Staff Report to the Zoning Administrator

Application Number: 06-0443

Applicant: Dayna Aguirre, Sutro Consulting
Owner: Santa Cruz County
APN: 061-371-16

Agenda Date: October 5,2007
Agenda Item #: 2
Time: After 10:00 a m.

Project Description: Proposal to co-locate three wireless communications antennas, a GPS antenna and 6 micro equipment cabinets on an existing 124-foot tall monopole. All power and telco lines to be routed overhead and along an existing cable bridge, therefore no ground disturbance is proposed.

Location: Property located on the east side of Graham Hill Road (3650 Graham Hill Road) approximately ½ mile north of Lockwood Lane.

Supervisoral District: 5th District (District Supervisor: Mark Stone)

Permits Required: Commercial Development Permit

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 06-0443, based on the attached findings and conditions.

Exhibits

A.	Project plans	G.	RF Report
B.	Findings	H.	Photosimulations
C.	Conditions	I.	Ecologist Review Letter, Jodi McGraw, dated 3/16/07
D.	Categorical Exemption (CEQA determination)	J.	Comments & Correspondence
E.	Assessor's Parcel Map		
F.	Zoningmap		

Parcel Information

Parcel Size:	27.8 acres/1,214,490 square feet
Existing Land Use - Parcel:	Public Facility (Juvenile Detention Center)
Existing Land Use - Surrounding:	State Park Land, Parks and Recreation, Mineral Quarry
Project Access:	Via Graham Hill Road, public road, 60-foot ROW

Planning Area:	San Lorenzo Valley
Land Use Designation:	P (Public Facility)
Zone District:	SU (Special Use)
Coastal Zone:	__ Inside X Outside
Appealable to Calif. Coastal Comm.	__ ***Yes*** X No

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site; no technical report required
Soils:	Not a mapped constraint; no technical report required
Fire Hazard:	Within a mapped fire hazard area
Slopes:	Steep slopes over 30% onsite
Env. Sen. Habitat:	Habitat Mitigation Plan currently in place on site for existing wireless communication facility (MetroPCS, 05-0474); proposed facility will not create additional ground disturbance.
Grading:	No grading proposed
Tree Removal:	No trees proposed for removal
Scenic:	Property located within the Graham Hill Road Scenic Corridor viewshed
Drainage:	Existing drainage adequate; no impervious surface proposed
Archeology:	Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	__ Inside X Outside
Water Supply:	San Lorenzo Valley Water District
Sewage Disposal:	Septic
Fire District:	Scotts Valley Fire District
Drainage District:	None

History

In 1998, the Zoning Administrator approved the construction of a 124-foot tall monopole with nine panel antennas and a 240 square foot equipment pad below for CellularOne (96-0626). In 2002, a Minor Variation to this project was approved (02-0521) to construct a fiberglass equipment shelter which still exists on the property.

In 2006, the Zoning Administrator approved MetroPCS application 05-0474 to co-locate three wireless antennas onto the existing monopole and to install three equipment cabinets, two power/telco boxes and a GPS antenna onto a steel platform. A Habitat Mitigation Plan was required for the project to ensure that the surrounding environment would not be impacted by the proposed construction. Although MetroPCS has received discretionary approval, the building permit for the construction **has** not been issued or finaled; therefore none of the approved equipment currently exists onsite and the measures required as part of the Habitat Mitigation Plan have not yet been implemented.

Project Setting

The existing parcel is approximately 28 acres and is developed with a Juvenile Detention Center and a Wireless Communications Facility. The parcel takes access from Graham Hill Road which is a public, County maintained road with a 60-foot right of way that is designated as a Scenic Corridor in the General Plan. There is a separate 12-foot wide access road that intersects with Graham Hill Road about 600-feet south of the Juvenile Center driveway that accesses the project site. The proposed site for the wireless communication facility is located on the far north comer of the property which is not visible from Graham Hill Road due to the topography and natural vegetation on the site.

Adjacent properties to the north, south, and east are zoned SU (Special Use). **A** mineral quarry exists to the northeast and the property to the south across Graham Hill Road is State Park land. The adjacent parcel to the northwest is zoned SU-0 (Special Use – Open Space) and is an open space easement.

Wireless Communication Facility

The proposed wireless communication facility will consist of mounting three panel antennas (51.5"H x 20.5"W x 3.5"D), six micro equipment cabinets (29.21" H **X** 17.05"W x 10.63"D), and a GPS antenna onto the existing 124-foot tall monopole and to route all power and telco lines along an a cable bridge that will be installed as part of approved discretionary permit 05-0474. The proposed antennas will be located about 77-feet high on the existing monopole, below all existing wireless antennas. None of the proposed equipment will be located on the ground. Visual simulations have been submitted and it has been determined that the new antennas and equipment cabinets will not be visible from Graham Hill Road.

The applicant has submitted a study by Hammett and Edison, Inc., consulting engineers, which indicates that the maximum calculated cumulative level at ground for **the** simultaneous operation of all **three** carriers is 0.16% of the public exposure limit and the maximum calculated cumulative level at the second floor elevation of any nearby building would be 0.23% of the public exposure limit set by the Federal Communications Commission. The RF emissions of **the** proposed wireless communications facility comply with the FCC standards.

Zoning Analysis

The subject property is an approximately 28 acre parcel zoned SU (Special Use) with a P (Public Facility) General Plan designation. Structure mounted wireless communications facilities are allowed withm the SU (Special **Use)** zone district if they are designed in a manner that is the least visually obtrusive and that is compatible with the existing development. In addition, this permit would co-locate the proposed facility with the existing CellularOne and MetroPCS wireless communications facilities approved by permits 96-0626 and 05-0474, which is encouraged where it is the least visually obtrusive option.

The application is consistent with the site location requirements in Section 13.10.661(f) in that the proposed antennas have been sited in the least visually obtrusive area and are screened by

natural vegetation and topography which will allow the preservation of the visual character and aesthetic values of the parcel and surrounding area. **As** stated the proposal is a co-location as encouraged per County Code 13.10.661(g) in that the subject proposal does not significantly increase the visual impact of the existing facility. In addition, development on the subject parcel does not place new development on a ridge, nor does the development disturb the existing topography or on-site vegetation. The construction of a new tower/facility within this area would impose significant potential impacts to the Sandhills habitat, which exists throughout the vicinity of the subject site.

Alternative Site Analysis

An alternative site analysis was not required for the current project in that locating **the** proposed facility at the project site will not create additional ground disturbance. This significantly reduces environmental impacts in that the creation of additional road grading, electrical utilities, and an additional tower would create unnecessary additional impacts *to* the environment and/or scenic resources that *are* located on the surrounding parcels.

Graham Hill Road Scenic Corridor

The project site is located within the Graham Hill Road Scenic Corridor. The site **of** the proposed wireless communications facilities is not visible from the Graham Hill Road scenic corridor in that the property is heavily wooded with sloped topography and the proposed site is located in the far north comer of **the** property about 1300 **feet** from Graham Hill Road. **The** proposed new equipment will not result in a visual impact to the scenic resource.

Habitat Mitigation Plan

MetroPCS was approved in 2006 to co-locate a wireless communication facility at the subject property (05-0474). As a condition of this approval, MetroPCS was required to implement and maintain a Habitat Mitigation Plan (HMP) at the subject site due to the habitat loss and mitigation failure **of** the original wireless communication facility at the site (CellularOne 96-0626). **A** condition of permit 05-0474 includes a review after 5 years to evaluate **the** success rate of enhanced habitat.

The current project was designed and sited in a way so that no additional ground disturbance will occur by utilizing the existing 124-foot monopole and the cable bridge that will be installed as a part of the MetroPCS (05-0474) permit; therefore, the current project was not required to be Jointly responsible for implementation and maintenance of the HMP. **A** review letter was submitted by Jodi McGraw, Population and Community Ecologist, which provides recommendations for further protection of the surrounding special status species and sensitive habitat during equipment installation, which are included as conditions of approval. In addition, the letter concludes that the proposed project, in conjunction with the provided recommendations, is consistent with the methods proposed by MetroPCS in their Habitat Mitigation Plan.

Because the current project is dependent on the previously approved MetroPCS discretionary permit (05-0474) for the installation of specific features, such as the cable bridge, and access

requirements, a condition of approval is included which requires the current applicant (T-Mobile) to submit proof of final building permit for discretionary permit 05-0474 (MetroPCS) prior to building permit issuance to ensure that no ground disturbance will occur that is not included as part of **the** HMP.

Design Review

The proposed wireless communication facility complies with the requirements of the County Design Review Ordinance, in that the proposed project will not be visible from Graham Hill Road and will be painted to match the existing monopole exactly to reduce the visual impact of the proposed development on surrounding land uses and the natural landscape.

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 **06-0443,** 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

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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.

This finding can be made, in that the proposed wireless communication facility will be located on an existing monopole that is not visible from publicly accessible areas. The subject property for the proposed project is located within the Graham Hill scenic conidor; however the project site is not visible from the scenic comdor in that the property is heavily wooded and the project site is located about 1300 feet from Graham Hill Road. The proposed project complies with General Plan Policy 5.10.3 (Protection of Public Vistas), in that no views of the beach, ocean, or other significant vistas *can* be viewed past or across the subject property, as the property is in a rural area with no significant public vista available beyond the subject property. The existing public views from the scenic road will remain unchanged as a result of this project.

An alternative site analysis was not required for the proposed project, due to the fact the proposed wireless communication facility will be located within an allowed zone district (per sections 13.10.661(b) & (c) of the County Code) and will be co-located with a previously approved wireless communication facility. The currently proposed site is the least visually and environmentally intrusive place in the near surrounding area.

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 project site is heavily wooded with sloping topography which eliminates any visual impact to Graham Hill Road scenic corridor and there is an existing building and a wireless communications facility currently on the project site with an associated access road and infrastructure for utilities; therefore, the currently proposed project site is the environmentally superior site for this project. **The** addition of a new wireless communications facility along the **Graham** Hill Road scenic corridor may result in a more visually intrusive project and possibly cause additional impact to the natural resources in the surrounding areas.

An alternative sites analysis was not required for the proposed project, due to the fact the proposed wireless communication facility will be located within an allowed zone district (per sections 13.10.661(b) & (c) of the County Code) and will be co-located with a previously approved wireless communication facility. The currently proposed site is the least visually and

environmentally intrusive place in the near surrounding area

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 Juvenile Detention building is in compliance with the SU (Special Use) zone district and P (Public Facility) General Plan designation, in which it is located. 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.

This finding can be made, in that the proposed wireless communications facility will be located on an existing monopole which is approximately 124-feet tall and this elevation is too low to interfere with an aircraft in flight.

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

This finding can be made, in that the maximum cumulative RF exposure level for simultaneous operation of both the existing and proposed carriers is 0.16% of the public exposure limit. The maximum calculated level at the second floor elevation of any nearby building is **0.23%** of the public exposure limit.

6. For wireless communication facilities in the coastal zone, the proposed wireless communication facility as conditioned is consistent with the all applicable requirements of the Local Coastal Program.

Not Applicable

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.

This finding can be made, in that the maximum cumulative RF exposure level for simultaneous operation of both the existing and proposed carriers is 0.16% of the public exposure limit. The maximum calculated level at the second floor elevation of any nearby building is 0.23% of the public exposure limit. The RF emissions of the proposed wireless communication facility comply with FCC standards.

The proposed project will not result in inefficient or wasteful use of energy, in that the most recent and efficient technology available to provide wireless communication services will be required as a condition of this permit. Upgrades to more efficient and effective technologies will be required to occur as new technologies are developed.

The project will not be materially injurious to properties or improvements in the vicinity in that the project will be on an existing monopole on a heavily wooded parcel therefore there will be no visual impact to surrounding properties.

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.

This finding can be made, in that the proposed wireless communication facility will be located within an allowed zone district for the construction of co-located wireless communications facilities. The project site is located within the SU (Special Use) zone district which is not a prohibited or restricted zone district (per sections 13.10.661(b) & (c) of the County Code).

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.

This finding can be made, in that the proposed wireless communication facility will be built in the least visually and environmentally intrusive manner due to the location on an existing monopole where existing wireless communication facilities already exist.

The subject property for the proposed project is located within the Graham Hill Road Scenic Corridor. The parcel is heavily wooded and the monopole is located about 1300 feet from the Graham Hill Road right of way, therefore there will be no visual impact to the scenic corridor as a result of this project. The proposed project complies with General Plan Policy 5.10.3 (Protection of Public Vistas), in that no views of the beach, ocean, or other significant vistas can be viewed past or across the subject property, as the property is on the inland side of the scenic

corridor with no significant public vista available beyond the subject property. The existing public views from the scenic corridor will remain unchanged as a result of this project.

The existing Juvenile Detention building is consistent with the uses specified for the P (Public Facility) land use designation in the County General Plan.

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.

This finding can be made, in that the project will not require the use of public services such as water or sewer, but will require electric power and telephone connections. The facility will require inspection by maintenance personnel at least once per month and this will not result in increasing traffic to unacceptable levels in the vicinity.

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.

This finding can be made, in that the proposed facility will be co-located on top of an existing monopole and will be compatible with the existing development on the subject property.

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 wireless communication facility will be of an appropriate scale and type of design that will not reduce or visually impact available open space in the surrounding area or the aesthetic qualities of surrounding properties.

Conditions of Approval

Exhibit **A:** Project Plans entitled "T-Mobile SF15034", prepared by Michael Wilk Architecture, 7 sheets, dated 7119/07.

I. This permit amends Commercial Development Permits 96-0626, 02-0521, and 05-0474 to construct a third wireless communications facility on an existing monopole as depicted on the approved "Exhibit **A**" for 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

C. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way, if required.

D. To ensure that the storage of hazardous materials on the site does not result in adverse environmental impacts, the applicant shall submit a Hazardous Materials Management Plan for review and approval by the County Department of Environmental Health Services.

II. **The** applicant shall obtain approval from the California Public Utilities Commission and the Federal Communications Commission to install and operate this facility.

III. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit proof that MetroPCS (discretionary permit 05-0474) has received a final building permit and that all site improvements have been installed and/or implemented.

B. Submit proof that these conditions have been recorded in the official records of the County of Santa Cmz (Office of the County Recorder).

C. 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 to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. All antennas and telecommunications equipment shall be located on the existing monopole and all telco and power lines shall be located on an existing cable bridge. There shall be no ground disturbance on the property.

2. Details showing compliance with fire department requirements, including all requirements of the Urban Wildland Intermix Code, if applicable.

3. Final project plans shall conform to the review letter submitted by Jodi McGraw, dated March 16,2007 and shall reference the Project Description Methods and the Recommended Methods to Avoid Impacts.

D. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.

E. Submit a "No-Take'' letter from the **U.S.** Fish and Wildlife Service.

F. Meet all requirements and pay any applicable plan check fee of the Scotts Valley Fire Protection District.

IV. Prior to any construction on site, the project crew shall meet onsite with the County Environmental Planner and with a project biologist with expertise in the ecology of the special status species and communities of the Sandhills to discuss the steps that will be used to avoid impacts to the sensitive species and habitats near the project area. These steps shall include:

1. Crews will travel from the parking area to the antenna facility using only the existing 2.5' wide paved path.

2. Work and crew access will be confined to the project area, which will consist of the antenna facility and the designated pathway, which should be delimited by the biologist prior to project construction using plastic tape.

V. All construction shall **be** performed according to the approved plans ***for*** the Building Permit. The qualified biologist shall inspect the project site periodically during project construction to ensure that the avoidance techniques **are** being implemented. 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. The qualified biologist shall evaluate the site conditions following completion of project construction and shall submit a review letter to the Environmental Planner which evaluates whether inadvertent impacts to the special status species and sensitive habitat have been avoided.

C. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the

discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

VI. Operational Conditions

A. NIER Report: A report documenting Nan-Ionizing Electromagnetic Radiation at the facility site shall be submitted within ninety (90) days after the commencement of normal operations, or within ninety **(90)** days after any major modification to power output of the facility.

B. Additional Facilities: A Planning Department review that includes a public hearing shall be required for any future co-location at this wireless communications facility.

C. Equipment Modifications: 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.

D. Camouflage: The camouflage materials shall be permanently maintained and replacement materials and/or paint shall be applied as necessary to maintain the camouflage of the facility.

E. Noise: All noise generated from the approved use shall comply with the requirements of the General Plan.

F. Lighting: All site, building, security and landscape lighting shall be directed away from the scenic comdor and adjacent properties. Light sources shall not be visible from adjacent properties. Light sources can be shielded by landscaping, structure, fixture design or other physical means. Building and security lighting shall be integrated into the building design.

G. Future Technologies: If future technological advances would allow for reduced visual impacts resulting from the proposed telecommunication facility, the applicant agrees through accepting the terms of this permit to make those modifications which would allow for reduced visual impact of the proposed facility as part of the normal replacement schedule. **If,** in the future, the facility is no longer needed, the applicant agrees to 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 vegetation.

H. Future Studies: 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 bearing and in its sole discretion, may revoke **or** modify the conditions of this permit.

I. Noncompliance: 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.

J. Transfer of Ownership: In the event that the original permittee sells its interest in the permitted wireless communications facility, the succeeding camer 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 camer shall provide a new contact name to the Planning Department.

VII. 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, it 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.

Minor variations to this permit which do not affect the overall concept or density **may be** approved **by** the Planning Director at the request of the applicant or staff **in** accordance with Chapter 18.10 of the County **Code.**

Please note: This permit expires *two* years from the effective date on the expiration date listed below unless you obtain the required permits and commence construction.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Don Bussey
Deputy Zoning Administrator

Samantha Haschert
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: 06-0443
Assessor Parcel Number: 061-371-16
Project Location: 3650 Graham Hill Road, Santa Cruz

Project Description: Proposal to co-locate a wireless communication facility on an existing 124-foot tall monopole

Person or Agency Proposing Project: Dayna Aguirre, Sutro Consulting

Contact Phone Number: (925) 548-7671

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 Proiect** 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. __X__ **Categorical Exemdion**

Specify type: Class 1 - Existing Facilities (Section 15301)

F. Reasons why the project is exempt:

Proposal to co-locate a wireless communication facility on an existing monopole.

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

_____ Date:_____
Samantha Haschert, Project Planner

EXHIBIT D

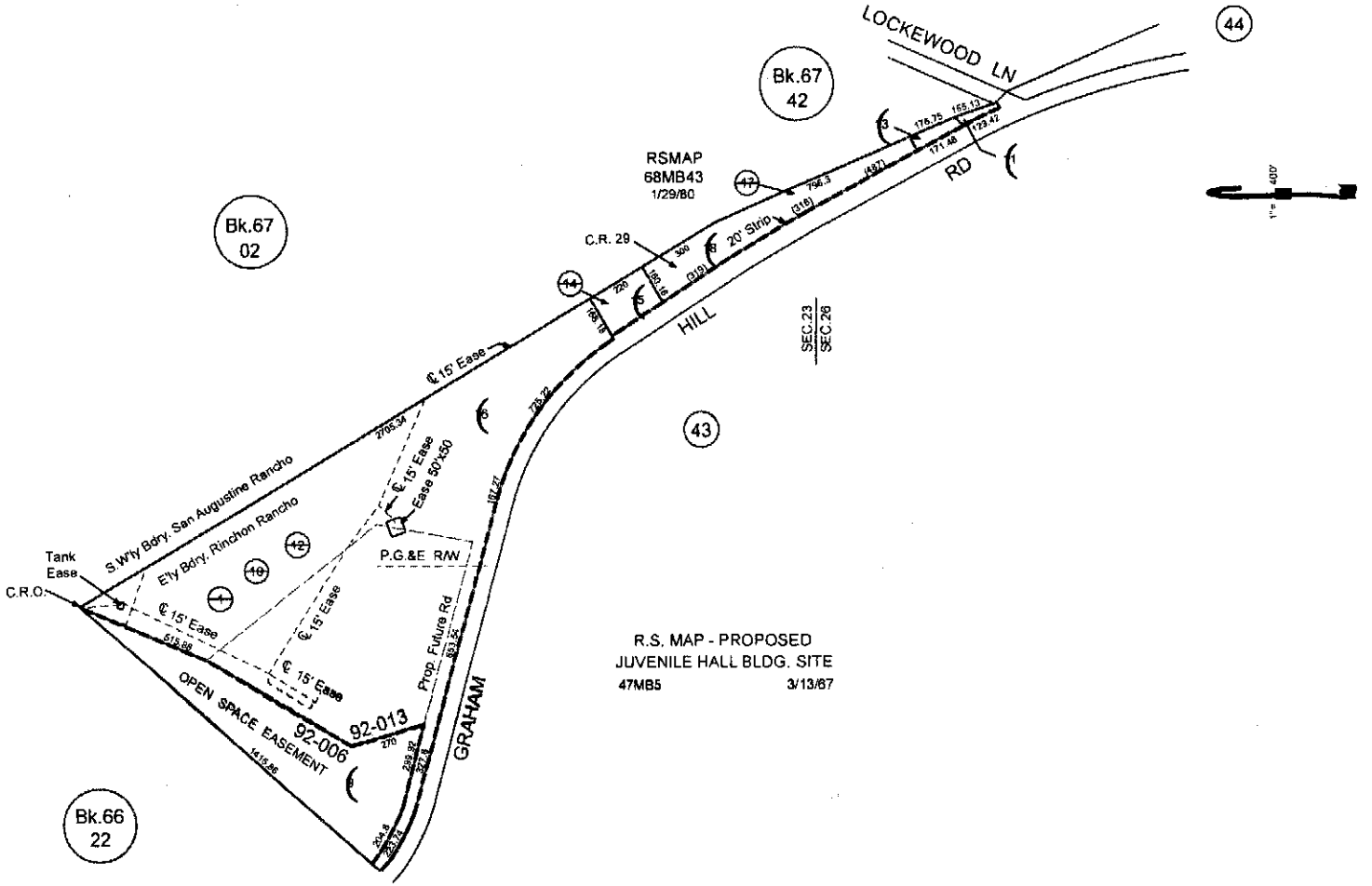
FOR TAX PURPOSES ONLY

POR. RINCON RANCHO

SECS. 23,25, & 26, T.10S., R.2W., M.D.B & M.

Tax Area Code
92-006 92-013

61-37



R.S. MAP - PROPOSED
JUVENILE HALL BLDG. SITE
47MB5 3/13/67

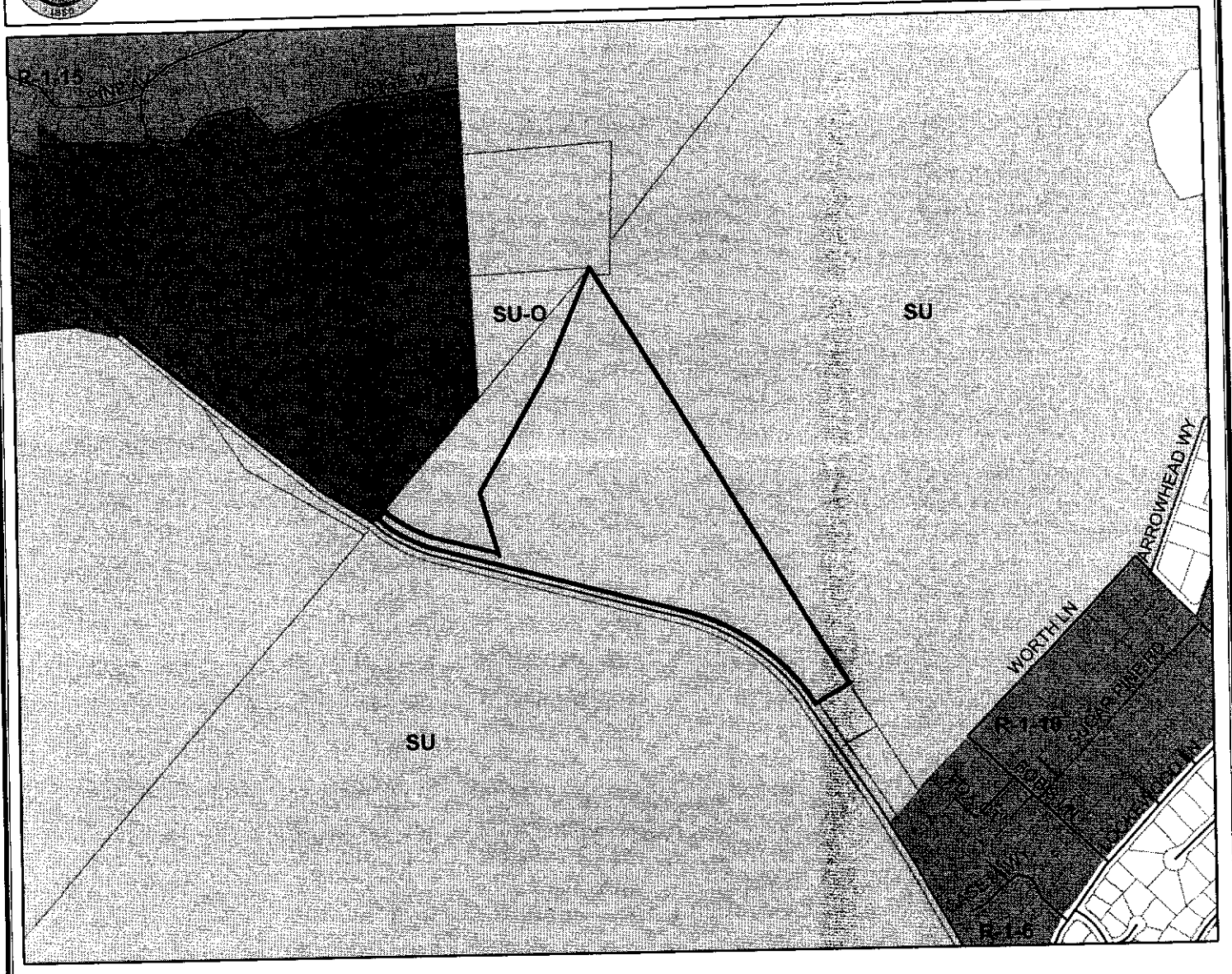
Note - Assessor's Parcel & Block
Numbers Shown in Circles.

Assessor's Map No. 61-37
County of Santa Cruz, Calif.
Jan 1964

EXHIBIT

Electronically drawn 7/13/95 KSA
Rev. 7/19/96 por. 61-44 KSA
Rev. 7/10/01 mvm (changed page nits.)
Rev. 5/17/02 mvm (TCA change)
Rev 4/8/03 CB (Cor to TCA)
Rev. 3/15/06 LLO (Spatial Adjustment)
Rev. 3/15/06 LLO (Changed Street Name)

Zoning Map



0 600 1,200 2,400 3,600 4,800 Feet

Legend

- APN 061-371-16
- Assessors Parcels
- **Streets**
- SPECIAL USE **(SU)**
- RESIDENTIAL-SINGLE FAMILY (R-1)
- PARK (PR)
- CITY PROPERTY

N
W E
S

Map Created by
County **of** Santa **Cruz**
Planning Department
August 2006

EXHIBIT F

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
RADIO AND TELEVISION

WILLIAM F. HAMMETT, P.E.
DANEE. ERICKSEN, P.E.
STANLEY SALEK, P.E.
ROBERT D. WELLCR. P.E.
MARK D. NEUMANN, P.E.
ROBERT P. SMITH, JR.
RAJAT MATHUR. P.E.
S. WESTON LANE

ROBERT L. HAMMETT, P.E.
1920-2002
EDWARD EDISON, P.E.

BY E-MAIL DAGUIRRE@SUTROCONSULTING.COM

July **20,2007**

Ms. Dayna **L.** Aguirre
Sutro Consulting
3145 Geary Boulevard, #509
San Francisco, California **941**18

Dear Dayna:

As you requested, we have updated our study of the RF exposure conditions near the T-Mobile base station (Site No. SF15034) proposed *to* be located at 3650 **Graham** Hill Road in Felton. California, An electronic copy o f our revised report is enclosed, reflecting the change in the number of antennas MetroPCS proposes to install. Fields in publicly accessible areas at the site are still calculated to be well below the applicable limits.

We appreciate the opportunity to be of service and would welcome any questions on this material. Please let me know **if** we may be of additional assistance.

Sincerely yours,

Rajat Mathur

tm

Enclosure

cc: Mr. Ryan Crowley (w/encl) – **BY** E-MAIL RCROWLEY@NORCALCON.COM

e-moil: rmathur@h-e.com
US Mail: Box 280068 • San Francisco, California 94128
Delivery: 470 Third Street West • Sonoma, California 95476
Telephone: 707/996-5200 San Francisco • 707/996-5280 Facsimile • 202/396-5200 D.C

EXHIBIT G

T-Mobile • Proposed Base Station (Site No. SF15034)
3650 Graham Hill Road • Felton, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of T-Mobile, a personal wireless telecommunications carrier, to evaluate the base station (Site No. SF15034) proposed to be located at 3650 Graham Hill Road in Felton, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. In Docket 93-62, effective October 15, 1997, the FCC adopted the human exposure limits for field strength and power density recommended in Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive, The more recent Institute of Electrical and Electronics Engineers ("IEEE") Standard C95.1-2005, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar exposure limits. A summary of the FCC's exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Personal Wireless Service	Approx. Frequency	Occupational Limit	Public Limit
Personal Communication ("PCS")	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio	855	2.85	0.57
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "channels") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables about 1 inch thick. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward

the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

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

Site and Facility Description

Based upon information provided by T-Mobile, including zoning drawings by Michael Wilk Architecture, dated July 20, 2006, it is proposed to mount three Andrew Model 932SDG65-VTEM directional panel PCS antennas on an existing 124-foot steel pole located atop a hill at 3650 Graham Hill Road in Felton. The antennas would be mounted with 2° downtilt at an effective height of about 93 1/2 feet above ground and would be oriented at 120" spacing, to provide service in all directions. The maximum effective radiated power in any direction would be 2,400 watts. representing six channels operating simultaneously at 400 watts each.

Also proposed to be installed on the same pole are similar antennas for use by MetroPCS, another wireless communications carrier. Metro reports that it will install three EMS Model RR6518-OODPL directional panel PCS antennas at an effective height of about 103 feet above ground and would be oriented at 120° spacing. The maximum effective radiated power in any direction would be 1,890 watts, representing six channels operating simultaneously at 315 watts each.

Presently located higher on the same pole are similar antennas for use by Cingular Wireless, another personal wireless telecommunications carrier. For the purposes of this study, it is assumed that Cingular has installed Kathrein Scala Model AP14/17-880-1940/065 directional dualband antennas at an effective height of about 118 feet above ground and operates with a maximum effective radiated power of 1,500 watts.

Study Results

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed T-Mobile operation by itself is calculated to be 0.0013 mW/cm^2, which is 0.13% of the applicable public exposure limit. The maximum calculated cumulative level at ground for the simultaneous operation of all three carriers is 0.16% of the public exposure limit; the maximum calculated cumulative level at the second-floor elevation of any nearby building would be **0.23%** of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels. Figure **3** attached provides the specific data required under Santa Cruz County Code Section 13.10.659(g)(2)(ix), for reporting the analysis of RF exposure conditions.

No Recommended Mitigation Measures

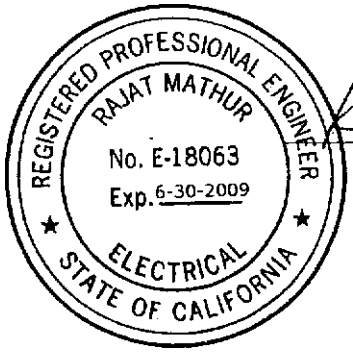
Due to their mounting locations, the T-Mobile antennas are not accessible to the general public: and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that the several carriers will, as FCC licensees: take adequate steps to ensure that their employees or contractors comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by T-Mobile at 3650 Graham Hill Road in Felton, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June **30,** 2009. This work has been carried out by him or under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



Rajat Mathur, P.E.

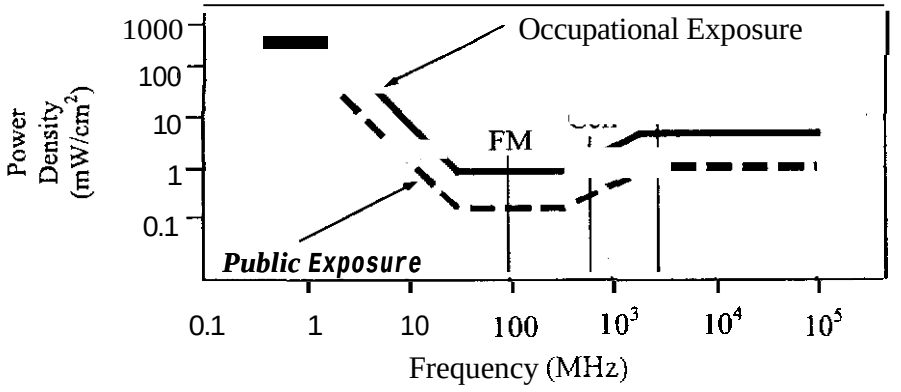
July **20,2007**

FCC Radio Frequency Protection Guide

The **U.S.** Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt *a* nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements, which are nearly identical to the more recent Institute of Electrical and Electronics Engineers Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, *3* kHz to 300 GHz." These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

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

Frequency	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	**Electric Field Strength (V/m)**		**Magnetic Field** Strength (A/m)		**Equivalent Far-Field Power Density (mW/cm^2)**	
0.3 – 1.34	**614**	***614***	1.63	***1.63***	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	18421**f**	*823.8/f*	4.891 f	*2.19/f*	900/ f^2	*180/f^2*
30 – **300**	61.4	*27.5*	0.163	***0.0729***	**1.0**	0.2
300 – 1,500	3.54√f	*1.59√f*	√f/106	*√f/238*	0300	*f/1500*
1,500 – 100,000	137	***61.4***	0.364	***0.163***	5.0	*1.0*



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

RFRCALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

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

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications cell sites. The near field zone is defined by the distance, D, from an antenna beyond which the manufacturer's published, far field antenna patterns will be fully formed; **the** near field may exist for increasing D until some or all *of* three conditions have been met:

$$1)\ D > \frac{2h^2}{\lambda} \qquad 2)\ D > 5h \qquad 3)\ D > 1.6\lambda$$

where h = aperture height of the antenna, in meters, and
λ = wavelength of the transmitted signal, in meters

The FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives this formula for calculating power density in the near field zone about an individual RF source:

$$\text{power density } S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}, \text{ in } mW/cm^2,$$

where θ_{BW} = half-power beamwidth of antenna, in degrees, and
P_{net} = net power input to the antenna, in watts.

The factor of 0.1 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates distances to FCC public and occupational limits.

Far Field.

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

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

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

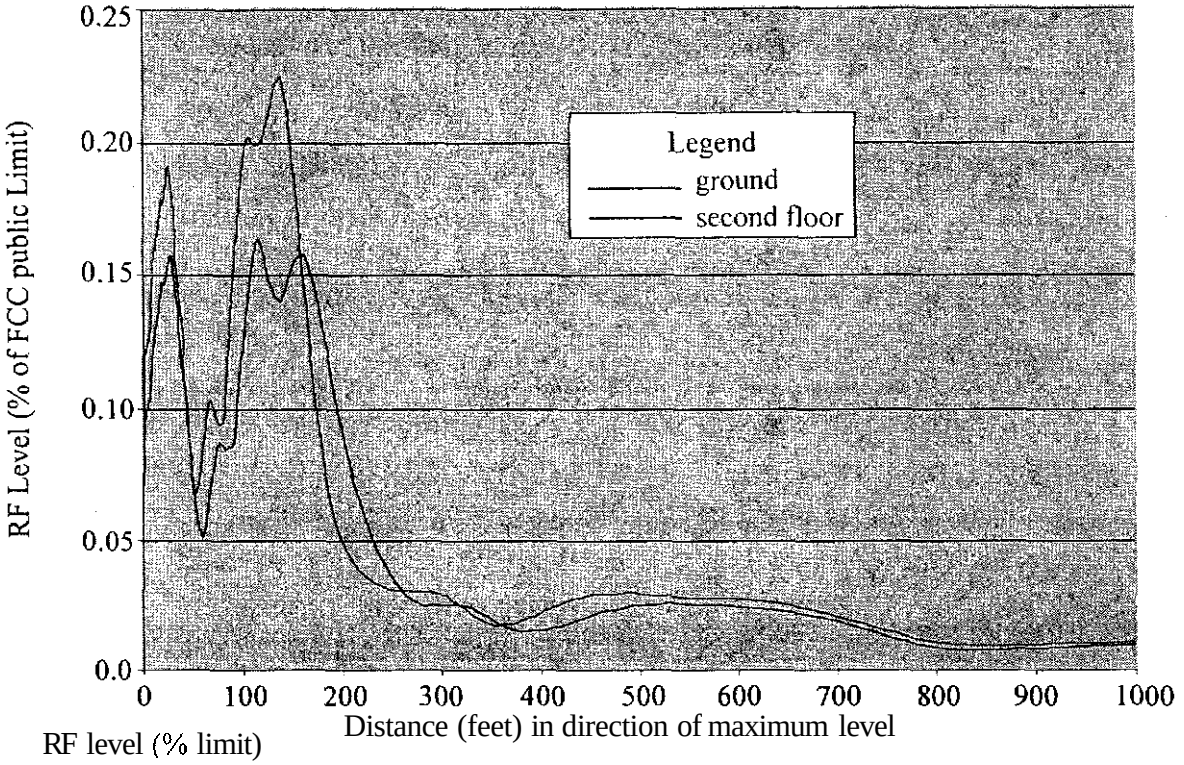
The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units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

T-Mobile • Proposed Base Station (Site No. SF15034)
3650 Graham Hill Road • Felton, California

Compliance with Santa Cruz County Code §13.10.659(g)(2)(ix)

"Compliance with the FCC's non-ionizing electromagnetic radiation (NIER) standards or other applicable standards shall be demonstrated for any new wireless communication facility through submission, at the time of application for the necessary permit or entitlement, of NIER calculations specifying NIER levels in the area surrounding the proposed facility. Calculations shall be made of expected NIER exposure levels during peak operation periods at a range of distances from fifty (50) to one thousand (1,000) feet, taking into account cumulative NIER exposure levels from the proposed source in combination with all other existing NIER transmission sources within a one-mile radius. *This should also include a plan to ensure that the public would be kept at a safe distance* from any NIER transmission source associated with the proposed wireless communication facility, consistent with the NIER standards of the FCC, or any potential future superceding standards."

Calculated Cumulative NIER Exposure Levels during Peak Operation Periods



RF level (% limit)

Distance (feet)	50	100	200	300	500	750	1,000
ground	0.068%	0.13%	0.090%	0.025%	0.025%	0.013%	0.0095%
second floor	0.072%	0.19%	0.049%	0.029%	0.029%	0.015%	0.011%

Calculated using **formulas** in **FCC** Office of Engineering Technology Bulletin No. 65 (1997), considering terrain variations within 1,000 feet of site.

Maximum effective radiated power (peak operation) - 2,400 watts

Effective T-Mobile antenna height above ground - 93 1/2 feet

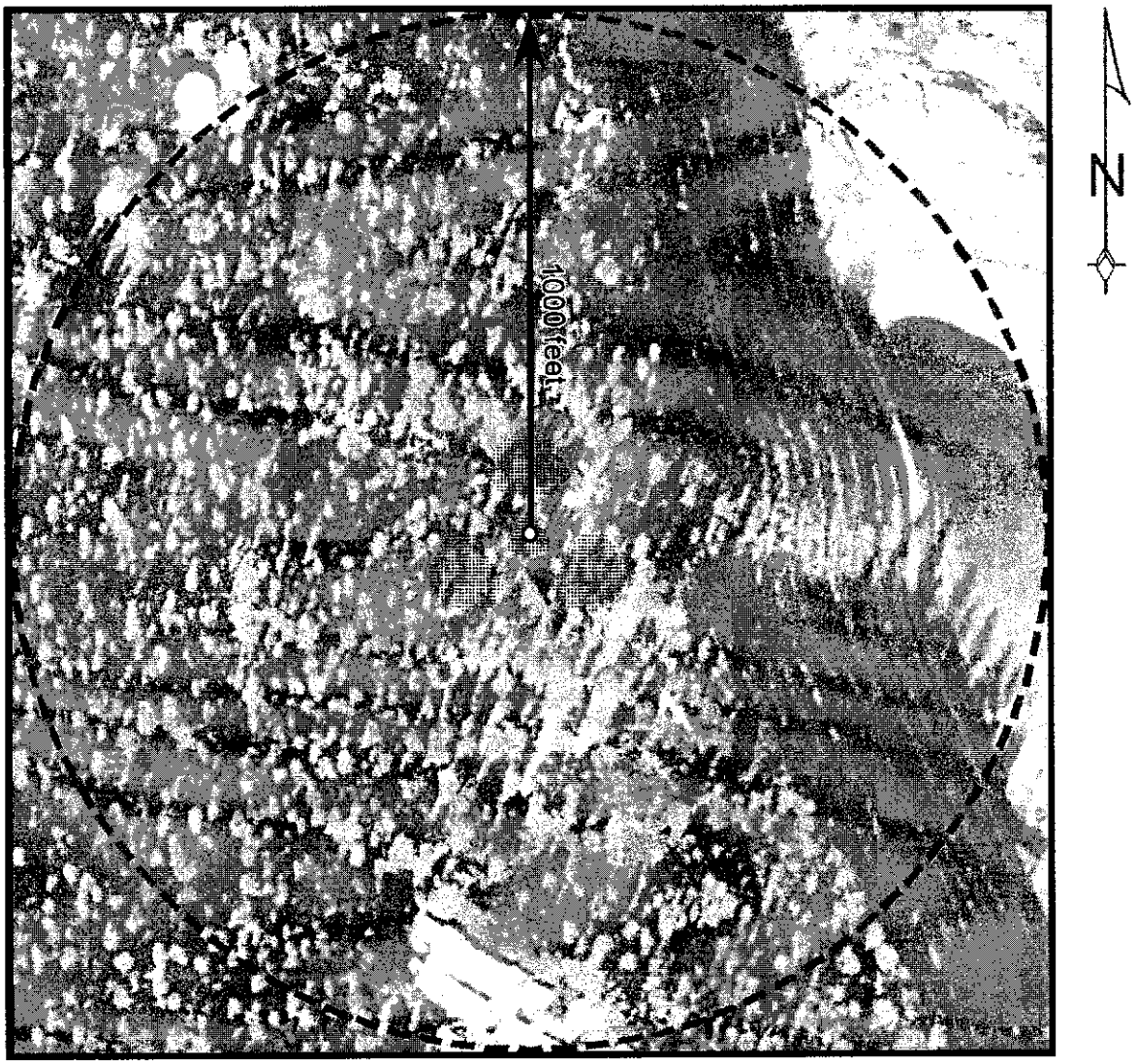
Other sources nearby - Cingular Wireless, MetroPCS (proposed)

Other sources within one mile - No authorized AM, FM, or TV broadcast stations
No known two-way stations close enough to affect compliance

Plan for restricting public access - Antennas are mounted on a tall pole

T-Mobile • Proposed Base Station (Site No. SF15034)
3650 Graham Hill Road • Felton, California

Calculated NIER Exposure Levels
Within 1,000 **Feet of Proposed Site**
for Simultaneous Operation of T-Mobile, MetroPCS, and Cingular Wireless

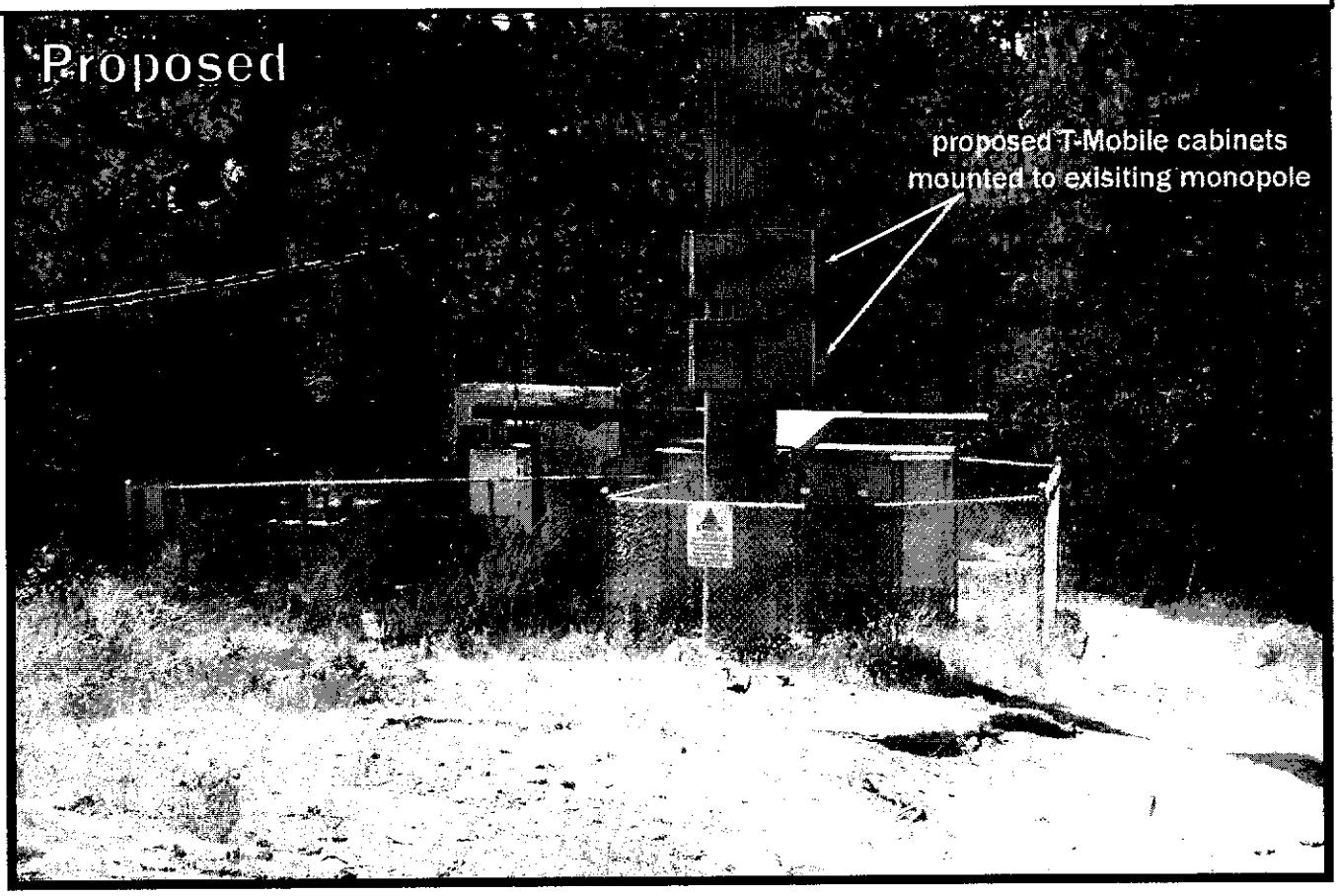


Aerial photo from **Maps a la Carte,** Inc

Legend
blank - less than 0.5% of FCC public limit (*i.e.*, more than 1,000 times below)
- 0.5% and above near ground level (highest level is 0.16%)
- 0.5% and above at 2nd floor level (highest level is 0.23%)

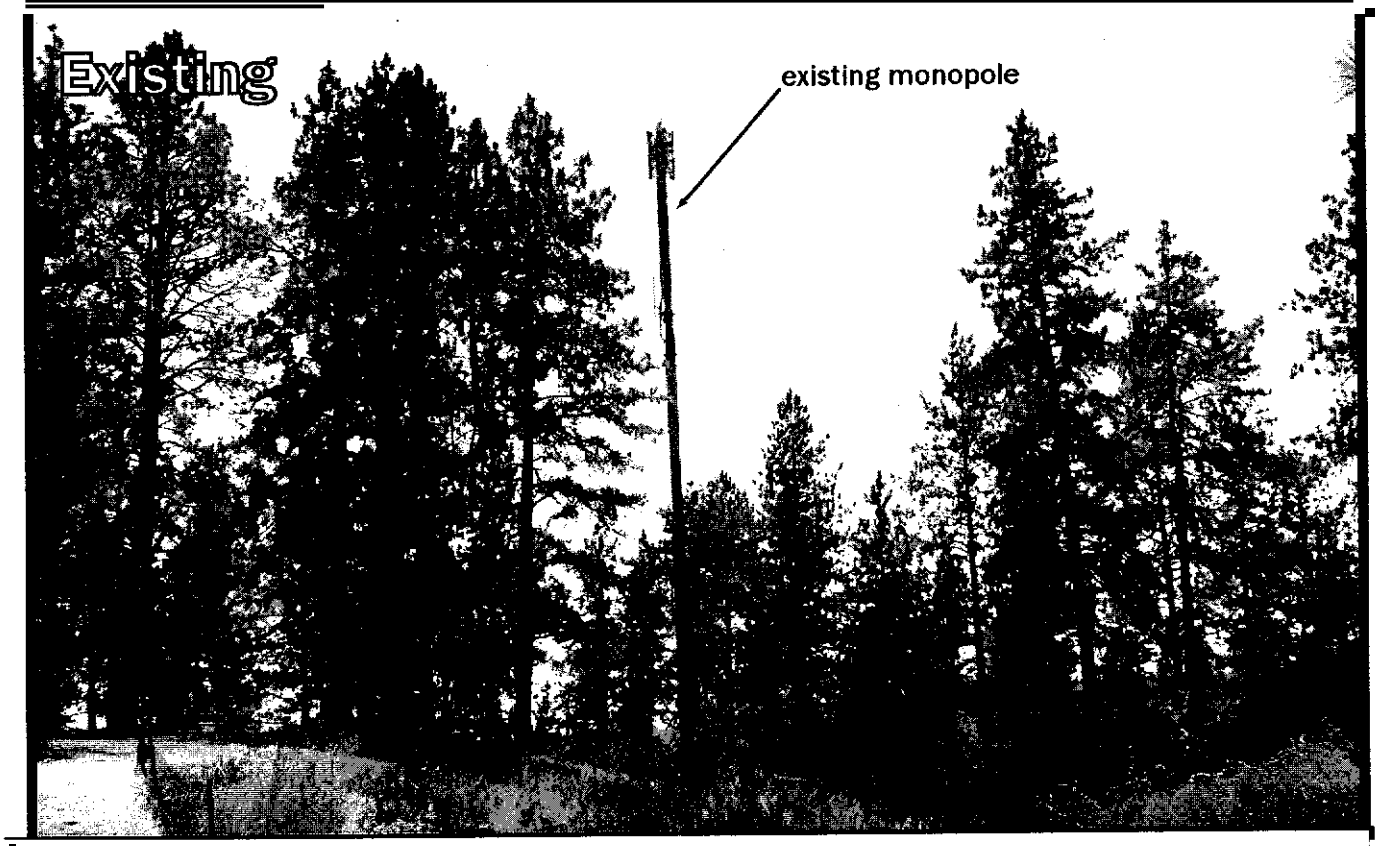
Calculated using formulas in FCC Office of Engineering Technology Bulletin No. 65 (1997), considering terrain variations within 1,000 feet of site. See text for further information.

T··Mobile· **SF15034** **Cingular Graham Hill Road** Near 3650 Graham Hill Rd. Felton, CA 95018

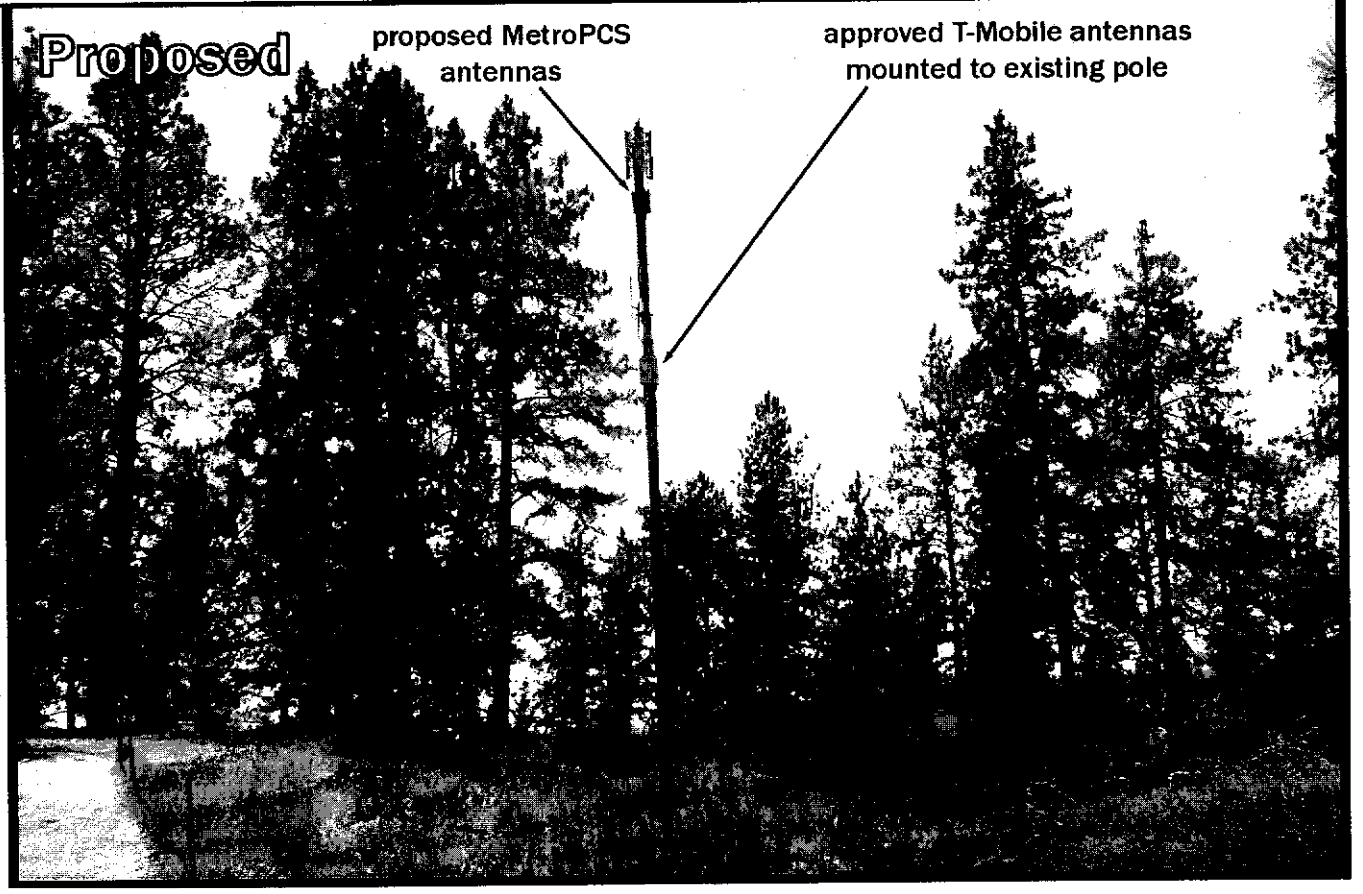


Photosimulation of the proposed telecommunication facility as seen looking west from the hiking trail

EXHIBIT H

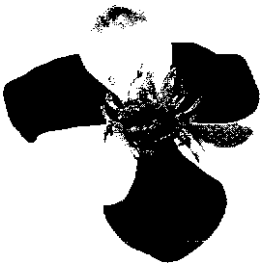


T-Mobile SF15034 **Cingular Graham Hill Road** Near 3650 Graham Hill Rd. Felton, CA 95018



Photosimulation of the proposed telecommunic ion facility as seen looking south along the hiking trail

EXHIBIT P



Jodi M. McGraw, Ph.L.
Population and Community Ecologist
PO Box 883 Boulder **Creek,** CA 95006
phone/fax: 831-338-1990 ▪jodimcgraw@sbcglobal.net

March 16,2007

Ms. Samantha Haschert
Planner
Santa **Cruz** County
701 Ocean Street, 4th Floor
Santa **Cruz,** CA 95060

RE: Review of T-Mobile's Proposed Metbods to Install and Maintain New Cellular Antenna Equipment on Mount Hermon, Santa Cruz County, California

Dear Ms. Haschert:

On behalf of T-Mobile and their colleagues at Sutro Consulting, I have reviewed T-Mobile's plans to co-locate cellular antenna equipment at the County of Santa Cruz's antenna facility atop Mount Hermon in Santa Cruz County, central coastal California. This letter describes my evaluation of the effects of T-Mobile's proposed methods to install and maintain the new equipment on the special status species and the sensitive habitat located at the project site.

This letter report contains three sections:

1. **Projeet Review Methods:** Describes the steps I took to review **the** proposed project;
2. **Project Description:** Describes the site conditions, proposed antenna equipment installation and maintenance methods; and
3. **Recommended Measures to Avoid Impacts:** Outlines training and monitoring measures designed to ensure impacts to special status species and sensitive habitats are successfully avoided

More information about the existing site conditions including the special status species and habitats is provided in the Habitat Mitigation Plan which I prepared for Metro PCS's proposed antenna co-location at the site (McGraw 2006).

Project Review Methods

In order to evaluate the potential effects **of** T-Mobile's proposed antenna equipment co-location on the sensitive biotic resources at the existing antenna site atop Mount Hermon, I conducted the following:

EXHIBIT J

1. I reviewed the project design (zoning) plans provided by T-Mobile on March 12,2007;
2. I met with T-Mobile Construction Project Manager Andrew Ogilvie at the project site on March 15,2007, to discuss the steps involved in installing and maintaining the new equipment, and to assess project impacts on the special status species and sensitive habitat in the area based on the known aspects of their biology and ecology.

I was provided with two sets of zoning plans for the project, as at the time of my review, T-Mobile was evaluating two alternative approaches to mounting the antenna equipment. My review evaluates the impacts of both alternative designs.

Antenna Equipment Installation and Maintenance

Site Description

To enhance the personal cellular telephone service that it provides its customers, T-Mobile is seeking to co-locate cellular antenna equipment at an existing antenna site located atop Mount Hermon—an approximately **890** foot tall hill located between the City of Scotts Valley and the town of Felton in central Santa Cruz County. The antenna site is located on land owned by the County of Santa **Cruz (APN:** 061-371-16) near 3650 Graham Hill Road, Felton, **CA** 95018.

The site features an existing approximately 25 foot by 30 foot antenna facility, which is encircled by a 6 foot tall chain link fence. Inside the facility, there is a **124** foot tall monopole and a cement slab which covers an estimated 70% of the ground surface and supports cabinets containing telecommunications and power equipment. **A** 0.25 mile long, approximately 15 foot wide paved road leads from **Graham** Hill Road to a large gravel-covered parking area downslope of the antenna site. **A** path variously constructed from gravel, wood planks, and asphalt leads from the parking area to the entrance to the antenna facility (McGraw 2006).

The antenna site is located in a region that supports special status plants and animals endemic to the Santa Cruz Sandhills—a unique ecosystem that occurs on the Zayante sand soils found atop the mountain (Table 1). Previous assessments have confirmed the presence of several of these species adjacent to the fenced antenna facility (McGraw 2006).

EXHIBIT 1

Table 1: Special status species and habitats occurring within and adjacent to the antenna facility atop Graham Hill. (McGraw **2006)**

Common Name	Scientific Name	status	Occurrence with Respect to the Antenna Facility	
			Within	Adjacent
Zayante band-winged grasshopper	*Trimerotropis infantilis*	Federally Endangered		X
Mount Hermon June beetle	*Polyphylla barbata*	Federally Endangered	X	X
Ben Lomond spineflower	*Chorizanthe pungens* var. *hartwegiana*	Federally Endangered; CNPS 1B (rare or endangered)	X	X
Santa Cruz wallflower	*Erysimum teretifolium*	Federally Endangered; California Endangered; CNPS 1B		X
silverleaf manzanita	*Arctostaphylos silvicola*	CNPS 1B	X	X
Ben Lomond buckwheat	*Eriogonum nudum* var. *decurrens*	CNPS 1B	X	X
maritime coast range ponderosa pine forest	na	California Natural Diversity Database Sensitive Community	X	X
northern maritime chaparral	na	California Natural Diversity Database Sensitive Community	X	X

Proiect Description

T-mobile is seeking to install the following new equipment within the antenna facility.

1. Three (3), six-port panel antennas
2. ***Six (6)*** to twelve (12) equipment cabinets (approx. 29" H x 17"W x 11" D)
3. A new cable tray.

Based on my review of the two alternate site plans and my discussion with T-Mobile's Construction Project Manager, I understand that T-mobile will install the antenna equipment through the following steps designed to avoid impacts to the special status species and sensitive habitat.

1. New equipment will be brought from the parking area to the installation area by hand or using a dolly (hand truck), as needed, to roll equipment **up** the existing 2.5' paved pathway. Neither a crane nor mechanized equipment will be used.

EXHIBIT T

2. The equipment cabinets will be attached either to the existing monopole or to the existing chain link fence using unistruct. The cabinets will be hung so as to provide a minimum of 24" clearance between the top of the soil surface and the bottom of the cabinets.
3. The antennas will be mounted on the existing monopole elevated approximately 120 feet above the soil surface.
4. Cables linking the equipment cabinets to the antennas will be routed through an overhead cable tray, which will be mounted to the existing fence, the monopole, and/or other equipment cabinets (i.e. using unistruct).

All work will be conducted with hand tools. The project will not cause soil disturbance, as it will not involve digging, grading, burying, or any covering of the soil surface.

To maintain the equipment, T-Mobile staff or their contractors will visit the site approximately once per month. They will access the antenna facility on foot using the existing pathways, and confine work to this fenced antenna facility.

Recommend Methods **to** Avoid **Impacts**

The following pre-construction training and construction monitoring measures are recommended to ensure that impacts to the special status species and sensitive habitats with the project site are avoided.

1. Prior to inception of the project, a biologist with expertise in the ecology of the special status species and communities of the Sandhills should meet with the project work crew to discuss the steps that will be used to avoid impacts to the sensitive species and habitats near the project area. These steps should include:
    a. Crews will travel from the parking area to the antenna facility use the existing 2.5' wide paved pathway.
    b. Work and crew access will be confined to the project area, which will consist of the antenna facility and the designated pathway, which should be delimited by the biologist prior to project construction using plastic tape.
2. The qualified biologist should inspect the project site periodically during project construction, to ensure that the avoidance techniques are being implemented.
3. The qualified biologist should evaluate site conditions following completion of project construction to evaluate whether inadvertent impacts to the special status species and sensitive habitat have been avoided.

In conclusion, it is my assessment that T-Mobile's proposed methods to install and maintain new antenna equipment at the existing antenna facility atop Mount Hermon, combined with the recommended pre-construction training and monitoring, will allow T-Mobile to implement their project while avoiding impacts to **the** special status species and communities at the project site. In this way, their methods are consistent with those proposed by Metro PCS in their Habitat Mitigation

EXHIBIT I

Plan describing similar activities (McGraw 2006), for which the US Fish and Wildlife Service issued a no take concurrence letter to Metro PCS. To provide assurance that their project complies

with the federal Endangered Species Act, T-Mobile might similarly wish to request a letter from the US Fish and Wildlife Service concurring that the proposed project will not result in impacts to endangered species, **prior** to commencing with project construction.

Please do not hesitate to contact me if you have any questions about my review *or* **if I** can assist you further.

Sincerely,

Jodi M. McGraw

Reference

McGraw, J. M. 2006. Final habitat mitigation plan for Metro PCS Cingular/Willow Pond Project (Application 05-0474). Report prepared for Metro PCS and submitted to the County *of* Santa Cruz Planning Department. September 29,2006.

cc: Mr. Mike Bakh, T-Mobile Omni Point Communications
Mr. Ryan Crowley, Sutro Consulting

EXHIBIT J

Project Planner: Samantha Haschert
Application No.: 06-0443
APN: 061-371-16

Date: March 23, 2007
Time: 07:53:53
Page: 1

Environmental Planning Completeness Comments

========== REVIEW ON MARCH 22. 2007 BY JESSICA L DEGRASSI ==========
Letter from Jodi McGraw states that the project is in conformance with the HMP established under original permit for the complex. The project isconjunction with the recommended pre-construction training and monitoring will avoid impacts to the special status species at the site.

Environmental Planning Miscellaneous Comments

========== REVIEW ON MARCH 22, 2007 BY JESSICA L DEGRASSI ==========
Condition permit conform to letter from Jodi McGraw.

A no-take concurrence letter will be required at building permit stage

Scotts Valley Fire District Completeness Conments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON SEPTEMBER 6. 2006 BY MARIANNE E MARSANO ==========
DEPARTMENT NAME: Scotts Valley Fire District
Submit a "plan review response sheet" when corrected sets are submitted for back check. All changes to drawings will require "clouding of the change".
SHOW on the plans. DETAILS of compliance with the Access Standards of the Santa Cruz County General Plan (Objective 6.5 Fire Hazards).
The access road shall be 12 feet minimum width and maximum twenty percent slope. The access road shall be all weather surface and all holes in the road repaired. The vegetation along the length of the access road shall be cut back10 feet to allow fire engine access due to the overgrown condition to date.

Scotts Valley Fire District Miscellaneous Conments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON SEPTEMBER 6. 2006 BY MARIANNE E MARSANO ==========
NO COMMENT

EXHIBIT J

COUNTY OF SANTA CRUZ | Planning Department

INTEROFFICE MEMO

APPLICATION NO: 06-0443

Date: August 24,2006

To: Robin Bolster-Grant, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Design Review for co-location of wireless communication antennae at 3650 Graham Hill Road. Santa Cruz

GENERAL PLAN / ZONING CODE ISSUES

Design Review Authority

13.10.663 General development performance standards for wireless communication facilities

Evaluation Criteria	**Meets** criteria **In code(** ✔)	Does not **meet** criteria (✔)	Urban **Designe** Evaluation
communications facilities shall preserve the visual character, native *vegetation* and *aesthetic* values of the parcel on which such facilities are proposed, the surrounding parcels and road right-of-ways, and the surrounding land uses to the greatest extent that is technically feasible, and shall minimize visual impacts on surrounding land and land uses to thegreatest extent feas ble			
Facilities shall be integrated to the maximum extent feasible to the existing characteristics of the site, and every effort shall be made to avoid, or minimize *to* the maximum extent feasible, visibility of a wireless communication facility within significant public viewsheds.	✔		
Utilization of camouflaging and/or stealth techniques shall be encouraged where appropriate.	✔		
Support facilities shall be integrated to the existing characteristics of the site, *so* as to minimize visual impact.	✔		

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Co-location is generally encouraged in situations where it is the least visually obtrusive option. such as when increasing the height/bulk of an existing tower would result in less visual impact than constructing a new separate tower in a nearby location.	✔		
visually prominent ridgeline, hillside or hilltop locations shall be sited and designed to be as visually unobtrusive as possible. Consistent with General Plan/LCP Policy 8.6.6, wireless communication facilities should be sited so the top of the proposed tower/facility is below any ridgeline when viewed from public roads in the vicinity			
If the tower must extend above a ridgeline the applicant must camouflage the tower by utilizing stealth techniques and hiding it among surrounding vegetation.	✔		
Site Disturbance			
Disturbance of existing topography and on-site vegetation shall be minimized, unless such disturbance would substantially reduce the visual impacts of the facility.	✔		
New wireless communication facilities in any portion of the Coastal Zone shall be consistent with applicable policies of the County Local Coastal Program (LCP) and the California Coastal Act.	✔		
No portion of a wireless communication facility shall extend onto or impede access to a publicly used beach.	✔		
Power and telecommunication lines servicing wireless communication facilities in the Coastal Zone shall be required to be placed	✔		
shall comply with the policies of the County General Plan/Local Coastal Plan and all applicable development standards for the zoning district in which the facility is to be located, particularly policies for protection of visual resources (i.e., General Plan/LCP Section 5.10). Public vistas from scenic roads, as designated in General Plan Section 5.10.10, shall be afforded the highest level of protection.	✔		
Visual Impacts to Neighboring Parcels			

To minimize visual impacts to surrounding residential uses, the base of any new freestanding telecommunications tower shall be set back from any residentially zoned parcel a distance equal to five times the height of the tower, or a minimum of three hundred (300) feet, whichever is greater.	✔		
This requirement may be waived by the decision making body if the applicant can prove that the tower will not be readily visible from neighboring residential structures, or if the applicant can prove that a significant area proposed to be served would otherwise not be provided personal wireless services by the subject carrier, including proving that there are no viable, technically feasible, environmentally equivalent or superior alternative sites outside the prohibited and restricted areas designated in Section 13.10.661(b) and 13.10.661(c).	✔		

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
DESIGN REVIEW CRITERIA			
Non-flammable Materials			
All wireless communication facilities shall be constructed of non-flammable material, unless specifically approved and conditioned by the County to be otherwise (e.g., when a wooden structure may be necessary to minimize visual impact).	✔		
Tower Type			
All telecommunication towers shall be self-supporting monopoles except where satisfactory evidence is submitted to the appropriate decision-making body that a non-monopole (such as a guyed or lattice tower) is required or environmentally superior.	✔		
All guy wires must be sheathed for their entire length with a plastic or other suitable covering.	✔		
Support Facilities			
The County strongly encourages all support facilities, such as equipment shelters, to be placed in underground vaults, so as to minimize visual impacts.	✔		

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Any support facilities not placed underground shall be located and designed to minimize their visibility and, if appropriate, disguise their purpose to make them less prominent. These structures should be no taller than twelve (12) feet in height, and shall be designed to blend with sxisting architecture and/or the natural surroundings in the area or shall be screened from sight by mature landscaping.	✔		
Exterior Finish			
All support facilities, poles, towers, antenna supports, antennas, and other components of mmmunication facilities shall be of a color approved by the decision making body.	✔		
Components of a wireless communication facility which will be viewed against soils, trees, or grasslands, shall be of a color or colors consistent with these landscapes.	✔		
All proposed stealth tree poles (e.g., "monopines") must use bark screening that approximates natural bark for the entire height and circumference of the monopole visible to the public, as technically feasible.	✔		
Visual Impact Mitigation			
Special design of wireless communication facilities may be required lo mitigate potentially significant adverse visual impacts, including appropriate camouflaging or utilization of stealth techniques.	✔		
Use of less visually obtrusive design alternatives, such as "microcell" facility-types that can be mounted upon existing utility poles, is encouraged.	✔		
Telecommunication towers designed to look like trees (e.g., "monopines") may be favored on wooded sites with existing similar looking trees where they can be designed to adequately blend with and/or mimic the existing trees. In other cases, stealth-type structures that mimic structures typically found in the built environment where the facility is located may be appropriate (e.g., small scale water towers, barns, and other typical farm-related structures on or near agricultural areas).	✔		
Rooftop or other building mounted antennas designed to blend in with the building's existing architecture shall be encouraged.	✔		
Co-location of a new **wireless** communication facility onto an existing telecommunication tower shall generally be favored over construction of a new tower.	✔		

Owners/operators of wireless communication towers/facilities are required to maintain the appearance of the tower/facility, as approved, throughout its operational life.	✔		
Public vistas from scenic roads, as designated in General Plan/LCP Section 5.10.10, shall be afforded the highest level of protection.	✔		
Height			
All towers shall be designed to be the shortest height possible so as to minimize visual impact.	✔		
Any applications for towers of a height more than the allowed height for structures in the zoning t must include a written justification proving the need for a tower of that height and the absence of viable alternatives that would have less visual impact, and in addition to any other required findings and/or requirements, i a variance approval pursuant to County Code Section 13.10.230.	✔		
Except for as provided for under Section 13.10.663(a)(5), all wireless communication facilities shall be unlit except when authorized personnel are present at night.	✔		
Roads and Parking			
All wireless communication facilities shall be served by the minimum sized roads and parking areas feasible.	✔		
Vegetation Protection and Facility Screening			
In addition to stealth structural designs, vegetative screening may be necessary to minimize wireless communication facility visibility within public viewsheds.	✔		
All new vegetation to be used for screening shall be compatible with existing surrounding vegetation.	✔		
Vegetation used for screening purposes shall be capable of providing the required screening upon completion of the permitted facility (i.e., an applicant cannot rely on the expected future screening capabiliies of the vegetation at maturity to provide the required immediate screening).	✔		

All telecommunications facilities to be located in areas of extensive natural vegetation shall be installed in such a manner so as to maintain the existing native vegetation. Where necessary; appropriate mature landscaping can be used to screen the facility. However, so as to not pose an invasive or genetic contamination threat to local gene pools, all vegetation proposed and/or required to be planted that is associated with a wireless communication facility shall be non-invasive species native to Santa Cruz County, and specifically native to the project location.	✔		
Non-native and/or invasive species shall be prohibited (such as any species listed on the California Exotic Pest Plant Council "Pest Plant List" in the categories entitled 'A, 'B', or 'Red Alert'). Cultivars of native plants that may cause genetic pollution (such as all manzanita, oak, monkey flower, poppy, lupine, paintbrush and ceanothus species) shall be prohibited in these relatively pristine areas.	✔		
All wireless communication facility approvals in such areas shall be conditioned for the removal of non-native invasive plants (e.g., iceplant) in the area disturbed by the facility and replanting with appropriate non-invasive native species capable of providing similar or better vegetated screening and/or visual enhancement of the facility unless the decision making body determines that such removal and replanting would be more environmentally damaging than leaving the existing non-native and/or invasive species in place (e.g., a eucalyptus grove that provides over wintering habitat for Monarch butterflies may be better left alone).	✔		
All applications shall provide detailed landscape/vegetation plans specifying the non-invasive native plant species to be used, including identification of sources to be used to supply seeds and/or plants for the project.	✔		
Any such landscape/vegetation plan shall be prepared by a qualified botanist experienced with the types of plants associated with the facility area. For purposes of this section, "mature landscaping" shall mean trees, shrubs or other vegetation of a size that will provide the appropriate level of visual screening immediately upon installation.	✔		

All nursery stock, construction materials and machinery, and personnel shall be free of soil, seeds, insects, or microorganisms that could pose a hazard to the native **species** or the natural biological processes of the areas surrounding the site (e.g., Argentine ants or microorganisms causing Sudden Oak Death or Pine Pitch Canker Disease).	✔		
Underground lines shall **be** routed outside of plant drip lines to avoid damage to tree and large shrub root systems to the maximum extent feasible.	✔		

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