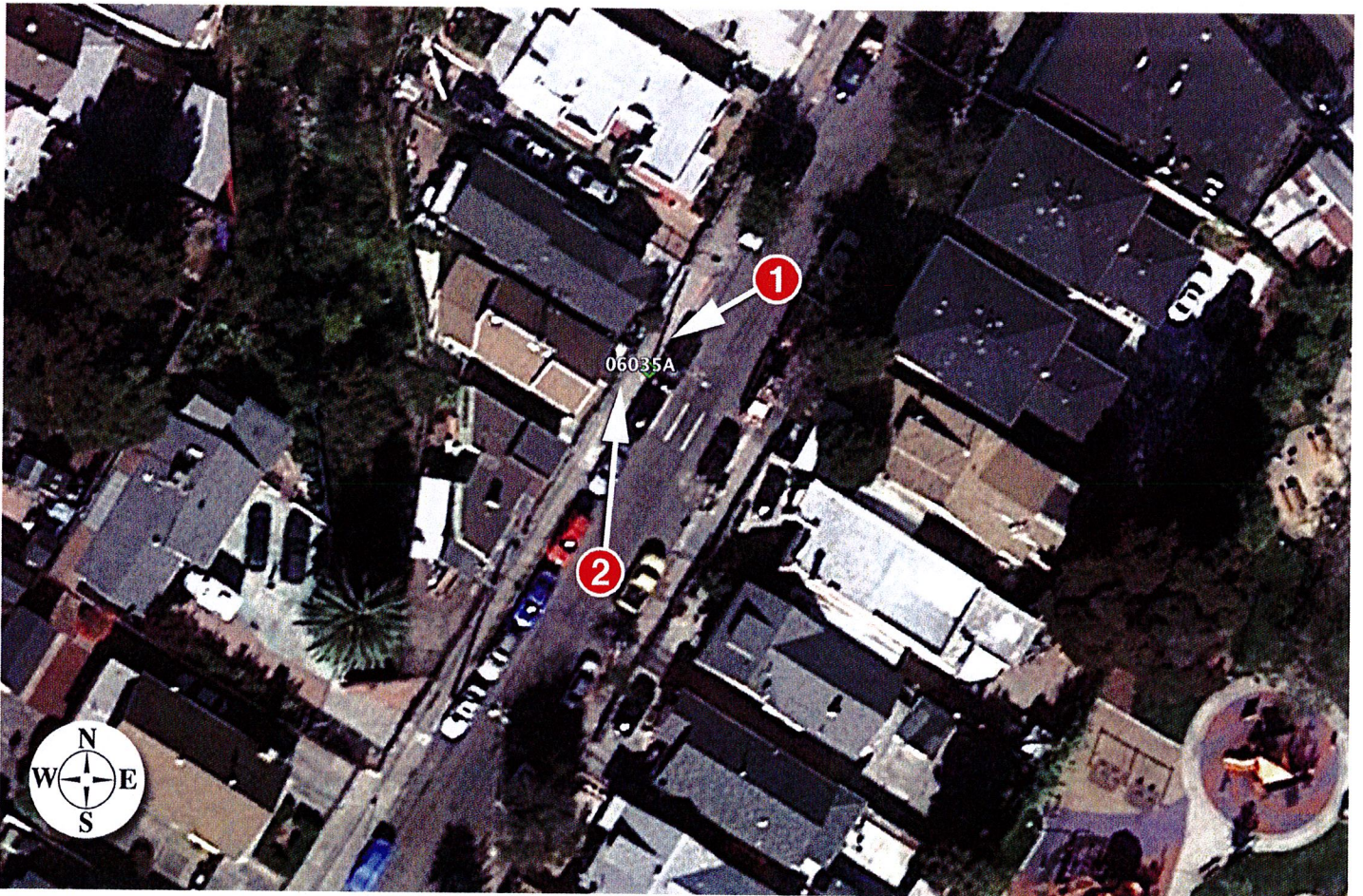
CONSTRUCTION SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
RF SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
REAL ESTATE SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**extenei** interconnectivity  
SYSTEMS













Existing



proposed antenna

Proposed





Existing



proposed antenna

Proposed





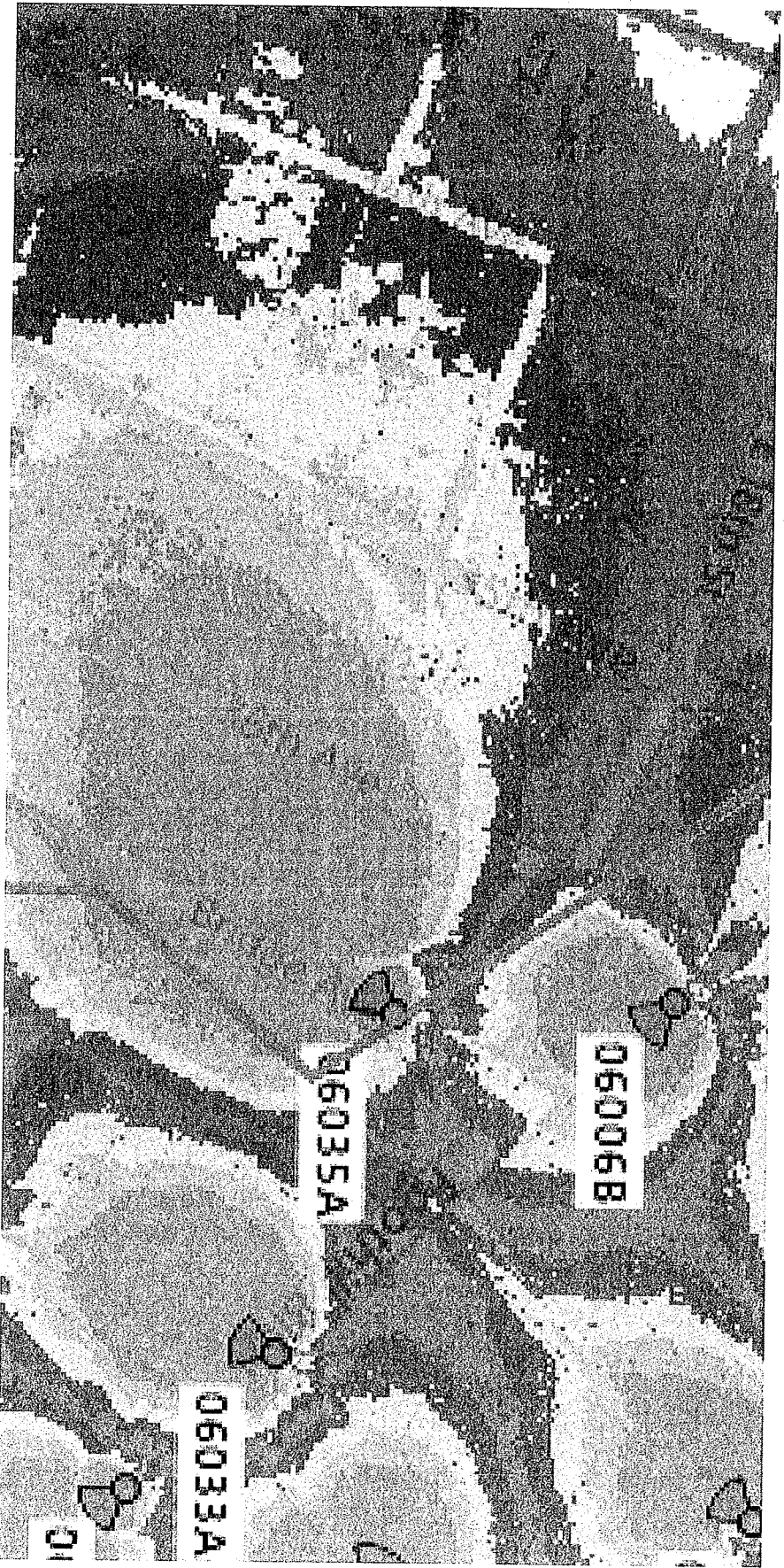
**EXTENET OAKLAND  
NODE 06035A  
ALTERNATIVE SITE ANALYSIS**

# MAP OF ALTERNATIVE POLES EVALUATED FOR NODE 06035A



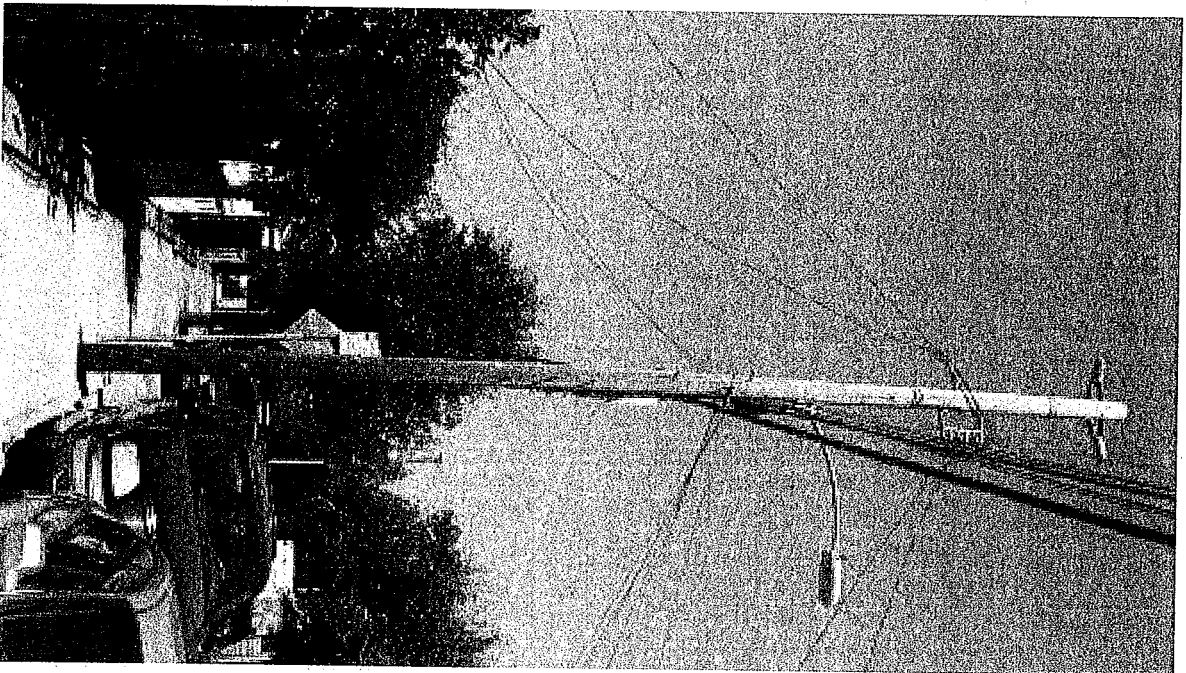
- The above maps depict ExteneNet's proposed Node 06035A in relation to other poles in the area that were evaluated as possibly being viable alternative candidates.
- The following is an analysis of each of those 3 alternative locations.

# PROPAGATION MAP OF NODES 06035A



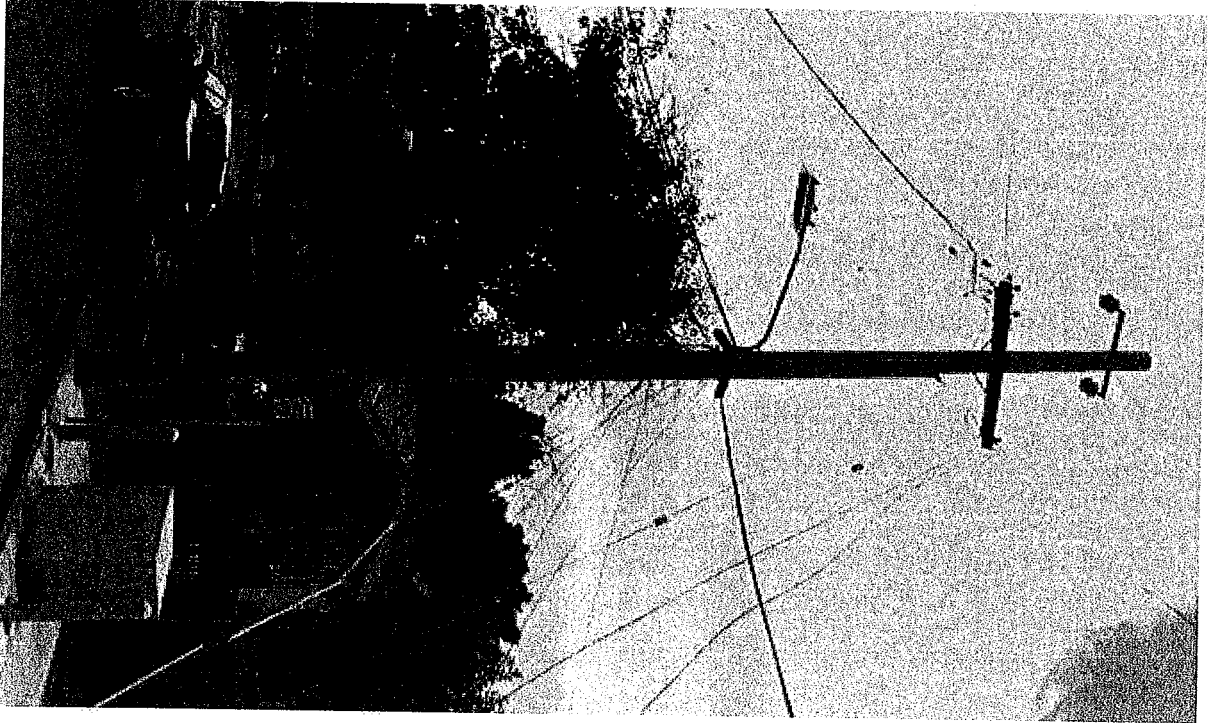
This propagation map depicts the ExtNet proposed Node 06035A in relation to surrounding proposed ExtNet small cell nodes.

## 06035A - PROPOSED LOCATION



- The location for ExteNet's proposed Node 06035A is a joint utility pole located adjacent to PROW at 1817 Bridge Avenue (37.779709, - 122.218466).
- ExteNet's objective is to provide T-Mobile 4G wireless coverage and capacity to the Oakland area.
- ExteNet evaluated this site and nearby alternatives to verify that the selected site is the least intrusive means to close T-Mobile's significant service coverage gap.

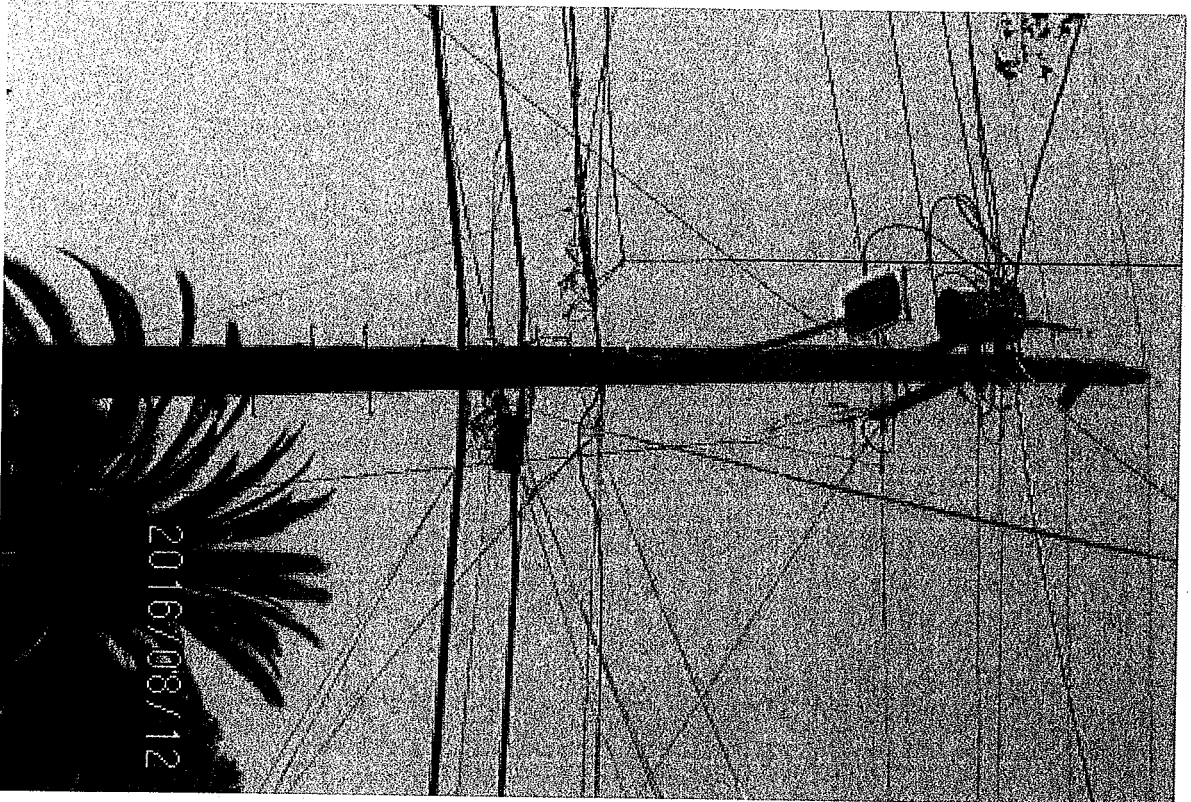
## ALTERNATIVE NODE 06035B



- Node 06035B is a joint utility pole located at 1837 Bridge Avenue (37.780067, - 122.218185).
- This pole is not a viable alternative candidate because this pole is located too close to primary Node 06006B.
- This pole is not a viable alternative candidate because this pole is located too close to primary Node 06006B.



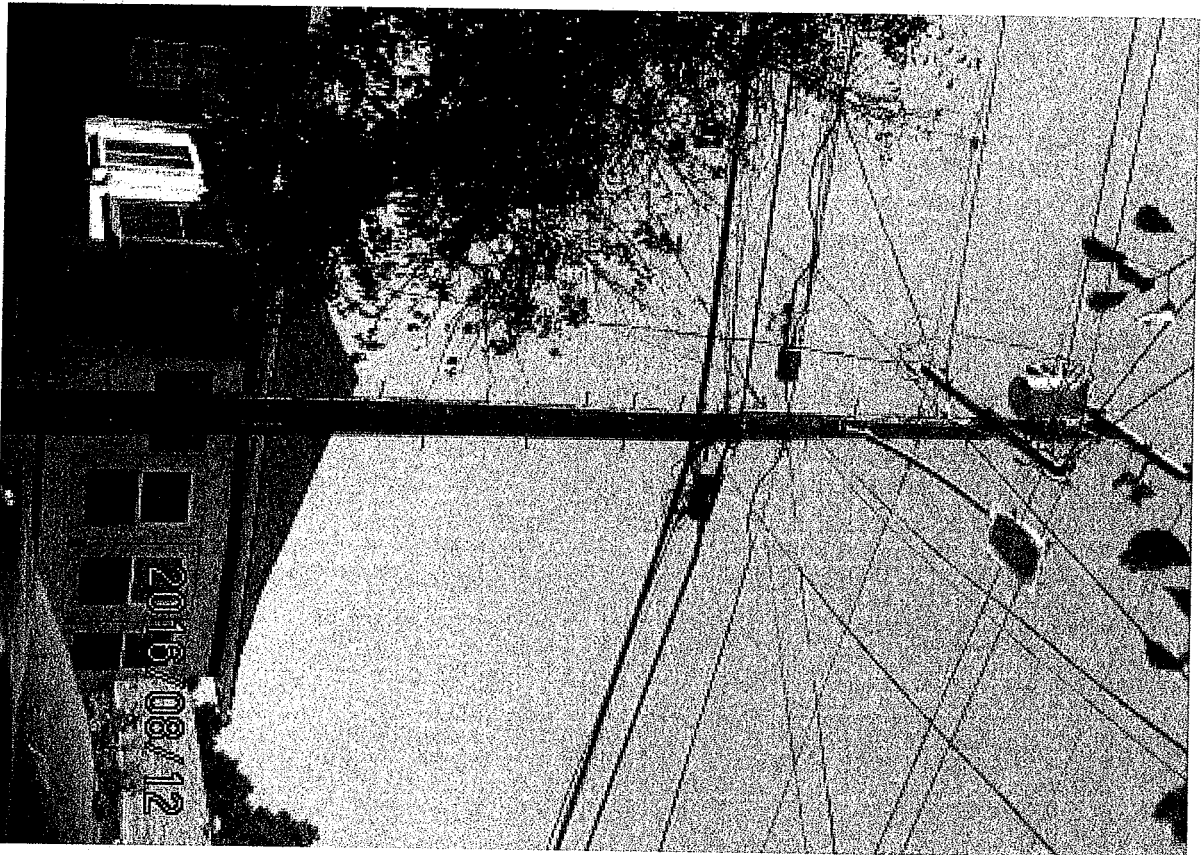
## ALTERNATIVE NODE 06035C



- Node 06035C is a joint utility pole located at 1801 Bridge Avenue (37.779455, -122.218657)
- This pole is not a viable alternative candidate because cross lines and cross arms prevent adequate climbing space on the pole pursuant to CPUC General Order 95, thus prohibiting a wireless facility from being installed at this location.
- This pole is not a viable alternative candidate because the existing transformer on the pole would need to be relocated to an uncertain destination in order to facilitate our proposed wireless installation.
- This pole is not a viable alternative candidate because this pole is located too far from primary Node 06006B.




## ALTERNATIVE NODE 06035D



- Node 06035D is a joint utility pole located near 1725 Bridge Avenue (37.779154, - 122.218884).
- This pole is not a viable alternative candidate because cross lines and cross arms prevent adequate climbing space on the pole pursuant to CPUC General Order 95, thus prohibiting a wireless facility from being installed at this location.
- This pole is not a viable alternative because the signal would be blocked by a tree.
- This pole is not a viable alternative candidate because the existing transformer on the pole would need to be relocated to an uncertain destination in order to facilitate our proposed wireless installation.
- This pole is not a viable alternative candidate because this pole is located too far from primary Node 06006B.

## **ALTERNATIVE SITE ANALYSIS CONCLUSION**

**Based on ExteneNet's analysis of alternative sites, the currently proposed Node 06035A is the least intrusive location from which to fill the surrounding significant wireless coverage gaps.**



**extenet**  
SM  
SYSTEMS

**Thank You!**

**ExteNet Systems CA, LLC • Proposed DAS Node (Site No. 06035A)  
1817 Bridge Avenue • Oakland, California**

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

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of ExteNet Systems CA, LLC, a wireless telecommunications facilities provider, to evaluate the addition of Node No. 06035A to be added to the ExteNet distributed antenna system (“DAS”) in Oakland, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

**Executive Summary**

ExteNet proposes to install a directional panel antenna on a utility pole sited in the public right-of-way at 1817 Bridge Avenue in Oakland. 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 <sup>2</sup> | 1.00 mW/cm <sup>2</sup> |
| 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.



**ExteNet Systems CA, LLC • Proposed DAS Node (Site No. 06035A)**  
**1817 Bridge Avenue • Oakland, California**

A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. 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 attached 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 ExteNet, including drawings by Black & Veatch Corporation, dated September 12, 2016, it is proposed to install one CommScope Model 3X-V65S-GC3-3XR 2-foot tall, tri-directional cylindrical antenna, with one direction activated, on a cross-arm to be added to a utility pole sited in the public right-of-way in front of the residence located at 1817 Bridge Avenue in Oakland. The antenna would employ no downtilt, would be mounted at an effective height of about 25 feet above ground, and its principal direction would be oriented toward 220°T. T-Mobile proposes to operate from this facility with a maximum effective radiated power in any direction of 214 watts, representing simultaneous operation 107 watts for AWS and 107 watts for PCS service. There are reported no other wireless telecommunications base stations at this site or nearby.

### **Study Results**

For a person anywhere at ground, the maximum RF exposure level due to the proposed T-Mobile operation is calculated to be 0.0043 mW/cm<sup>2</sup>, which is 0.43% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building is 2.3% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.



**ExteNet Systems CA, LLC • Proposed DAS Node (Site No. 06035A)  
1817 Bridge Avenue • Oakland, California**

**Recommended Mitigation Measures**


Due to its mounting location and height, the ExteNet antenna would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training be provided to all authorized personnel who have access to the antenna, including employees and contractors of the utility companies. No access within 2 feet directly in front of the antenna itself, such as might occur during certain activities, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory signs\* on the pole at or below the antenna, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

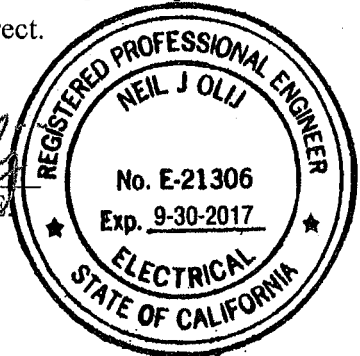
**Conclusion**

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the node proposed by ExteNet Systems CA, LLC, at 1817 Bridge Avenue in Oakland, California, 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 personnel and posting signs is recommended to establish compliance with occupational exposure limitations.

**Authorship**

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-21306, which expires on September 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.

  
Neil J. Olij, P.E.  
707/996-5200



October 21, 2016

\* 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. Signage may also need to comply with the requirements of California Public Utilities Commission General Order No. 95.

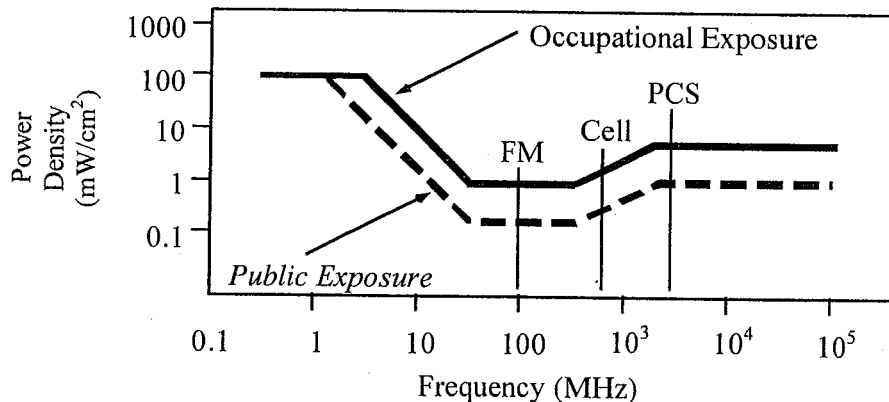


## FCC Radio Frequency Protection Guide

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



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

## RFR.CALC™ Calculation Methodology

### Assessment by Calculation of Compliance with FCC Exposure Guidelines

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

#### Near Field.

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

For a panel or whip antenna, power density  $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$ , in mW/cm<sup>2</sup>,

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<sup>2</sup>,

where  $\theta_{BW}$  = 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

$\eta$  = 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<sup>2</sup>,

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.





October 28, 2016

City Planner  
Planning Department  
City of Oakland  
250 Frank Ogawa Plaza, 2<sup>nd</sup> Floor  
Oakland, CA 94612

**Re: Proposed ExteneNet Small Cell Node Installation**  
**Applicant: ExteneNet Systems (California) LLC**  
**Nearest Site Address: Public Right of Way near 1817 Bridge Avenue**  
**Site ID: NW-CA-SANFRANMC Node 06035A**  
**Latitude/Longitude: 37.779709, -122.218466**

Dear City Planner,

On behalf of ExteneNet Systems (California) LLC, this letter and attached materials are to apply for a design review permit to install a small cell node in the public right-of-way near 1817 Bridge Avenue ("Node 06035A").<sup>1</sup> The following is an explanation of the existing site, a project description of the designed facility, the project purpose and justifications in support of this proposal.

**A. Project Description.**

The proposed location for our facility currently consists of an approximate 38 foot tall wood utility pole in the public right-of-way on the west side of Bridge Avenue just southwest of the intersection with Foothill Boulevard, at about 1817 Bridge Avenue. Power lines are on the pole at about 31 feet, 32 feet and 37 feet above ground.

ExteneNet proposes to swap the pole for a new pole measuring 43 feet above ground and to affix one canister antenna within an antenna shroud on a proposed antenna support. The antenna, measuring 23.5 inches long and 7.9 inches in diameter, will be placed on an antenna support arm attached at 23 feet. Two proposed diplexers measuring 6.4 inches long, 4.6 inches wide and 1.8 inches deep will be placed within the side arm antenna mount. Two MRRUs measuring 7.9 inches tall, 7.9 inches wide and 3.9 inches deep will be placed on the pole at 10 feet 6 inches and 13 feet 4 inches. A miniature emergency shut-off safety switch and electricity meter will be placed on the pole at about eight feet above ground. All equipment will be painted brown to match the utility pole. Our proposal is depicted in the attached design drawings and photographic simulations.

This is an unmanned facility that will operate at all times (24 hours per day, seven days per week) and will be serviced about once per year. Our proposal will greatly benefit the area by improving wireless telecommunications service as detailed below.

**B. Project Purpose.**

<sup>1</sup> ExteneNet expressly reserves all rights concerning the city's jurisdiction to assert zoning regulation over the placement of wireless facilities in the public rights-of-way.

The purpose of this project is to provide T-Mobile third and fourth generation (3G and 4G) wireless voice and data coverage to the surrounding area where there is currently a significant gap in service coverage. These wireless services include mobile telephone, wireless broadband, emergency 911, data transfers, electronic mail, Internet, web browsing, wireless applications, wireless mapping and video streaming. The proposed node is part of a larger small cell providing coverage to areas of Oakland that are otherwise very difficult or impossible to cover using traditional macro wireless telecommunications facilities due to the local topography and mature vegetation. The attached radio frequency propagation maps depict T-Mobile's larger small cell project. Further radio frequency details are set forth in the attached Radio Frequency Statement, including propagation maps depicting existing and proposed coverage in the vicinity of Node 06035A.

A small cell network consists of a series of radio access nodes connected to small telecommunications antennas, typically mounted on existing wooden utility poles within the public rights-of-way, to distribute wireless telecommunications signals. Small cell networks provide telecommunications transmission infrastructure for use by wireless services providers. These facilities allow service providers such as T-Mobile to establish or expand their network coverage and capacity. The nodes are linked by fiber optic cable that carry the signal stemming from a central equipment hub to a node antenna. Although the signal propagated from a node antenna spans over a shorter range than a conventional tower system, small cell can be an effective tool to close service coverage gaps.

### **C. Project Justification, Alternative Site and Design Analysis.**

Node 06035A is an integral part of the overall small cell project, and it is located in a difficult coverage area near E 16th Street. The coverage area consists of a primarily residential neighborhood off of Bridge Avenue, Foothill Boulevard, E 16th Street, and surrounding areas. Node 06035A 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.

Based on ExteNet's analysis of alternative sites the currently proposed Node 06035A is the least intrusive means to close T-Mobile's significant service coverage gap in the area. Node 06035A best uses existing utility infrastructure, adding small equipment without disturbing the character of the neighborhoods served. Deploying a small cell node at an existing pole location minimizes any visual impact by utilizing an inconspicuous spot. By installing antennas and equipment at this existing pole location, T-Mobile does not need to propose any new infrastructure in this coverage area.

The small cell node RF emissions are also much lower than the typical macro site, they are 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.

This proposed redesign is a viable design developed according to our discussions with the Planning Department. As discussed with City Planning, Node 06035A is the least intrusive option. Also the proposed location is a good coverage option because it sits at a spot from which point T-Mobile can adequately propagate its wireless signal.

ExteNet considered alternative sites on other utility poles in this area but none of these sites is as desirable from construction, coverage or aesthetics perspectives. The proposed location is approximately equidistant from other small cell nodes that ExteNet plans to place in surrounding hard-to-reach areas, so that service coverage can be evenly distributed. The proposed facility is not in the path of any protected view sheds. The other utility poles in the area are more conspicuous than the proposed pole. In addition to the utility pole proposed to host Node 06035A, ExteNet considered alternative sites set forth in the attached Alternative Site Analysis.

#### **ExteNet Systems**

2000 Crow Canyon Place, Suite 210 • San Ramon, CA 94583  
(415) 596-3474 • [mvergovich@extenetsystems.com](mailto:mvergovich@extenetsystems.com)

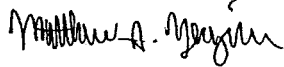
Alternative designs were considered including placing equipment inside of a ground-mounted cabinet. However, the pole-mounted equipment would better suit the area because it would blend in with the pole. We also evaluated whether equipment could be undergrounded but unfortunately this is not possible because there is insufficient right-of-way space for the necessary equipment access and the equipment would be compromised from saturation by rainwater. The antennas cannot be undergrounded because they rely on a line-of-site in order to properly transmit a signal.

Drawings, propagation maps, photographic simulations, 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<sup>2</sup> requires the city to issue its final decision on ExteNet'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.

Thank you.

Best Regards,  
EXTENET SYSTEMS



*Matthew S. Yergovich*

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<sup>2</sup> 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).



# OAKLAND

## CITY OF OAKLAND BUREAU OF PLANNING

250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612-2031  
Phone: 510-238-3911 Fax: 510-238-4730

### PLANNING COMMISSION PUBLIC NOTICE

|                                     |   |
|-------------------------------------|---|
| <b>Location:</b>                    | Utility pole in sidewalk adjacent to: 1817 Bridge Avenue (southwest of Foothill Boulevard)  |
| <b>Assessor's Parcel Number(s):</b> | 033-2134-010-00   |
| <b>Proposal:</b>                    | To establish a "small cell site" telecommunications facility, in order to enhance existing services, by attaching an antenna and equipment up to 26'-3" on a 43' wooden utility pole located in the public right-of-way (sidewalk).   |
| <b>Applicant / Phone Number:</b>    | Ana Gómez/Black & Veatch & Extener (for: T-Mobile) (913) 458-9148   |
| <b>Owner:</b>                       | Extener et al.  |
| <b>Case File Number:</b>            | PLN16368  |
| <b>Planning Permits Required:</b>   | Regular Design Review with additional findings for Macro Telecommunications Facility  |
| <b>General Plan:</b>                | Mixed Housing Type Residential  |
| <b>Zoning:</b>                      | RM-2  |
| <b>Environmental Determination:</b> | Exempt, Section 15301 of the State CEQA Guidelines: Existing Facilities;<br>Exempt, Section 15302: Replacement or Reconstruction;<br>Exempt, Section 15303: New Construction of Small Structures;<br>Section 15183: Projects Consistent with a Community Plan, General Plan or Zoning |
| <b>Historic Status:</b>             | Non historic property   |
| <b>City Council District:</b>       | 5   |
| <b>Date Filed:</b>                  | November 20, 2016   |
| <b>Action to be Taken:</b>          | Decision based on staff report  |
| <b>Finality of Decision:</b>        | Appealable to City Council  |
| <b>For Further Information:</b>     | Contact case planner Marilu Garcia at (510) 238-5217 or by email at <a href="mailto:mgarcia2@oaklandnet.com">mgarcia2@oaklandnet.com</a> .  |

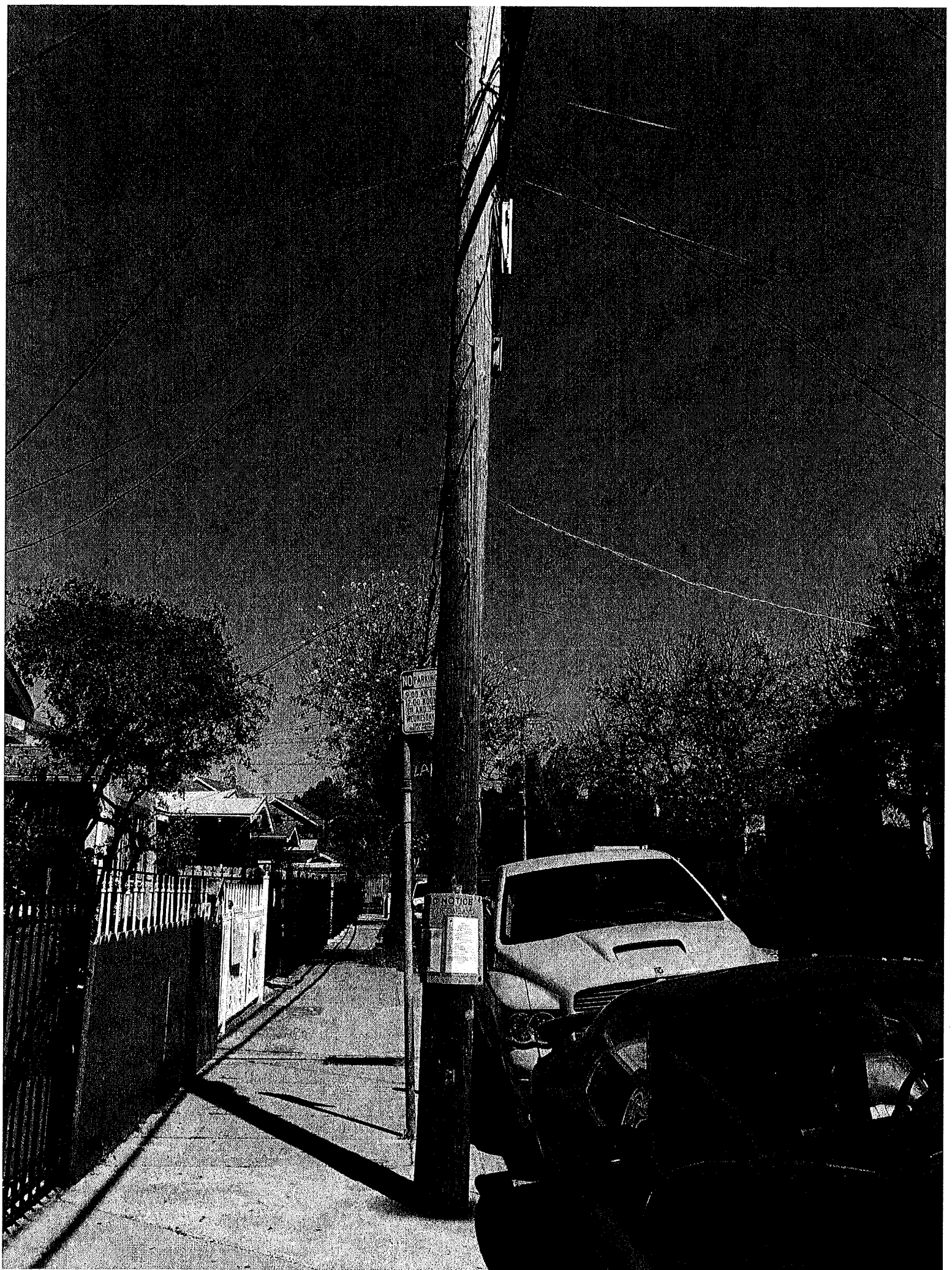
If any, should be directed to the Bureau of Planning, 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, California 94612-2031 at or prior to the public hearing on **April 19, 2017**, at Oakland City Hall, Council Chambers, 1 Frank H. Ogawa Plaza, Oakland, California 94612. The public hearing will start at 6:00 p.m.

Commission decision on appeal and/or in court, you will be limited to issues raised at the public hearing or in correspondence delivered to the Bureau of Planning prior to the public hearing on this case. If you wish to be notified of the decision of any of these cases, please provide the case planner with a regular mail or email address.

The decision of the application found above is preliminary in nature and that the project and/or such description may change prior to a decision being made. Such appeal must be filed within ten (10) business days of the date of the decision reached by the Planning Commission on these cases. They are appealable to the City Council. Such appeal must be filed within ten (10) business days of the date of the decision reached by the Planning Commission and by 4:00 p.m. An appeal shall be on a form provided by the Bureau of Planning, and submitted to the Bureau of Planning, 250 Frank H. Ogawa Plaza, Suite 2114, to the attention of the Case Planner. The appeal shall state specifically wherein it is claimed there was error or abuse of discretion on the part of the Planning Commission and must include payment in accordance with the City of Oakland Master Fee Schedule. The appeal shall be supported by substantial evidence and must include payment in accordance with the City of Oakland Master Fee Schedule. Failure to do so will preclude you from challenging the City's decision in court. The appeal itself must raise every issue that is contested along with all the evidence supporting the appeal. Failure to do so will preclude you from raising such issues during the public hearing on this case. The appeal itself must be filed with the City of Oakland, 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612-2031, on or before the date of the public hearing mentioned above. Failure to do so will preclude you from raising such issues during the public hearing on this case.

POSTING DATE: March 31, 2017

IT IS UNLAWFUL TO ALTER OR REMOVE THIS NOTICE WHEN POSTED ON SITE



NO PARKING  
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FOR THE  
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NO PARKING  
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March 31, 2017

City Planner  
Planning Department  
City of Oakland  
250 Frank H. Ogawa Plaza, 2<sup>nd</sup> Floor  
Oakland, CA 94612

**Re: Public Outreach Summary**

**Applicant:** ExteneNet Systems (California) LLC  
**Nearest Site Address:** Public Right of Way near 1817 Bridge Avenue  
**Site ID:** NW-CA-SANFRNMC-TMO Node 06035A  
**Latitude/Longitude:** 37.779709, -122.218466  
**Planning Application:** PLN16368

Dear City Planner,

This week we notified the following groups by sending them the attached project flier:

- The Unity Council
- Friends of Peralta Hacienda Historical Park

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

Best Regards,

*Ana Gomez/PSV for ExteneNet*

Ana Gomez  
ExteneNet Permitting Contractor



# ExteneNet is improving wireless service in Oakland!

January 4, 2017

ExteneNet Systems is a neutral host telecommunications infrastructure provider that is working to improve wireless service in Oakland.

We will soon be proposing to install fiberoptic cables and state-of-the-art small cell wireless facilities at existing telephone pole and light pole locations in the Oakland public right-of-way.

Telecommunications carriers transmit their signal through ExteneNet's facilities to improve wireless voice, data, and public safety connectivity.

Although experiences with wireless services vary based on specific location and usage times, the wireless service proposed by this infrastructure will help meet existing, fluctuating and future demands.

Please see attached examples of actual ExteneNet facilities like the ones we will be proposing in Oakland.

## **Want to learn more?**

Please visit <http://www.extenetsystems.com/> or email [myergovich@extenetsystems.com](mailto:myergovich@extenetsystems.com).







March 31, 2017

City Planner  
Planning Department  
City of Oakland  
250 Frank H. Ogawa Plaza, 2<sup>nd</sup> Floor  
Oakland, CA 94612

**Re: GO 95 Required Two Feet Clearance Between Antenna and Pole**  
**Applicant: ExteNet Systems (California) LLC**  
**Nearest Site Address: Public Right of Way near 1817 Bridge Avenue**  
**Site ID: NW-CA-SANFRNMC-TMO Node 06035A**  
**Latitude/Longitude: 37.779709, -122.218466**  
**Planning Application: PLN16368**

Dear City Planner,

This letter is in response to discussions with City of Oakland Planning Department seeking clarification on the proposed antenna placement on the utility pole.

Wireless facility attachments to utility poles must comply with CPUC General Order 95 design, safety and clearance standards. Specifically, Rule 94.4(E) states: *Antennas shall maintain a 2 ft horizontal clearance from centerline of pole when affixed between supply and communication lines or below communication lines.* This rule precludes ExteneNet from placing the antennas flush mounted to the utility pole when there is a power source attached to the pole. ExteneNet minimized the clearance as much as possible by placing the antenna shroud just over two feet from the centerline of the utility pole.

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

Thank you.

Best Regards,

A handwritten signature in blue ink that reads "Ana Gomez/BV for ExteneNet".

Ana Gomez  
ExteneNet Permitting Contractor