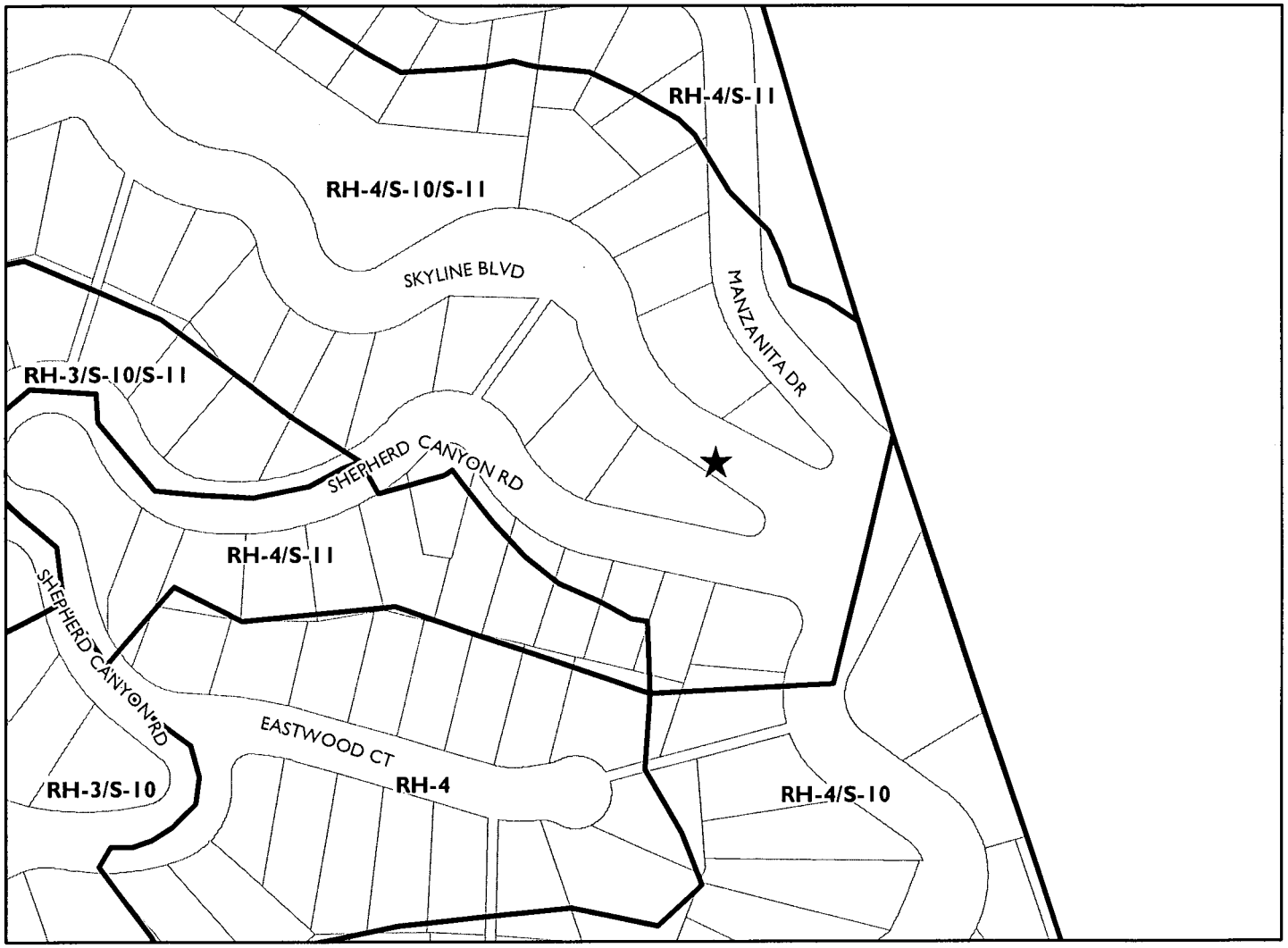
Case File Number: PLN15-181 **October 7, 2015**

Location:	**The Public Right of Way near to 8173 Skyline Boulevard. (See map reverse)**
Assessors Parcel Numbers:	**Nearest lot adjacent to the project site (048E-7321-022-04)**
Proposal:	The project involves the installation of a new wireless Telecommunications facility (AT&T Wireless) on a new 45' tall wood pole located in the public right-of-way; installation of two panel antennas (two-foot long and ten inches wide) mounted at 45 feet above the ground; an associated equipment box, one battery backup and electrical meter boxes meter box within a 8 foot long by 2 foot wide equipment shroud mounted on the pole at 8 feet above the ground.
Applicant:	Extenet Systems Inc./AT&T Mobility
Contact Person/ Phone Number:	Matthew Yergovich (415) 596-3474
Owner:	City of Oakland
Case File Number:	PLN14-181
Planning Permits Required:	Major Conditional Use Permit and Design Review to install a new Monopole Telecommunication Facility in the residential zone.
General Plan:	Hillside Residential
Zoning:	RH-4/S-10/S-11 Zone
Environmental Determination:	Exempt, Section 15303 of the State CEQA Guidelines; New construction of small structures. Section 15183 of the State CEQA Guidelines; projects consistent with a community plan, General Plan or zoning.
Historic Status:	Not a Potential Designated Historic Property; Survey Rating: N/A
Service Delivery District:	3
City Council District:	4
Date Filed:	4/14/2015
Finality of Decision:	Appealable to City Council within 10 days
For Further Information:	Contact case planner Jason Madani at **(510) 238-4790** or jmadani@oaklandnet.com

SUMMARY

The proposal is to install a new wireless Telecommunications Facility on a new 45 foot tall wood pole designed to resemble a PG&E utility pole located in the public right-of-way near to 8173 Skyline Boulevard and adjacent to City of Oakland vacant sloped parcel and about 10 feet west of existing "bicycle sign". ExteNet Systems Inc. for (AT&T Mobility) is proposing to install two panel antennas (two-feet long and ten inches wide) mounted at 45' pole height; an associated equipment box, one battery backup and electrical meter box within an 8 foot long by 2 foot wide

CITY OF OAKLAND PLANNING COMMISSION



Case File: PLN15181
Applicant: ExteNet System for AT&T Mobility
Address: The public Right of Way near 8173 Skyline Boulevard
Zone: RH-4 /S-10/S-11

equipment shroud mounted on the pole at 8 feet above the ground. Because this installation is a stand-alone telecommunication pole and not a joint-use utility pole, it is considered a Monopole by City of Oakland regulations. A Major Conditional Use Permit and Design Review is required for the installation of a new Monopole Telecommunication Facility in a residential zone. Staff believes, given the topography, mature vegetation, and lack of close residences, the project meets all the required findings listed below for an approval of the project.

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.

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 FCC standards in this regard. See, 47 U.S.C. 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.

47 U.S.C.332(c) (7) (B) (ii). See 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, contact Steve Markendorff, Chief of the Broadband Branch, Commercial Wireless Division, Wireless Telecommunications Bureau, at (202) 418-0640 or e-mail "smarkend@fcc.gov".

PROJECT DESCRIPTION

The applicant (Extenet Systems Inc. for AT&T Mobility) is proposing to install a new 45-foot tall wood pole located in the City of Oakland public right-of-way. The project involves installation of two panel antennas (two-feet long and ten inches wide) mounted at 45' pole above ground; an associated equipment box, one battery backup and electrical meter box within a 8 foot long by 2 foot wide equipment shroud mounted on the pole at 8 feet above the ground. **(See Attachment A)**

PROPERTY DESCRIPTION

The project site is located in the City of Oakland public right-of-way near 8173 Skyline Boulevard and adjacent to a City of Oakland owned vacant sloped parcel and about 10 feet west of existing "bicycle sign" near to the intersection of Shepherd Canyon Road and Skyline Boulevard.

GENERAL PLAN ANALYSIS

The subject property is located within the Hillside Residential General Plan designation. The Hillside Residential Land Use Classification is intended "to identify, create, maintain and enhance neighborhood residential areas that are characterized by detached, single unit structures on hillside lot. The antennas and equipment cabinet will be mounted on a monopole telecommunication facility located in public right-of-away and is camouflage with the existing mature tall trees; therefore, the proposed unmanned wireless telecommunication facility will not adversely affect or detract from the residential characteristics of the neighborhood.

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ZONING ANALYSIS

The project site is located in RH-4 Hillside Residential, S-10 Scenic Route Combining and S-11 Site Development and Design Review Combining Residential Zones. The intent of the RH-4 Zone is: "to create, preserve, and enhance areas for single-family estate living at very low densities in spacious environments and is typically appropriate to portions of the Oakland hill areas. The proposal for a new unmanned wireless telecommunication facility on a new monopole telecommunication facility requires a Major Conditional Use Permit and Design Review because the project is located within a residential zone. Given the topography, mature vegetation, and limited close homes, the proposed monopole will be camouflaged by the existing mature trees. Staff finds that the proposal meets the applicable RH-4 and S-10 and S-11 zoning and City of Oakland Telecommunication regulations.

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines list the projects that qualify as categorical exemptions from environmental review. The proposed project is categorically exempt from the environmental review requirements pursuant to Section 15303, new construction of small structures, and 15183, projects consistent with a community plan, general plan or zoning.

KEY ISSUES AND IMPACTS

1. Conditional Use Permit and Design Review

Section 17.17.040 and 17.128.080 of the City of Oakland Planning Code requires a Conditional Use Permit and Design Review to install a Monopole Telecommunication facility in the RH-4 zone. Furthermore, Section 17.134.020 defines a major and minor conditional use permit. Subsections (A) (3) (i) lists a major conditional use permit: "Any telecommunication facility within any residential zone". The required findings for a major conditional use permit are listed and included in staff's evaluation as part of this report.

2. Project Site

Section 17.128.110 of the City of Oakland Telecommunication Regulations indicate that new wireless facilities shall generally be located on designated properties or facilities in the following 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 non-residential zones (excluding all HBX Zones and the D-CE3 and D-C-4 Zones).
D. Existing commercial or industrial structures in residential zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
E. Other non-residential uses in residential zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
F. Residential uses in non-residential 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.

Since the proposed project involves installation of a new monopole facility with new antennas and associated equipment cabinets on a site, the proposed project meets (B), hence a site alternatives analysis is not required, although the applicant did provide one.

Alternative Site Analysis:

ExteNet considered alternative sites on other utility poles in this area but none of these sites are as desirable from a coverage perspective or from an aesthetics perspective to minimize visual impact. The proposed location is approximately equidistant from other DAS nodes proposed in the surrounding area so that service coverage can be evenly distributed.

Staff has reviewed the applicant's written evidence of an alternative sites analysis (see attachment C) and determined that the site selected conforms to the telecommunication regulation requirements. In addition, staff agrees that no other sites are more suitable. The project has met design criteria (B and G) since, the proposed two (2) new antennas are mounted

on a new monopole facility 45' above ground, an associated equipment box within a 8 foot long by 2 foot wide equipment shroud mounted on the pole at 8feet above the ground.

3. Project Design

Section 17.128.120 of the City of Oakland Telecommunications Regulations indicates that 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 higher preference design alternative can not 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).

City of Oakland Planning staff has reviewed and determined that the site selected conforms to all other telecommunication regulation requirements. The project has met design criteria (C) since the antennas will be mounted on a new wood pole resembling existing PG&E wood poles and is adjacent to City of Oakland vacant parcel with mature trees, the wooden pole will be camouflaged partially within the existing mature trees and an associated equipment cabinet will be within a singular equipment box (shroud) attached to the pole and painted to match the color of wooden pole to minimize potential visual impacts from public view. The applicant has revised the original location of their proposal to this site to reduce potential impact on the adjacent neighboring properties. (**See Attachment C**)

4. Project Radio Frequency Emissions Standards

Section 17.128.130 of the City of Oakland Telecommunication Regulations require that the applicant submit the following verifications including requests for modifications to existing facilities:
a. The telecommunications regulations require that the applicant submit written documentation demonstrating that the emission from the proposed project are within the limits set by the Federal Communications Commission. In the document (attachment B) prepared by Hammett & Edison RF Compliance Experts, Inc. Inc. Registered Professional Engineer, the proposed project was evaluated for compliance with appropriate guidelines limiting human exposure to radio

frequency electromagnetic fields. According to the report on the proposal, the project will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, the proposed site will operate within the current acceptable thresholds as established by the Federal government or any such agency that may be subsequently authorized to establish such standards.
b. 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.

The RF emissions report, states that the proposed project will not cause a significant impact on the environment. Additionally, staff recommends that prior to the final building permit sign off; the applicant submit a certified RF emissions report stating that the facility is operating within acceptable thresholds established by the regulatory federal agency.

CONCLUSION

The proposed project meets all of the required findings for approval. The proposal will provide an essential telecommunication services to the community and the City of Oakland at large. It will also be available to emergency services such as Police, Fire and Health response teams. Staff believes that the findings for approval can be made to support the Conditional Use Permit and Design Review.

RECOMMENDATIONS:

1. Affirm staff's environmental determination

2. Approve Major Conditional Use Permit, and Design Review application PLN14-181 subject to the attached findings and conditions of approval.

Prepared by:

Jason Madani
Planner II

Reviewed by:

Scott Miller
Zoning Manager

Reviewed by:

Darin Ranelletti, Deputy Director
Bureau of Planning and Building

Approved for forwarding to the
City Planning Commission

Rachel Flynn, Director
Bureau of Planning and Building

ATTACHMENTS:

A. Project Plans & Photo simulations
B. Site Safe RE Compliance Experts RF Emissions Report
C. Site Alternative Analysis and Coverage Maps

FINDINGS FOR APPROVAL

FINDINGS FOR APPROVAL:
This proposal meets all the required findings under Section 17.134.050, of the General Use Permit criteria; all the required findings under Section 17.136.050. (B), of the Non-Residential Design Review criteria; all the required findings under Section 17.128.080 (B), of the telecommunication facilities (Monopole) Design Review criteria; and all the required findings under Section 17.128.080. (C), of the telecommunication facilities (Monopole) Conditional Use Permit criteria; and as set forth below and which are required to approve your application. Required findings are shown in **bold** type; reasons your proposal satisfies them are shown in normal type.

SECTION 17.134.050 – GENERAL USE PERMIT FINDINGS:

A. That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development.

The purpose of the project is to enhance wireless telecommunications in the area along Skyline line Boulevard. The new facilities are designed to resemble utility poles found in the area and is located next to a vacant City of Oakland vacant sloped parcel with mature tall trees. The proposal will be partially camouflaged by the existing mature trees. The facility will be unmanned and will not create additional vehicular traffic in the area and will not adversely affect the operating characteristics or livability of the hillside area.

B. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant.

The proposed unmanned wireless telecommunication facility will not adversely affect or detract from the civic, commercial or residential characteristics of the neighborhood, because the antennas will be mounted on a monopole telecommunication facility located in an unpopulated area

C. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.

The proposed development will enhance the successful operation of the surrounding area in its basic community function and will provide an essential service to the community or region. This will be achieved by improving the functional use of the site by providing a regional telecommunication facility for the community, which will be available to police, fire, public safety organizations and the general public.

D. That the proposal conforms to all applicable design review criteria set forth in the DESIGN REVIEW PROCEDURE of Chapter 17.136 of the Oakland Planning Code.

The proposal conforms with all significant aspects of the design review criteria set forth in Chapter 17.136 of the Oakland Planning Code, as outlined below.

E. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

The proposal conforms in all significant aspects with the Oakland General Plan and with any other applicable plan or zoning maps adopted by the City of Oakland. The proposed monopole telecommunication facility expansion in the Hillside Residential General Plan designation will enhance and improve communication service for a mix of civic, commercial, residential and institutional uses in the area.

17.136.050(B) – NONRESIDENTIAL DESIGN REVIEW CRITERIA:

1. That the proposal will help achieve or maintain a group of facilities which are well related to one another and which, when taken together, will result in a well-composed design, with consideration given to site, landscape, bulk, height, arrangement, texture, materials, colors, and appurtenances; the relation of these factors to other facilities in the vicinity; and the relation of the proposal to the total setting as seen from key points in the surrounding area. Only elements of design which have some significant relationship to outside appearance shall be considered, except as otherwise provided in Section 17.136.060;

The proposal is to install a new 45' tall wood pole located in the public right-of-way. The project involves the installation of two panel antennas mounted at 45' above the ground; an associated equipment box, one battery backup and meter boxes within a shroud mounted on the pole at 8 feet above the ground and located within the City of Oakland public right–of-way. It is partially camouflaged with mature tall trees.

2. That the proposed design will be of a quality and character which harmonizes with, and serves to protect the value of, private and public investments in the area;

The design will be appropriate and compatible with current zoning and general plan land use designations. The antennas will be located on a monopole designed to look like a PG&E utility pole set in a wooded area and will have minimal visual impacts as seen from the roadway.

3. 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 proposal conforms with the City of Oakland General Plan and meets specific General Plan policies and the Supplemental Report and Recommendations on Revisions to the Citywide Telecommunications Regulations. The proposal will conform to performance standards for noise set forth in Section 17.120.050 for decibels levels in residential areas for both day and nighttime

use. The Project conforms to all monopole-facility definitions set forth in Section 17.128.080 and meets all design review criteria to minimize all impacts throughout the neighborhood.

17.128.080(B) DESIGN REVIEW CRITERIA FOR MONOPOLE FACILITIES

1. Collocation is to be encouraged when it will decrease visual impact and collocation is to be discouraged when it will increase negative visual impact:

The proposed project entails a new monopole design to look like a PG&E utility pole set in a wooded area and will have minimal visual impacts as seen from the roadway.

2. Monopoles should not be sited to create visual clutter or negatively affect specific views:

The proposed antennas will be mounted to a monopole which will be located in an area with limited houses and is screened by dense vegetation. Given the topography, and the location of wooden pole, the project will have minimal visual impacts in the hillside area.

3. Monopoles shall be screened from the public view wherever possible:

See above #2 finding

4. 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:

The associated equipment box, one battery backup and meter boxes will be within a 8 foot long by 2 foot wide equipment shroud attached to the utility pole and painted to match the wooden pole. The equipment will be placed where it will not be accessed by the public.

5. Site location and development shall preserve the preexisting character of the surrounding buildings and land uses and the zone district as much as possible. Wireless communication towers shall be integrated through location and design to blend in with the existing characteristics of the site to the extent practical. Existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized, unless such disturbance would result in less visual impact of the site to the surrounding area:

The proposed antennas will be located on a monopole in an area with limited houses, and screened by existing dense vegetation. Based on the location of site, the proposed monopole will not result in a visual impact and will blend in with the existing characteristics of the site.

6. 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 antennas will be mounted to a monopole and will not be accessible to the public due to its location. The equipment cabinet will be located in a service area which is only accessible to maintenance workers and not to the public.

Section 17.128.080(C) CONDITIONAL USE PERMIT (CUP) FINDINGS FOR MONOPOLE FACILITIES

1. The project must meet the special design review criteria listed in subsection B of this section (17.128.080C):

The proposed project meets the special design review criteria listed in section 17.128.080B. (see Staff's findings in the preceding Section).

2. Monopoles should not be located any closer than one thousand five hundred (1,500) feet from existing monopoles unless technologically required or visually preferable:

The site is appropriate because the proposed antennas will be located on a monopole in an area with limited homes, and existing tall trees and will serve the near by residential neighborhood without actually being located on a residential property.

3. The proposed project must not disrupt the overall community character:

The site is appropriate because the proposed antennas will be located on a monopole within City of Oakland public right-of-way in wooded area, thus it will not disrupt the overall community character of the site.

4. *If a Major Conditional Use Permit is required,* the Planning Director or the Planning Commission may request independent expert review regarding site location, collocation and facility configuration. Any party may request that the Planning Commission consider making such request for independent expert review.
a. If there is any objection to the appointment of an independent expert engineer, the applicant must notify the Planning Director within ten days of the Commission request. The Commission will hear arguments regarding the need for the independent expert and the applicant's objection to having one appointed. The Commission will rule as to whether an independent expert should be appointed.
b. Should the Commission appoint an independent expert, the Commission will direct the Planning Director to pick an expert from a panel of licensed engineers, a list of which will be compiled, updated and maintained by the Planning Department.
c. No expert on the panel will be allowed to review any materials or investigate any application without first signing an agreement under penalty of perjury that the expert will keep confidential any and all information learned during the investigation of the application. No personnel currently employed by a telecommunication company are eligible for inclusion on the list.
d. An applicant may elect to keep confidential any proprietary information during the expert's investigation. However, if an applicant does so elect to keep confidential various items of proprietary information, that applicant may not introduce the confidential proprietary information for the first time before the Commission in support of the application.
e. The Commission shall require that the independent expert prepare the report in a timely fashion so that it will be available to the public prior to any public hearing on the application.

f. Should the Commission appoint an independent expert, the expert's fees will be paid by the applicant through the application fee, imposed by the city.
N/A

CONDITIONS OF APPROVAL
PLN14-181

STANDARD CONDITIONS:

1. Approved Use
Ongoing

a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, **PLN14-181**, and the plans dated **August 15, 2015** and submitted on **September 2, 2015** and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall required prior written approval from the Director of City Planning or designee.

b) This action by the City Planning Commission ("this Approval") includes the approvals set forth below. This Approval includes: **The project involves the installation of a new wireless Telecommunications facility (AT&T Wireless) on a new 45' tall wood pole located in the public right-of-way; installation two panel antennas (two-foot long and ten inches wide) mounted at 45 feet above the ground; an associated equipment box, one battery backup and electrical meter boxes meter box within a 8 foot long by 2 foot wide equipment shroud mounted on the pole at 8 feet above the ground.**

2. Effective Date, Expiration, Extensions and Extinguishment
Ongoing

Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the approval date, 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 permit, 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 for this project may invalidate this Approval if the said extension period has also expired.

3. Scope of This Approval; Major and Minor Changes
Ongoing

The project is approved pursuant to the **Oakland Planning Code** only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

4. Conformance with other Requirements
Prior to issuance of a demolition, grading, P-job, or other construction related permit

a) The project applicant shall comply with all other applicable federal, state, regional and/or local codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency.

b) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to automatic extinguishing systems, water supply improvements and hydrants, fire department access, and vegetation management for preventing fires and soil erosion.

5. Conformance to Approved Plans; Modification of Conditions or Revocation

Ongoing

a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.

b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.

c) Violation of any term, conditions or project description relating to the Approvals 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 Approvals 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.

6. Signed Copy of the Conditions

With submittal of a demolition, grading, and building permit

A copy of the approval letter and conditions shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

7. Indemnification

Ongoing

a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (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, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the 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 applicant shall execute a Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and

the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter of Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or Conditions of Approval that may be imposed by the City.

8. Compliance with Conditions of Approval

Ongoing

The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

9. Severability

Ongoing

Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified conditions, and if any 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 Management

Prior to issuance of a demolition, grading, and/or construction permit

The project applicant may be required to pay for on-call special inspector(s)/inspections as needed during the times of extensive or specialized plan check review, or construction. The project applicant may also be required to cover the full costs of independent technical and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

12. Days/Hours of Construction Operation

Ongoing throughout demolition, grading, and/or construction

The project applicant shall require construction contractors to limit standard construction activities as follows:

a) Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving 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. Monday through Friday.

b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.

c) Construction activity shall not occur on Saturdays, with the following possible exceptions:

i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.

ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.

d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.

e) No construction activity shall take place on Sundays or Federal holidays.

f) 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.

13. Landscape Maintenance

Ongoing

All new landscaping shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements.

14. Operational Noise-General

Ongoing

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.

PROJECT SPECIFIC CONDTIONS:

15. Radio Frequency Emissions

Prior to the final building permit sign off

The applicant shall submit a certified RF emissions report stating the facility is operating within the acceptable standards established by the regulatory Federal Communications Commission.

16. Monopole height limitation

Prior to the issuance of building permit

The applicant shall submit a revised elevation to indicate that, the proposed monopole structure height is limited to 45 feet.

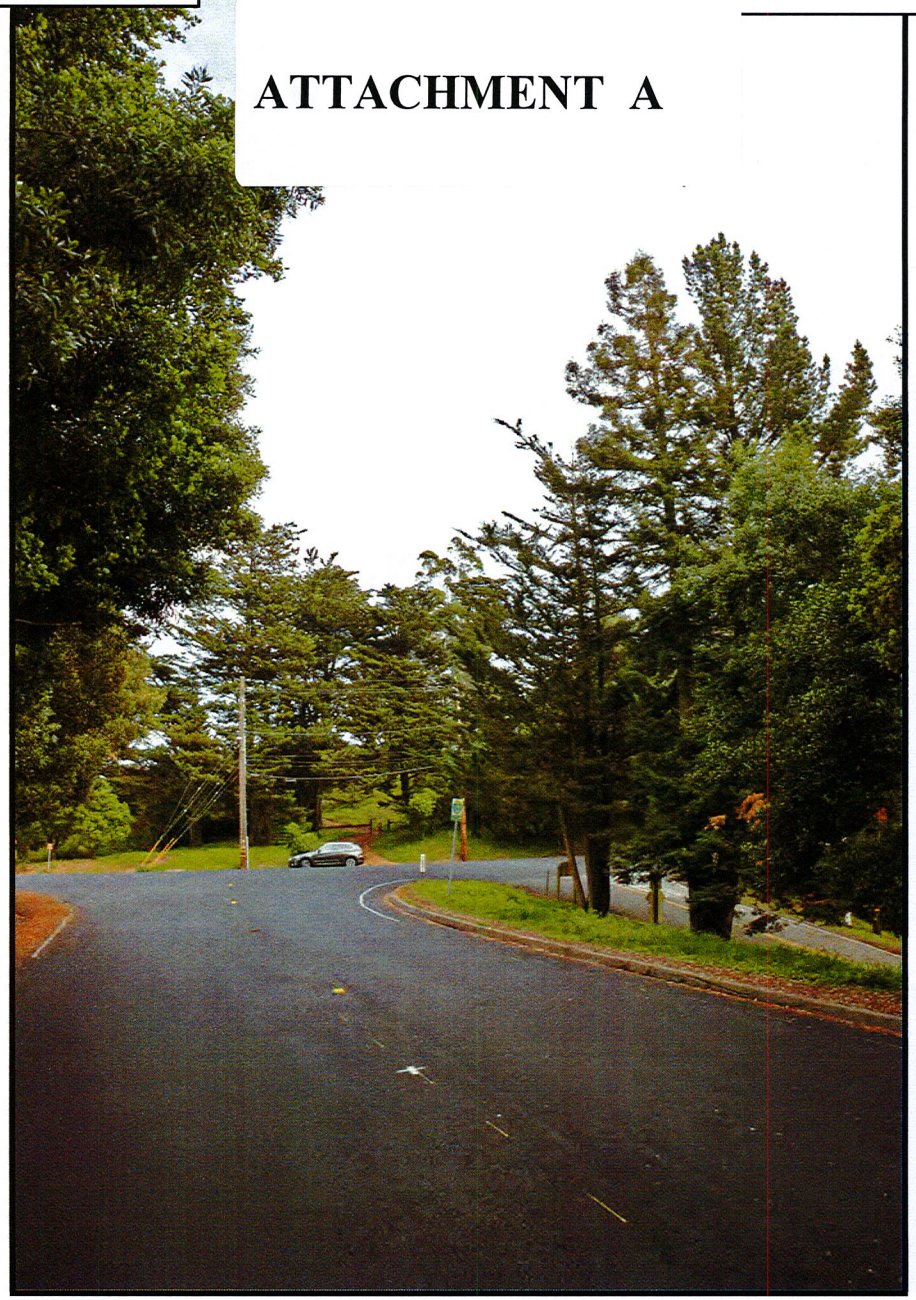
view from Skyline Blvd looking southeast at site

AT&T Wireless

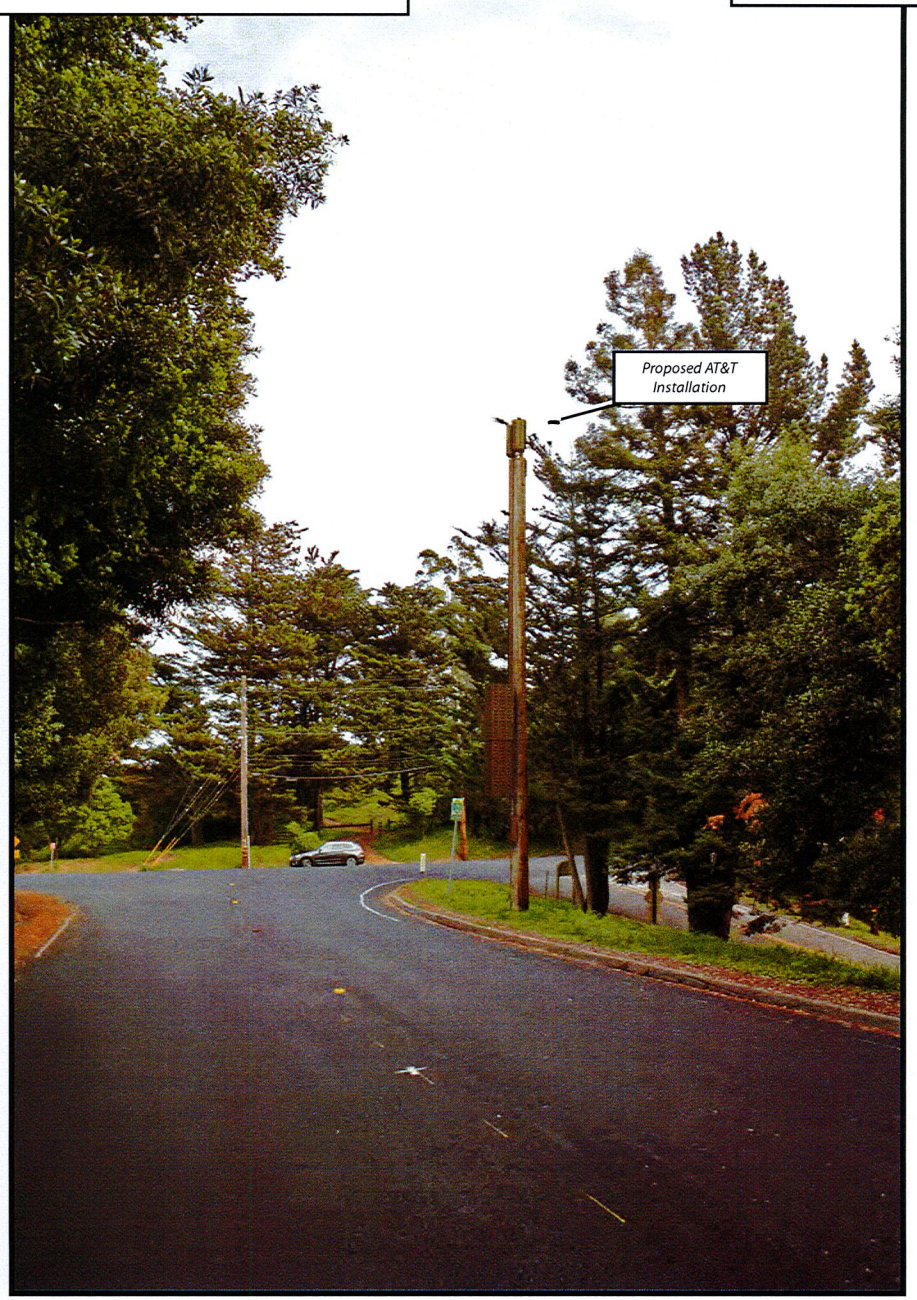
8173 Skyline Blvd, Oakland , CA
Oakhills AT&T South Network Node 55E

ATTACHMENT A

Existing



Proposed



AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

ATTACHMENT A

at&t

OAKHILLS AT&T SOUTH NETWORK
OAKS-055E
(PROW) NEXT TO 8173 SKYLINE RD, OAKLAND, CA 94611

LEGEND & SYMBOLS

- CENTERLINE
- PROPERTY/LEASE LINE
- PROPOSED CONDUIT
- E — E — POWER CONDUIT
- T — T — TELEPHONE CONDUIT
- PWR — PWR — AERIAL ELECTRICAL LINE
- TV — TV — COAXIAL CABLE/CONDUIT
- OH — OH — OVERHEAD CONDUCTORS
- CHAIN LINK FENCING
- SPOT ELEVATION (DATUM)
- FLAG NOTE
- ITEM BALLOON (DETAIL SHEETS)
- DETAIL REFERENCE
- SECTION REFERENCE

ABBREVIATIONS

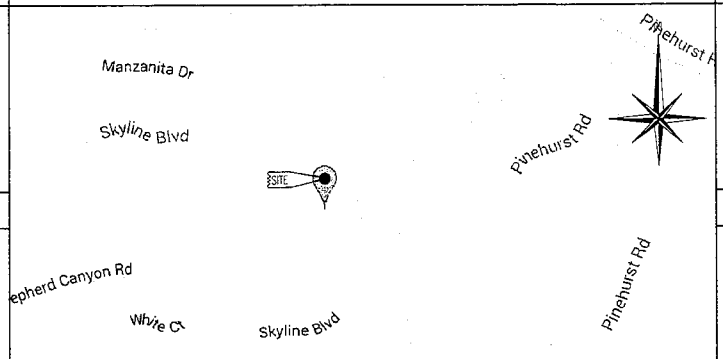
AL	ALUMINUM	FLR	FLOOR	PRELIM	PRELIMINARY
ALY	ALLOY	FT	FOOT	PWR	POWER
ANT	ANTENNA	FS	FARSIDE	QTY	QUANTITY
AGL	ABOVE GROUND LEVEL	FSTNR	FASTENER	R	RADIUS
		GALV	GALVANIZED	RAD	RADIATION
AMSL	ABOVE MEAN SEA LEVEL	GA	GAUGE	RC	RAD CENTER
		GEN	GENERATOR	RCVR	RECEIVER
APVD	APPROVED	GND	GROUND/GROUNDING	RLY	ALLOY
APPROX	APPROXIMATE	ID	INSIDE DIAMETER	RELOC	RELOCATED
AR, A/R	AS REQUIRED	MATL	MATERIAL	REQD	REQUIRED
BAT	BATTERY	MAX	MAXIMUM	SH	SHEET
BC	BOLT CIRCLE	MFR	MANUFACTURER	SPLY	SUPPLY
BLDG	BUILDING	MTD	MOUNTED	SS	STAINLESS STL
BRKT	BRACKET	MTG	MOUNTING	STD	STANDARD
CAB	CABINET	MTR	METER	STL	STEEL
CL	CENTERLINE	MAX	MAXIMUM	STRL	STRUCTURAL
CONC	CONCRETE	MIN	MINIMUM	SQ	SQUARE
CND	CONDUIT	(N)	NEW	SW	SWITCH
DN	DOWN	NS	NEARSIDE	THD	THREAD
(E)	EXISTING	NTS	NOT TO SCALE	THK	THICK
EA	EACH	OC	ON CENTER	TNND	TINNED
EL	ELEVATION	OD	OUTSIDE DIAMETER	TYP	TYPICAL
EMBED	EMBEDMENT	(P)	PROPOSED	UBC	UNIFORM BUILDING CODE
EMER	EMERGENCY	PLYWD	PLYWOOD		
ENCL	ENCLOSURE	PI	PLACES	W/	WITH
EQPT	EQUIPMENT	PNL	PANEL	W/O	WITHOUT
EQ SP	EQUAL SPACE	P/O	PART OF	XMFR	TRANSFORMER
HGT	HEIGHT	POSN	POSITION	XMTR	TRANSMITTER
(F)	FUTURE				

CODE COMPLIANCE

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

1. CALIFORNIA BUILDING CODE CBC-2010
2. CALIFORNIA ADMINISTRATIVE CODE. (INCL. TITLES 24 & 25) 2010.
3. ANSI/ EIA-222-F LIFE SAFETY CODE NFPA.
4. BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA)
5. CALIFORNIA ELECTRICAL CODE CEC-2010.
6. CALIFORNIA MECHANICAL CODE CMC-2010.
7. CALIFORNIA PLUMBING CODE CPC 2010.
8. LOCAL BUILDING CODE(S).
9. CITY AND/OR COUNTY ORDINANCES.
10. MUST COMPLY TO LATEST CALIFORNIA FIRE CODE. (AND LATEST MUNICIPAL FIRE CODE).
11. CALIFORNIA GENERAL ORDER 95 AND 128.

VICINITY MAP



DRIVING DIRECTIONS

FROM: 4430 ROSEWOOD DR, PLEASANTON, CA 94588-3050
TO: NEXT TO 8173 SKYLINE RD, OAKLAND, CA 94611
DISTANCE: 27.3 MILES (33 MIN)

1. HEAD EAST ON ROSEWOOD DR 49 FT
2. MAKE A U-TURN 0.5 MI
3. TURN RIGHT ONTO OWENS DR 0.1 MI
4. TURN RIGHT ONTO HACIENDA DR 0.4 MI
5. SLIGHT RIGHT TO MERGE ONTO I-580 W TOWARD OAKLAND 0.2 MI
6. MERGE ONTO I-580 W 11.6 MI
7. KEEP RIGHT AT THE FORK TO STAY ON I-580 W, FOLLOW SIGNS FOR OAKLAND/SAN FRANCISCO 8.3 MI
8. KEEP RIGHT AT THE FORK TO CONTINUE ON CA-13 N/WARREN FWY, FOLLOW SIGNS FOR CALIFORNIA 13/BERKELEY 3.2 MI
9. TAKE THE PARK BLVD EXIT 0.1 MI
10. TURN LEFT ONTO MOUNTAIN BLVD 0.3 MI
11. TURN RIGHT ONTO SNAKE RD 0.2 MI
12. CONTINUE STRAIGHT ONTO SHEPHERD CANYON RD 1.6 MI
13. TURN RIGHT TO STAY ON SHEPHERD CANYON RD 0.2 MI
14. TURN LEFT ONTO SKYLINE BLVD 85 FT
15. DESTINATION WILL BE ON THE LEFT

SIGNATURE BLOCK

APPROVED BY:	INITIALS:	DATE:
MUNICIPAL AFFAIRS:		
RF MANAGER:		
CONSTRUCTION MANAGER:		
PROJECT MANAGER:		
APPLICANT AGENT:		
APPLICANT:		

PROJECT DESCRIPTION

THESE DRAWINGS DEPICT A PORTION OF A DISTRIBUTED ANTENNA SYSTEM (DAS) TELECOMMUNICATIONS NETWORK, TO BE CONSTRUCTED BY EXTENET SYSTEMS AND OWNED AND OPERATED BY NEW CINGULAR WIRELESS PCS, LLC, IN THE PUBLIC RIGHT OF WAY PURSUANT TO AUTHORITY GRANTED BY THE CALIFORNIA PUBLIC UTILITIES COMMISSION.

THE MAIN COMPONENTS OF THIS INSTALLATION ARE:
THE ADDITION OF TWO (2) 27.75"X10.625"X6.25" PANEL ANTENNAS, ONE (1) BBU CABINET, ONE (1) RADIO UNIT, ASSOCIATED ELECTRICAL COMPONENTS, AND MOUNTING BRACKETS AS REQUIRED, LOCATED ON A NEW WOOD POLEE

DRAWING INDEX

BUILDING / SITE DATA

LATITUDE:	37.835985	TYPE OF CONSTRUCTION:	ATTACHMENTS TO A NEW WOOD POLE
LONGITUDE:	-122.185034	AREA OF CONST:	-
ELEVATION:	N / A	HANDICAP REQUIREMENTS:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.
JURISDICTION:	ALAMEDA COUNTY		
A.P.N.:	048D-7311-012DD	TITLE 24 REQUIREMENTS:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. THIS PROJECT IS EXEMPT.
ZONING:	PUBLIC RIGHT OF WAY		
OCCUPANCY:	U, UNMANNED		

PROJECT TEAM

PROPERTY OWNER:
NAME: PUBLIC RIGHT OF WAY
ADDRESS: NEXT TO 8173 SKYLINE RD, OAKLAND, CA 94611

APPLICANT:
NEW CINGULAR WIRELESS PCS, LLC
2600 CAMINO RAMON,
SAN RAMON, CA 94583
CONTACT: VANI MULLER
PHONE: (510) 258-1703

CONSTRUCTION MANAGER:
EXTENET SYSTEMS CA, LLC.
CONTACT: KEN BOOKER
PHONE: (510) 406-0829

APPLICANT AGENT:
MATTHEW YERGOVICH
EXTENET SYSTEMS REAL ESTATE
CONTRACTOR FOR AT&T MOBILITY
1825 WEBSTER ST
SAN FRANCISCO, CA 94115
PHONE: (415) 596-3474
EMAIL: myergo@gmail.com

MUNICIPAL AFFAIRS:
EXTENET SYSTEMS CA, LLC.
CONTACT: BILL STEPHENS
PHONE: (510) 612-2511

ARCHITECT:
AERO COMMUNICATIONS, INC.
5711 RESEARCH DRIVE
CANTON, MI 48188
CONTACT: GARY GETCHELL
PHONE: (510) 292-8918

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at&t
NEW CINGULAR WIRELESS PCS, LLC
2600 CAMINO RAMON
SAN RAMON, CA 94583

PROJECT INFORMATION:
OAKHILLS AT&T SOUTH NETWORK NODE 055E
NEXT TO 8713 SKYLINE RD, OAKLAND, CA 94611

CURRENT ISSUE DATE:
8/15/15

ISSUED FOR:
PERMITTING

BY:	DATE:	DESCRIPTION:	REV:
ACI	8/15/15	ZDs	0
BY	DATE	DESCRIPTION	REV

PLANS PREPARED BY:
ACI
Aero Communications Inc.
1-800-825-4ACI
5711 Research Drive
Canton, MI 48188
ACI NUMBER: OAKS-055E

CONSTRUCTED BY:
net SYSTEMS YOUR NETWORK, EVERYWHERE.
3030 Warrenville Rd, Suite 340
Lisle, IL 60532
www.extenet.com

SEAL OF APPROVAL:

SHEET TITLE:
TITLE SHEET AND PROJECT INFORMATION

SHEET NUMBER: T1
REVISION: 0
8/15/15

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT.

2. IMPORTANT NOTICE: SECTION 4215 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TOLL FREE 1-800-227-2600, TWO DAYS BEFORE YOU DIG.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POT HOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN A 1' MINIMUM VERTICAL CLEARANCE.

4. IF ANY EXISTING HARDSCAPE OR LANDSCAPE INDICATED ON THE APPROVE PLANS IS DAMAGED OR REMOVED DURING DEMOLITION OR CONSTRUCTION, IT SHALL BE REPAIRED AND/OR REPLACED IN KIND PER THE APPROVED PLANS.

5. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.

6. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND FIELD ENGINEERING DIVISION.

7. MANHOLES OR COVERS SHALL BE LABELED EXTENEL.

8. CONTRACTOR SHALL IMPLEMENT AN EROSION CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.

9. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

CALTRANS NOTES

1. ANY REMOVED OR DAMAGED STRIPING AND MARKINGS SHALL BE REPLACED IN KIND AS PER CALTRANS STANDARDS AND AT PERMITTEE'S EXPENSE.

Call before you dig
811 / 1-800-227-2600
www.usanorth.org

SPECIAL NOTES

1. INDEMNIFICATION CLAUSE: THE CONTRACTOR AGREES AND SHALL: ASSUME SOLE AND COMPLETE RESPONSIBILITY OF THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTIES. THAT THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONDITIONS. THE CONTRACTOR FURTHER AGREES TO DEFEND INDEMNIFY AND HOLD EXTENCL, REPRESENTATIVES, AND ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT.

2. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION AND THROUGHOUT THE COURSE OF CONSTRUCTION WORK, THE CONTRACTOR SHALL FULLY COMPLY WITH "CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH" ACT OF 1973 INCLUDING ALL REVISIONS AND AMENDMENTS THERETO.

3. ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF GO95,128 AND THE STANDARD "SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" AS ADOPTED BY THE CITY, COUNTY OR STATE AS MODIFIED BY STANDARD PLANS AND ADDENDUMS.

4. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES AS SHOWN HEREON ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST. THE CONTRACTOR SHALL VERIFY PRIOR TO THE START OF CONSTRUCTION AND SHALL USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY OR AGENCY FACILITIES WITHIN THE LIMITS OF WORK, WHETHER THEY ARE SHOWN ON THIS PLAN OR NOT.

5. THE CONTRACTOR SHALL NOTIFY THE CITY, COUNTY OR STATE ENGINEER INSPECTION DEPARTMENT, AT LEAST TWO DAYS BEFORE START OF ANY WORK REQUIRING THEIR INVOLVEMENT.

6. THE CITY, COUNTY OR STATE SHALL SPECIFY THE EXPIRATION PERIOD OF THE PERMIT FOR THIS CONSTRUCTION PROJECT.

7. THE MINIMUM COVER FOR ALL CONDUITS PLACED UNDERGROUND SHALL BE 30 INCHES TO THE FINISHED GRADE AT ALL TIMES.

8. THE CONTRACTOR SHALL TUNNEL ALL CURB AND GUTTERS AND BORE ALL CONCRETE DRIVEWAYS AND WALKWAYS AT THE DIRECTION OF THE CITY, COUNTY OR STATE ENGINEER.

9. ALL A.C AND/OR CONCRETE PAVEMENT SHALL BE REPLACED AT THE DIRECTION OF THE CITY, COUNTY OR STATE ENGINEERS.

10. ALL SHRUBS, PLANTS OR TREES THAT HAVE BEEN DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK, SHALL BE REPLANTED AND/OR REPLACED SO AS TO RESTORE THE WORK SITE TO ITS ORIGINAL CONDITION.

11. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROCESSING OF ALL APPLICANT PERMIT FORMS ALONG WITH THE REQUIRED LIABILITY INSURANCE FORMS. CLEARLY DEMONSTRATING THAT EXTENEL, THE CITY, COUNTY OR STATE IS ALSO INSURED WITH THE REQUIRED LIABILITY INSURANCE IN THE AMOUNT OF $1,000,000.00 FOR THIS CONSTRUCTION PROJECT.

12. VAULTS, PEDESTALS, CONDUITS AND OTHER TYPES OF SUBSTRUCTURE ARE EITHER SPECIFIED ON THIS PLAN OR WILL BE SPECIFIED BY THE CONSTRUCTION ENGINEER, ANY AND ALL DEVIATIONS FROM THE SPECIFIED TYPES OF MATERIAL MUST BE APPROVED BY THE SYSTEM ENGINEER, IN WRITING BEFORE INSTALLATION THEREOF.

13. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES IN INCLUDING SEWER LATERALS & WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.

14. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.

15. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE, WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE CITY, COUNTY AND STATE "STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WATER QUALITY TECHNICAL REPORT (WQTR), AND/OR WATER POLLUTION CONTROL PLAN (WPCP).

2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.

3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.

4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.

5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.

6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.

7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.

8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OF RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.

9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION/SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.

10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.

12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.

13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.

14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.

15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF AN, ENGINEER OF WORK, OWNER/DEVELOPER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURE AND OTHER RELATED CONSTRUCTION ACTIVITIES.

SCALE NTS 2

GENERAL NOTES

ROW GROUND CONSTRUCTION NOTES:

1. 120/240 POWER REQUIRED FOR 3-WIRE SERVICE.
2. GC TO REMOVE/CLEAN ALL DEBRIS, NAILS, STAPLES, OR NON-USED VERTICALS OFF THE POLE.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MUNICIPAL, COUNTY, STATE, FEDERAL, GO95 AND GO128 STANDARDS AND REGULATIONS.
4. CALL USA 48 HOURS PRIOR TO EXCAVATING AT (800) 227-2600.
5. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
6. ALL EQUIPMENT TO BE BONDED.
7. METERING CABINET REQUIRES 3' CLEARANCE AT DOOR OPENING.
8. CAULK CABINET BASE AT PAD.

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 5 OHMS OR LESS.
2. 5/8"x8' ROD, CAD WELD BELOW GRADE
3. #6 GROUND AND BOND WIRE.
4. WOOD MOLDING, STAPLED EVERY 3' AND AT EACH END
5. GROUNDS 3' FROM POLE.
6. PLACE 3 #10GA WIRES FROM BREAKER TO METER BOX.

STANDARD CONDUIT NOTES:

1. FOR UNDERGROUND USE SCHEDULE 40.
2. FOR RISERS USE SCHEDULE 80.
3. PLACE 2" GALVANIZED STEEL CONDUIT FOR ANY CONDUIT UNDER 3", STUB UP 10' THEN CONVERT TO SCHEDULE 80.
4. CONVERT 4" CARRIER CONDUIT TO 3" AT BASE OF POLE.
5. GC TO STUB UP POLE 10' w/3" POWER CONDUIT, POWER CO. TO CONVERT FROM 3" SCH. 80 TO 2" SCH. 80 FROM TOP OF STUB UP.
6. ALL CONDUIT WILL BE MAN DRILLED AND EQUIPPED WITH 3/8" PULL ROPE.

STANDARD TRENCHING NOTES:

1. MAINTAIN 40" MINIMUM COVER FOR ELECTRICAL CONDUIT.
2. MAINTAIN 30" MINIMUM COVER FOR COMMUNICATIONS CONDUIT.
3. SAND SHADING MINIMUM 1" UNDER CONDUITS, AND 6" COVERING ON TOP REQUIRED.
4. ALL ELECTRICAL SERVICE CONDUITS FROM POWER COMPANY, WHETHER FROM POLES, TRANSFORMERS, OR OTHER LOCATIONS; WILL BE SLURRY BACKFILLED.
5. IN STREET SLURRY TO GRADE AND MILL DOWN 1-1/2" FOR AC CAP.
6. IN DIRT SLURRY 18" FROM GRADE, AND FILL WITH 95% COMPACTION NATIVE SOIL FOR BALANCE.
7. PLACE WARNING TAPE IN TRENCH 12" ABOVE ALL CONDUITS AND #18 WARNING TAPE ABOVE GROUND RING.

ROW UTILITY POLE CONSTRUCTION NOTES:

1. NO BOLT THREADS TO PROTRUDE MORE THAN 1-1/2".
2. FILL ALL HOLES LEFT IN POLE FROM REARRANGEMENT OF CLIMBERS.
3. ALL CLIMB STEPS NEXT TO CONDUIT SHALL HAVE EXTENDED STEPS.
4. CABLE NOT TO IMPEDE 15" CLEAR SPACE OFF POLE FACE (12:00)
5. 90° SHORT SWEEPS UNDER ANTENNA ARM. ALL CABLES MUST ONLY TRANSITION ON THE INSIDE OR BOTTOM OF ARMS (NO CABLE ON TOP OF ARMS).
6. USE CABLE CLAMPS TO SECURE CABLE TO ARMS; PLACE 2" CARRIER CABLE ID TAGS ON BOTH SIDES OF ARMS.
7. USE 90° CONNECTOR AT CABLE CONNECTION TO ANTENNAS.
8. PLACE GPS ON ARM WITH SOUTHERN SKY EXPOSURE AT MINIMUM 6' FROM TRANSMIT ANTENNA, WHICH IS 24" AWAY FROM CENTER OF POLE.
9. USE 1/2" CABLE ON ANTENNAS UNLESS OTHERWISE SPECIFIED.
10. FILL VOID AROUND CABLES AT CONDUIT OPENING WITH FOAM SEALANT TO PREVENT WATER INTRUSION.

SCALE NTS 3

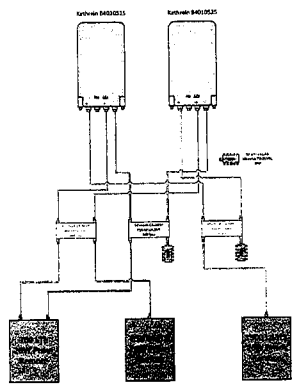
ROW CONSTRUCTION GENERAL NOTES

WIND LOADING INFORMATION	
ANTENNA/MOUNT ARM AREA TOTAL	6.88 SQ. FT.
TOP GRADE	45'-0"
BOTTOM GRADE	42'-5"
METER/BREAKER AREA TOTAL	1.21 SQ. FT.
TOP GRADE	9'-0"
BOTTOM GRADE	7'-0"
BATTERY BACK-UP AREA TOTAL	IN SHROUD
TOP GRADE	-
BOTTOM GRADE	-
PRISM DECK AREA TOTAL	IN SHROUD
TOP GRADE	-
BOTTOM GRADE	-
PRISM DECK (TYP.) AREA TOTAL	192 SQ. FT.
TOP GRADE	-
BOTTOM GRADE	-
COAX RISER SIZE	3"Ø
COAX RISER TOP GRADE	41'-6"
COAX RISER BTM GRADE	11'-7"
PWR RISER SIZE	1"ø
PWR RISER TOP GRADE	31'-6"
PWR RISER BTM GRADE	8'-0"

ANTENNA & CABLE SCHEDULE

ANTENNA SECTOR	AZIMUTH	ANTENNA MAKE / MODEL	COAXIAL CABLE LENGTH	CABLES PER SECTOR	CABLE SIZE
SECTOR ALPHA	75°	KATHREIN 840-10525	30'/3'	4/6	1/2"
SECTOR BETA	155°	KATHREIN 840-10525			
SECTOR GAMMA					

NOTE: CONTRACTOR TO FIELD VERIFY CABLE LENGTHS PRIOR TO ORDERING, FABRICATION, OR INSTALLATION OF CABLES.



SCALE NTS 1

LOADING AND ANTENNA CABLE SCHEDULES

at&t

NEW CINGULAR WIRELESS PCS, LLC
2600 CAMINO RAMON
SAN RAMON, CA 94583

PROJECT INFORMATION:

OAKHILLS AT&T
SOUTH NETWORK
NODE 055E
NEXT TO 8713 SKYLINE RD.
OAKLAND, CA 94611

CURRENT ISSUE DATE:
8/15/15

ISSUED FOR:
PERMITTING

BY:	DATE:	DESCRIPTION:	REV:
ACI	8/15/15	ZDs	0
BY	DATE	DESCRIPTION	REV

PLANS PREPARED BY:

ACI
Aero Communications Inc.
1-800-825-4ACI
5711 Research Drive
Canton, MI 48188

ACI NUMBER: OAKS-055E

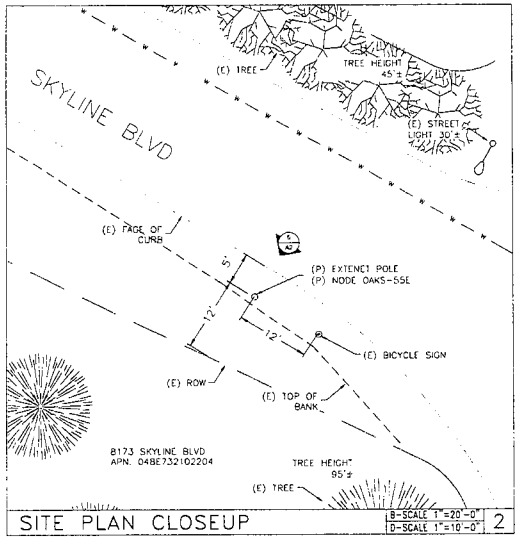
CONSTRUCTED BY:

net SYSTEMS
YOUR NETWORK. EVERYWHERE.
3030 Warrenville Rd, Suite 340
Lisle, IL 60532
www.extenel.com

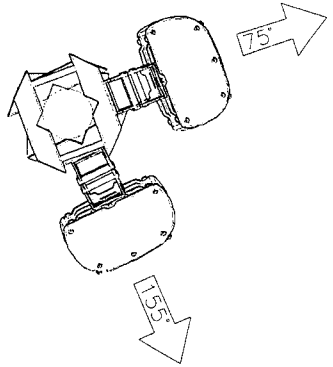
SEAL OF APPROVAL:

SHEET TITLE:
GENERAL NOTES AND SCHEDULES

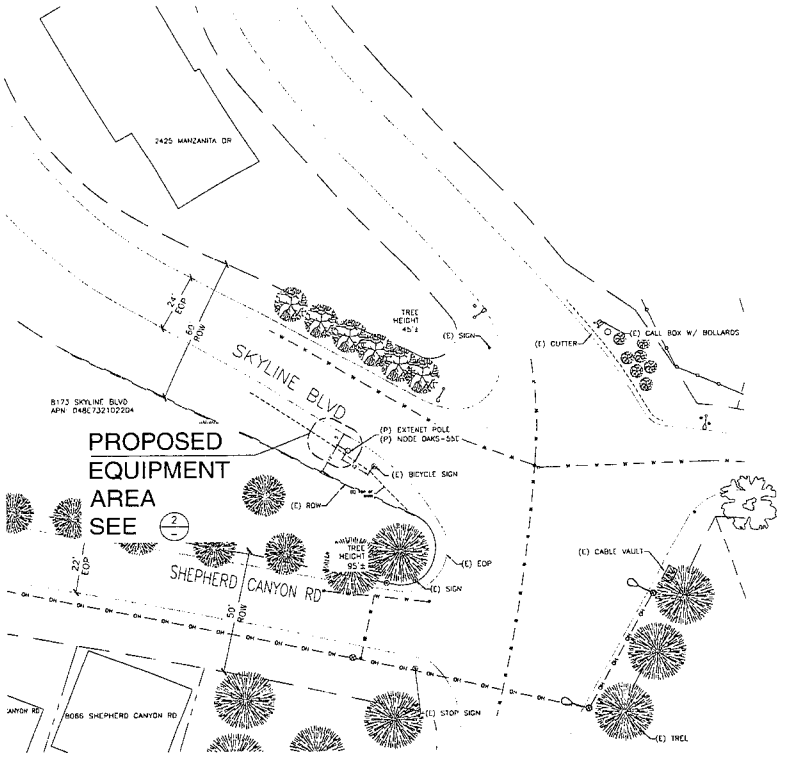
SHEET NUMBER: T2
REVISION: 0
8/15/15



SITE PLAN CLOSEUP | B-SCALE 1"=20'-0" D-SCALE 1"=10'-0" | 2



ANTENNA AZIMUTHS | SCALE NTS | 3



SITE PLAN | 0' 5' 15' 25' 50' | B-SCALE 1"=50'-0" D-SCALE 1"=25'-0" | 1

at&t

NEW CINGULAR WIRELESS PCS, LLC
2600 CAMINO RAMON
SAN RAMON, CA 94583

PROJECT INFORMATION:

OAKHILLS AT&T
SOUTH NETWORK
NODE 055E
NEXT TO 8713 SKYLINE RD.
OAKLAND, CA 94611

CURRENT ISSUE DATE:

8/15/15

ISSUED FOR:

PERMITTING

BY	DATE	DESCRIPTION	REV
ACI	8/15/15	ZDs	0

PLANS PREPARED BY:

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Aero Communications Inc.
1-800-825-4ACI
5711 Research Drive
Canton, MI 48188

ACI NUMBER: OAKS-055E

CONSTRUCTED BY:

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SEAL OF APPROVAL:

SHEET TITLE:

SITE PLAN

SHEET NUMBER: A1 | REVISION: 0 8/15/15

SHUTDOWN PROTOCOL 7"X9" LAMINATED CARD CARDSTOCK

at&t

AT&T oDAS Shutdown Procedure

PROCEDURE TO DE-ENERGIZE RADIO FREQUENCY (RF) SIGNAL EMERGENCY and NON-EMERGENCY WORK REQUIRING RF SIGNAL SHUTDOWN

(A) PG&E personnel SHALL contact AT&T Mobility Switch Center to notify them of an emergency shutdown 800-638-2822. Dial option 9 for cell site "Related" emergency's then option 1. Provide the following information when calling or leave a voicemail:
(1) Identify yourself and give callback phone number.
(2) Site number and if applicable site name (located on the shutdown box)
(3) Site address and location
(4) Nature of emergency and site condition

(B) Pull Disconnect Handle down to the Open or "OFF" Position. The RF signal will shut down within a few seconds. A visual inspection of the interior blade will confirm that both incoming AC Lead and Battery Backup are disconnected.

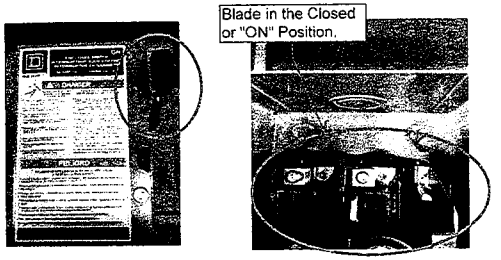
(C) Notify AT&T (New Cingular) Switch Center when the emergency work is completed.

See reverse side to view photo of the "on" and "off" position.

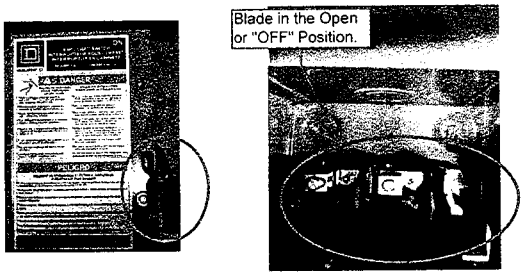
FRONT

at&t

Switch in the Closed Position ("ON")



Switch in the Open Position ("Off")



BACK

SHUTDOWN PROTOCOL

SCALE NTS | 1

at&t
NEW CINGULAR WIRELESS PCS, LLC
2600 CAMINO RAMON
SAN RAMON, CA 94583

PROJECT INFORMATION:
OAKHILLS AT&T SOUTH NETWORK NODE 055E
NEXT TO 8713 SKYLINE RD,
OAKLAND, CA 94611

CURRENT ISSUE DATE:
8/15/15

ISSUED FOR:
PERMITTING

BY:	DATE:	DESCRIPTION:	REV:
ACI	8/15/15	ZDs	0
BY	DATE	DESCRIPTION	REV

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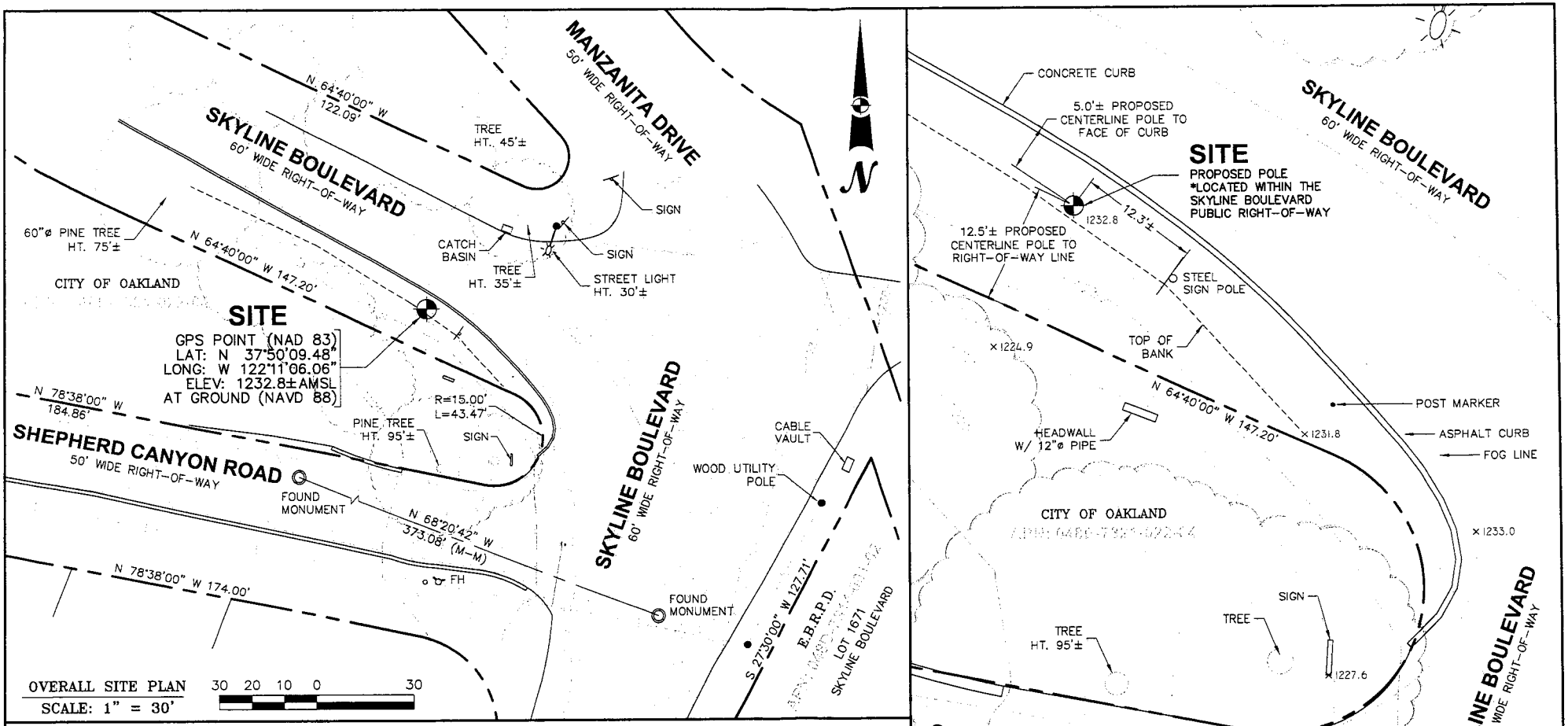
Lisle, IL 60532
www.exlenet.com

SEAL OF APPROVAL:

SHEET TITLE:
POWER & RF SAFETY PROTOCOLS

SHEET NUMBER: S1
REVISION: 0
8/15/15



SURVEY DATA

NAD 83 Datum:

Lat: N 37°50'09.48" *Long:* W 122°11'06.06"

Equipment Used: Topcon Hiperlite Receiver

Site Ground Elevation: 1232.8± AMSL (NAVD 88) AT BASE OF PROPOSED POLE.

Basis of Elevations:
GLOBAL POSITIONING SYSTEM (GPS)

Basis of Bearings:
MAP OF FORESTLAND HIEGHTS FILED IN BOOK 10 AT PAGE 81 IN THE RECORDS OF ALAMEDA COUNTY, AND TWO FOUND MONUMENTS AS SHOWN.

Date of Field Survey: AUGUST 5, 2015

THIS MAP IS NOT A PROPERTY BOUNDARY SURVEY, THIS IS TOPOGRAPHY MAP. NO PROPERTY CORNER MONUMENTS WERE SET FOR THIS PROJECT. THE BOUNDARY REPRESENTED ON THIS MAP IS BASED ON COMPILED RECORD DATA AND BEST FIT ONTO EXISTING IMPROVEMENTS.

at&t
AT&T MOBILITY
5001 Executive Parkway
San Ramon, CA 94583

QUIET RIVER
Land Services Inc.
11501 Dublin Boulevard, Suite 200
Dublin, CA 94568
(925) 734-6788 Phone

SITE SURVEY PLAN VIEW

SW-CA-OAKHILLS-ATT NODE 055E
PUBLIC RIGHT-OF-WAY AT 8066 SHEPHERD CANYON ROAD
OAKLAND ALAMEDA COUNTY CALIFORNIA

EXNT1543	DRN. BY: MAS	CHK. BY: KMM	DATE: 8/13/15

ATTACHMENT B

AT&T Mobility • DAS Node No. OAKS-055E
8173 Skyline Road • Oakland, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a personal wireless telecommunications carrier, to evaluate a distributed antenna system (DAS) node proposed to be located at 8173 Skyline Road in Oakland, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Executive Summary

AT&T proposes to install directional panel antennas on top of a proposed pole, to be sited at 8173 Skyline Road 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)	5–80 GHz	5.00 mW/cm^2	1.00 mW/cm^2
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	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	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "channels") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky.

Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

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

Site and Facility Description

Based upon information provided by AT&T, including zoning drawings by Aero Communications, Inc., dated August 15, 2015, it is proposed to install two Kathrein Model 840-10525 directional panel antennas on a proposed 45-foot pole to be sited at 8173 Skyline Road in Oakland. The antennas would employ no downtilt, would be mounted at an effective height of about 44 feet above ground, and would be oriented toward 75°T and 155°T. The maximum effective radiated power in any direction would be 219 watts, representing simultaneous operation at 104 watts for PCS, 61 watts for cellular, and 54 watts for 700 MHz service.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed AT&T operation is calculated to be 0.0013 mW/cm^2, which is 0.26% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence* is 0.0023 mW/cm^2, which is 0.47% 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.

* Located at least 80 feet away, based on photographs from Google Maps.

No Recommended Mitigation Measures

Due to their mounting locations and height, the AT&T antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that AT&T will, as an FCC licensee, take adequate steps to ensure that its employees or contractors receive appropriate training and comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by AT&T Mobility near 8173 Skyline Road 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.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

Rajat Mathur, P.E.
707/996-5200

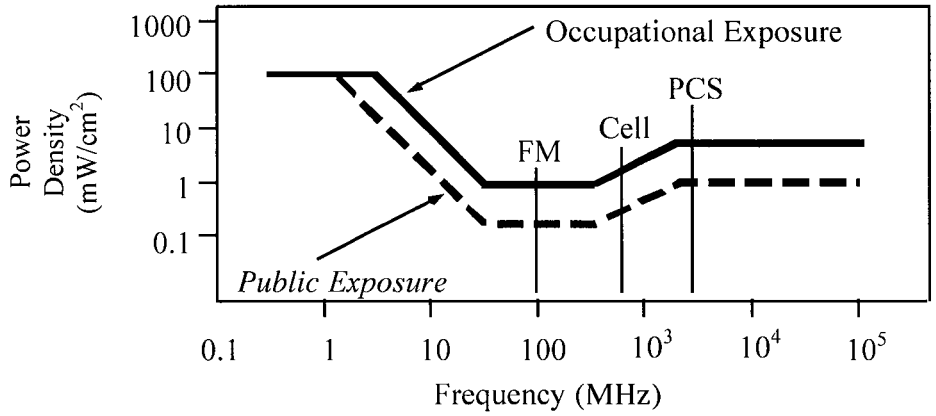
August 31, 2015

FCC Radio Frequency Protection Guide

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

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

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



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

RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

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

Near Field.

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

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

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

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and
P_{net} = net power input to the antenna, in watts,
D = distance from antenna, in meters,
h = aperture height of the antenna, in meters, and
η = aperture efficiency (unitless, typically 0.5-0.8).

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

Far Field.

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

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

where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

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

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ATTACHMENT C

September 2, 2015

City Planner
Planning Department
City of Oakland
250 Frank Ogawa Plaza, 2nd Fl.
Oakland, CA 94612

Re: Proposed AT&T Mobility DAS Node Installation

Applicant:	**New Cingular Wireless PCS, LLC (d/b/a AT&T Mobility)**
Nearest Site Address:	**Public Right of Way near 8173 Skyline Rd., Oakland, CA**
Site ID:	**SW-CA-OAKHILLS-ATT Node 55E**
Latitude/Longitude:	**37.835985, -122.185034**
City Planning #:	**PLN15-181**

Dear City Planner,

On behalf of New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility ("AT&T"), this letter and attached materials are to apply for a design review permit to install a distributed antenna system ("DAS") node in the public right-of-way near 8173 Skyline Road ("Node 55E").[1] This is the same DAS node that AT&T pursued by its previous application filed on March 6, 2014 in the public right-of-way near 2400 Manzanita Drive (Node 55C / PLN14-047). AT&T hereby proposes to amend its current application number PLN15-181, filed on June 3, 2015, formerly proposed at the existing utility pole in the public right-of-way near 0 Park Boulevard (Node 55D), to relocate the proposal to the public right-of-way near 8173 Skyline Road about 10-feet west of the existing bicycle sign. City Planning Staff could not support application number PLN14-047 because of its perceived view impact, and the neighbors opposed application number PLN15-181 so the present application has been prepared as an alternative after working with Planning Staff and the neighbors. The following is an explanation of the existing site, a project description of the redesigned facility, the project purpose and justifications in support of this proposal.

A. Project Description.

The proposed location for our facility currently consists of raw land in the public right of way near 8173 Skyline Road about 10-feet west of an existing bicycle sign. There are no residential parcels or houses within at least 50-feet of this location, and the site is shrouded by nearby trees that are over 90-feet tall.

AT&T proposes a new wooden pole with two panel antennas on top that are approximately two feet long, 10 inches wide and six inches deep, extending to a height of 45 feet above ground. We also propose to install an equipment cabinet on the pole that is approximately eight feet tall by two feet wide and deep. A miniature emergency shut-off safety switch and electricity meter will be placed on the pole at about eight feet above ground. The equipment will be connected to underground telecommunications and power lines. All equipment will be painted brown to match the wooden pole. Our proposal is depicted in the attached design drawings and photographic simulations.

[1] AT&T 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.

ExteNet Systems
For AT&T Mobility
1826 Webster Street • San Francisco, CA 94115
(415) 596-3474 • myergovich@extenetsystems.com

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 by an AT&T technician. Our proposal will greatly benefit the area by improving wireless telecommunications service as detailed below.

B. Project Purpose.

The purpose of this project is to provide AT&T 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 DAS providing coverage to areas of the Oakland, Berkeley, Kensington and El Cerrito 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 AT&T's larger DAS 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 55E.

A DAS network consists of a series of radio access nodes connected to small telecommunications antennas, typically located in the public rights-of-way, to distribute wireless telecommunications signals. DAS networks provide telecommunications transmission infrastructure for use by wireless services providers. These facilities allow service providers such as AT&T 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, DAS can be an effective tool to close service coverage gaps.

C. Project Justification, Alternative Site and Design Analysis.

Node 55E is an integral part of the overall DAS project, and it is located in a difficult coverage area because of its winding roads, hilly terrain and plentiful trees. The coverage area consists of a hilly Oakland Hills neighborhood running off of Skyline Boulevard, Pinehurst Road, Manzanita Drive, and surrounding areas. Node 55E 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 AT&T's analysis of alternative sites, if the originally chosen candidates 55C at 2400 Manzanita Drive and 55D at 0 Park Boulevard are not preferred by the City then the currently proposed Node 55E at 8173 Skyline Boulevard is the least intrusive means to close AT&T's significant service coverage gap in the area because it best uses an inconspicuous location, adding small equipment without disturbing the character of the neighborhoods served. Node 55E should be barely noticeable amidst the backdrop of trees and terrain.

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

This proposed redesign is a viable alternative design and location developed according to our discussions with the Planning Department. 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. As discussed with City Planning, Node 55E is the least intrusive option because antennas can be nestled amidst large trees without imposing any view impact. Also the proposed location is a good coverage option because it sits at a spot from which point AT&T can adequately propagate its wireless signal.

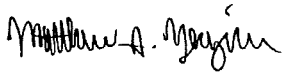
AT&T considered alternative sites on other utility poles in this area but none of these sites is as desirable from construction, coverage or aesthetics perspectives. The proposed location is approximately equidistant from other DAS nodes that AT&T plans to place in surrounding hard-to-reach areas, so that service coverage can be evenly distributed. There are a number of trees near the proposed site that will allow the installation to blend in with the backdrop of foliage. In addition to this location, AT&T considered alternative sites set forth in the attached Alternative Site Analysis.

Revised drawings, an AT&T Radio Frequency Statement, 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[2] requires the city to issue its final decision on AT&T's application within 150 days. We respectfully request expedited review and approval of this application. Feel free to contact me if you have any questions. Thank you.

Thank you.

Best Regards,
EXTENET SYSTEMS



Matthew S. Yergovich
For AT&T Mobility

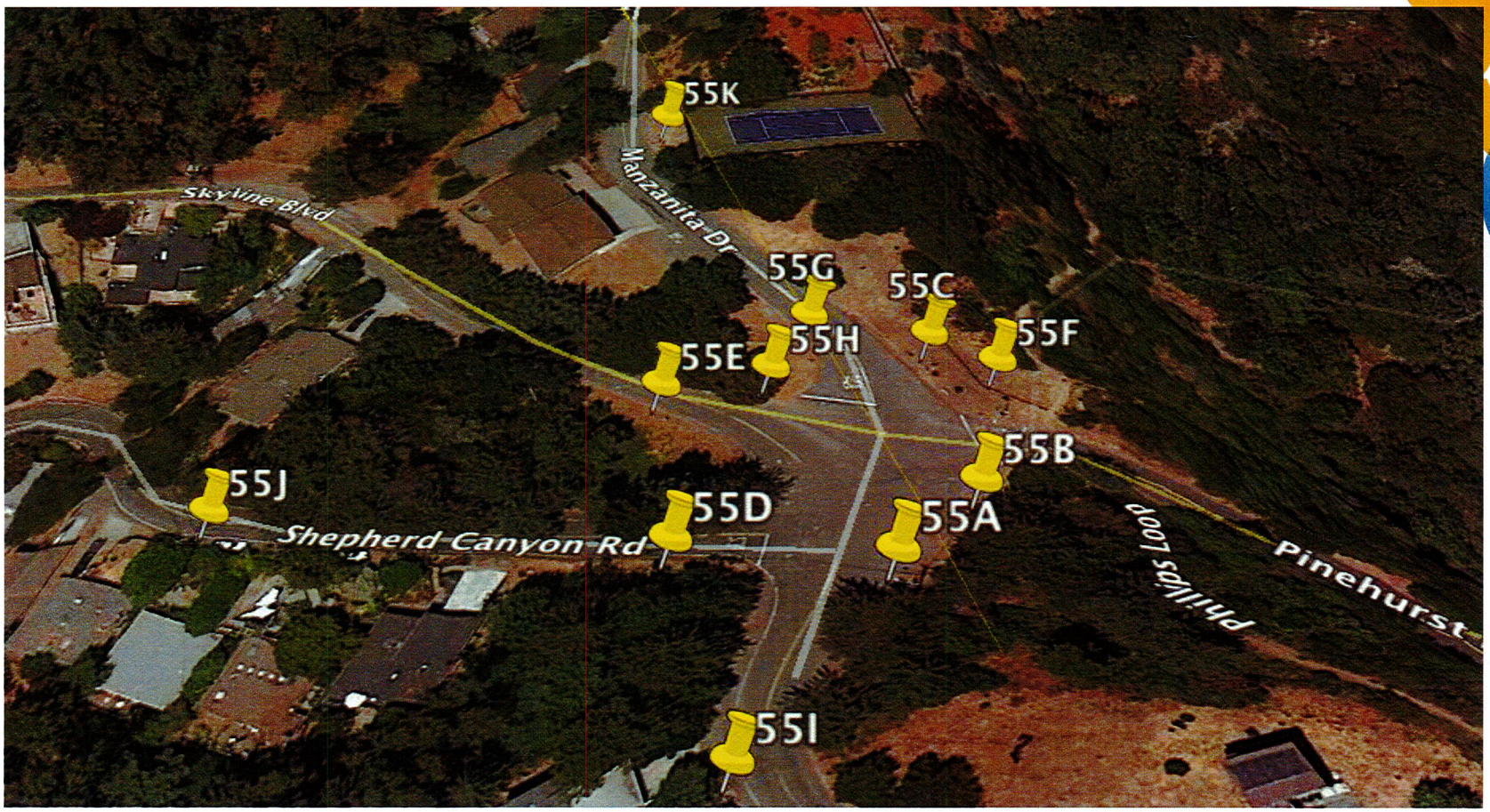
[2] *See* Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B), WT Docket No. 08-165, Declaratory Ruling, 24 F.C.C.R. 13994 (2009).

ExteNet Systems
For AT&T Mobility
1826 Webster Street • San Francisco, CA 94115
(415) 596-3474 • myergovich@extenetsystems.com

Rethink Possible®

ATTACHMENT C

Node 55E - 8173 Skyline Rd.
Oakland, California
Alternative Site Analysis



On the map above, the proposed AT&T wireless facility in the public right-of-way near 8173 Skyline Road (37.835985, -122.185034) is indicated as Node "55E." The 10 alternative locations that AT&T analyzed are marked by pins 55A, 55B, 55C, 55D, 55F, 55G, 55H, 55I, 55J and 55K.

55 A: 37.835680, -122.184684

55 B: 37.835873, -122.184552

55 C: 37.836107, -122.184664

55 D: 37.835732, -122.185013

55 E: 37.835985, -122.185034 (Present Proposal)

55 F: 37.836023, -122.184550

55 G: 37.836125, -122.184855

55 H: 37.836044, -122.184895

55 I: 37.835363, -122.184918

55 J: 37.835860, -122.185730

55K: 37.836520, -122.185104

Alternative Node 55E - Present Proposal

- The location for AT&T's proposed wireless facility (Node 55E) is in the public right-of-way about 10-feet west of a at a bicycle trail sign located near 8173 Skyline Road (37.835985, -122.185034).
- The pole is screened by adjacent trees and foliage, and does not block view corridors.
- AT&T re-evaluated this site and nearby alternatives to verify that the selected site is the least intrusive means to close AT&T's significant service coverage gap in the area.

Alternative Node 55A

- Node 54A is in the public right-of-way at a joint utility pole identified by number 110109451 across from 8211 Skyline Boulevard (37.835684, -122.184727).
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would violate CPUC General Order 95 regulations because all four quadrants of the pole are occupied.

Alternative Node 55B

- Node 55B is in the public right-of-way at a joint utility pole across from 8211 Skyline Boulevard (37.835873, -122.184552) just north of 55A near the intersection with Pinehurst Road .
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would violate CPUC General Order 95 regulations because all four quadrants of the pole are occupied.

Alternative Node 55C

- Node 55C is in the public right-of-way at an open space near 2400 Manzanita Drive (37.836107, -122.184664).
- This location and design was proposed to the City in AT&T's land use permit application submitted on March 6, 2014.
- This location and design is a viable alternative but is not preferred by City Planning Staff because of the view impact imposed looking eastward.

Alternative Node 54D

- Node 55D is in the public right-of-way at a joint utility pole identified by pole number 110109452 at 8066 Shepherd Canyon Road (37.835732, -122.185013).
- This photo depicts an existing telecommunications cabinet mounted to the utility pole. In June 2015, AT&T proposed to mount antennas to the top of the pole, and place an associated equipment cabinet on the ground adjacent to the pole.
- AT&T relocated its proposal from this location to the present location (Node 55E) in response to public opposition to Node 55D. However, Node 55D remains a viable alternative location to close AT&T's significant service coverage gap in the area.

Alternative Node 55F

- Node 55F is in the public right-of-way at a city-owned light pole just southeast of 55C near 2400 Manzanita Drive (37.836023, -122.184550).
- This location and design is a viable alternative but is not preferred by City Planning Staff because of the view impact imposed looking eastward.

Alternative Node 55G

- Node 55G is in the public right-of-way at a city-owned light pole near 2425 Manzanita Drive (37.836125, -122.184855).
- This location and design is a viable alternative but is not preferred by City Planning Staff because the site is much more exposed and therefore an installation here would be more visually intrusive.

Alternative Node 55H

- Node 55H is in the public right-of-way at city-owned light pole near 8230 Skyline Boulevard (37.836044, -122.184895).
- This location and design is a viable alternative but is not preferred by City Planning Staff because the site is much more exposed and therefore an installation here would be more visually intrusive.

Alternative Node 55I

- Node 54I is in the public right-of-way at a joint utility pole near 8211 Skyline Boulevard (37.835363, -122.184918).
- This pole is not a viable alternative to close AT&T's significant service coverage gap. Placing wireless equipment on this pole would violate CPUC General Order 95 regulations because all four quadrants of the pole are occupied.

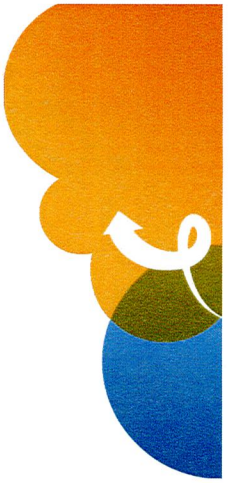
Alternative Node 55J

- Node 55J is in the public right-of-way at a joint utility pole near 8040 Shepherd Canyon Road (37.835860, -122.185730).
- This location does not close AT&T's significant service coverage gap due to the steep decline in elevation and associated blockage of AT&T's signal by nearby trees, houses and terrain.
- Antennas and equipment are already located on this pole, occupying the space needed for AT&T's proposed installation and therefore blocking AT&T from installing here.

Alternative Node 55K

- Node 55K is in the public right-of-way at a city-owned light pole near the Hills Swim and Tennis Club at 2400 Manzanita Drive (37.836520, -122.185104).
- This location and design is a viable alternative but is not preferred by City Planning Staff because the site is much more exposed and therefore an installation here would be more visually intrusive.

Node 55E – Alternative Site Analysis Conclusion



Based on AT&T's analysis of alternative sites, the currently proposed location at 8173 Skyline Road (Node 55E) is the least intrusive means to fill AT&T's significant wireless coverage gap.