July 20, 2011 Page 1

City Planning Commission
Case File Number: CMD11-027

Location:1307 Tunnel Road (APN: 048H-7589-002-00)

Proposal: To install 2 antenna panels, 4 Radio Remote Unit (RRU's) antennas on two separate ground-mounted 9-foot high steel pipes on an open site that contains 6 existing ground-mounted antenna panels, all to be concealed by a new screening fence, and the installation of 1 equipment cabinet inside an existing equipment shelter.

Contact Person: The Lyle Company/ Jonathan Fong

Phone Number: (916) 868-6673 Owner: AT&T Corporation

Case File Number: CMD11027

Planning Permits Required: Major Conditional Use Permit to operate a Mini Telecommunications

facility in a residential zone;

Regular Design Review to install a Telecommunications Facility

General Plan: Hillside Residential

Zoning:RH-4 Hillside Residential Zone;

S-10 Scenic Route Combining Zone

Environmental Determination: Exempt, Section 15301(e) of the State CEQA Guidelines:

Existing Facilities (additions to existing structures);

Section 15183 of the State CEQA Guidelines:

Projects consistent with a Community plan, General Plan or Zoning

Historic Status: None; Survey Rating: None

Service Delivery District:2

City Council District:1

Date Filed:February 23, 2011(revised plans submitted on 07/06/11)

Action to be Taken: Decision based on staff report

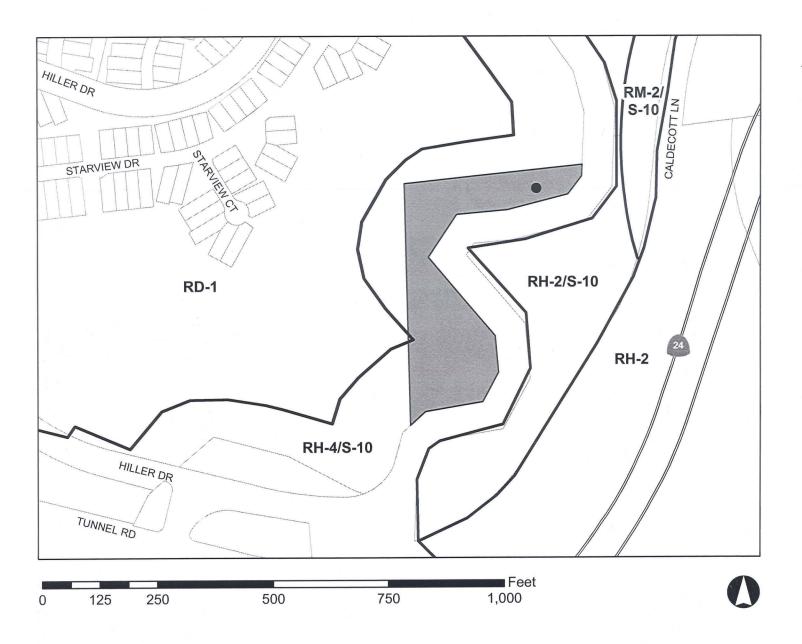
Finality of Decision: Appealable to City Council within 10 days

For Further Information: Contact Case Planner Mike Rivera at (510) 238-6417, or by email at mrivera@oaklandnet.com

PROJECT SUMMARY

The applicant requests a Major Conditional Use Permit and Regular Design Review to install two (2) antenna panels and 4 Radio Remote Unit (RRU's) antennas and one equipment cabinet on an open site that contains six (6) existing antenna panels including equipment cabinets inside an existing equipment shelter. The proposal is considered a Mini Telecommunications facility because when added to the (6) exiting antennas on the property, the site would contain no more than (12) antennas on the open site.(A Mini Telecommunications is an attached wireless communication facility that consists of no more than (12) antennas). The proposal is located in the RH-4 Hillside Residential Zone. Per Section 17.134.020(A)(3)(i) of the Oakland Planning Code a Major Conditional Use Permit is required for a Telecommunications Facility located in a residential zone. This proposal requires a determination by the Planning Commission. Staff recommends approval subject to the required findings (See Attachment A) and conditions of approval (See Attachment B).

CITY OF OAKLAND PLANNING COMMISSION



Case File: CMD11-027

Applicant: The Lyle Company / Jonathan Fong

Address:

1307 Tunnel Road

Zone:

RH-4

TELECOMMUNICATIONS BACKGROUND

Under the Telecommunications Act of 1996, the Federal Communications Commission (FCC) preempted cities' zoning jurisdiction over wireless telecommunications facilities, limiting their authority to aesthetic review and confirmation of satisfactory radio frequency (RF) emissions reports. For further information, the FCC can be contacted at 1-888-225-5322 or www.fcc.gov

PROPERTY DESCRIPTION

The proposed development is located in a 1.93-acre (84,036 square foot) parcel at 1307 Tunnel Road in the Oakland Hills. The site is bounded to the east and south by Interstate-24 and to the west and north by residential properties up on the ridgeline. The Caldecott Tunnel is located about 2,000 feet to the northeast. The development site is located near the toe of a steep hillside next to Tunnel Road. Access to the site is through a gravel driveway located southwest of the property. The site also contains a level gravel pad parking area for maintenance vehicles and containing an AT&T equipment shelter. The existing Telecommunication facility (antennas) is located northeast on a steep uphill area and about 40 foot high from Tunnel Road. The antennas and the equipment shelter are surrounded by a mix of pine and oak trees and large shrubs. The six (6) existing ground-mounted panel antennas are attached on separate 6-foot high steel pipes, and the existing equipment cabinets are located inside a shelter which will remain. The existing Telecommunications facility was approved by the Planning Commission on February 18, 1998 under Planning application CMD98010.

PROJECT DESCRIPTION

The applicant, AT&T, proposes to install a telecommunications facility within an existing open site that contains other wireless antennas and related concealed equipment cabinets. The proposal includes 2 panel antennas, 4 Radio Remote Unit (RRU's) antennas and 1 equipment cabinet. The proposed antennas will be located up on a steep hillside and on an existing open pad area that measures about 220 square feet. The proposed antennas will be stacked and mounted on two separate 9 foot high steel pipes. The proposed equipment cabinet will be installed inside the existing equipment shelter located southwest of the property. The shelter is located on the toe of the hillside and next to the utility parking area. To screen the existing and proposed antennas from public view, the applicant proposes to install a chain-link fence with green vinyl slats that varies from 8.5 foot to 12 foot in height around the telecommunication facility. For safety purposes and as mandated by the Radio Frequency Emissions project engineer (EBI), the applicant also proposes to install a 3 foot high chain barrier around the proposed chain-link fence (See Attachment C). The proposed development also includes a Radio Frequency Emissions Report, prepared by EnviroBusiness Incorporated (EBI), a Consulting Engineering firm (See Attachment D). Staff will discuss the content of this report in the body of this staff report. The application also includes photo simulation of the site with the existing antennas and the proposed screen fence taken from different angles from Tunnel Road (See Attachment E).

GENERAL PLAN ANALYSIS

The property is designated by the Oakland General Plan as a Hillside Residential area. The intent of the Hillside Residential designation is to create, maintain and enhance neighborhood residential areas that are characterized by detached, single unit structures on hillside parcels. The General Plan sets goals and objectives to minimize conflicts between residential and non-residential activities while providing opportunities for residents to live and work at the same location. The proposed telecommunication facility would provide and improve essential services to surrounding neighborhoods and to the public in general.

Objective N5 states:

"The mix of residential and non-residential activities in Oakland neighborhoods is one factor making these areas so dynamic and distinctive. This intermixing of activities is likely to continue as telecommunications and improved technology make living and working at the same location increasingly feasible and desirable..."

The proposed development to operate a telecommunication facility provides needed services that are in character with the surrounding residential activities. Although the operation of a wireless communication facility is a non-residential activity, the use of wireless telephone and internet services is essential because it provides personal and professional services to the general public and to local emergency personnel as the need for quality and reliable wireless use or internet services is in demand.

ZONING ANALYSIS

The proposed development is located in the RH-4 Hillside Residential Zone. The intent of the RH-4 regulations is to create, maintain, and enhance areas for single-family dwellings and is typically appropriate in already developed areas of the Oakland Hills. In addition to the RH-4 Zone, the proposed development is located in the S-10 Scenic Route Combining Zone. The intent of the S-10 zone is to create, preserve, and enhance areas where hillside terrain, wooded canyons and ridges, and fine vistas or panoramas of Oakland, neighboring areas, or the Bay can be seen from the road, and is typically appropriate to roads along or near ridges, or through canyons of the Oakland Hills which roads have good continuity and relatively infrequent vehicular access from abutting properties. Staff finds the proposal meets the intent of the designated zones because the Mini Telecommunications facility will create and enhance telephone wireless and internet communication services to the surrounding areas characterized by single-family residences on hillside parcels. Staff also believes that the proposed development located on a level pad area will preserve the hillside terrain, landscaping and panoramas. The proposal does not require grading, the removal of existing landscaping or blockage of significant panoramas viewed from the road. Sections 17.13.040 & 17.134.020(A)(3)(i) of the Planning Code, states that the development proposal for a Telecommunication Facility in the RH-4 Hillside Residential Zone requires a Major Conditional Use Permit. The purpose of the Major Conditional Use Permit is to analyze the operating characteristics and the potential adverse effects of the proposed telecommunication (Mini) facility on the surrounding areas.

DESIGN REVIEW ANALYSIS

Section 17.136.040 of the Planning Code, states that the proposed development of a Telecommunications (Mini) Facility requires Regular Design Review. The purpose for Design Review is to evaluate projects that require special design treatment and consideration of relationships to the site and physical surroundings and without significantly impacting neighboring properties. The criteria for Conditional Use Permit and Regular Design Review require the making of specific findings to support the project. Staff is able to make the required findings to approve the Mini Telecommunication Facility proposal (See Attachment A).

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines lists the projects that qualify as categorical exemptions from environmental review. The development proposal is categorically exempt from the environmental review requirements pursuant to Section 15301(e) for additions to existing structures, and also pursuant to Section 15183 for projects consistent with a Community Plan, General Plan or Zoning.

KEY ISSUES AND IMPACTS

1. Conditional Use Permit and Regular Design Review Findings

Section 17.134.020(A)(3)(i) of the Oakland Planning Code states that the operation of a Telecommunication Facility (Mini) within a residential zone area requires a Major Conditional Use Permit (CUP). To make the required findings for a CUP, the proposed development is subject to the General Use Permit Criteria found in Sections 17.134.050 and 17.128.060(C). Furthermore, the proposal is subject to the Specific Design Review Criteria for Mini Facilities found in Section 17.128.060(B) and the Regular Design Review Criteria found in Section 17.136.050 (B). Staff will evaluate these required Findings within the content of this report (See Attachment A).

2. Site Location Preferences

Section 17.128.110 of the Telecommunication Regulations states that new wireless facilities shall generally be located on the following properties or facilities in order of preference:

- A. Co-located on an existing structure or facility with existing wireless antennas.
- B. City owned properties or other public or quasi-public facilities.
- C. Existing commercial or industrial structures in non-residential zones.
- D. Existing commercial or industrial structures in residential zones
- E. Other non-residential uses in residential zones.
- F. Residential uses in non-residential zones.
- G. Residential uses in residential zones.

The Telecommunication regulation above states that wireless facility proposals locating on an A, B or C ranked preference, do not require a site alternative analysis. Staff finds that the proposed development fits with the first site location preference (A) because the proposed 6 antennas will be collocated within an existing facility that contains 6 other antennas. Staff believes that the collocation of the new antennas will not disrupt the hillside characteristics because the proposal does not require grading or the removal of significant landscaping. Furthermore, to aesthetically improve the site, the applicant proposes to screen the existing and proposed antennas by installing a chain-link fence with green vinyl slats around the perimeter of the telecommunications facility. Staff believes that the installation of the fence will screen from public view the visibility of the unsightly site. Therefore, staff finds that a site alternative analysis is not required.

3. Site Design Preferences

Section 17.128.120 of the Telecommunication Regulations states that new wireless facilities shall generally be designed in the following order of preference:

- A. Building or structure mounted antennas 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 (façade 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.

The regulation states that telecommunications facilities designed to meet A or B ranked preference, do not require a site design alternative analysis. Staff finds the proposed development to collocate 6 antennas on a site that contains 6 other antennas fits with Site Design Preference A. The proposed antennas will be mounted on two separate 9 foot high, 6 inch diameter steel pipes located to the north "Sector A-4" and to the south "Sector B-4" of the site. Furthermore, the applicant proposes to conceal from view the existing and proposed wireless antennas by installing a chain-link fence with green vinyl slats around the perimeter of the site. Furthermore, the existing trees and shrubs around the property and antenna site will remain to provide additional screening from public view.

4. Radio Frequency Emissions Standards

Section 17.128.130 of the Telecommunications Regulations requires the applicant to submit the following verifications:

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

The proposed development includes a Radio Frequency (RF) Emissions report prepared by EBI (EnviroBusiness Inc.), an engineering consulting company. The report prepared on January 21, 2011 by Stephanie Penta concluded that based on the proposed design plans, the proposal will comply with the set standards for limiting public exposure to radio frequency energy and will not cause significant impacts on the environment (See Attachment D). To confirm that the applicant meets the standards of Section 17.128.130 of the Planning Code, staff recommends a condition of approval that requires the applicant to submit to the Planning Division a final Radio Frequency emissions report prior to the issuance of a final building inspection for this project stating that the facility is operating within the acceptable thresholds as established by the Federal Communication Commission (See Conditions of Approval # 16).

CONCLUSION

The proposal to operate 6 new wireless antennas and 1 equipment cabinet is a compatible use to the site and surrounding areas because the telecommunications facility provides and improves wireless services to the general public, without creating impacts to the environment. Staff finds that the proposal will not create a significant impact to the site because the new and existing antennas are similar in size and design thus making them compatible. Furthermore, the proposal includes the installation of a chain-link fence with green vinyl slats around the perimeter of the telecommunication facility, which will conceal all the antennas from public view. The proposal also complies with the Radio Frequency regulations set by the Federal Communication Commission. Therefore, staff determines the application meets the required findings for Conditional Use Permit and Design Review (See Attachment A), and recommends approval of the application to the Planning Commission subject to the Conditions of Approval (See Attachment B).

RECOMMENDATIONS

- 1. Affirm staff's environmental determination.
- 2. Approve Major Conditional Use Permit and Regular Design Review application CMD11-027 subject to the attached Findings and Conditions of Approval.

Prepared by

Mike Rivera Planner II

Approved by:

Scott Miller Zoning Manager

Approved for forwarding to the City Planning Commission:

Eric Angstadt, Deputy Director

Community & Economic Development Agency

ATTACHMENTS

- A. Project Findings
- B. Project Conditions of Approval
- C. Revised Design Plans, submitted on July 6, 2011
- D. Radio Frequency Emissions Report submitted on February 23, 2011
- E. Revised Photo Simulations submitted on July 6, 2011

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ATTACHMENT A

Findings for Approval

The findings required granting your application for Major Conditional Use Permit and Design Review found in Sections 17.134.050, 17.128.060(C) and 17.128.060 (B), 17.136.050(B) of the Oakland Zoning Regulations, and the reasons your proposal satisfy these findings, are as follows:

SECTION 17.134.050 - CONDITIONAL 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 proposed telecommunications facility will be compatible with the site because the location, size and design of the new antennas will not adversely affect the development of the abutting properties and surrounding neighborhood. The new antennas will be located on a level, but steep small hillside surrounded by existing landscaping, upslope terrain and a new solid fence that will screen them from public view. The new antennas will be installed on an existing open pad that is approximate 220 square foot in area and their compact size and design will relate to the existing antennas. The proposed equipment cabinet will be placed inside an existing equipment shelter which is located on the toe of the hillside and fairly distanced from Tunnel Road. The proposal also includes a Radio Frequency (RF) Emissions report and states that the antennas comply with the regulations set by the Federal Communication Commission. In order to comply with Radio Frequency Standards, staff recommends the applicant submits an RF Emissions report prior to the final building inspection stating that the facility is operating within the acceptable thresholds (See Condition of Approval # 16).

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 telecommunications facility to install six antennas and one equipment cabinet will provide a convenient and functional living and working environment to the general public because of the demand of reliable wireless connection and high speed internet improvements. The proposal is located on an area with topographic challenges, yet the existing vegetation, antenna design and new screening of the facility will be compatible to the hillside setting because the antennas will not physically affect the hillside.

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 telecommunications facility will provide and enhance the demand for reliable wireless communication and internet services to the surrounding uphill residential

neighborhood. The proposal will also provide and improve essential services to motorist traveling along the nearby Interstate-24 Freeway including emergency officials.

D. That the proposal conforms with all applicable Regular Design Review criteria set forth in Section 17.136.050 of the Oakland Planning Code.

The proposed development conforms to the applicable design review findings in Section 17.136.050(B) for Non-Residential Facilities. See design review findings listed 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 property is designated by the Oakland General Plan as Hillside Residential. The intent of the Hillside Residential designation is to create, maintain and enhance neighborhood residential areas that are characterized by detached, single-unit structures on hillside parcels. Upon review of the revised design plans, staff finds that the proposed development conforms with the policies of the General Plan because the operation of a telecommunications facility will provide and serve the needs of the general public. The proposed wireless communication facility is compatible with the site and hillside setting because the Mini Facility is screened and designed to blend in with the backdrop of the upslope terrain so that it is less conspicuous from public view.

SECTION 17.128.060(B)-CONDITIONAL USE PERMIT CRITERIA FOR MINI FACILITIES

1. The project must meet the special design review criteria listed in subsection B of this section.

The proposed development for the collocation of two antennas panels and four radio remote unit antennas conform to the design review criteria for Mini Facilities as described in section 17.128.060 (B). See Design Review findings listed below.

2. The proposed project must not disrupt the overall community character.

The proposed antennas to be located on an existing telecommunications facility in a residential zone, will not disrupt the characteristics of the hillside residential neighborhood. The telecommunication facility will not be visible from public view because the antennas will be screened by a new chain-link fence that will have muted green color vinyl slats. The design of the new fence and the existing landscaping around the facility will continue to maintain the overall hillside community character.

3. The proposed project must not have any visual impact.

The proposed development will not have any visual impact from surrounding properties or from public views because the telecommunications facility will be screened by a muted green color fence that will blend in with the backdrop of the hillside, surrounding trees and shrubs. To reduce the visibility of the development, staff recommends that the proposed safety chain barrier supported by 3 foot high steel pipes around the antenna site should be painted with a muted green color to match the chain-link fence so that it blends in with the hillside setting. (See Condition of Approval # 17)

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SECTION 17.128.060 (B)-DESIGN REVIEW CRITERIA FOR MINI FACILITIES

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

The proposed development is located on an open hillside area. The installation of the antennas will be mounted on two separate low-height steel ground-mounted pipes. The new and existing antennas will be screened by a new chain-link fence with muted green color vinyl slats that will not require the antennas to be painted because the new fence will provide a better design alternative that will screen all related parts such as conduits or cable trays.

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

The proposed development for the installation of new antennas will be ground-mounted on steel pipes on an open hillside surrounded by trees and shrubs. Therefore, this required finding does not apply because the antennas will not be mounted on an architecturally significant building.

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

This required finding is not applicable because the proposed antennas will not be placed on a building, but rather on ground-mounted low height steel pipes that will be screened by a chain-link fence with muted green color vinyl slats.

4. Equipment shelters shall be concealed from view or placed underground.

The proposed development includes the installation of a single equipment cabinet located inside an existing equipment shelter. The existing equipment shelter is located approximate 200 feet from view (road) and it is screened by a row of large pine trees along Tunnel Road.

5. 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, anticlimbing measures and anti-tampering devices.

The proposed antennas will be located in a new enclosed chain-link fence that will have a 3 foot wide access gate. In addition, the telecommunications facility has a chain-link fence with an access gate located in the center of the access stairway. The existing and new access gates will reduce public access into the telecommunications facility located on a steep hillside.

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

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The proposed antennas are ground-mounted and supported by steel pipes. The existing and proposed antennas will be screened by a new chain-linked fence. The proposed equipment cabinet is inside an existing equipment shelter. Therefore, this finding does not apply.

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

The proposed antennas and equipment cabinet will not be accessible to the public. The antenna site is located on a steep hillside and will be located inside a new fence with a locked gate. The equipment cabinet will be located inside an existing shelter that will require a key or some other type of access code.

SECTION 17.136.050 (B)-DESIGN REVIEW FINDINGS FOR NON-RESIDENTIAL FACILITIES

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 proposed development will improve and maintain the design of the telecommunications facility because the existing and proposed antennas will be screened by a new fence that is designed to relate to the hillside. The new fence which varies in height in order to break up its mass will be green and will be surrounded by existing large trees and shrubs so that the hillside setting around the facility will not be changed.

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 proposed development will be in character with the hillside area because the antennas will be screened by a new fence. The proposed fence will protect the neighborhood context because the design of the chain-link fence varies in height to break up mass and provide some vertical articulation. Furthermore, the proposed muted green color fence will blend in with the surrounding landscape setting to minimize its visibility and protect value of private and public investment in the area.

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 Oakland General Plan Objectives and Policies including the Conditional Use Permit Findings 17.134.050 & 17.128.060(C), and Design Review Findings 17.128.060(B) and 17.136.050(B) found within this report.

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ATTACHMENT B

Conditions of Approval

1. Approved Use

Ongoing

- a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, and the *revised* design review plans dated **July 6**, **2011** and submitted to the City on **July 6**, **2011**, 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 **Planning Commission** ("this Approval") includes the approvals set forth below. This Approval includes the installation of six (6) wireless communication antennas and one (1) equipment cabinet located at 1307 Tunnel Road.

2. Effective Date, Expiration, Extensions and Extinguishment

Ongoing

Unless a different termination date is prescribed, this Approval shall expire **two (2) 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 **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 laws/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. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition of Approval #3.
- 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, elevated walking pathways, safety railings, emergency lighting and vegetation management for preventing fires.

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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 of approval** 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 of approval** if it is found that there is violation of any of the **conditions of approval** or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Conditions of Approval.

6. Signed Copy of the Conditions of Approval

With submittal of a demolition, grading, and building permit

A copy of the approval letter and **Conditions of Approval** 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 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 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.

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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 of approval**, and if one or more of such **conditions of approval** is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid **conditions of approval** 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 by City officials and project developer 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 third-party special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review or construction. The project applicant may also be required to cover the full costs of independent technical review 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. Tree Protection During Construction

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

Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:

- a) Before the start of any clearing, excavation, construction or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the City Tree Reviewer. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.
- b) Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the City Tree Reviewer from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.

Page 15

- a) No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the Tree Reviewer from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the tree reviewer. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.
- b) Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.
- c) If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Agency of such damage. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.
- d) All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.

13. Landscape Maintenance.

Ongoing

All existing 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.

15. Lighting Plan

Prior to the issuance of an electrical or building permit

The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

SPECIFIC PROJECT CONDITIONS

16. Emissions Report

Prior to final inspection

The applicant shall provide an RF emissions report to the City of Oakland Zoning Division indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency that may be subsequently authorized to establish such standards.

Page 16

17. Post and Chain Safety Barrier

Prior to issuance of a building permit

The applicant shall revise the plans and paint the post and chain safety barrier with a muted green color to match the design of the new chain-link fence located around the antenna site.

18. Sinking Fund for Facility Removal or Abandonment.

Prior to issuance of a building permit.

The applicant shall provide proof of the establishment of a sinking fund to cover the cost of removing the facility if it is abandoned within a prescribed period. The word "abandoned" shall mean a facility that has not been operational for a six (6) month period, except where nonoperation is the result of maintenance of renovation activity pursuant to valid City permits. The sinking fund shall be established to cover a two-year period, at a financial institution approved by the City's Office of Budget and Finance. The sinking fund payment shall be determined by the Office of Budget and Finance and shall be adequate to defray expenses associated with the removal of the telecommunication facility.

19. Encroachment Permits

Prior to issuance of a demolition, grading or building permit

The applicant shall obtain any encroachment permits, waiver of damages or other approvals required by the Building Services Division, for any privately constructed public improvements, or any permanent or temporary elements located in the public right of way. This shall include telecommunication equipment, overhead wires, underground trenching, etc.

APPROVED BY:		
City Planning Commission:	(date)	(vote)



CNU0055

FA. #: 10087935 USID: 12715 LTE SITE: CCL00055

TUNNEL ROAD

OAKLAND, CA 94618 1307 TUNNEL ROAD



at&t at 84.8 H.30 ROSENORO, CA 94588

CNU0055 LTE SITE: CCL00055 FA.#: 10087935 USID: 12715 TUNNEL ROAD

OJECT INFORMATION:

1307 TUNNEL ROAD OAKLAND, CA 94618

RRENT ISSUE DATE: 07/06/11

City of Oakland Planning & Zoning Division

ATTACHMENT C

A 12/10/10 90% CONSTRUCTION H 12/10/10 10 90% CONSTRUCTION H DRAWING 0 12/20/10 100% CONSTRUCTION J 12/20/10 100% CONSTRUCTION J 12/20/10 100% CONSTRUCTION J

02/01/11 SAC COMMENTS 05/19/11 DESIGN CHANGE 3 07/06/11 DESIGN CHANGE

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(DESIGN CHANGE)

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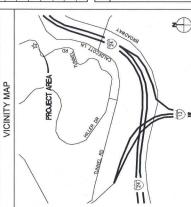
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1062 CONCANION BLVD. LIVERMORE, CA 94550 TEL: (925) 606-5868

GENERAL CONTRACTOR NOTES

	APPROVALS				
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\parallel		LANDLORD:	CONSTRUCTION MANAGER:	RF ENGINEER:	SITE ACQUISITION MANAGER:

GOLD CAMP DR. SUITE 30 CHO CORDOVA, CA 95670 HEET TITLE:

EQUIPMENT AND CONSTRUCTION DETAILS

A-7

SITE INFORMATION AND VICINITY MAP TITLE SHEET,

V

NETWORK OPERATIONS MANAGER UTILITY COORDINATOR:

NEW ONE (1) 3" FIBER/POWER CONDUIT RUN FROM MAIN UNIT TO RRU'S. NEW (1) INDOOR MAIN UNIT MOUNTED TO EXISTING RACK INSIDE EXIST EQUIPMENT SHELTER. 7. NEW TWO (2) SURGE SUPPRESSION BOXES, ONE (1) PER SECTOR 8. NEW ONE (1) GPS ANTENNA MOUNTED ON EXISTING SHELTER 9. NEW ONE (1) DC SURGE PROTECTOR IN EXISTING SHELTER. NEW TWO (2) LTE ANTENNAS MOUNTED ON EXISTING NEW FOUR (4) RET'S PER ANTENNA CONFIGURATION 6. NEW ONE (1) FIBER/POWER BOX ALL WORK AND MATERALS SHALL BE PERFORMED AND INSTALLED IN MOCORRANCE WITH THE CURRENT EDITIONS OF THE FEDLEWING CODES AS ADDRED BY THE LOCAL COMERNING AUTHORITIES, NOTHING IN THESE PLANS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

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2010 CALFORNA BULLONG CODE
2010 CALFORNA MELETIME CODE
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r team	PRO	PROJECT INFORMA
APPLICANT/LESSEE:	SITE ADDRESS:	1307 TUNNEL ROAD OAKLAND, CA 94618
4430 ROSEWOOD DR. PLEASANTON CA 95488	APN:	48H-7589-2
	PROPERTY OWNER:	MITCH LYON
	LATITUDE:	37.85221" N (NAD
	LONGITUDE:	-122.22375° W (NA
ZONING MANAGER:	GROUND ELEVATION:	±830' AMSL
LYLE COMPANY 3140 GOLD CAMP DRIVE, SUITE 30	HEIGHT OF STRUCTURE:	±11' AGL
RANCHO CORDOVA, CA 95670 CONTACT: JONATHAN FONG	ZONING:	R-30/S-10
PHONE: (916) 266-7000	JURISDICTION:	COUNTY OF ALAMED
The state of the s	TELEPHONE;	AT&T
	POWER:	PG&E
CONSTRUCTION MANAGER:		

DR. SUITE 400 MANAGER:

AL A. SHAH. P.E.

ATTACHMENT

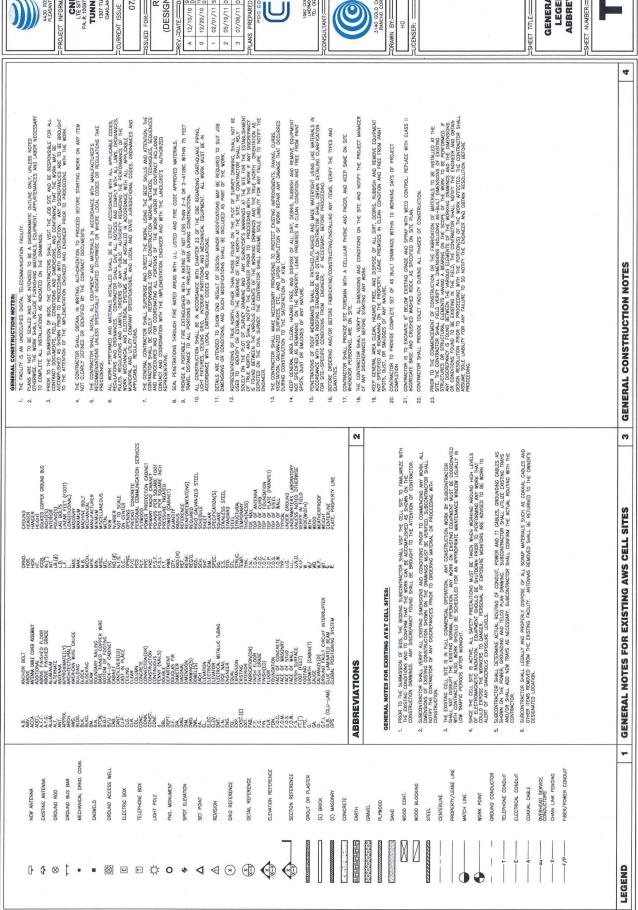
PROJECT TEAM

ERICSSON
6160 STONERIDGE MALL DR. SUITE 40
PLEASANTON, CA 94588
CONTACT: AMEDIE PARK
PHONE: (925) 737–5800
EMALL: omedie,pork@ericsson.com

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at&t 4430 ROSEWOOD DRIVE PLEASANTON, CA 94588

CNU0055 LTE SITE: CCL00055 FA, #: 10087935 USID: 12715 TUNNEL ROAD 1307 TUNNEL ROAD OAKLAND, CA 94618

RRENT ISSUE DATE: 07/06/11

(DESIGN CHANGE) SUED FOR: REV3

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1062 CONCANNON BLVD. LIVERMORE, CA 94550 TEL: (925) 606-5868

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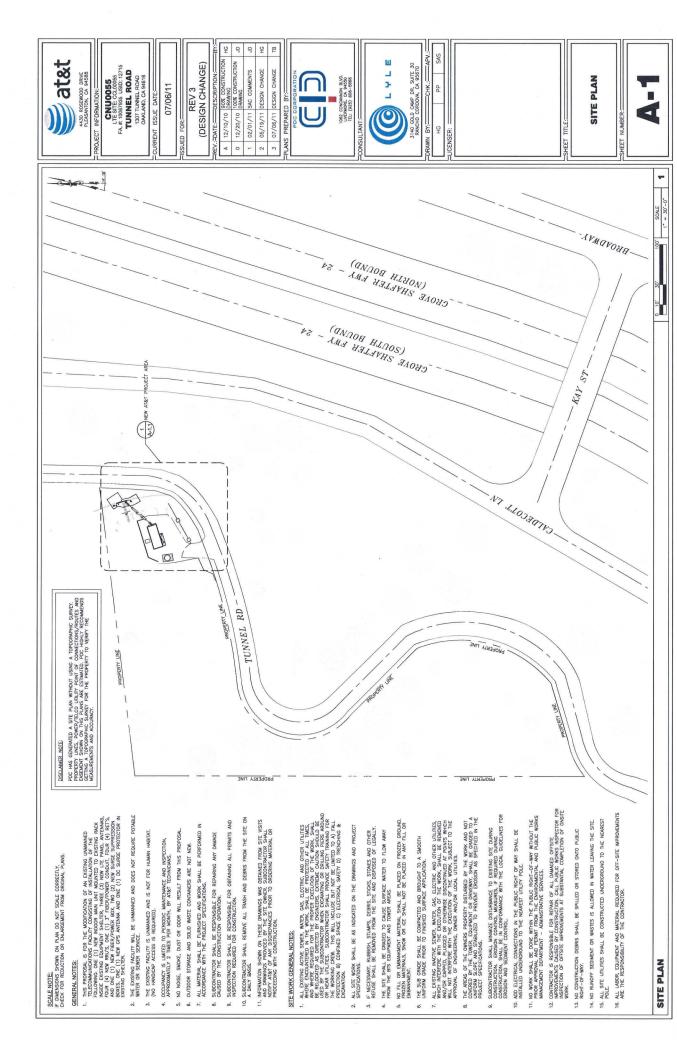
5140 GOLD CAMP DR, SUITE 30 RANCHO CORDOVA, CA 95670

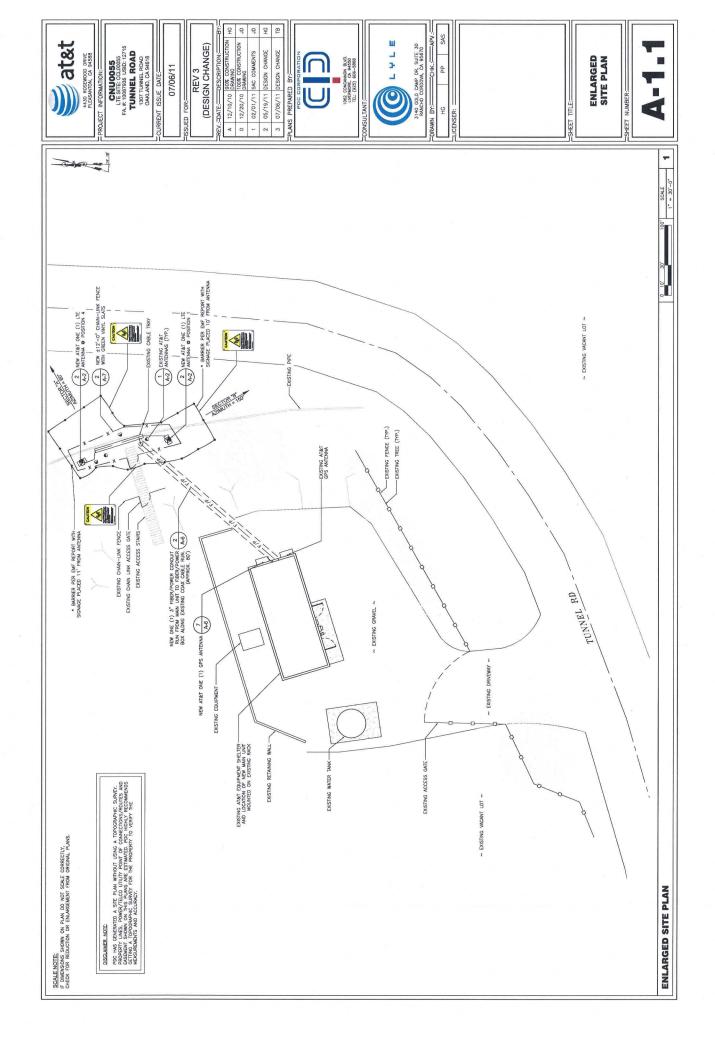
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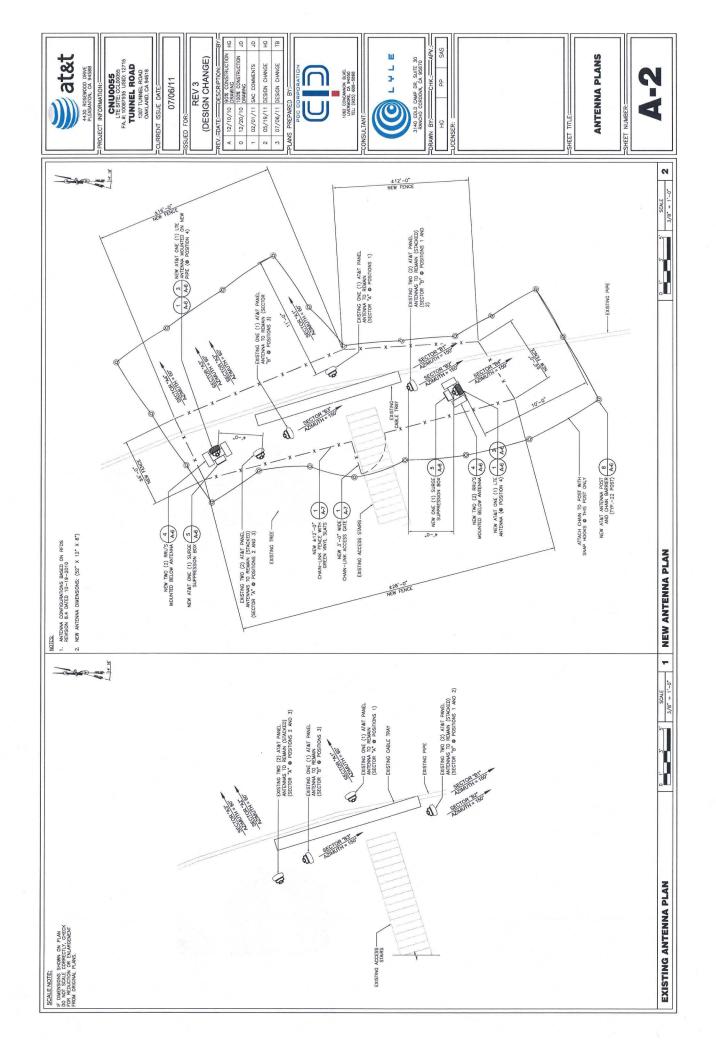
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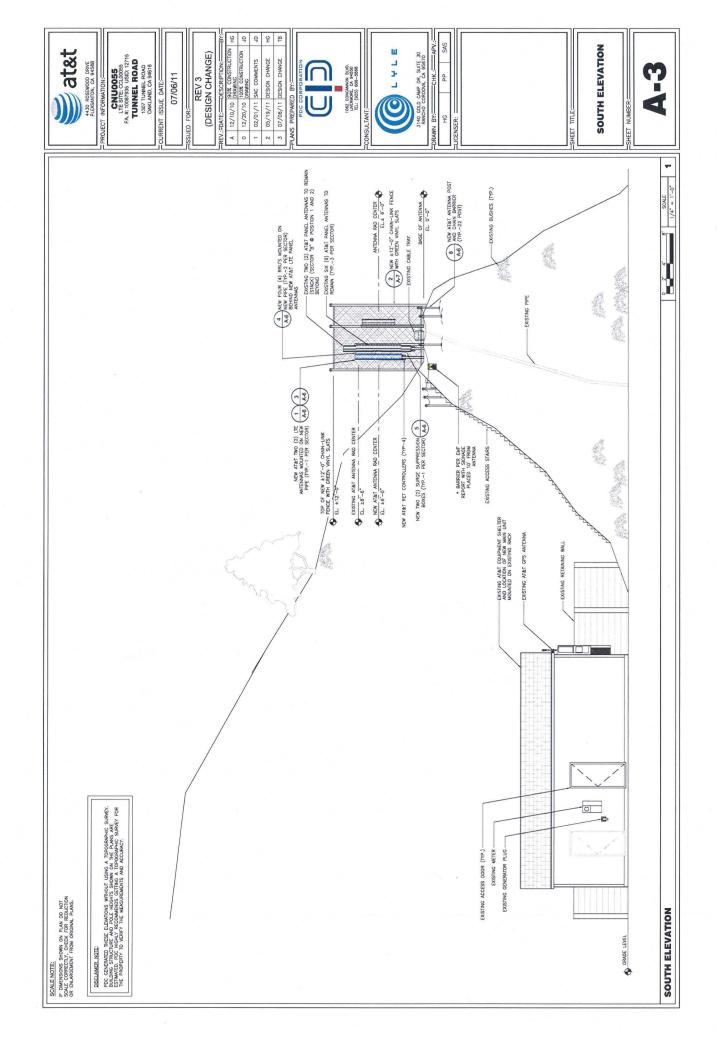
ABBREVIATIONS

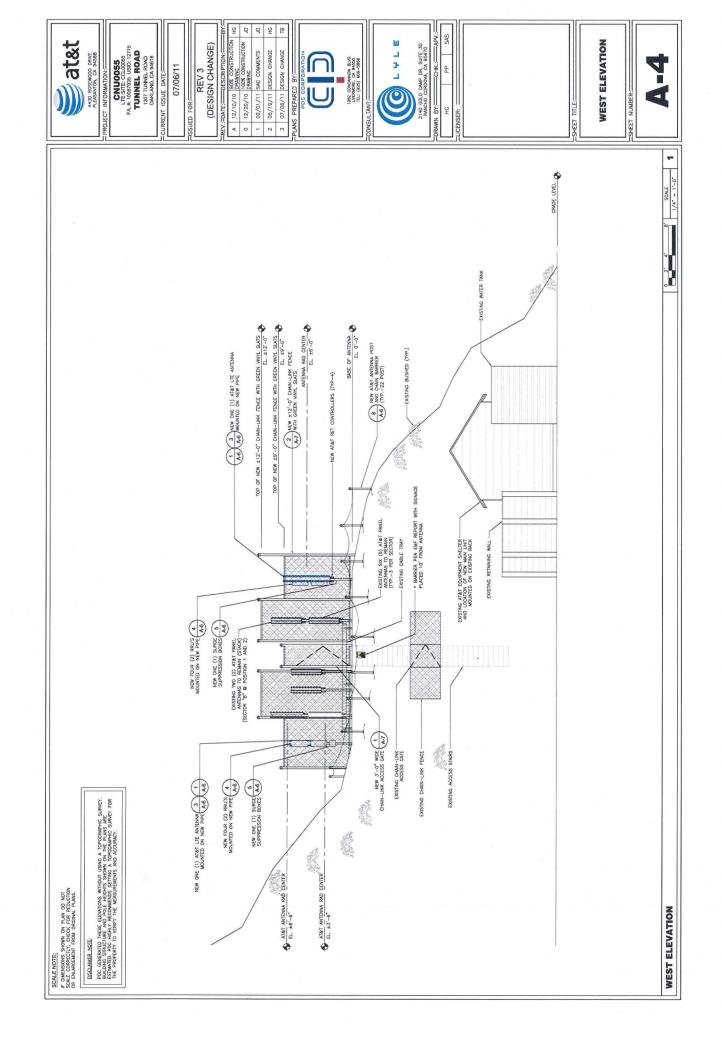
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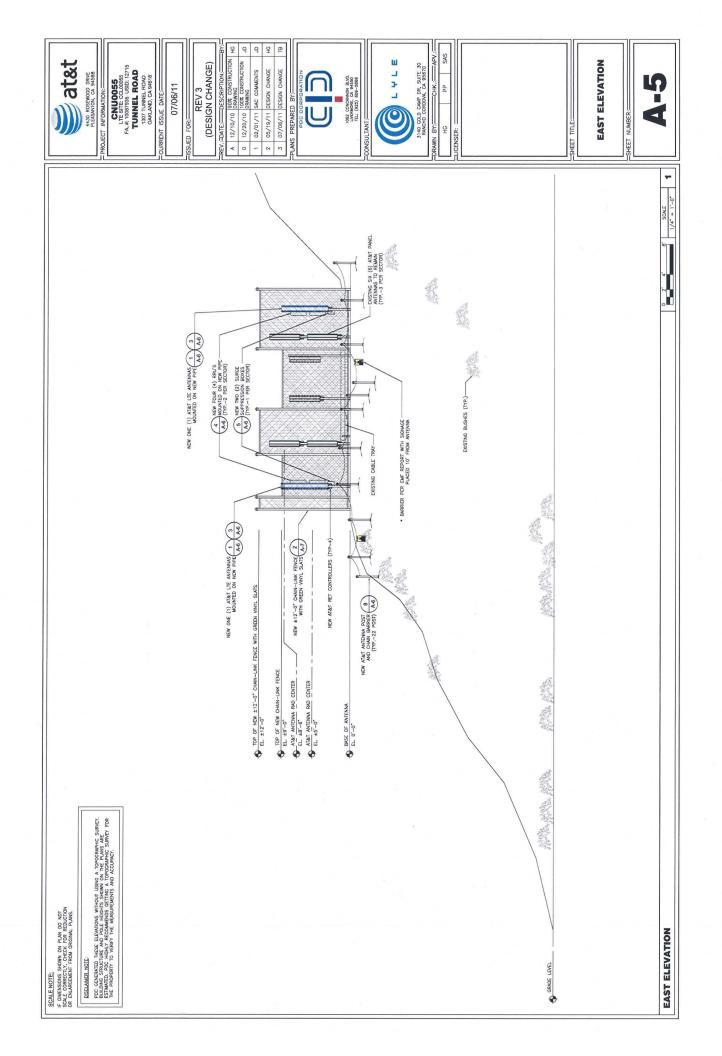


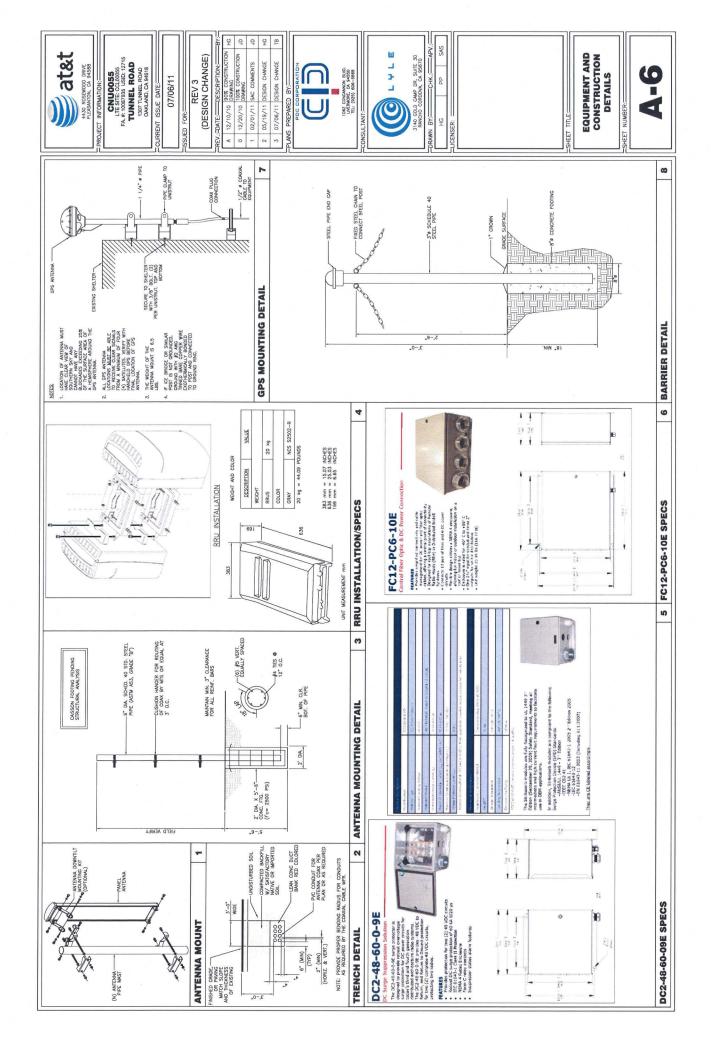


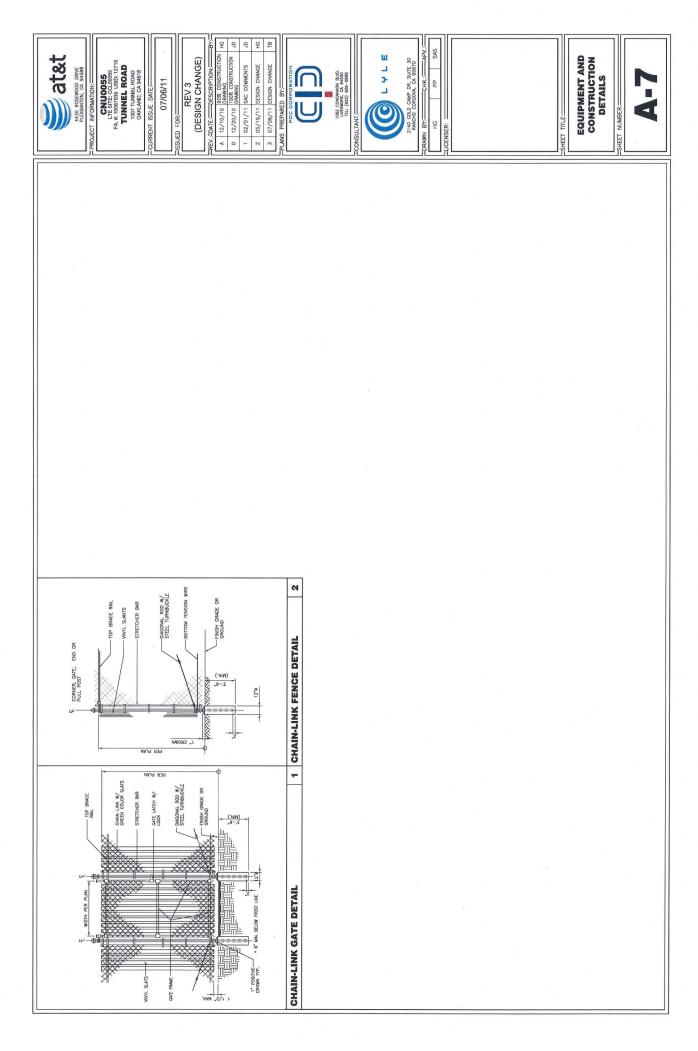












Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

Prepared for: AT&T Mobility, LLC c/o The Lyle Company 3140 Gold Camp Drive Suite 30 Rancho Cordova, CA 95670



USID# 12715 Site No. CNU0055 Tunnel Road 1307 Tunnel Road Oakland, Califnonia 94618 Alameda County 37.852220; -122.223750 NAD8\$

EBI Project No. 62102011 January 21, 2011





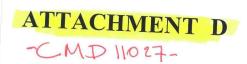


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APPENDICES

Appendix A Personnel Certifications
Appendix B Antenna Inventory
Appendix C RoofView® Export File
Appendix D RoofView® Graphic
Appendix E Compliance/Signage Plan

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by AT&T Mobility, LLC to conduct radio frequency electromagnetic (RF-EME) modeling for AT&T Site CNU0055 located at I307 Tunnel Road in Oakland, Califnonia to determine RF-EME exposure levels from proposed AT&T wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

This report contains a detailed summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Plan with antenna locations
- Antenna inventory with relevant parameters for theoretical modeling
- Graphical representation of theoretical MPE fields based on modeling
- Graphical representation of recommended signage and/or barriers

This document addresses the compliance of AT&T's transmitting facilities independently and in relation to all collocated facilities at the site.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits <u>and</u> there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 9 feet of AT&T's proposed antennas at the ground. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 3 feet of AT&T's proposed antennas at the ground.

AT&T Recommended Signage/Compliance Plan

AT&T's RF Exposure Policy guidance, dated March 31, 2009, requires that:

- 1. All sites must be analyzed for RF exposure compliance;
- 2. All sites must have that analysis documented; and
- 3. All sites must have any necessary signage and barriers installed.

Site compliance recommendations have been developed based upon protocols presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009, additional guidance provided by AT&T, EBI's understanding of FCC and OSHA requirements, and common industry practice. Barrier locations have been identified (when required) based on guidance presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009. The following signage is recommended at this site:



- Green INFO I sign posted at the base of each pole.
- Yellow CAUTION sign posted at the base of each pole.

The signage proposed for installation at this site complies with AT&T's RF Exposure Policy and therefore complies with FCC and OSHA requirements. Barriers are recommended for this site. More detailed information concerning site compliance recommendations is presented in Section 5.0 and Appendix E of this report.

1.0 SITE DESCRIPTION

This project involves the proposed installation of up to six (6) wireless telecommunication antennas on a pole in Oakland, Califnonia. There are two sectors (A and B) proposed at the site. The current plans for the site include two (2) proposed antennas per sector, a total of six (6) antennas to be installed on the site. In each sector, there is assumed to be one antenna transmitting in the UMTS 850, UMTS 1900 frequencies. One antenna will be transmitting in the LTE 700 and LTE AWS 1710 frequencies. The remaining antenna is/ assumed to be transmitting in the GSM 850 and GSM 1900 frequencies. The Sector A antennas will be oriented 60° from true north. The Sector B antennas will be oriented 150° from true north. The bottoms of the LTE antennas will be 3.9 feet above ground level. The bottoms of the GSM antenna in Sector B and the Sector C GSM/UMTS antennas will be 2.85 feet boave ground level. The bottom of the UMTS antenna in Sector B will be 6.35 feet above ground level. Appendix B presents an antenna inventory for the site.

Access to this site is accomplished by walking up to the area around the poles. Workers must be elevated to antenna level to access them, however the low Z value makes these antennas accessible to the general public.

2.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

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

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

Table I and Figure I (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a

particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm²). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm²) and an uncontrolled MPE of 1 mW/cm² for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC's occupational MPE is 2.83 mW/cm² and an uncontrolled MPE of 0.57 mW/cm². These limits are considered protective of these populations.

(A) Limits for Occu	pational/Controlled	d Exposure		
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (\$) (mW/cm²)	Averaging Time [E] ² , [H] ² , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f²)*	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for Gene	ral Public/Uncontro	olled Exposure		
The state of the s			T	
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time [E] ² , [H] ² , or S (minutes)
(MHz)	Strength (E)	Strength (H)		[E] ² , [H] ² , or S
(MHz)	Strength (E) (V/m)	Strength (H) (A/m)	(mW/cm²)	[E] ² , [H] ² , or S (minutes)
(MHz) 0.3-1.34 1.34-30	Strength (E) (V/m) 614	Strength (H) (A/m)	(mW/cm²) (100)*	[E] ² , [H] ² , or S (minutes)
(MHz)	Strength (E) (V/m) 614 824/f	Strength (H) (A/m) 1.63 2.19/f	(mW/cm²) (100)* (180/f²)*	[E] ² , [H] ² , or S (minutes) 30 30

f = Frequency in (MHz)

Plane-wave Equivalent Power Density

1,000

Occupational/Controlled Exposure
---- General Population/Uncontrolled Exposure
---- General Population/Uncontrolled Exposure

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Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)

Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

^{*} Plane-wave equivalent power density

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm ²	1.00 mW/cm ²
Cellular Telephone	870 MHz	2.90 mW/cm ²	0.58 mW/cm ²
Specialized Mobile Radio	855 MHz	2.85 mW/cm ²	0.57 mW/cm ²
Most Restrictive Freq, Range	30-300 MHz	1.00 mW/cm ²	0.20 mW/cm ²

MPE limits are designed to provide a substantial margin of safety. 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.

Personal Communication (PCS) facilities used by AT&T in this area operate within a frequency range of 850-1900 MHz. Facilities typically consist of: I) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

3.0 AT&T RF EXPOSURE POLICY REQUIREMENTS

AT&T's RF Exposure Policy guidance, dated March 31, 2009, requires that:

- 1. All sites must be analyzed for RF exposure compliance;
- 2. All sites must have that analysis documented; and
- 3. All sites must have any necessary signage and barriers installed.

Pursuant to this guidance, worst-case predictive modeling was performed for the site. This modeling is described below in Section 4.0. Lastly, based on the modeling and survey data, EBI has produced a Compliance Plan for this site that outlines the recommended signage and barriers. The recommended Compliance Plan for this site is described in Section 5.0.

4.0 Worst-Case Predictive Modeling

In accordance with AT&T's RF Exposure policy, EBI performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site ground-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

For this report, EBI utilized antenna and power data provided by AT&T, and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65.

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The assumptions used in the modeling are based upon information provided by AT&T, and information gathered from other sources. There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 9 feet of AT&T's Sector B and C antennas at ground level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 3 feet of AT&T's Sector B and C antennas at ground level. At the nearest walking/working surfaces to the AT&T antennas, the maximum power density generated by the AT&T antennas is approximately 1,493.60 percent of the FCC's general public limit (298.72 percent of the FCC's occupational limit).

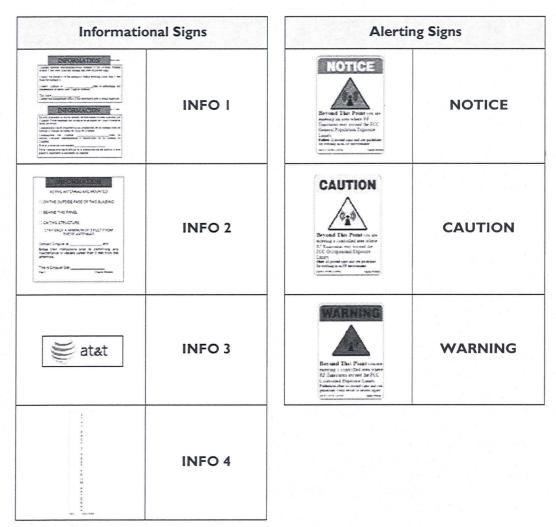
The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground level coverage.

5.0 RECOMMENDED SIGNAGE/COMPLIANCE PLAN

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. As presented in the AT&T guidance document, the signs must:

- Be posted at a conspicuous point;
- Be posted at the appropriate locations;
- Be readily visible; and
- Make the reader <u>aware</u> of the potential risks <u>prior</u> to entering the affected area.

The table below presents the signs that may be used for AT&T installations.



Based upon protocols presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009, and additional guidance provided by AT&T, the following signage is recommended on the site:

Recommended Signage:

- Green INFO I sign posted at the base of each pole.
- Yellow CAUTION sign posted at the base of each pole.

Barriers should be installed 9 feet in front of the AT&T Sector B and C antennas. Barriers may consist of rope, chain, fencing, or painted/taped stripes. The signage and any barriers are graphically represented in the Signage Plan presented in Appendix E.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed AT&T telecommunications equipment at the site located at 1307 Tunnel Road in Oakland, Califnonia.

EBI has conducted theoretical modeling to estimate the worst-case power density from AT&T antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements, as well as AT&T's corporate RF safety policies. As presented in the preceding sections, based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 9 feet of AT&T's proposed antennas at the ground. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 3 feet of AT&T's proposed antennas at the ground.

Signage is recommended at the site as presented in Section 5.0 and Appendix E. Posting of the signage brings the site into compliance with FCC rules and regulations and AT&T's corporate RF safety policies.

7.0 LIMITATIONS

This report was prepared for the use of AT&T Mobility, LLC. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

Appendix A Certifications

Preparer Certification

- I, Stephanie Penta, state that:
 - I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
 - I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
 - I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
 - I have been trained in on the procedures outlined in AT&T's RF Exposure Policy guidance (dated 3/31/09) and on RF-EME modeling using RoofView® modeling software.
 - I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.



Appendix B Antenna Inventory

	1		T	_	1	1				1	T	Г
Ν	3.9	3.9	6.35	6.35	2.85	2.85	3.9	3.9	2.85	2.85	2.85	2.85
>	901	901	92	92	92	92	77	77	46	46	25	25
×	21	21	23	23	23	23	26	26	37	37	4	4
Horizontal Beamwidth (Deg.)	89	65	89	63	89	63	89	65	89	63	89	63
Length (ft)	4.2	4.2	4.3	4.3	4.3	4.3	4.2	4.2	4.3	4.3	4.3	4.3
Azimuth (deg.)	09	09	09	09	09	09	150	150	150	150	150	150
Model	Andrew DBXNH- 6565A-R2M	Andrew DBXNH- 6565A-R2M	Kathrein 742- 264	Kathrein 742- 264	Kathrein 742- 264	Kathrein 742- 264	Andrew DBXNH- 6565A-R2M	Andrew DBXNH- 6565A-R2M	Kathrein 742- 264	Kathrein 742- 264	Kathrein 742- 264	Kathrein 742-
Gain (dBd)	11.3	14.5	11.85	14.65	11.85	14.65	11.3	14.5	11.85	14.65	11.85	14.65
ERP (Watts)	247	516	250	250	200	200	247	516	250	250	200	200
Freq (MHz)	LTE 700	LTE AWS 1710	UMTS 850	UMTS 1900	GSM 850	GSM 1900	LTE 700	LTE AWS 1710	UMTS 850	UMTS 1900	GSM 850	GSM
Antenna Type	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel	Panel
Operator	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T	AT&T
Antenna Number	ATT AI	ATT AI	ATT A2	ATT A2	ATT A3	ATT A3	ATT BI	АТТ В І	ATT B2	ATT B2	ATT B3	ATT B3

1. Note that EBI uses an assumed set of antenna specifications and powers for unknown and other carrier antennas for modeling purposes.

Appendix C Roofview® Export File

Uptime Profile

Appendix D Roofview ® Graphics

% of FCC Public Exposure Limit



Exposure Level ≥ 5,000



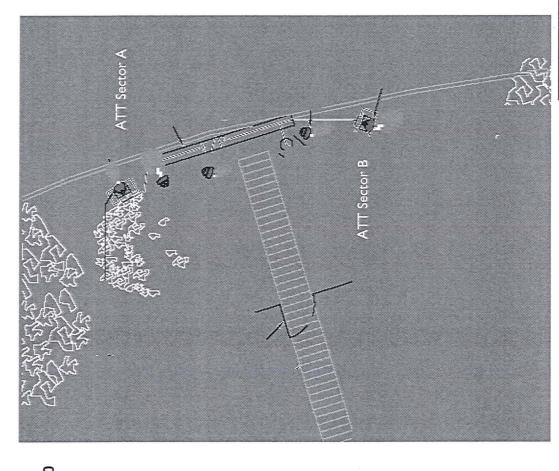
500 < Exposure Level ≤ 5000

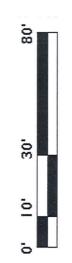


100 < Exposure Level ≤ 500



Exposure Level ≤ 100





Roofview: Composite Exposure Levels Facility Operator: AT&T Mobility

Site Name: Tunnel Road

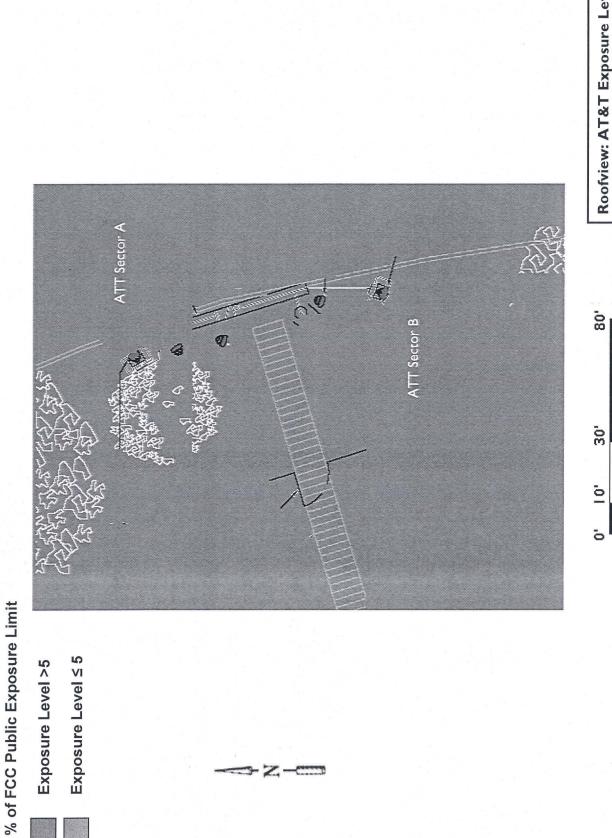
AT&T Site Number: CNU0055 USID Number: 12715

Report Date: 01-21-11

Other Camier Antennas

AT&T Antennas





Roofview: AT&T Exposure Levels

Facility Operator: AT&T Mobility

AT&T Site Number: CNU0055 Site Name: Tunnel Road

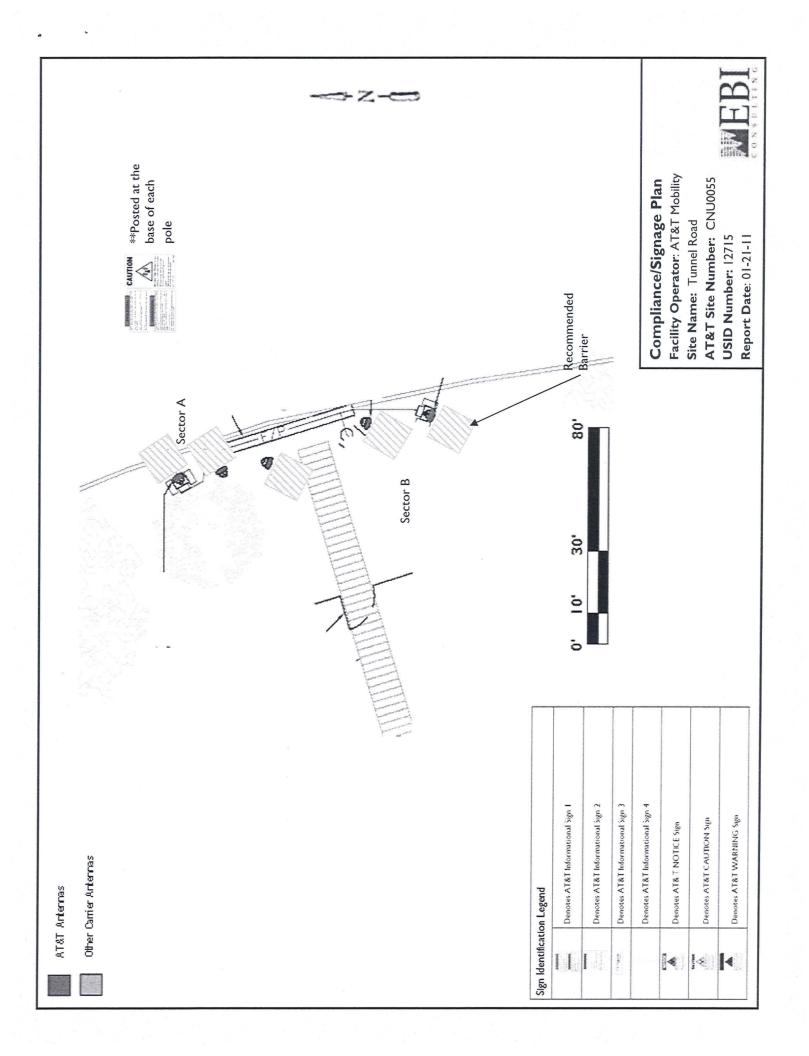
USID Number: 12715 Report Date: 01-21-11

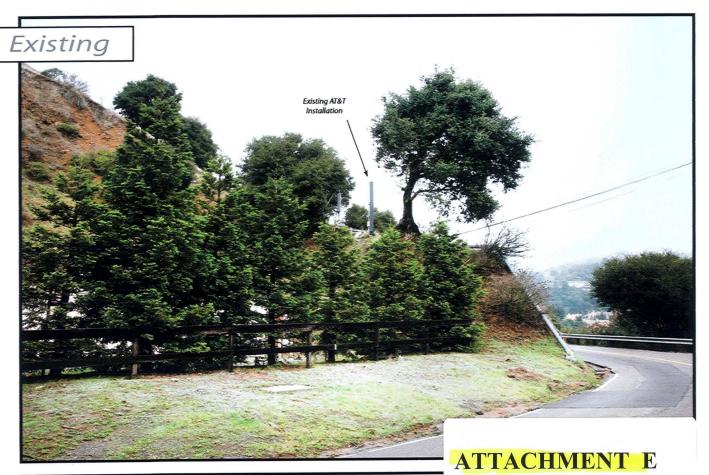


AT&T Antennas

Other Camier Antennas

Appendix E Compliance/Signage Plan





- CMD 11027 -

Proposed AT&T Installation

Proposed

AdvanceSine

AT&T Wireless

CNU0055 Tunnel Road 1307 Tunnel Road, Oakland, CA

view from Tunnel Road looking north at site

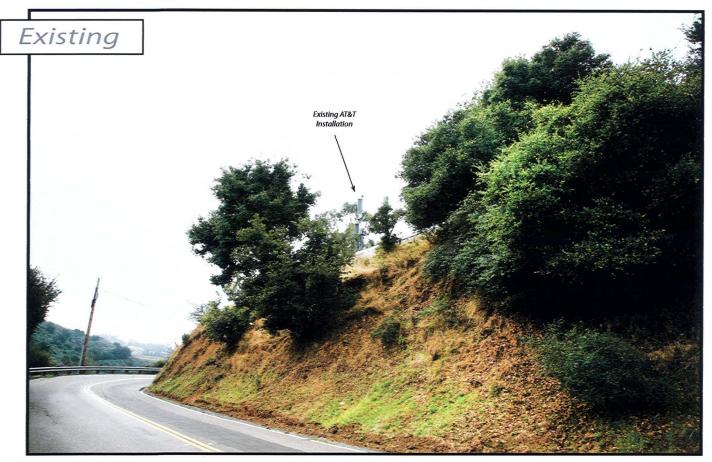




AdvanceSime Photo Simulation Solutions Contact (925) 202-8507

AT&T Wireless

1307 Tunnel Road, Oakland, CA





AT&T Wireless

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