



Staff Report to the Zoning Administrator

Application Number: **111216**

Applicant: Julie Epshteyn
Owner: Brad Huxtable
APN: 060-261-11

Agenda Date: December 2, 2011
Agenda Item #: 6
Time: After 1

Project Description: Proposal to expand an existing wireless carrier lease area by 70 square feet to add 3 panel antennas and 2 equipment cabinets to an existing wireless carrier facility to result in 9 total panel antennas mounted on an existing 60-foot tall monopine and a total of 5 equipment cabinets at the existing wireless carrier facility.

Location: Property is located east of Hwy 17 directly south of the Pasatiempo exit on the east side of El Rancho Drive at 200 El Rancho Drive.

Supervisory District: 1st District (District Supervisor: John Leopold)

Permits Required: Amendment to Commercial Development Permits 97-0880, 01-0312, 03-0056, 05-0481 and 08-0205.

Technical Reviews: RF electromagnetic radiation analysis (pursuant to FCC guidelines) by Site Safe RF Compliance Experts, Consulting Engineers.

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 111216, based on the attached Findings and Conditions.

Exhibits

- | | |
|---|---|
| A. Project plans | E. Assessor's, Location, Zoning and General Plan Maps |
| B. Findings | F. RF radiation analysis report by Site Safe RF Compliance, dated September 16, 2011. |
| C. Conditions | |
| D. Categorical Exemption (CEQA determination) | |

Parcel Information

Parcel Size: 1.59 acres
Existing Land Use - Parcel: Residential, Telecommunications wireless facility
Existing Land Use - Surrounding: Residential, Public Facility (Highway 17)

County of Santa Cruz Planning Department
701 Ocean Street, 4th Floor, Santa Cruz CA 95060

Project Access: From driveway off El Rancho Road.
Planning Area: Carbonara
Land Use Designation: PF (Public Facility)

Zone District: SU (Special Use)
Coastal Zone: ☐ Inside ☒ Outside
Appealable to Calif. Coastal Comm. ☐ Yes ☒ No

Environmental Information

Geologic Hazards: Not mapped/no physical evidence on site
Soils: 177-Watsonville Loam, 2-15% slopes
Fire Hazard: Not a mapped constraint
Slopes: 2-15 % slopes
Env. Sen. Habitat: No biotic resources of concern on site
Grading: No grading proposed
Tree Removal: No trees proposed to be removed
Scenic: Not visible from Hwy 17
Drainage: Existing drainage adequate
Archeology: Mapped potential resource area; prior archeological site assessment did not reveal presence of resources.

Services Information

Urban/Rural Services Line: ☒ Inside ☐ Outside
Water Supply: n/a
Sewage Disposal: n/a
Fire District: Scotts Valley Fire
Drainage District: none

History

Five approvals for wireless communications facilities have been granted on the subject property. Commercial Development Permit (CDP) 97-0880 allowed the construction of a wireless telecommunications facility for Pacific Bell, consisting of a 40-foot high monopole and a 10 square foot concrete pad. Commercial Development Permit 01-0312 was approved on 11/16/01 to amend CDP 97-0880 to allow the construction of a new 48-foot high monopole, as well as a 220 square foot equipment shed in addition to the existing 40 foot monopole. On 03/18/04 CDP 03-0056 was approved to transfer ownership of the wireless facility associated with the 48-foot cell tower from Sprint to AT&T Wireless, and to delete the equipment storage building and replace it with a reduced equipment enclosure by constructing a concrete slab and 6-foot high fenced area to house three equipment cabinets. On March 3, 2006, CDP 05-0481 was approved to replace the existing 45-foot monopole with a 60-foot monopole (disguised as a tree), reinstall two existing antennas, construct six new antennas, install three equipment cabinets, one ground-mounted GPS antenna, two power/telco boxes, a 24 square foot concrete pad and a new six-foot cyclone fence. Minor Variation 08-0205 was approved on January 16, 2009, to allow the replacement of 3 existing panel antennas with new panel antennas, and to add one equipment cabinet.

Project Setting

The project site is located on the west side of El Rancho Drive in the Carbonera Planning Area. The site is located between El Rancho Drive and Highway 17 and is developed with two existing wireless facilities and a single-family dwelling. Highway 17 is located to the west, with residential development located to the north, east and south.

Analysis

The current application includes an analysis by Site Safe RF Compliance Experts, Consulting Engineers, dated September 16, 2011, that evaluates the maximum potential radio-frequency (RF) radiation exposure from the facility, pursuant to FCC-specific guidelines (see Exhibit F). The maximum ambient RF exposure level that could result from the proposed new equipment by itself at ground level will be below the applicable public exposure limit.

Section 47 USC 332 (c)(7)(iv) of the Telecommunications Act of 1996 does not allow jurisdictions to regulate the placement, construction, or modification of Wireless Communications Facilities based on the environmental effects of RF emissions if these emissions comply with FCC standards. The RF emissions of the proposed wireless communications facility comply with these standards as determined by Site Safe RF Compliance Experts.

Zoning & General Plan Consistency

The subject property is a 1.6-acre lot, located in the SU (Special Use) zone district, with a P (Public Facility) General Plan designation. This zone district is considered supportive of the Public Facility land use designation which is intended to provide for present and future availability of land for both public and quasi-public facilities. Specifically, General Policy 2.21.1(a) provides for development or increases in intensity of use for private non-residential public facilities.

Wireless Ordinance/Zoning Issues

This application is subject to County Code 13.10.659 (Regulations for the siting, design, and construction of wireless communications facilities). The application is consistent with subsection 13.10.659(h)(1) in that the proposed 70 square foot expansion, 3 new antennas and 2 new equipment cabinets are located and camouflaged to preserve the visual character and aesthetic values of the parcel and surrounding area. The proposal utilizes a parcel currently approved and developed with wireless communication facilities. Development on this site does not place new development on a ridge, nor does the development disturb the existing topography or on-site vegetation. Site lighting will be limited to motion activated security/maintenance lighting. The proposed location for the 70 square foot expansion, 3 new antennas and 2 new equipment cabinets is on an area of the lot that is not directly adjacent to surrounding residential uses. While the subject parcel is zoned SU (Special Use), the General Plan Designation is Public Facility, therefore the subject parcel is not considered a Restricted Area per County Code 13.10.661(c).

Visual Impacts

The project site is located within the Highway 17 Scenic Corridor. The proposed Wireless Communication Facility and associated equipment cabinets comply with the requirements of the County Design Review Ordinance, in that the proposed 70 square foot expansion, 3 new antennas and 2 new equipment cabinets will not be readily visible from any public area off site. Mature native vegetation on the property also provides screening and reduces the project's visual impact on the surrounding residences as well as Highway 17. The proposed antennas will match the existing monopine.

Environmental Review

The currently proposed project is eligible for exemption from further environmental review pursuant to CEQA Section 15302, Existing Facilities, which exempts replacement and reconstruction work on an existing telecommunications facility with negligible expansion of capacity.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

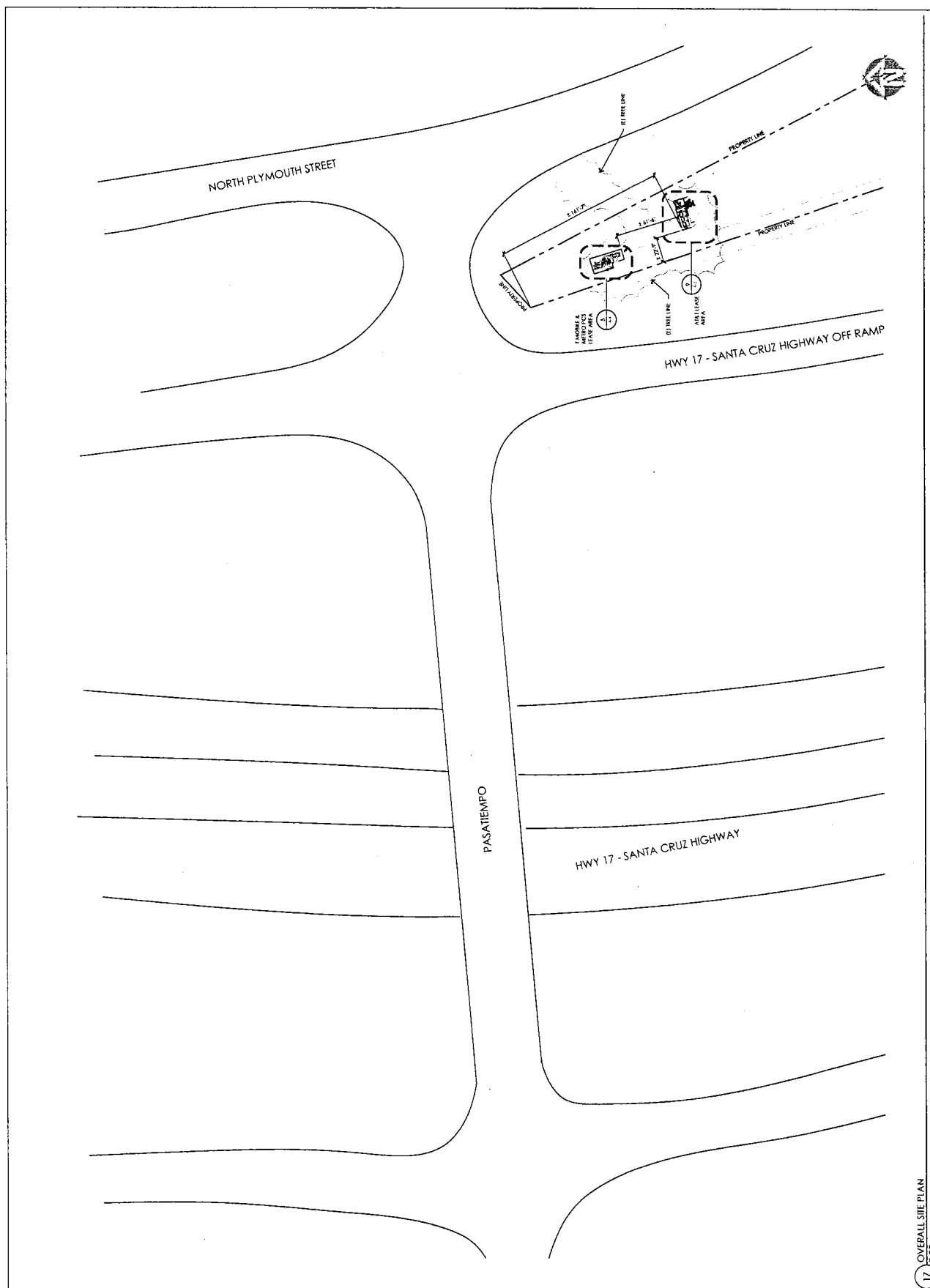
- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **111216**, based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

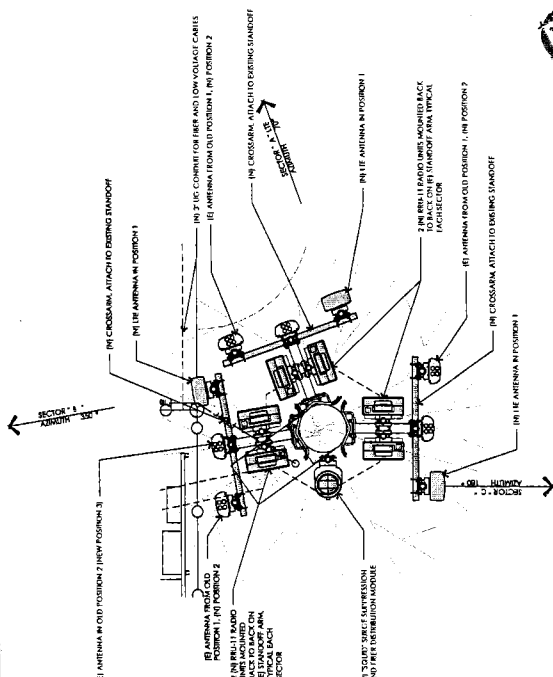
The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

Report Prepared By: Alice Daly
Santa Cruz County Planning Department
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Santa Cruz CA 95060
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E-mail: alice.daly@co.santa-cruz.ca.us

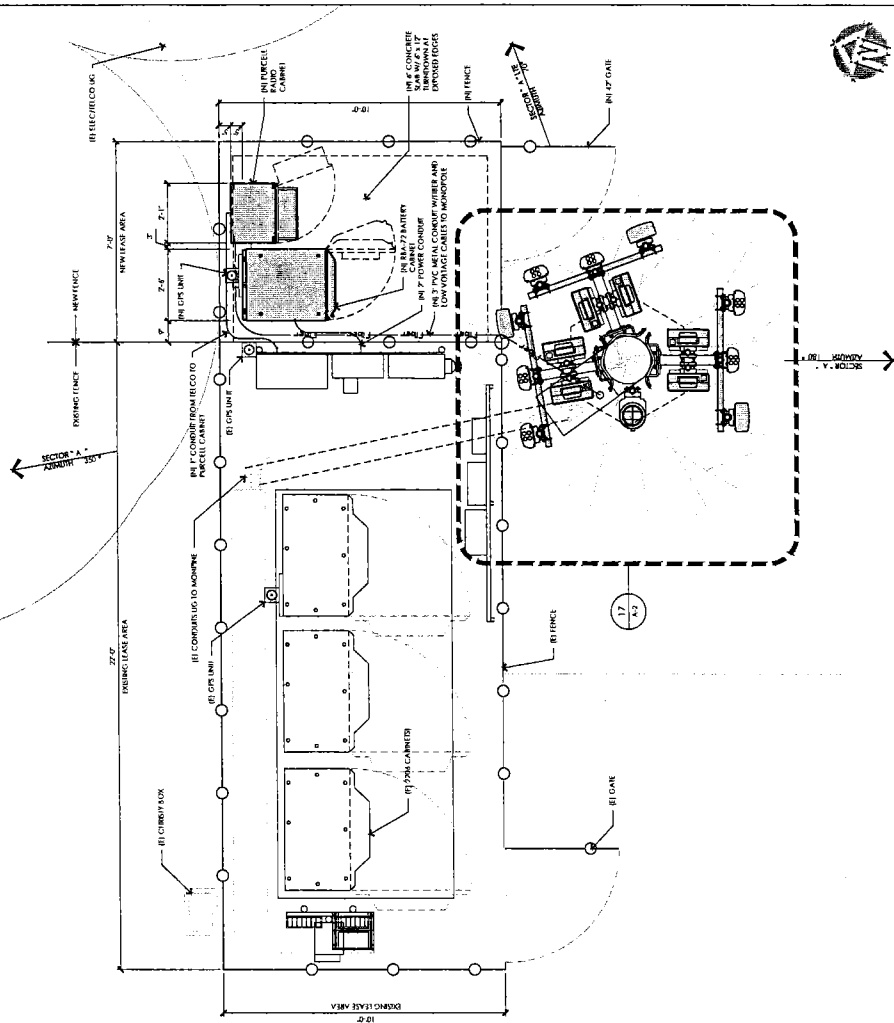
at&t PREPARED FOR 4435 BOWMAN DRIVE, SUITE 2 FARMINGTON, CONNECTICUT 06030		Jurisdiction: COUNTY OF SANTA CRUZ 200 EL RANCHO SANTA CRUZ, CA 95060 Hwy 17-El Rancho CNU3495 / CCL03495		OVERALL SITE PLAN Date: 06/17/11 Project: 06/09/203 Revision: 100% CD SUBMITTAL 04/20/11 100% CD SUBMITTAL 06/24/11 100% CD REV 1	
Borges 1120 North Highway Suite 202 Walnut Creek, CA 94598		17 OVERALL SITE PLAN 17-007		A-1	



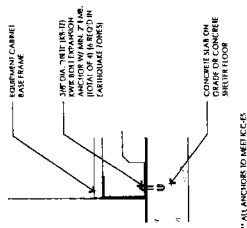
17 ENLARGED ANTENNA PLAN
1/17" = 1'-0"



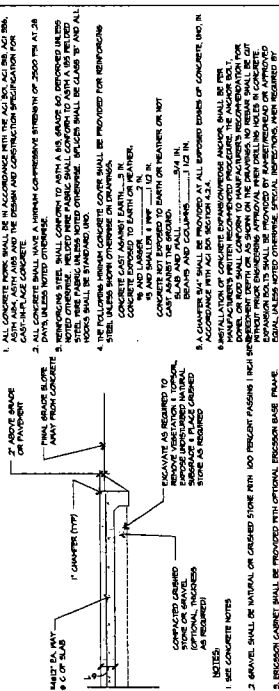
9 ENLARGED A1&T SITE PLAN
1/2" = 1'-0"



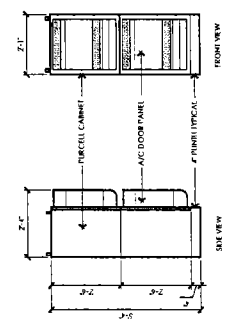
12 EQUIPMENT ATTACHMENT - CONCRETE SLAB



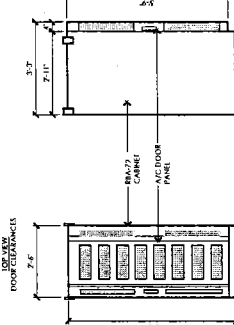
CONCRETE SLAB DETAIL



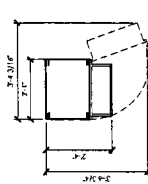
PURCELL LITE CONDITIONED CABINET



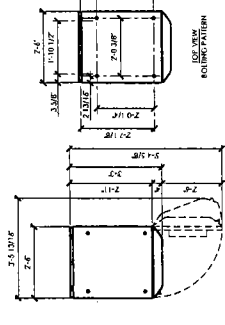
15 R8A-72 DETAIL



PURCELL LITE CONDITIONED CABINET




RBA 72 CABINET SPECIFICATIONS



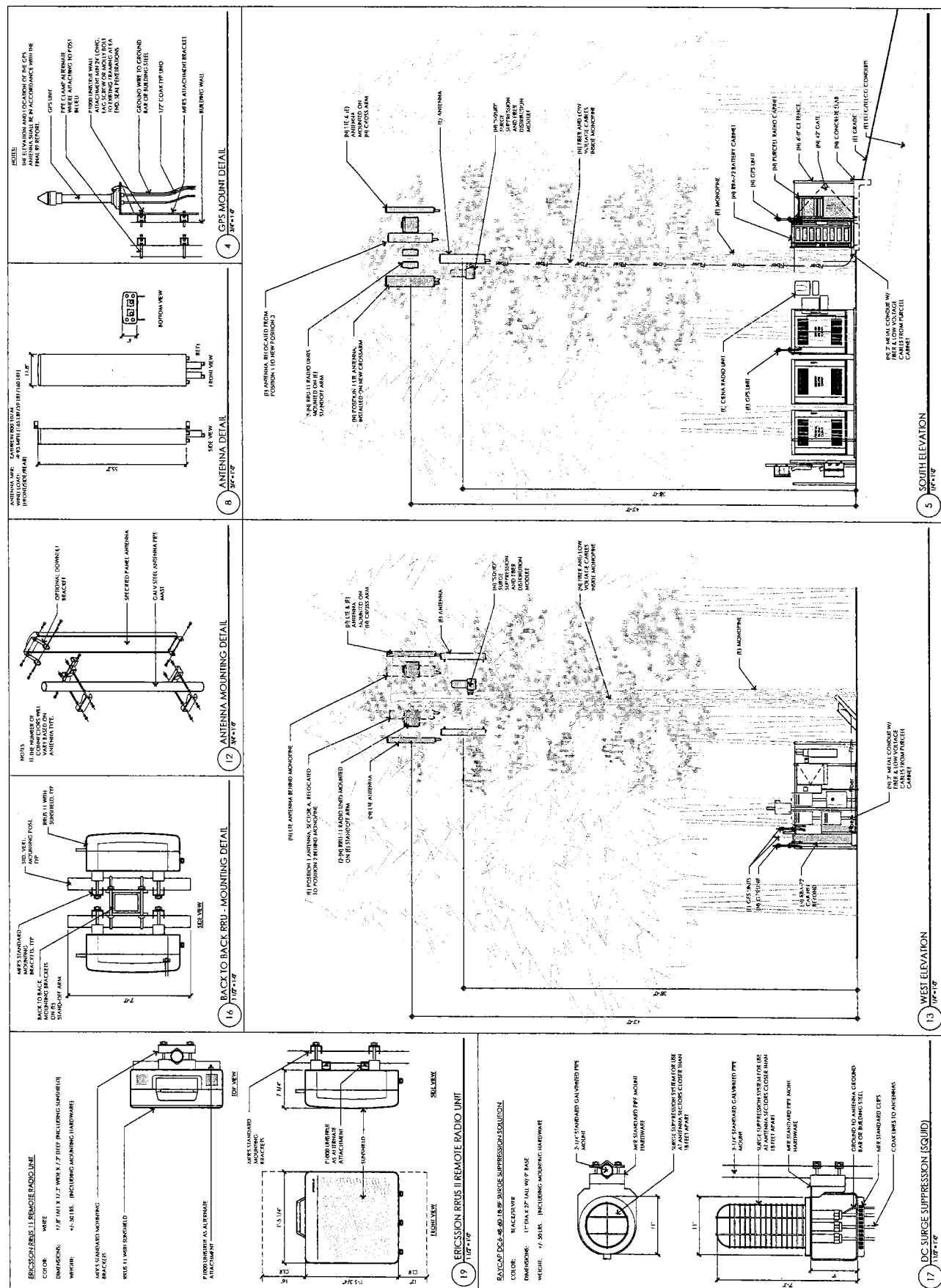
ELEVATIONS & DETAILS		Order No.	06/17/11	09/08/208	Job No.
Remarks	Date	No.			
			0	04/20/11	90% CD SUBMITTAL
			0	04/17/11	100% CD SUBMITTAL
			0	08/24/11	100% CD REV 1

CNU3495 / CCL03495
Hwy 17-El Rancho
200 EL RANCHO
SANTA CRUZ, CA 95060
Jurisdiction: COUNTY OF SANTA CRUZ

PREPARED FOR
at&t
1430 Rosewood Drive, 8ldg 2
Menlo Park, California 94025



1310 North Broadway
Suite 202
Wolnui Creek, CA 94596



EX

11. *Staphylococcus aureus* is a Gram-positive bacterium that is commonly found on the skin and in the nose. It is a facultative anaerobe, meaning it can grow in the presence or absence of oxygen. *S. aureus* is a pathogen that can cause a variety of infections, including skin infections, pneumonia, and sepsis. It is resistant to many antibiotics, making it a significant public health concern.

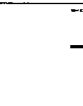


TABLE 1. *Continued*



Wireless Communication Facility Use Permit Findings

1. The development of the proposed wireless communications facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive habitat resources (as defined in the Santa Cruz County General Plan/LCP Sections 5.1, 5.10, and 8.6.6.), and/or other significant County resources, including agricultural, open space, and community character resources; or there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts and the proposed facility has been modified by condition and/or project design to minimize and mitigate its visual and other resource impacts.

The proposal will not significantly affect any designated visual resources in that, while the site is within a vista from a designated scenic road (Highway 17), and is therefore protected by General Plan Policy 5.10.3, steps have been taken to reduce the visual impacts of the development to a less than significant level. Specifically, the monopole is proposed to replace an existing monopole in the same location. The existing monopole is camouflaged to blend into the existing natural surroundings, and the proposed new antennas will blend in and will not change the treelike appearance of the pole. The proposed equipment sheds will be screened by existing vegetation, will be painted a neutral earth tone color, and will not be visible from the scenic highway, as demonstrated by visual simulations provided by the applicant.

2. The site is adequate for the development of the proposed wireless communications facility and, for sites located in one of the prohibited and/or restricted areas set forth in Sections 13.10.661(b) and 13.10.661(c), that the applicant has demonstrated that there are not environmentally equivalent or superior and technically feasible: (1) alternative sites outside the prohibited and restricted areas; and/or (2) alternative designs for the proposed facility as conditioned.

This finding can be made in that the proposed site is not located in a prohibited or restricted area as set forth in Sections 13.10.661(b) and 13.10.661(c). As such, no alternative site analysis or alternative designs are required. Wireless communication facilities are an allowed use within the SU (Special Use) zone district.

3. The subject property upon which the wireless communications facility is to be built is in compliance with all rules and regulations pertaining to zoning uses, subdivisions and any other applicable provisions of this title (County Code 13.10.660) and that all zoning violation abatement costs, if any, have been paid.

This finding can be made, in that the existing wireless telecommunications facilities are permitted uses under permits 97-0880, 01-0312, 03-0056, 05-0481 and 08-0205. The existing and proposed uses, as designed, are compatible with the zone district and General Plan designation.

No zoning violation abatement fees are applicable to the subject property.

4. The proposed wireless communication facility as conditioned will not create a hazard for

aircraft in flight.

The proposed facility will not create a hazard for aircraft in flight in that the top of the existing monopine is lower than the tops of the existing trees in the area.

5. The proposed wireless communication facility as conditioned is in compliance with all FCC and California PUC standards and requirements.

The facility is in compliance with all FCC and California PUC standards and requirements in that the equipment for the facility is reviewed by the appropriate state and federal agencies.

Cingular Wireless, another telecommunications carrier, has a similar base station located about 95 feet to the north. During its 1997 ZA hearing, it was reported a maximum effective radiated power of 200 watts, and a maximum ambient RF of 0.012 percent. Collectively these facilities are well below acceptable safety standards.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

The location of the proposed 3 new antennas and the 2 new equipment cabinets and the conditions under which the equipment would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public due to its location, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity in that the project is located in an area designated for public/private utility use and is not encumbered by physical constraints to development. The maximum ambient RF at ground level due to the proposed operation would not exceed the most restrictive applicable limit. The maximum effective radiated power within any direction would be 1,000 watts.

Cingular Wireless, another telecommunications carrier, has a similar base station located about 95 feet to the north. During its 1997 Zoning Administrator hearing, it was reported a maximum effective radiated power of 200 watts, and a maximum ambient RF of 0.012 percent. Collectively these facilities are well below acceptable safety standards.

Construction will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation energy and resources.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

The project site is located in the SU zone district. The proposed location of the replacement antenna and equipment and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the SU zone district, which are established by the General Plan designation of P (Public Facilities). See Finding 3.

The ordinance regulating the location wireless communications facilities (13.10.659(f)(2)) authorizes the construction of such devices within the SU zone districts with other than a residential General Plan designation.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

The subject parcel has a land use designation of P (Public Facilities). The proposed private, non-residential public facility use is consistent with all elements of the General Plan in that the use is permitted by General Plan Policy 2.21.1(a), and that the proposal is consistent with General Plan Policy 8.6.6 as the development does not disturb ridge tops or natural land forms. Further, the use is

not located in a hazardous or environmentally sensitive area and the proposal protects natural resources by expanding in an area already in use and designated for this type of development.

The subject property is located within the Highway 17 scenic corridor. The existing monopine is visible from points along the corridor, however the existing topography and vegetation along the highway only allow brief views of the monopine, which is camouflaged to appear as a natural pine tree, and additional vegetation provide additional screening for the tower and associated equipment. The visual impact is thus less than significant.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

The use will not overload utilities and will not generate traffic on the streets in the vicinity in that the facilities are an unattended/non-habitable operation. Improved wireless communication resulting from the installation of this facility may have a positive impact on traffic circulation in that drivers will have improved access to emergency services thereby reducing response time.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

The proposed additions to the existing facilities will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design in their vicinity. The existing monopine structure is camouflaged to blend into the existing natural surroundings and the associated new antennas and equipment cabinets will be painted in earth tone and tree colors and screened by the existing mature vegetation in the area. The proposed design will adequately camouflage the additions to the existing wireless communications facility from view.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed 3 new antennas and 2 new equipment cabinets will be of a scale and design that will blend in with the existing telecommunications facility and will not have a visual impact upon available open space in the surrounding area.

Conditions of Approval

Exhibit A: Project plans, 7 pages, dated August 24, 2011, by Richard Sambucetti, Architect.

- I. This permit amends and incorporates all of the findings and conditions of Commercial Development Permit 97-0880, Commercial Development Permit 01-0312, Commercial Development Permit 03-0056, Commercial Development Permit 05-0481 and Minor Variation 08-0205. Any findings or conditions contained in this permit that are in conflict with prior permits will be superceded by the conditions contained within this permit.

This permit authorizes the expansion of an existing wireless carrier lease area by 70 square feet to add 3 panel antennas and 2 equipment cabinets to an existing wireless carrier facility to result in 9 total panel antennas mounted on an existing 60-foot tall monopine and a total of 5 equipment cabinets at an existing telecommunications facility. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

- A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
 - B. Obtain a Building Permit from the Santa Cruz County Building Official.
 - 1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
 - C. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days from the effective date of this permit.
 - D. The applicant shall obtain approval from the California Public Utilities Commission and the Federal Communications Commission to install and operate this facility.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
- A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods. Any changes not properly labeled will not be authorized by any Building Permit issued for the proposed development.
 - 1. Identify color and finish of exterior materials on plans. Paint for the

antennas must be non-reflective and match the existing paint color of the monopole, while the proposed equipment shelter/cabinets shall be painted a neutral earth tone color.

2. Details showing compliance with fire department requirements.
- B. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached.
 - C. Meet all requirements and pay any applicable plan check fee to the Scotts Valley Fire Department.
 - D. To ensure the continued provision of mitigation of the visual impact of the wireless communications facility, the applicant shall submit a maintenance program prior to building permit issuance which includes the following:
 1. A signed contract for maintenance with the company that provides the exterior finish and camouflage materials, for annual visual inspection and follow-up repair, painting, and resurfacing as necessary. Additional paint and/or replacement materials shall be installed as necessary to blend the newly-permitted antennas and equipment cabinets with the existing wireless communications utilities infrastructure.
- III. All construction shall be performed according to the approved plans for the building permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
- A. All site improvements shown on the final approved Building Permit plans shall be installed.
 - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
- IV. Operational Conditions
- A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
 - B. All noise generated from the approved use shall be contained on the property.
 - C. The operator of the wireless communication facility must submit within 90 days of commencement of normal operations (or within 90 days of any major modification of power output of the facility) a written report to the Santa Cruz County Planning Department documenting the measurements and findings with respect to compliance

with the established Federal Communications Commission (FCC) Non-Ionizing Electromagnetic Radiation (NEIR) exposure standard. The wireless communication facility must remain in continued compliance with the NEIR standard established by the FCC at all times. Failure to submit required reports or to remain in continued compliance with the NEIR standard established by the FCC will be a violation of the terms of this permit.

- D. If, in the future, the facility is no longer needed, the operator of the wireless communication facility must abandon the facility and be responsible for the removal of all permanent structures and the restoration of the site as needed to re-establish the area consistent with the character of the surrounding natural landscape.
- E. If, as a result of future scientific studies and alterations of industry-wide standards resulting from those studies, substantial evidence is presented to Santa Cruz County that radio frequency transmissions may pose a hazard to human health and/or safety, the Santa Cruz County Planning Department shall set a public hearing and in its sole discretion, may revoke or modify the conditions of this permit.
- F. Any modification in the type of equipment shall be reviewed and acted on by the Planning Department staff. The County may deny or modify the conditions at this time, or the Planning Director may refer it for public hearing before the Zoning Administrator.
- G. The access road shall be permanently maintained to allow access to emergency vehicles at all times. Any obstruction of the access road, as a result of neglect or lack of maintenance, will be in violation of the conditions of this permit.
- H. The equipment cabinet area must be locked at all times except when authorized personnel are present. The antennas must not be accessible to the public.
- I. All site, building and security lighting shall be directed onto the lease site and away from adjacent properties. The site shall be unlit except when authorized personnel are present at night.
- J. Transfer of Ownership: In the event that the original permittee sells its interest in the permitted wireless communications facility, the succeeding carrier shall assume all responsibilities concerning the project and shall be held responsible to the County for maintaining consistency with all project conditions of approval, including proof of liability insurance. Within 30-days of a transfer of ownership, the succeeding carrier shall provide a new contact name to the Planning Department.
- V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
 - 1. COUNTY bears its own attorney's fees and costs; and
 - 2. COUNTY defends the action in good faith.
- C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.
- D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor(s) in interest, transferee(s), and assign(s) of the applicant.
- E. Within 30 days of the issuance of this development approval, the Development Approval Holder shall record in the office of the Santa Cruz County Recorder an agreement that incorporates the provisions of this condition, or this development approval shall become null and void.

In accordance with Chapter 18.10 of the County Code, minor variations to this permit that do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff.

Application #: 1111216
APN: 060-261-11
Owner: Brad E. Huxtable

Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained. Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration date: _____

Steven Guiney
Deputy Zoning Administrator

Alice Daly
Project Planner

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 111216

Assessor Parcel Number: 060-261-11

Project Location: 200 El Rancho Drive

Project Description: Expand an existing wireless carrier lease area by 70 square feet to add 3 panel antennas and 2 equipment cabinets to an existing wireless carrier facility to result in 9 total panel antennas mounted on an existing 60-foot tall monopine and a total of 5 equipment cabinets at the existing wireless carrier facility. .

Person or Agency Proposing Project: Julie Epshteyn

Contact Phone Number: 925-951-7091

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.
B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:

E. ☒ **Categorical Exemption**

Specify type: Class 2 - Existing Facilities (Section 15302)

F. Reasons why the project is exempt:

Minor additions of equipment and area to an existing telecommunications facility involving negligible expansion of capacity.

In addition, none of the conditions described in Section 15300.2 apply to this project.

Alice Daly, Project Planner

Date: _____

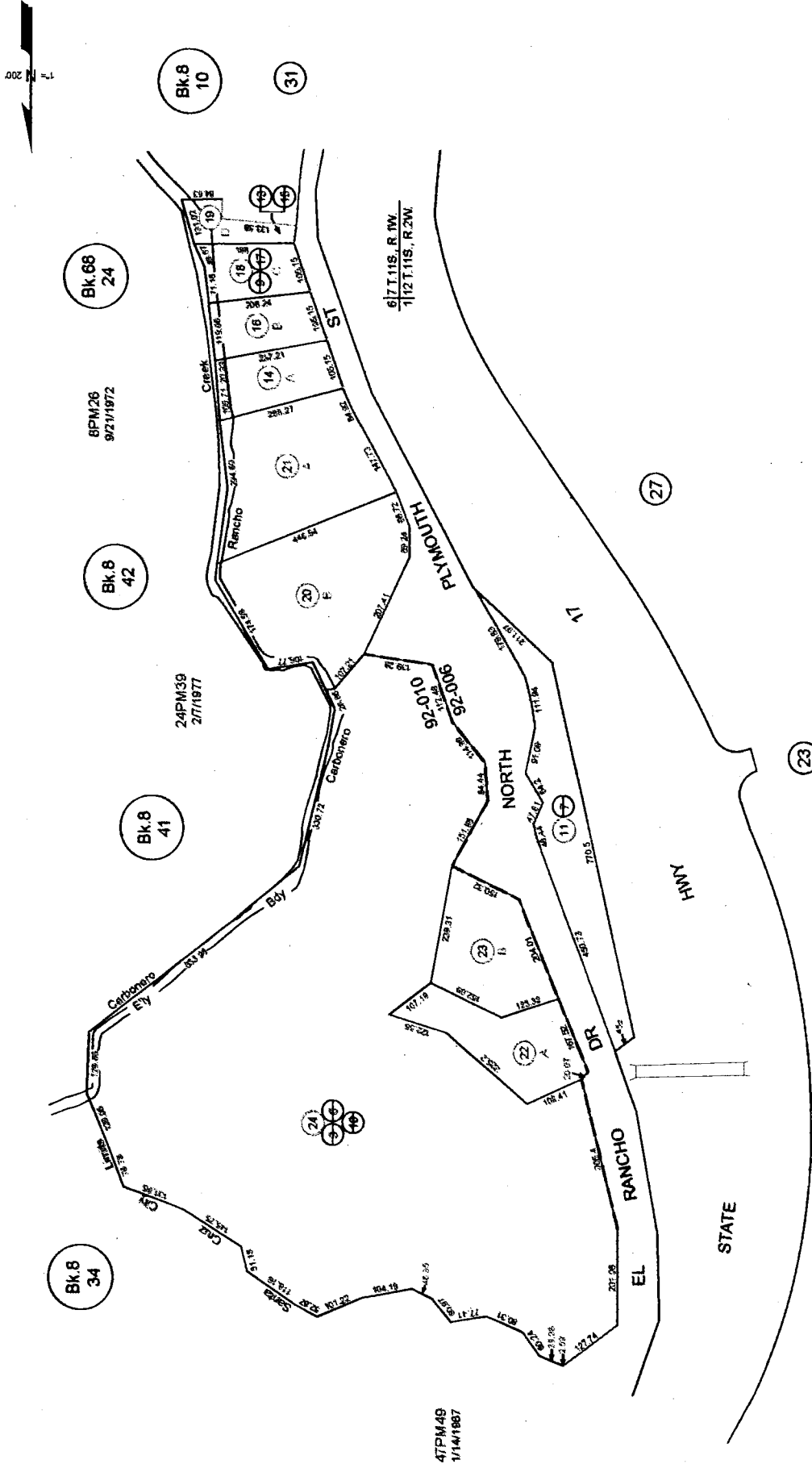
FOR TAX PURPOSES ONLY

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POR. CARBONERO RANCHO
SEC. 1 & 12, T.11S., R.2W., &
SECS. 6 & 7, T.11S., R.1W., M.D.B. & M.

Tax Area Code
92-006 92-010

60-26



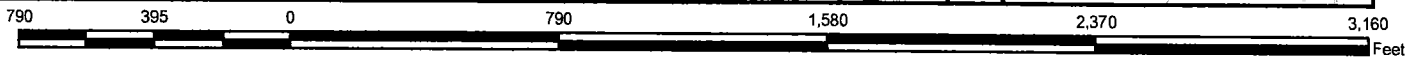
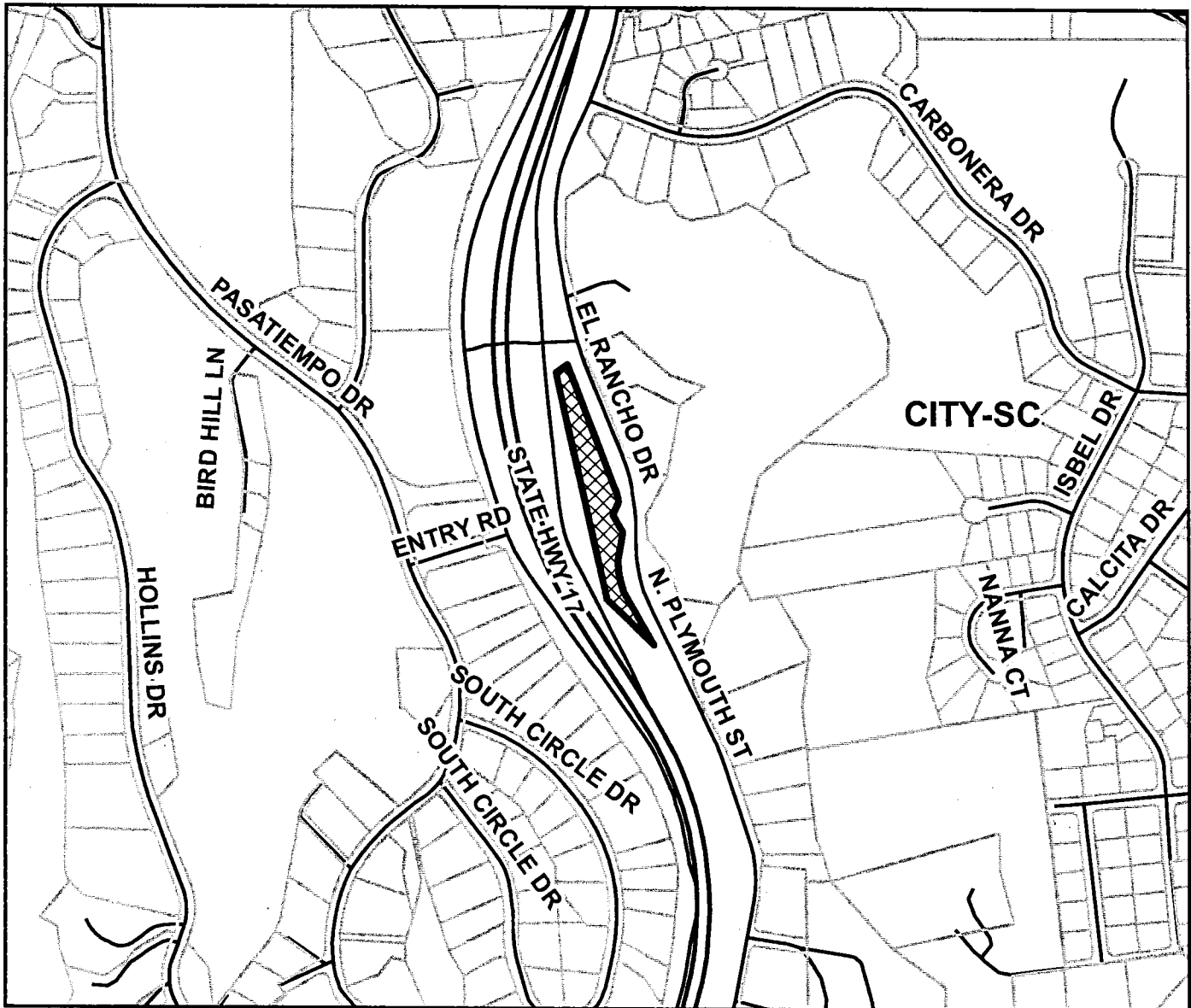
Assessor's Map No. 60-26
County of Santa Cruz, Calif.
Jan. 2002

Note - Assessor's Parcel & Block
Numbers are Shown in Circles.






Electronically repositioned 1/3/02 ksa
Ray Santa Cruz City Realignm 1/3/02 ksa
Ray 8/5/08 mc (added North Plymouth St)

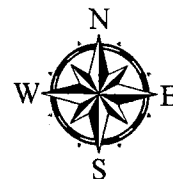


Location Map



LEGEND

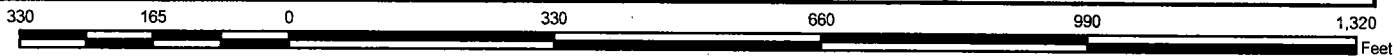
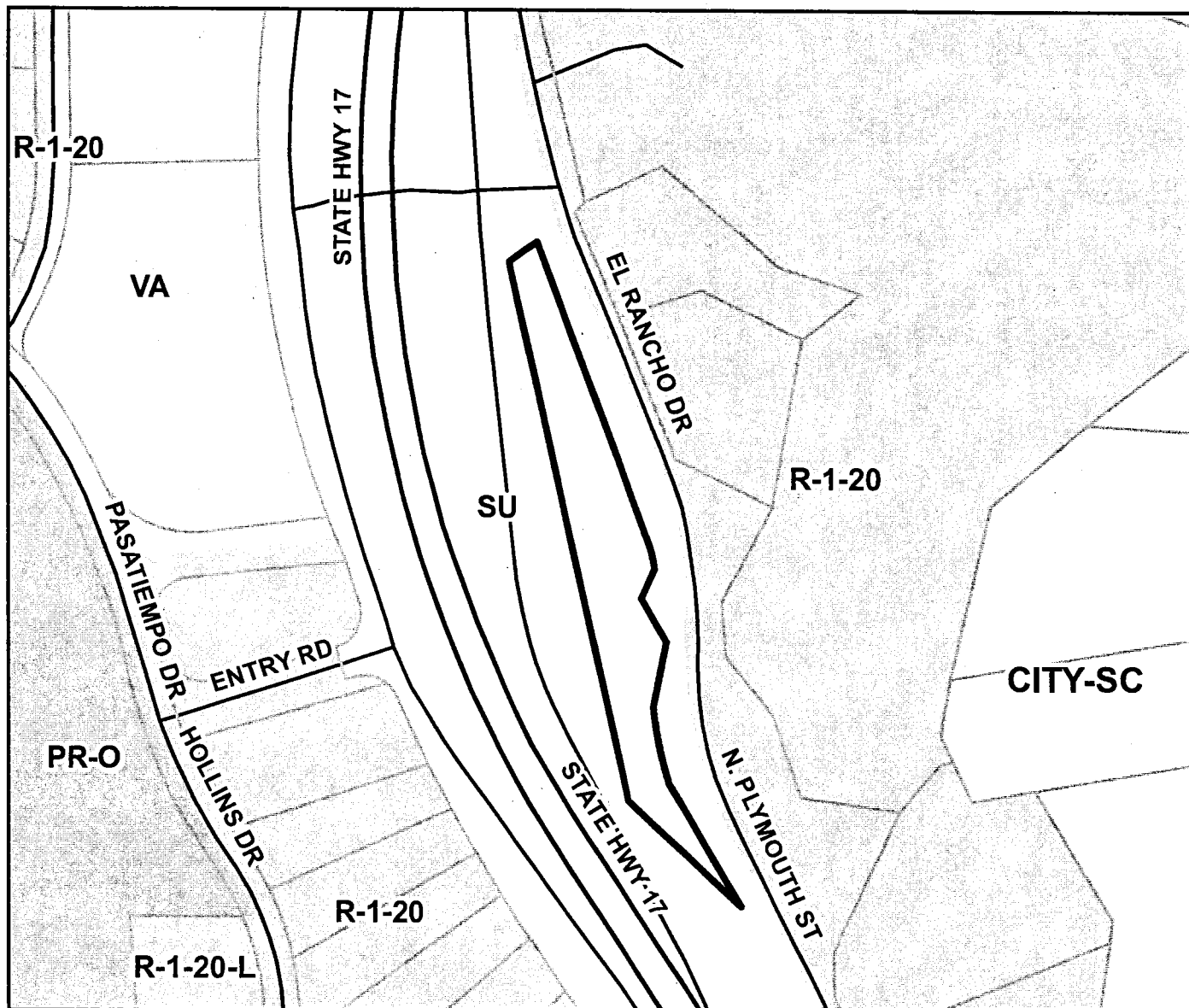
-  APN: 060-261-11
-  Assessors Parcels
-  Streets
-  State Highways
-  SANTA CRUZ



Map Created by
County of Santa Cruz
Planning Department
October 2011

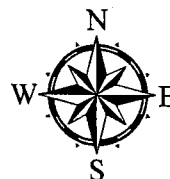


Zoning Map



LEGEND

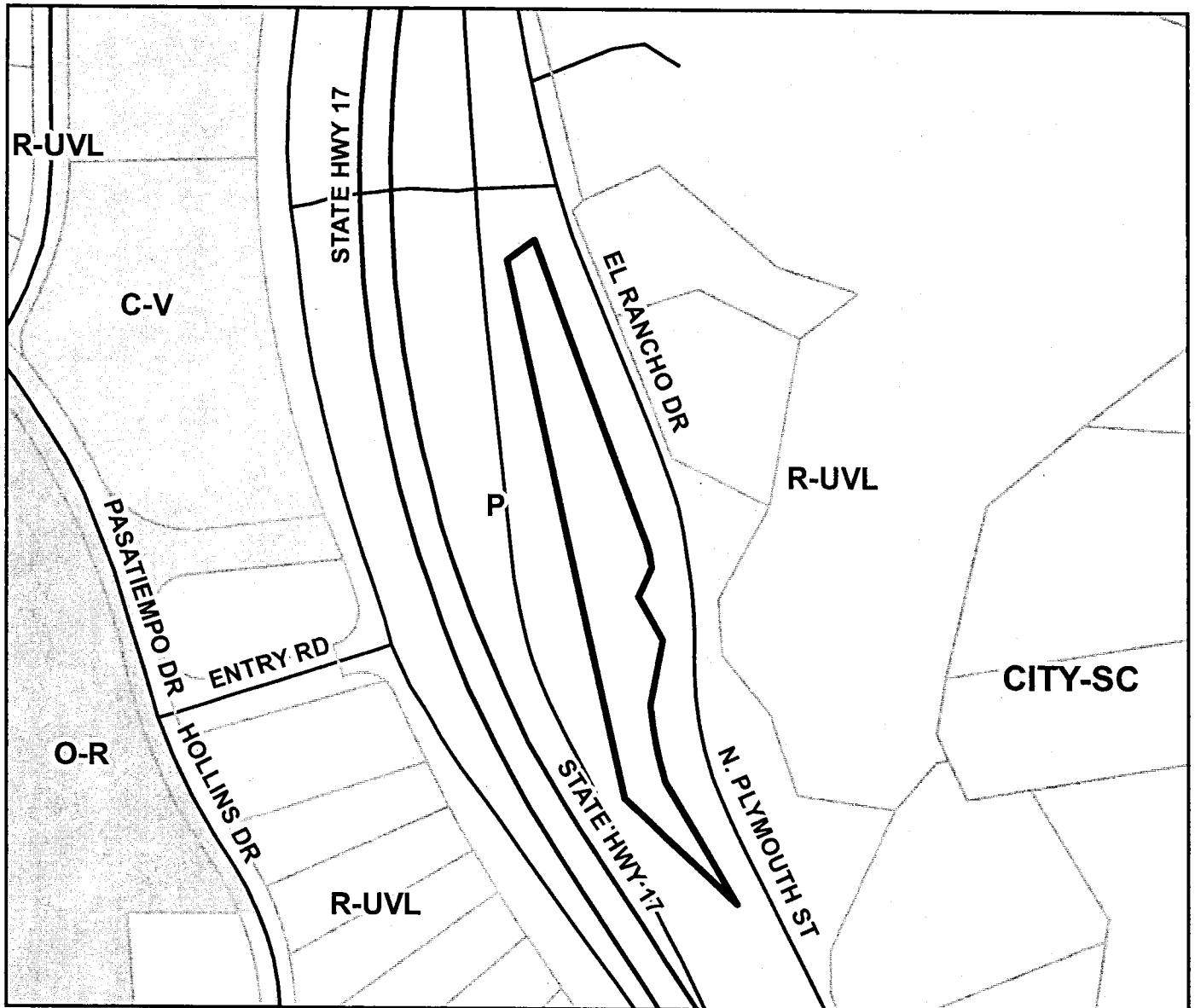
- APN: 060-261-11
- Assessors Parcels
- Streets
- State Highways
- SANTA CRUZ
- SPECIAL USE
- COMMERCIAL-VISITOR ACCOM.
- RESIDENTIAL-SINGLE FAMILY
- PARK



Map Created by
County of Santa Cruz
Planning Department
October 2011

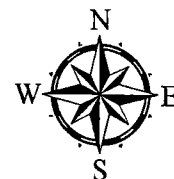


General Plan Designation Map



LEGEND

- APN: 060-261-11
- Assessors Parcels
- Streets
- State Highways
- SANTA CRUZ
- Public Facilities
- Residential - Urban Very Low Density
- Commercial-Visitor Accom.
- Parks and Recreation



Map Created by
County of Santa Cruz
Planning Department
October 2011

**Forza Telecom on behalf of AT&T
Mobility, LLC
Site ID - CNU3495
USID - 44804
Site Name - Highway 17 El
Rancho
Site Compliance Report**

**200 El Rancho Drive
Santa Cruz, CA 95060
Santa Cruz County**

Latitude: N36-59-55.72
Longitude: W122-1-13.94
Structure Type: Monopole

Report generated date: September 16, 2011
Report by: Tony DeMattia
Customer Contact: Irina Asadchaya

**AT&T Mobility, LLC will be Compliant based on
FCC Rules and Regulations.**

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Table of Contents

1	EXECUTIVE SUMMARY	2
2	REGULATORY BASIS	3
2.1	FCC RULES AND REGULATIONS	3
2.2	OSHA STATEMENT	4
3	SITE COMPLIANCE	5
3.1	SITE COMPLIANCE STATEMENT	5
3.2	ACTIONS FOR SITE COMPLIANCE	5
4	SAFETY PLAN AND PROCEDURES	6
5	ANALYSIS	7
5.1	RF EMISSIONS DIAGRAM	7
6	SITE AUDIT	9
6.1	ANTENNA INVENTORY	9
7	ENGINEER CERTIFICATION	11
APPENDIX A – STATEMENT OF LIMITING CONDITIONS		12
APPENDIX B – ASSUMPTIONS AND DEFINITIONS		13
GENERAL MODEL ASSUMPTIONS		13
USE OF GENERIC ANTENNAS		13
DEFINITIONS		14
APPENDIX C – RULES & REGULATIONS		16
EXPLANATION OF APPLICABLE RULES AND REGULATIONS		16
OCCUPATIONAL ENVIRONMENT EXPLAINED		16
APPENDIX D – GENERAL SAFETY RECOMMENDATIONS		17
ADDITIONAL INFORMATION		18



1 Executive Summary

Forza Telecom on behalf of AT&T Mobility, LLC has contracted with Sitesafe, Inc. (Sitesafe), an independent Radio Frequency (RF) regulatory and engineering consulting firm, to determine whether the proposed communications site, CNU3495 - Highway 17 El Rancho, located at 200 El Rancho Drive, Santa Cruz, CA, is in compliance with Federal Communication Commission (FCC) Rules and Regulations for RF emissions.

This report contains a detailed summary of the RF environment at the site including:

- diagram of the site;
- inventory of the make / model of all antennas
- theoretical MPE based on modeling.

This report addresses exposure to radio frequency electromagnetic fields in accordance with the FCC Rules and Regulations for all individuals, classified in two groups, "Occupational or Controlled" and "General Public or Uncontrolled." This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

This document and the conclusions herein are based on the information provided by AT&T Mobility, LLC.

If you have any questions regarding RF safety and regulatory compliance, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

2 Regulatory Basis

2.1 FCC Rules and Regulations

In 1996, the Federal Communication Commission (FCC) adopted regulations for the evaluating of the effects of RF emissions in 47 CFR § 1.1307 and 1.1310. The guideline from the FCC Office of Engineering and Technology is Bulletin 65 ("OET Bulletin 65"), *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields*, Edition 97-01, published August 1997. Since 1996 the FCC periodically reviews these rules and regulations as per their congressional mandate.

FCC regulations define two separate tiers of exposure limits: Occupational or "Controlled environment" and General Public or "Uncontrolled environment". The General Public limits are generally five times more conservative or restrictive than the Occupational limit. These limits apply to accessible areas where workers or the general public may be exposed to Radio Frequency (RF) electromagnetic fields.

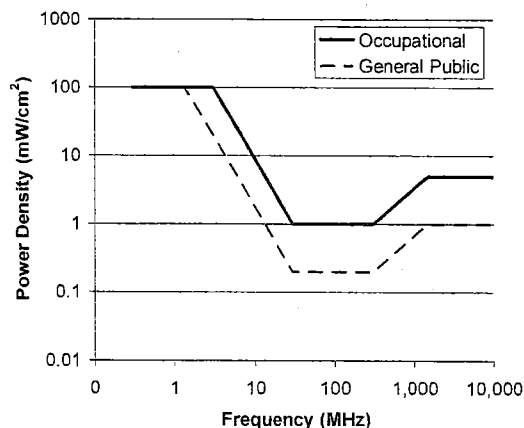
Occupational or Controlled limits apply in situations in which persons are exposed as a consequence of their employment and where those persons exposed have been made fully aware of the potential for exposure and can exercise control over their exposure.

An area is considered a Controlled environment when access is limited to these aware personnel. Typical criteria are restricted access (i.e. locked or alarmed doors, barriers, etc.) to the areas where antennas are located coupled with proper RF warning signage. A site with Controlled environments is evaluated with Occupational limits.

All other areas are considered Uncontrolled environments. If a site has no access controls or no RF warning signage it is evaluated with General Public limits.

The theoretical modeling of the RF electromagnetic fields has been performed in accordance with OET Bulletin 65. The Maximum Permissible Exposure (MPE) limits utilized in this analysis are outlined in the following diagram:

FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



Limits for Occupational/Controlled Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	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/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

Limits for General Population/Uncontrolled Exposure (MPE)

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

f = frequency in MHz

*Plane-wave equivalent power density

2.2 OSHA Statement

The General Duty clause of the OSHA Act (Section 5) outlines the occupational safety and health responsibilities of the employer and employee. The General Duty clause in Section 5 states:

(a) Each employer –

- (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
- (2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA has defined Radiofrequency and Microwave Radiation safety standards for workers who may enter hazardous RF areas. Regulation Standards 29 CFR § 1910.147 identify a generic Lock Out Tag Out procedure aimed to control the unexpected energization or start up of machines when maintenance or service is being performed.



3 Site Compliance

3.1 Site Compliance Statement

Upon evaluation of the cumulative RF emission levels from all operators at this site, Sitesafe has determined that:

This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

AT&T Mobility, LLC is predicted to contribute **greater than 5%** of the maximum permissible exposure (MPE) based on theoretical modeling using parameters supplied by the client. A detailed explanation of the 5% rule can be found in the Definition section of Appendix B.

The compliance determination is based on General Public MPE levels based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and the level of restricted access to the antennas at the site. Any deviation from the AT&T Mobility, LLC's proposed deployment plan could result in the site being rendered non-compliant.

3.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

This site will be compliant with the FCC rules and regulations. However, because AT&T Mobility, LLC is predicted to contribute greater than 5% of the maximum permissible exposure (MPE), *should the site be subsequently deemed non-compliant for any reason*, any wireless operator(s) who contribute greater than 5% of the maximum permissible energy would be jointly liable for bringing the site into compliance.

Sitesafe found one or more issues that led to our determination. The site will be made compliant if the following changes are implemented:

- Posting RF signs that a person could read and understand the signs prior to accessing the site;

Site Access Location (AT&T Mobility LLC Tower Base)

Information Sign 1 required, in English.
Information Sign 1 required, in Spanish.
Yellow caution sign required.

Site Access Location (T-Mobile/MetroPCS Tower Base)

Yellow caution sign required.



4 Safety Plan and Procedures

The following items are general safety recommendations that should be administered on a site by site basis as needed by the carrier.

General Maintenance Work: Any maintenance personnel required to work immediately in front of antennas and / or in areas indicated as above 100% of the Occupational MPE limits should coordinate with the wireless operators to disable transmitters during their work activities.

Training and Qualification Verification: All personnel accessing areas indicated as exceeding the General Population MPE limits should have a basic understanding of EME awareness and RF Safety procedures when working around transmitting antennas. Awareness training increases a workers understanding to potential RF exposure scenarios. Awareness can be achieved in a number of ways (e.g. videos, formal classroom lecture or internet based courses).

Physical Access Control: Access restrictions to transmitting antennas locations is the primary element in a site safety plan. Examples of access restrictions are as follows:

- Locked door or gate
- Alarmed door
- Locked ladder access
- Restrictive Barrier at antenna (e.g. Chain link with posted RF Sign)

RF Signage: Everyone should obey all posted signs at all times. RF signs play an important role in properly warning a worker prior to entering into a potential RF Exposure area.

Assume all antennas are active: Due to the nature of telecommunications transmissions, an antenna transmits intermittently. Always assume an antenna is transmitting. Never stop in front of an antenna. If you have to pass by an antenna, move through as quickly and safely as possible thereby reducing any exposure to a minimum.

Maintain a 3 foot clearance from all antennas: There is a direct correlation between the strength of an EME field and the distance from the transmitting antenna. The further away from an antenna, the lower the corresponding EME field is.

Site RF Emissions Diagram: Section 5 of this report contains an RF Diagram that outlines various theoretical Maximum Permissible Exposure (MPE) areas at the site. The modeling is a worst case scenario assuming a duty cycle of 100% for each transmitting antenna at full power. This analysis is based on one of two access control criteria: General Public criteria means the access to the site is uncontrolled and anyone can gain access. Occupational criteria means the access is restricted and only properly trained individuals can gain access to the antenna locations.

5 Analysis

5.1 RF Emissions Diagram

The RF diagram(s) below display theoretical spatially averaged percentage of the Maximum Permissible Exposure for all systems at the site unless otherwise noted. These diagrams use modeling as proscribed in OET Bulletin 65 and assumptions detailed in Appendix B.

The key at the bottom of each diagram indicates if percentages displayed are referenced to FCC Occupational or General Public Maximum Permissible Exposure (MPE) limits. Color coding on the diagram is as follows:

- a) Composite Exposure Levels
 - Areas indicated as Green are below 100% of the MPE limits.
 - Blue represents areas predicted to be between 100% and 500% of the MPE limits.
 - Yellow represents areas predicted to be between 500% and 5000% of the MPE limits.
 - Red areas indicated predicted levels greater than 5000% of the MPE limits.
- b) AT&T Mobility 5% Exposure Levels:
 - Areas indicated as Green are below 5% of the MPE limits.
 - Purple represents areas predicted to be greater than 5% of the MPE limits.

The theoretical analysis identified the maximum predicted MPE levels to be:

Maximum Theoretical General Public or Uncontrolled MPE level:	12.5%
Maximum Theoretical Occupational or Controlled MPE Level:	2.5%
AT&T Maximum Theoretical General Public or Uncontrolled MPE level:	12.5%
AT&T Maximum Theoretical Occupational or Controlled MPE level:	2.5%

General Population diagrams are specified when an area is accessible to the public; i.e. personnel that do not meet Occupational or RF Safety trained criteria, could gain access.

If trained occupational personnel require access to areas that are delineated as Red or above 100% of the limit, Sitesafe recommends that they utilize the proper personal protection equipment (RF monitors), coordinate with the carriers to reduce or shutdown power, or make real-time power density measurements with the appropriate power density meter to determine real-time MPE levels. This will allow the personnel to ensure that their work area is within exposure limits.

The key at the bottom also indicates the level or height of the modeling with respect to the main level. The origin is typically referenced to the main rooftop level, or ground level for a structure without access to the antenna level. For example:

Average from 0 feet above to 6 feet above origin

and

Average from 20 feet above to 26 feet above origin

The first indicates modeling at the main rooftop (or ground) level averaged over 6 feet. The second indicates modeling at a higher level (possibly a penthouse level) of 20 feet averaged over 6 feet.

Abbreviations used in the RF Emissions Diagrams

PH=##'	Penthouse at ## feet above main roof
--------	--------------------------------------

Additional Information in the RF Emissions Diagrams Key

The RF emissions diagram provides indications of RF signage, barriers and locked doors. The table below lists the abbreviations used to indicate locked doors, signs and barriers:

Table 1: RF Signage and Barrier Key					
RF Signage			Barriers		
Type	Existing Location	Recommended Location	Type	Existing Location	Recommended Location
Notice	<u>NE</u>	<u>NR</u>	Locked Door	<u>LE</u>	<u>LR</u>
Caution	<u>CE</u>	<u>CR</u>	Fencing	<u>RE</u>	<u>RR</u>
Warning	<u>WE</u>	<u>WR</u>	Rope Chain		
Info Sign 1	<u>I1E</u>	<u>I1R</u>	Paint Stripes		
Info Sign 2	<u>I2E</u>	<u>I2R</u>	Tape		
Info Sign 3	<u>I3E</u>	<u>I3R</u>			
Info Sign 4	<u>I4E</u>	<u>I4R</u>			

6 Site Audit

6.1 Antenna Inventory

The Antenna Inventory shows all transmitting antennas at the site. This inventory was provided by the customer, and was utilized by Sitesafe to perform theoretical modeling of RF emissions. The inventory coincides with the site diagrams in this report, identifying each antenna's location at CNU3495 - Highway 17 El Rancho. The antenna information collected includes the following information:

- Licensee or wireless operator name
- Frequency or frequency band
- Transmitter power – Effective Radiated Power ("ERP"), or Equivalent Isotropic Radiated Power ("EIRP") in Watts
- Antenna manufacturer make, model, and gain

For other carriers at this site, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

The following antenna inventory and representative photographs, on this and the following page, were obtained or verified during the site visit and were utilized to create the site model diagrams:

Table 3: Antenna Inventory

Ant #	Operated By	TX Freq (MHz)	ERP (Watts)	Antenna Gain (dBS)	Az (Deg)	Antenna Model	Ant Type	Len (ft)	Horizontal Half Power Beamwidth (Deg)	Location		
										X	Y	Z
1	AT&T Mobility LLC	734/2100	980/1996	12.13/15.22	70	Kathrein-Scalca 80010764 (Proposed)	Panel	4	68/61	0'	0'	43'
2	AT&T Mobility LLC	850/1900	1112/1225	12.66/15.06	70	Powerwave 7920	Panel	4	70/70	0'	0'	43'
3	AT&T Mobility LLC	850/1900	480/1619	11.85/14.65	70	Kathrein-Scalca 742264	Panel	4	68/65	0'	0'	38'
4	AT&T Mobility LLC	734/2100	980/1996	12.13/15.22	350	Kathrein-Scalca 80010764 (Proposed)	Panel	4	68/61	0'	0'	43'
5	AT&T Mobility LLC	850/1900	1112/1225	12.66/15.06	350	Powerwave 7920	Panel	4	70/70	0'	0'	43'
6	AT&T Mobility LLC	850/1900	480/1612	11.85/14.65	350	Kathrein-Scalca 742264	Panel	4	68/65	0'	0'	38'
7	AT&T Mobility LLC	734/2100	980/1996	12.13/15.22	180	Kathrein-Scalca 80010764 (Proposed)	Panel	4	68/61	0'	0'	43'
8	AT&T Mobility LLC	850/1900	1112/1225	12.66/15.06	180	Powerwave 7920	Panel	4	70/70	0'	0'	43'
9	AT&T Mobility LLC	850/1900	491/1650	11.85/-1.00	180	Kathrein-Scalca 742264	Panel	4	68/65	0'	0'	38'
10	T-Mobile	1900	1000	16.26	0	RFS APX16DW-16DWV	Panel	4	65	-18'	70'	53'
11	T-Mobile	1900	1000	16.26	120	RFS APX16DW-16DWV	Panel	4	65	-18'	70'	53'
12	T-Mobile	1900	1000	16.26	240	RFS APX16DW-16DWV	Panel	4	65	-18'	70'	53'
13	MetroPCS	1900	1000	15.47	0	Kathrein-Scalca 80010504	Panel	4	62	-18'	70'	48'
14	MetroPCS	1900	1000	15.47	120	Kathrein-Scalca 80010504	Panel	4	62	-18'	70'	48'
15	MetroPCS	1900	1000	15.47	240	Kathrein-Scalca 80010504	Panel	4	62	-18'	70'	48'

NOTE: X, Y and Z indicate relative position of the antenna to the origin location on the site, displayed in the model results diagram. Specifically, the Z reference indicates antenna height above the main site level unless otherwise indicated. ERP values provided by the client and used in the modeling may be greater than are currently deployed. For other carriers at this site the use of "Generic" as an antenna model or "Unknown" for a wireless operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.



7 Engineer Certification

The professional engineer whose seal appears on the cover of this document hereby certifies and affirms that:

I am registered as a Professional Engineer in the jurisdiction indicated in the professional engineering stamp on the cover of this document; and

That I am an employee of Sitesafe, Inc., in Arlington, Virginia, at which place the staff and I provide RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission (FCC) as well as the regulations of the Occupational Safety and Health Administration (OSHA), both in general and specifically as they apply to the FCC Guidelines for Human Exposure to Radio-frequency Radiation; and

That I have thoroughly reviewed this Site Compliance Report and believe it to be true and accurate to the best of my knowledge as assembled by and attested to by Tony DeMattia.

September 16, 2011



Appendix A – Statement of Limiting Conditions

Sitesafe field personnel visited the site and collected data with regard to the RF environment. Sitesafe will not be responsible for matters of a legal nature that affect the site or property. The property was visited under the premise that it is under responsible ownership and management and our client has the legal right to conduct business at this facility.

Due to the complexity of some wireless sites, Sitesafe performed this visit and created this report utilizing best industry practices and due diligence. Sitesafe cannot be held accountable or responsible for anomalies or discrepancies due to actual site conditions (i.e., mislabeling of antennas or equipment, inaccessible cable runs, inaccessible antennas or equipment, etc.) or information or data supplied by AT&T Mobility, LLC, the site manager, or their affiliates, subcontractors or assigns.

Sitesafe has provided computer generated model(s) in this Site Compliance Report to show approximate dimensions of the site, and the model is included to assist the reader of the compliance report to visualize the site area, and to provide supporting documentation for Sitesafe's recommendations.

Sitesafe may note in the Site Compliance Report any adverse physical conditions, such as needed repairs, observed during the survey of the subject property or that Sitesafe became aware of during the normal research involved in performing this survey. Sitesafe will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because Sitesafe is not an expert in the field of mechanical engineering or building maintenance, the Site Compliance Report must not be considered a structural or physical engineering report.

Sitesafe obtained information used in this Site Compliance Report from sources that Sitesafe considers reliable and believes them to be true and correct. Sitesafe does not assume any responsibility for the accuracy of such items that were furnished by other parties. When conflicts in information occur between data provided by a second party and physical data collected by Sitesafe, the physical data will be used.



Appendix B – Assumptions and Definitions

General Model Assumptions

In this site compliance report, it is assumed that all antennas are operating at **full power at all times**. Software modeling was performed for all transmitting antennas located on the site. Sitesafe has further assumed a 100% duty cycle and maximum radiated power.

The site has been modeled with these assumptions to show the maximum RF energy density. Sitesafe believes this to be a worst-case analysis, based on best available data. Areas modeled to predict emissions greater than 100% of the applicable MPE level may not actually occur, but are shown as a worst-case prediction that could be realized real time. Sitesafe believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor).

Thus, at any time, if power density measurements were made, we believe the real-time measurements would indicate levels below those depicted in the RF emission diagram(s) in this report. By modeling in this way, Sitesafe has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

Use of Generic Antennas

For the purposes of this report, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information about a carrier, their FCC license and/or antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of equipment, antenna models, and transmit power to model the site. If more specific information can be obtained for the unknown measurement criteria, Sitesafe recommends remodeling of the site utilizing the more complete and accurate data. Information about similar facilities is used when the service is identified and associated with a particular antenna. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

Where the frequency is unknown, Sitesafe uses the closest frequency in the antenna's range that corresponds to the highest Maximum Permissible Exposure (MPE), resulting in a conservative analysis.



Definitions

5% Rule – The rules adopted by the FCC specify that, in general, at multiple transmitter sites actions necessary to bring the area into compliance with the guidelines are the shared responsibility of all licensees whose transmitters produce field strengths or power density levels at the area in question in excess of 5% of the exposure limits. In other words, any wireless operator that contributes 5% or greater of the MPE limit in an area that is identified to be greater than 100% of the MPE limit is responsible taking corrective actions to bring the site into compliance.

Compliance – The determination of whether a site is safe or not with regards to Human Exposure to Radio Frequency Radiation from transmitting antennas.

Decibel (dB) – A unit for measuring power or strength of a signal.

Duty Cycle – The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 100% corresponds to continuous operation.

Effective (or Equivalent) Isotropic Radiated Power (EIRP) – The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Effective Radiated Power (ERP) – In a given direction, the relative gain of a transmitting antenna with respect to the maximum directivity of a half wave dipole multiplied by the net power accepted by the antenna from the connecting transmitter.

Gain (of an antenna) – The ratio of the maximum intensity in a given direction to the maximum radiation in the same direction from an isotropic radiator. Gain is a measure of the relative efficiency of a directional antennas as compared to an omni directional antenna.

General Population/Uncontrolled Environment – Defined by the FCC, as an area where RFR exposure may occur to persons who are **unaware** of the potential for exposure and who have no control of their exposure. General Population is also referenced as General Public.

Generic Antenna – For the purposes of this report, the use of "Generic" as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of antenna models to select a worst case scenario antenna to model the site.

Isotropic Antenna – An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.



Maximum Measurement – This measurement represents the single largest measurement recorded when performing a spatial average measurement.

Maximum Permissible Exposure (MPE) – The rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with acceptable safety factor.

Occupational/Controlled Environment – Defined by the FCC, as an area where Radio Frequency Radiation (RFR) exposure may occur to persons who are **aware** of the potential for exposure as a condition of employment or specific activity and can exercise control over their exposure.

OET Bulletin 65 – Technical guideline developed by the FCC's Office of Engineering and Technology to determine the impact of Radio Frequency radiation on Humans. The guideline was published in August 1997.

OSHA (Occupational Safety and Health Administration) – Under the Occupational Safety and Health Act of 1970, employers are responsible for providing a safe and healthy workplace for their employees. OSHA's role is to promote the safety and health of America's working men and women by setting and enforcing standards; providing training, outreach and education; establishing partnerships; and encouraging continual process improvement in workplace safety and health. For more information, visit www.osha.gov.

Radio Frequency Radiation – Electromagnetic waves that are propagated from antennas through space.

Spatial Average Measurement – A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.

Transmitter Power Output (TPO) – The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load.

Appendix C – Rules & Regulations

Explanation of Applicable Rules and Regulations

The FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Specific regulations regarding this topic are listed in Part 1, Subpart I, of Title 47 in the Code of Federal Regulations. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC and OSHA Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.

It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations. Individual licensees that contribute less than 5% MPE to any total area out of compliance are not responsible for corrective actions.

OSHA has adopted and enforces the FCC's exposure guidelines. A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

Occupational Environment Explained

The FCC definition of Occupational exposure limits apply to persons who:

- are exposed to RF energy as a consequence of their employment;
- have been made aware of the possibility of exposure; and
- can exercise control over their exposure.

OSHA guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

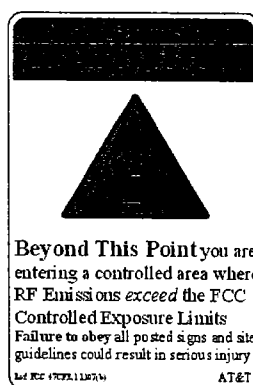
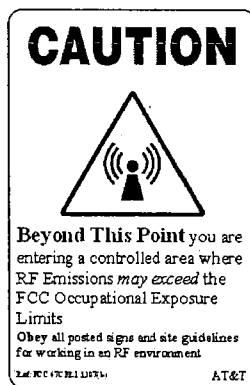
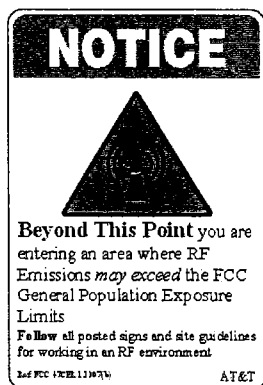
In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF Emissions diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

All AT&T Mobility, LLC employees who require access to this site must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

Appendix D – General Safety Recommendations

The following are *general recommendations* appropriate for any site with accessible areas in excess of 100% General Public MPE. These recommendations are not specific to this site. These are safety recommendations appropriate for typical site management, building management, and other tenant operations.

1. All individuals needing access to the main site (or the area indicated to be in excess of General Public MPE) should wear a personal RF Exposure monitor, successfully complete proper RF Safety Awareness training, and have and be trained in the use of appropriate personal protective equipment.
2. All individuals needing access to the main site should be instructed to read and obey all posted placards and signs.
3. The site should be routinely inspected and this or similar report updated with the addition of any antennas or upon any changes to the RF environment including:
 - adding new antennas that may have been located on the site
 - removing of any existing antennas
 - changes in the radiating power or number of RF emitters
4. Post the appropriate **NOTICE**, **CAUTION**, or **WARNING** sign at the main site access point(s) and other locations as required. Note: Please refer to RF Exposure Diagrams in Appendix B, to inform everyone who has access to this site that beyond posted signs there may be levels in excess of the limits prescribed by the FCC. The signs below are examples of signs meeting FCC guidelines.



5. Ensure that the site door remains locked (or appropriately controlled) to deny access to the general public if deemed as policy by the building/site owner.
6. For a General Public environment the four color levels identified in this analysis can be interpreted in the following manner:
 - a) Composite Exposure Levels
 - Areas indicated as Green are below 100% of the MPE limits or below.
 - Blue represents areas predicted to be between 100% and 500% of the MPE limits.



- Yellow represents areas predicted to be between 500% and 5000% of the MPE limits.
- Red areas indicated predicted levels greater than 5000% of the MPE limits.

b) AT&T Mobility 5% Exposure Levels:

- Areas indicated as Green are below 5% of the MPE limits or below.
- Purple represents areas predicted to be greater than 5% of the MPE limits.

7. Use of a Personal Protective Monitor: When working around antennas, Sitesafe strongly recommends the use of a Personal Protective Monitor (PPM). Wearing a PPM will properly forewarn the individual prior to entering an RF exposure area.

Keep a copy of this report available for all persons who must access the site. They should read this report and be aware of the potential hazards with regards to RF and MPE limits.

Additional Information

Additional RF information is available by visiting both www.Sitesafe.com and www.fcc.gov/oet/rfsafety. OSHA has additional information available at: <http://www.osha-slc.gov/SLTC/radiofrequencyradiation>.