

**Staff Report to the Agricultural Policy Advisory Commission** 

Application Number: 06-0309

Applicant: Evan Shepherd Reif of Peacock	Date: January <b>18,2007</b>
Associates for Metro PCS	
Owners: Mark & Carol Pista	Agenda Item #: 13
APN: 050-211-14	Time: 1:30 p.m.

Project Description: Proposal to install a wireless communications facility with three panel antennae inside a 9 to 12 inch diameter, 60-foot tall flag pole, and 3 ground mounted equipment cabinets with two electrical service panels and a global positioning satellite antenna on an existing 108 square foot concrete pad enclosed by a 7-foot solid wood board redwood fence, on site with an existing apple storage barn and cooler.

Location: Property located approximately 1,000 feet north from the intersection of Buena Vista Drive and Freedom Boulevard on the east side at 2276 Freedom Boulevard in Watsonville.

Permits Required: Agricultural Buffer Setback Determination, Commercial Development Permit

Staff Recommendation:

• Approval of Application 06-0309, based on the attached findings and conditions.

**Exhibits** 

- A. Project plans
- Findings B.
- C. Conditions
- Assessor's parcel map, Location map D.
- E. Zoning map, General Plan map

Parcel Information

- F. Comments & Correspondence
- G. Photosimulation
- H. **RF** Study

Parcel Size:	1.6 acres
Existing Land Use - Parcel:	Barn and cold storage for apple juice processing
Existing Land Use - Surrounding:	Orchards
Project Access:	Freedom Boulevard
Planning Area:	Pajaro Valley
Land Use Designation:	A (Agriculture)

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

Zone District:	CA (Commercial Agriculture)
Supervisorial District:	Second (District Supervisor: Pirie)
Within Coastal Zone:	Inside <u>X</u> Outside

## **Environmental Information**

Geologic Hazards:	Rear of lot adjacent to Corralitos Creek floodway
Soils:	Baywood loamy sand, Elder sandy loam
Fire Hazard:	Not a mapped constraint
Slopes:	0-9 percent slopes
Env. Sen. Habitat:	Portion of the site is mapped/no physical evidence on site
Grading:	No grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Not a mapped resource
Drainage:	Existing drainage adequate
Archaeology:	Mapped/no physical evidence on site

## **Services Information**

Inside Urban/Rural Services Line:	Yes X No
Water Supply:	Private well
Sewage Disposal:	Private septic system CSA#12
Fire District:	Pajaro Valley Fire Service Area
Drainage District:	Zone 7 Flood Control/Water Conservation District

## **Analysis and Discussion**

The proposed project is to install a wireless communications facility on site with an existing apple storage barn and cold storage warehouse on a 1.6-acre parcel. The project is located at 2276 Freedom Boulevard in Watsonville. The apple packing and juice manufacturing facility was approved by the Zoning Administrator as Use Permit 77-1892-U on December 9, 1977. The cell tower site is within 200 feet of Commercial Agricultural land to the north and south. The applicant is requesting a reduction in the 200 foot agricultural buffer setback to 25 & 50 feet from Assessor's Parcel Numbers 050-211-15 and 050-211-13 and review for consistency with CA zoning.

The subject property is characterized by flat topography adjacent to Corralitos Creek. The parcel is not located within the Urban Services Line and may be characterized **as an** agricultural neighborhood. The parcel carries an Agriculture (A) General Plan designation and the implementing zoning is (CA) Commercial Agriculture. Commercial Agriculture zoned land is situated within 200 feet at the south side of the parcel at Assessor's Parcel Numbers 050-211-13, Pista apple orchard of 20.8 acres, and at the north side of the parcel at APN 050-211-15, the 7.9 acre Noburu nursery.

A reduced agricultural buffer is recommended due to the fact that the 105-foot width of the parcel would not allow sufficient building area if the required 200-foot setbacks were maintained from the adjacent Commercial Agriculture zoned property. The applicant is proposing a solid six-foot fence around the equipment cabinet to therefore protect the agricultural interests on the Commercial Agriculture zoned parcels. The applicant shall further be required to record a Statement of Acknowledgement regarding the issuance of a county building permit in an area determined by the County of Santa Cruz to be subject to Agricultural-Residential use conflicts.

The project is consistent with General Plan Policy 5.13.27 in that no land will be removed from agricultural production as a result of this proposal, as the flagpole which houses the apparatus is located between existing structures (Exhibit H, photo simulation). County Code Section 13.10.661 requires a Telecommunications Act Exception pursuant to Section 13.10.668(a) for land zoned Commercial Agriculture (CA). Evidence must be presented that no alternative locations exist that could provide the carrier (Metro PCS) sufficientcoverage/capacity in that area. Six alternate properties were investigated for potential cell site locations, however no sites proved feasible (Exhibit F). No nearby sites were available for collocation. The applicant has submitted a study by Hammet Edison, consulting engineers, that indicates the maximum RF exposure level to be 0.18% of the applicable public exposure limit. The RF emissions of the proposed wireless communications facility comply with FCC standards. Because of the location in the vicinity of Watsonville municipal airport, an FAA Determination of No Hazard to Air Navigation was required (Exhibit F).

## Recommendation

- Staff recommends that your Commission **APPROVE** the Agricultural Buffer Determination from 200 feet to about 25 & 50 feet to the cell tower from the adjacent CA zoned properties known **as** APN's 050-211-13 and 050-211-15, proposed under Application # 06-0309, based on the attached findings and recommended conditions; and
- Forward the application to the Zoning Administrator for final determination.

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: <a href="http://www.co.santa-cruz.ca.us">www.co.santa-cruz.ca.us</a>

Report Prepared By: Joan Van der Hoeven, AICP Santa Cruz County Planning Department 701 Ocean Street, 4th Floor Santa Cruz CA 95060 Phone Number: (831) 454-5174 E-mail: <u>pln140@co.santa-cruz.ca.us</u>

Report Reviewed By: Klepter Glenda Hill, AICP Principal Planner **Policy Division** 



# EXHIBIT A



# EXHIBIT A



Required Findings **for** Agricultural Buffer Setback Reduction County Code Section 16.50.095(b)

- 1. Significant topographical differences exist between the agricultural and non-agricultural uses which eliminate the need for a 200 foot setback; or
- 2. Permanent substantial vegetation or other physical barriers exist between the agricultural and non-agricultural uses which eliminate the need for a 200 foot buffer setback; or a lesser setback distance is found to be adequate to prevent conflicts between the non-agricultural development and the adjacent agricultural uses, based on the establishment of a physical barrier, unless it is determined that the installation of a barrier will hinder the affected agricultural use more than it would help it, or would create a serious traffic hazard on a public or private right-of-way; and/or some other factor which effectively supplants the 200 foot buffering distance to the greatest degree possible; or

The wireless communications facility is proposed to be set back 25 & 50 feet from the adjacent Commercial Agriculture zoned parcels to the north and south. An effective barrier consisting of a six foot tall solid redwood board fence would be adequate to prevent conflicts between the non-agricultural development and the adjacent Commercial Agriculture zoned land of APN 050-211-13 & -15. This banier, as proposed, shall not create a hazard in terms of the vehicular sight distance necessary for safe passage of traffic.

- **3.** The imposition of a 200 foot agricultural buffer setback would preclude building on a parcel of record as of the effective date of this chapter, in which case a lesser buffer setback distance may be pennitted, provided that the maximum possible setback distance is required, coupled with a requirement for a physical barrier, or vegetative screening or other techniques to provide the maximum buffering possible, consistent with the objective of permitting building on a parcel of record.
- **4.** Required findings for non-agricultural development on commercial agricultural land, County Code section 16.50.095(e).

Any non-agricultural development proposed to be located on type 1, type 2 or type 3 agricultural land shall be sited so at to minimize possible conflicts between agriculture in **the** area and non-agricultural uses, and where structures are to be located on agricultural parcels, such structures shall be located so as to remove as little land as possible from production or potential production.

The subject parcel is zoned CA (Commercial Agriculture) and carries an Agriculture (A) General Plan designation. The parcel is designated for agricultural production. The parcel is within 200 feet of Commercial Agriculture zoned land, and is zoned Commercial Agriculture. The proposed flag pole which encases the communications equipment is located between two buildings and would not remove any land from production.

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## Required Findings for Developmient on Land Zoned Commercial Agriculture or Agricultural Preserve County Code Section 13.10.314(A)

1. The establishment or maintenance of this use will enhance or support the continued operation of commercial agriculture on the parcel and will not reduce, restrict or adversely affect agricultural resources, or the economic viability of commercial agricultural operations, of the area.

The establishment of the proposed wireless communications facility disguised in the flagpole will enhance continued operations of commercial agriculture on the parcel by providing additional income from property rental. The lease area is located between existing structures and will not adversely affect agricultural resources. The existing apple orchard operation shall not be negatively impacted by proposed development.

2. The use or structure is ancillary. incidental or accessory to the principal agricultural use of the parcel. or no other agricultural use of the parcel is feasible for the parcel; or

The existing apple storage and processing operation shall not be diminished by the proposed wireless communications facility in that the existing agricultural use will not change and will continue to operate as a support facility for the adjacent apple orchards.

- **3.** The use consists of an interim public use which does not impair long-term agricultural viability; and
- 4. Single fainily residential uses will be sited to minimize conflicts, and that all other uses will not conflict with commercial agricultural activities on site, where applicable, or in the area.
- 5. The use will be sited to remove no land from production (**or** potential production) if any nonfarmable potential building site is available, or if this is not possible, to remove as little land as possible from production.

The proposed wireless communications facility will remove as little land as possible from production, consistent with General Plan Policy 5.13.27 in that the proposed stealth flag pole and equipment cabinets will be located between two buildings in an area that would not be conducive to fanning. The lease area is not under agricultural production.

## **Conditions of Approval**

Exhibit A: Project Plans, 5 Sheets by Omni Design Group dated 4/27/06 revised 5/04/06.

- I. This permit authorizes an Agricultural Buffer Setback reduction from the proposed residential use to **APN's** 050-211-13 & -15. 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 Commercial Development Permit from the Zoning Administrator.
  - C. Obtain a Building Permit from the Santa Cruz County Building Official.
- 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 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. A development setback of a minimum of 25 & 50 feet from the wireless coinmunications facility to the adjacent Commercial Agriculture zoned parcels APN's 050-211-13 & -15.
    - 2. Final plans shall show the location of the fences **used** for the purpose of buffering adjacent agricultural land.
  - B. The owner shall record a Statement of Acknowledgement, as prepared by the Planning Department, and submit proof of recordation to the Planning Department. The statement of Acknowledgement acknowledges the adjacent agricultural land use and the agricultural buffer setbacks.
- III. All constitution 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.** The agricultural buffer setbacks shall be met as verified by the County Building Inspector.
  - B. The required physical barrier shall be installed. The applicantiowner shall contact the Planning Department's Agricultural Planner, a minimum of three working days in advance to schedule an inspection to verify that the required barrier (minimum six foot tall solid wood board fencing) has been completed.



- C. All inspections required by the building permit shall be completed to the satisfaction of the County Euilding.Official and/or the County Senior Civil Engineer.
- IV. Operational Conditions
  - A. The physical barrier shall be permanently maintained.
  - B. All required Agricultural Buffer Setbacks shall be maintained.
  - C. 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, up to and including permit revocation.
- 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, 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 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. <u>Settlement</u>. 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. <u>Successors Bound</u>. "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:	1/18/2007
Effective Date:	Pending approval by the Zoning Administrator
Expiration Date:	2 years from ZA approval

Appeals: Any property owner. or othe: person aggrieved, or any other person whose interests are adversely affected by **any** act or determination of the Agricultural Policy Advisory Commission under the provisions of County Code Chapter 16.50, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.





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# EXHIBIT E



## MEMORANDUM

Date: June 13, 2006

- To: Joan Van der Hoeven, Development Review
- From: Frank Barron. Policy Section
- Re: Policy Section Comments on App. 06-0309 Proposed Metro PCS Flagpole WCF at 2276 Freedom Blvd.

This proposed wireless communications facility (WCF) to be disguised as a flagpole and located on APN 050-211-14 (2276 Freedom Blvd.) will require a Telecommunications Act Exception because it is proposed for a "prohibited area" as defined in the County's WCF Ordinance (County Code Section 13.10.660-668). The subject parcel is zoned Commercial Agricultural, which is one of the prohibited zoning districts described in Code subsection 13.10.661(b).

As described in Section 13.10.668 (Telecommunication Act Exception Procedure) and subsection 13.10.661(b)(4) WCFs cannot be approved in prohibited areas unless the applicant can prove that a denial would result in a violation of the Federal Telecommunications Act of 1996 and that no possible alternatives exist (including multiple WCFs on non-prohibited sites) that would render the Telecommunications Act Exception unnecessary. In order to meet this test, the applicant will have to provide sufficient technical evidence, subject **to** potentially costly independent third-party review (at the applicant's expense), that there are no feasible alternatives to the proposed location that could provide the carrier (Metro PCS) sufficient coverage/capacity in that area. Such proof would have to include detailed analyses of all other potential sites (including possible co-locations at nearby **sites**), and combinations of multiple sites, in non-prohibited or non-restricted areas. Since this is an extremely difficult burden for the applicant to meet, no Telecommunications Act Exceptions have ever been sought by other applicants or approved by the County.

Since it is improbable that the applicant will be able to meet the test to receive a Telecommunications Act Exception, we strongly recommend that the applicant strive **to** find an alternative site or sites outside a prohibited or restricted area and withdraw this proposal.

**COUNTY OF SANTA CRUZ** 

# **INTEROFFICE MEMO**

## APPLICATION NO: 06-0309

Date:	June 12, 2006
Τα	Joan Vanderhoeven, Project Planner

From: Larry Kasparowitz. Urban Designer

Re: Design Review for wireless communication facility at 2276 Freedom Boulevard. Watsonville

## **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 Designer's Evaluation
SITE LOCATION			
Visual character of site			
Site location and development of wireless 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 the greatest extent feasible	~		
Facilities shall <b>be</b> integrated to <b>the</b> maximum extent feasible to the existing characteristics <b>of</b> 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.	~		

Co-location is generally encouraged in		✓
a new separate tower in a nearby location.		
vvireless communication facilities proposed		
for visually prominent ridgeline, niliside or		
to be as visually upobtrusive as possible		
Consistent with General Plan/LCP Policy		
8.6.6 wireless communication facilities		
should be sited so the top <b>of</b> the proposed		
towerlfacility is below any ridgeline when		
viewed from public roads in the vicinity.		
If the tower must extend above a ridgeline		NIA
the applicant must camouflage the lower by		
utilizing stealth techniques and hiding it		
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.		
Coastal <b>Zone</b> Considerations		
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 ponion or a wretess communication	✓	
a publicly used beach		
Power and telecommunication lines servicing		
wireless communication facilities in the	✓	
Coastal Zone shall be required to be placed		
underground.	I	
Consistency with <b>Other</b> Regulations	ļ•	<b>#</b>
All proposed wireless communication		
facilities 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 PlanILCP		
Section 5.10). Public vistas from scenic		
roads, as designated in General Pian		
Section 5.10.10, shall be afforded the		
highest level of protection.		

Visual Impacts to Neighboring Parcels		
To minimize visual impacts to surrounding	<b>J</b>	
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	J	
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
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	✓		
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	<b>v</b>		
The County strongly encourages all support facilities, such <b>as</b> equipment shelters, to be placed in underground vaults. so as to		✓	

none ?

Any support facilities not place shall be located and designed their visibility and, <b>if</b> appropriat purpose to make them less pro- structures should <b>be</b> no taller t feet in height, and shall be des with existing architecture and/o surroundings in the area or sh from sight by mature landscap	d underground to minimize e, disguise their ominent. These han twelve <b>(12)</b> signed to blend or the natural all <b>be</b> screened ing.		No landscape screening is proposed
Exterior Finish			
All support facilities, poles, tow supports. antennas, and other communication facilities shall I approved by the decision mak	vers. antenna components of pe of a color ing body.	~	
Components of a wireless cor facility which will <b>be</b> viewed ag trees, or grasslands, shall be colors consistent with these la	nmunication ainst <b>soils,</b> of a color or ndscapes.		NIA
All proposed stealth tree poles "monopines")must use bark s approximates natural bark for height and circumference of th visible to the public, as technic	creening that the entire ne monopole cally feasible.		NIA
Special design of wireless cor facilities may be required to m potentially significant adverse including appropriate camoufl utilization of stealth technique	nmunication itigate visual impacts, aging or s.	~	
Use of less visually obtrusive alternatives, such as 'microcel that can be mounted upon ex poles, is encouraged.	design I" facility-types sting utility		
Telecommunication towers de like trees (e.g., "monopines") on wooded sites with existing trees where they can <b>be</b> desig adequately blend with and/or existing trees. In other cases, structures that mimic structure found in the built environment facility is located may <b>be</b> appr small scale water towers, bar typical farm-related structures agricultural areas). Rooftop or other building mou designed to blend in with the existing architecture shall be Co-location of a new wireless	esigned to look may <b>be</b> favored similar looking gned to mimic the stealth-type es typically twhere the opriate (e.g., ns, and other on or near unted antennas building's encouraged. communication		N/A
facility onto an existing teleco tower shall be favor construction of a new tower. O s/operators of wireless towers/facilities are required t appearance of the towerffacil	mmunication ed over communication o maintain the ity. as approved.		 Suggest as Condition & Approval



Public vistas from scenic roads, as designated in General Plan/LCP Section 5.10.10, shall be afforded the highest level of protection.	•		
All towers shall be designed to be the shortest height possible <i>so</i> as to minimize visual	✓		
Any applications for towers of a height more than the allowed height for structures in the zoning district 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 shall, in addition to any other required findings andlor requirements, require 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 communicationfacilities shall be served by the minimum sized roads and parking areas feasible.	~		
In addition to stealth structural designs, vegetative screening may be necessary to minimize wireless communicationfacility 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 capabilities 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 <b>native</b> 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.		NIA
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 <b>o</b> providing similar or better vegetated screening <b>and/or</b> 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 <b>in</b> place (e.g., a eucalyptus grove that provides over wintering habitat for Monarchbutterflies may be better left alone).		NIA
All applications shall provide detailed landscape/vegetation plans specifying the non-invasive native plant species to be used, including identification <b>of</b> sources to be used to supply seeds and/or plants for the project		NIA
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 levd of visual screening immediately upon installation.		NIA
All nursery stock, construction materials and machinery, and personnel shall <b>be</b> free <b>of soil</b> 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 <b>Sudden Oak</b> Death or Pine Pitch Canker Disease).		NIA
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.		N/A

## COUNYOF SANTACRZ DISCRETIONARY APPLICATION COMMENTS

Project Planner: Joan Van Der Hoeven Application No.: 06-0309 APN: 050-211-14 Date: July 7. 2006 Time: 15:58:03 Page: 1

## Project Review Completeness Comments

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

Wireless Communications facilities are not a permitted use in the CA Commercial Agriculture zone district as per County Code Section 13.10.661.

## Project Review Miscellaneous Comments

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







November 20,2006

Ms. Joan Van der Hoeven santa Cruz county Planning Department 701 Ocean St., 4<sup>th</sup> Floor Santa Cruz, CA 95060

RE: Telecom Act Exception and FAA Approval 06-0309

Dear Ms. Van der Hoeven:

As requested in your letters dated 7/7/06 and 8/2/06, 1 **am** providing the **required** information regarding FAA approval and the Telecom Act Exemption (13.10.668):

Attached memo **dated** 6/13/06 from Frank Barron **suggests** that a Telecom Act Exception Procedure "is improbable" and that the applicant provide "proof **to** include detailed analysis of all other potential sites.... in non-prohibited or non-restricted **areas**". Our supporting documentation is **as** follows:

- 1. Excerpt **from** County **GIS** map showing proposed site relative to nearby alternative sites with preferable **zoning**.
- 2. Parcel Maps and title information for alternative sites with preferable zoning.
- 3. Letters to property owners of alternative sites with preferable zoning; including certified mail and return receipts.
- 4. Letter from MetroPCS RF engineer regarding need for site and proximity of American Legion and Landmark Baptist Church to an existing MetroPCS site at Airport Road and Freedom Blvd., Endoscopy Clinic SF1033 dated 10/18/06.
- 5. Independent "analysis of need" by Hammett and Edison dated 11/8/08.
- 6. RF engineer's search ring

In analysis of the submitted information, the following properties were contacted:

- 1. Filipino Community-2446 Freedom Blvd- No Response
- 2. Fujita-2400 Freedom Blvd- Owner not interested
- 3. Monument Lumber- 2418 Freedom Blvd- Owner not interested
- **4.** American Legion Post- Freedom Blvd- Owner interested. Site too close to SF1033 per RF engineer's analysis letter and plot analysis in H&E report
- 5. Landmark Mission Baptist Church- Owner not interested. Site too close to SF1033 per RF engineer's analysis letter and plot analysis in H&E report.
- 6. Olivera- 2546 Freedom Blvd- No Response

The alternatives analysis, as submitted herein meets the ordinance requirements pursuant to 13.10.662(c):

- 1. An alternative site analysis by an independent RF engineer is attached. See report by Hammett and Edison dated 11/8/06
- 2. Collocation: There are no nearby sites for collocation
- 3. We have documented "good faith diligent attempts to rent, lease, purchase, or otherwise obtain at least two technically feasible sites. See attached; 6 alternative site owners were approached including **4** technically feasible sites.

Given the above and submitted information and analyses, this site meets the requirements of 13.10.668 for a Telecommunications Act Exemption **as:** 

1. The proposed wireless communication facility would eliminate or substantially reduce one ore more significant gaps in the applicant carrier's network; and

2. There **are** no viable, technically reasible, and environmentally equivalent or superior potential alternatives outside the prohibited and restricted areas identified in Sections 13.110.661(b) and 13.110.661(c) that could eliminated or substantially reduce said significant gap(s).

You also asked for documentation regarding FAA approval for this proposed flagpole wireless site. See attached FAA letter dated 11/15/2006. In this letter, FAA study # 2006-AWP-6235-OE the FAA provides their **"DETERMINATION** OF NO HAZARD TO AIR NAVIGATION".

Given the above, we believe this application to be complete and respectfully request that you deem the application complete and set the calendar for **this** application with the Agricultural Commission for their review prior to the ZA hearing. Please advise when you have determined this application to be complete so that we can proceed with the required signage.

If you have any questions, please do not hesitate to call. Thank You.

Evan Shepherd Reiff, MRP Peacock Associates, Inc. for metroPCS Mobile: 831-345-2245





Federal Aviation Administration Air Traffic Airspace Branch, ASW-520 2601 Meacham Blvd. Fort Worth, TX 76137-0520

Issued Date: 11/15/2006

Robert Geyer Metro PCS, Inc. 1080 Marina Village Parkway 4th Floor Alameda, CA 94501

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has completed an aeronautical study under the provisions of **49** U.S.C., Section **44718** and, if applicable, Title **14** of the Code of Federal Regulations, part **77**, concerning:

Structure:	Antenna Tower
Location:	Watsonville, CA
Latitude :	36-56-36.50 N NAD 83
Longitude:	121-47-3.59 W
Heights:	60 feet above ground level (AGL)
	<b>195</b> feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

To coordinate frequency activation and verify that no interference is caused to FAA facilities, prior to beginning any transmission from the site you must contact MONTEREY SUPPORT CTR @ 831 372-1119.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory Circular 70/7460-1 70/7460-1K.

This determination expires on 05/15/2008 unless:

### (a) extended, revised or terminated by the issuing office.

(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the PCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPTRATION DATE.

Thie determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice



to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (310)725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2006-AWP-6235-OE.

Signature Control No: 487195-507844

(DNE)

EXHIBIT F

Karen McDonald Specialist

Attachment(s) Frequency Data Map

## Frequency Data for ASN 2006-AWP-6235-OE

LOW	HIGH	FREQUENCY	BRP	ERP
FREQUENCY	FREQUENCY	UNIT		UNIT
1976.25		MHZ	308	Ŵ





# Photosimulation of view looking due north from the orchard.





## MetroPCS • Proposed Base Station (Site No. SF18370) 2276 Freedom Boulevard • Watsonville, California

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

The **fim** of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of MetroPCS, a personal wireless telecommunications carrier, to evaluate the base station (Site No. SF18370) proposed to be located at 2276 Freedom Boulevard in Watsonville, 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 ("NCRF"). 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 C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, *3* kHz to 300 GHz," includes nearly identical 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 limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Personal Wireless Service	Approx. Frequency	Occuoational Limit	Public Limit
Personal Communication ("PCS")	1,950 MHz	$5.00  { m mW/cm^2}$	1.00 mW/cm <sup>2</sup>
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

## MetroPCS • Proposed Base Station (Site No. SF18370) 2276 Freedom Boulevard • Watsonville, California

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 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 Metro, including zoning drawings by Omni Design Group, Inc., dated May **4**, 2006, it is proposed to mount three Andrew Model 931DG70-VTREM directional PCS antennas inside the top of a new 60-foot flag pole to be sited between two commercial buildings located at 2276 Freedom Boulevard in Watsonville. The antennas would be mounted at an effective height of about 57<sup>1</sup>/<sub>2</sub> feet above ground and would be oriented toward 90°T, 210°T, and 330°T. The maximum effective radiated power in any direction would be 1,890 watts, representing six PCS channels operating simultaneously at 315 watts each. There are no reported other wireless base stations installed nearby.

## **Study Results**

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed Metro operation by itself is calculated to be  $0.0018 \text{ mW/cm}^2$ , which is 0.18% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building would be 0.27% 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.

## **Recommended Mitigation Measures**

Due to their mounting location, the Metro antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within **5** feet in front of the Metro

HAMMETT & EDISON, INC CONSULTING ENGINEERS SAN FRANCISCO

## MetroPCS • Proposed Base Station (Site No. SF18370) 2276 Freedom Boulevard • Watsonville, California

antennas themselves, such as might occur during maintenance activities on the flag or pole, should be allowed while the site is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs' at the antennas and/or on the pole below the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

## Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by MetroPCS at 2276 Freedom Boulevard in Watsonville, 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 Nos. E-I3026 and M-20676, which expire on June 30, 2007. 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.

F-13026 M-20676 William Hammett, P.E 6-30-07

May 18,2006

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Warning signs should comply with **ANSI** C95.2 color, symbol, and content conventions. In addition, contact information should be provided (*e.g.*, **a** telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

# BACKGROUND FOR APAC AGENDA ITEM **13**

13.10.659 Regulations for the siting, design, and construction of wireless communication facilities.

(Repealed by Ord. 4714 § 1, 4/29/03 and Ord. 4743 § 1, 11/18/03) (Ord. 4631 § 1, 8/7/01)

13.10.660 Regulations for the siting, design, and construction of wireless communication facilities.

(a) Purpose. The purpose of Sections 13.10.660 through 13.10.668, inclusive, is to establish regulations, standards and circumstances for the siting, design, construction, major modification, and operation of wireless communication facilities in the unincorporated area of Santa Cruz County. It is also the purpose of Sections 13.10.660 through 13.10.668, inclusive, to assure, by the regulation of siting of wireless communications facilities, that the integrity and nature of residential, rural, commercial, and industrial areas are protected from the indiscriminate proliferation of wireless communication facilities, while complying with the Federal Telecommunication Act of 1996, General Order 159A of the Public Utilities Commission of the State of California and the policies of Santa Cruz County. It is also the purpose of Sections 13.10.660 through 13.10.668, inclusive, to locate and design wireless communication towers/facilities so as to minimize negative impacts, such as, but not limited to, visual impacts, agricultural and open space land resource impacts, impacts to the community and aesthetic character of the built and natural environment, attractive nuisance, noise and falling objects, and the general safety, welfare and guality of life of the community. It is also the purpose of Sections 13.10.660 through 13.10.668, inclusive, to provide clear guidance to wireless communication service providers regarding the siting of and design of wireless communication facilities. (b) Findings.

(1) The proliferation of antennas, towers, satellite dishes, and other wireless communication facility structures could create significant, adverse visual impacts. Therefore, there is a need to regulate the siting, design, and construction of wireless communication facilities to ensure that the appearance and integrity of the community is not marred by unsightly commercial facilities,

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**4-** 1-2007

Particularly in residential, historically significant, scenic coastal areas, and other environmentally sensitive areas.

(2) General Order 159A of the Public Utilities Commission (PUC) of the State of California acknowledges that local citizens and local government are often in a better position that the PUC to measure 1 at inposition and to identify at ites. Accordingly, the JC will generally defer to local ints to regulate the location and design of cell sites, wireless communication facilitie and mobile telephone switching offices ( $O_{c}$ ) including ( $\epsilon$  the issuance of land use approvals; ) acting as  $I \Rightarrow$  Agency for purposes of satisfying the C in  $\epsilon$  is and CEQA procedures.

(3) While the licensing of w eless communication facilities is under the control of the  $\epsilon$  (Communication Commission (FCC) and Public Utilities Commission (PJC) of the State of California, local government must address r like to the the state of regulation concerns where not preempted by federal statute or regulation

(4) In order to r the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a, safety, as the environment, it is in the public interest for local government to the public h a at it is with surrounding land uses.

(5) Commercial wireless communication facilitie are or near is and as in are generally is connected wireless communication facilitie are or near is and as in are generally is connected on residentially zoned with the character of residential zones in the County and, therefore, should not be located on residentially zoned with the sit carbon be proven that are no interview in the coverage needed to eliminate or substantially reduce significant gaps in the applicant carrier's coverage needed to eliminate or substantially reduce significant gaps in the applicant carrier's coverage needed to eliminate or substantially reduce significant gaps in the applicant carrier's coverage needed to eliminate or substantially reduce significant gaps in the applicant carrier's coverage needed to eliminate or substantially reduces a substantial substant

(c) Applicability. Activities and 1: regulated by this chapter include the siti desian. construction, m ju har operation fally rele ( r hical) i. silities including n Commission (FCC) regulated dish antennas, antennas used or multi-IC an hi £. rice (MMDS) or "wireless IN " int personal wireless channel, multi-point t⊧ibutic service facilities (e.g., cellular phone services, PC al ommu icatic wireless ie. paging services, wireless internet services etc.) ∋ g\_iticisinth )C are il to H th particularly the Federal Telecommunications Act of be consistent with state

y are not intended to: ( ) be used to unreasonably discriminate among providers , in th of functionally equivalent services; (2) have the effect of p c billing p servir l i⊧ek with n Sai ⊫Cruz County; or (3) have the ff∈ t of ⇒hibiti the siti⊧g of i stera communication facilities o the k i of the environmental/health effects of di frequ emissions, to the extent that the regulated services and facilitie l with th ł of the Fed **Communications Commission** ir such sio (d) niti

"Antennas" means any system of wires, s, rods, ting. discs, dish flat r or similar ces including "whip nt is a tack it to a telecommunications tower, mast or other structure, which is bill attice with the radio-frequency radiation generating equipment associated with a base static are d for the issi or reception of election agree waves.

'Available space on a tower or structure to ich antennas of a sti sp provider are both structurally and ctrom ignetically able to be attached. icati lel s the primary sending and receiving site in a wireless "Base station" ini network, including all radio-frequency generating equipment connected to antennas. More than one base station a more than one variety of telecommunications providers can be le ited on a single tower or structure.

"C Ilular's f(r) in a wireless telecommunications service that permits customers to use multiple telephones and other communication f(r) is to  $r \in t$ , if f(r) radio r litter sit with r to the blic-switched take f(r) network or to other fixed or mobile communication de cost

"CEQA" means California inc. n Juality Act.

"Channel" r the segment of the radiation spectrum from an antenna *t* i one signal. An antenna may radiate on many channels simultaneously.

"Co-l at it or ited fallity" men in more than one wireless providers sha a single wireless communication facility. A located facility can b comprised of a single tower, mast/pole or structure that supports to or more the structure that supports to or more the structure that or more than one public or private in the structure that consist of dditions or extensions the to existing towers so a to the enough space for more than one user, or it can involve the construction of a new replacement

tower with more antenna space that supplants an older tower with less capacity. Placing new wireless communication facilities/antennas upon existing or new P. G.8 E. or other utility towers or poles (e.g., "microcell" sites) is also considered co-location.

"Communication equipment shelter" means a structure located at a base station designed principally to enclose equipment used in connection with telecommunication transmissions. "dBm" means the unit of measure of the power level of an electromagnetic signal expressed in decibels referenced to one milliwatt.

"Dish antenna" means any device incorporating a reflective surface that is solid, open mesh, or bar configured that is shallow dish, cone, horn, or cornucopia-shaped and is used to transmit andlor receive electromagnetic signals.

"Equipment building, shelter or cabinet" means a cabinet or building used to house equipment used by wireless communication providers at a facility.

"FAA" means Federal Aviation Administration.

"Facility site" means a property, or any part thereof, which is owned or leased by one or more wireless service providers and upon which one or more wireless communication facility(s) and required landscaping are located.

"FCC means Federal Communications Commission, the federal government agency responsible for regulating telecommunications in the United States.

"GHz" means gigahertz, or one billion hertz.

"Ground-mounted wireless communication facility" means any antenna with its base placed directly on the ground, or that is attached to a mast or pipe, with an overall height of not exceeding sixteen (16) feet from the ground to the top of the antenna.

"Hertz." One hertz is a unit of measurement of an electric or magnetic field which reverses its polarity at a frequency of once per second (i.e., one cycle or wavelength per second).

"Least visually obtrusive." With regard to wireless communication facilities, this shall refer to technically feasible facility site and/or design alternatives that render the facility the most visually inconspicuous relative to other technically feasible sites and/or designs. It does not mean that the facility must be completely hidden, but it may require screening or other camouflaging *so* that the facility is not immediately recognizable as a wireless communication facility from adjacent properties and roads used by the public.

Macrocell site" means a radio transceiver (i.e., transmits and receives signals) facility that is comprised of an unmanned equipment shelter (above or below ground) approximately three hundred (300) square feet per licensed provider, omni-directional whip, panel or microwave dish antennas mounted on a support structure (e.g., monopole, lattice tower) or building. A macrocell site typically includes sixty (60) radio transmitters.

"Major modification to power output" means any of the following resulting in an increase in the wireless communicationfacility's power output and/or increase in the intensity or change in the directionality of NIER propagation patterns: increase or intensification, or proposed increase or intensification, in power output or in size or number of antennas; change in antenna type or model; repositioning of antenna(s); change in number of channels per antenna above the maximum number previously approved by the County of Santa Cruz, including changes to any/all RF-generatingequipment/componentry that are attached to antennas (e.g., conversion of wireless communication to wireless internet that requires continuous transmitting at full power). "Major modification to visual impact" means any increase or intensification, or proposed increase or intensification, in dimensions of an existing andlor permitted wireless communications facility (including, but not limited to, its telecommunications tower or other structure designed to support telecommunications transmission, receiving andlor relaying antennas and/or equipment) resulting in an increase of the visual impact of said wireless communications facility.

"MHz" means megahertz, or one million hertz.

"Microcell site" means a small radio transceiver facility comprised of an unmanned equipment cabinet with a total volume of one hundred (100) cubic feet or less that is either under or aboveground, and one omni-directional whip antenna with a maximum length of five feet, or up to three small (approximately 1' x 2' or 1' x 4') directional panel antennas, mounted on a single pole, an existing conventional utility pole, or some other similar support structure.

"Minor antenna" or "minor wireless communication facility" means any of the following:

(1) A ground- or building-mounted receive-only radio or television antenna that is: (a) six inches or less in diameter or width; and (b) ten (10) feet or less in height as measured from existing grade (including mast or pipe) or, for building mounted antennas, not exceeding the height limit for non-commercial antennas in the zoning district;

(2) A ground- or building-mounted citizens band radio antenna that is: (a) six inches or less in diameter or width; and (b) ten (10) feet or less in height as measured from existing grade

(i ig mast or pipe) or, for building mounted antennas, not exceeding the thit if it finoncommercial antennas in the zoning district;

(3) A ground or building-mounted satellite receiving dish that: (a) is not more than one meter in diameter for a residential zoned cl or is not more than two meters in diameter for a commercial or industrial lp; el arc (t) d not exceed the height limit for nonial t in the zoning district; or

(4) A g , illdi g, or tower-mounted antenna o to I on a non main as it by a federally licensed amateur radio op as part of the start of the vice, the sight of which (including tower or mast) does not to the height limit for non-commercial antennas in the zoning district.

"Monit ing" end t est y the use of instruments in the , of radiofrequency/non-ionizing radiation exposure at a site as a whole, or from individual wireless communication facilities/towers/antennas/re = e

"Me it ina pr bl" means an industry ac le tra tiel frec 3 (RF) he measurement protocol sed to t i A pliance with LCC RF radiation exposure standards, in accordance with the National Council on Radiation Protection and Measurements Reports 86 and 119 and with the RF di tic delina ific tions of OET Bulletin 65 (or 1 superseding reports/standards), his is to be used to measure the emissions and determine rad frequency radiation exposure levels from existing and new telecommunications facilities. RF radiation exposure measurements are to be taken at various locations, including those from I release to be the highest 

"MMDS" means multi c an all multi-point distribution rice (also known as "wireless cable"). "MTSO is means mobile telephone switching offices.

"M or le" r a single le-structure ted on the ground to support one or more wireless communication antennas.

Non-ionizing electromagnetic radiation (NIER)" means radiation from the province of the electromagnetic spectrum A frequencies of approximately one million GHz and including all frequencies below the ultraviolet range, such as visible light infrared radiation million v radiation, and the frequencies below the ultraviolet range of the such as visible light infrared radiation million v radiation, and the frequencies below the ultraviolet range.

activity that does not a nil i a major modification to power output or a major modification to sual impact.

CS" or 'r s il communications services" means digital wireless communications technology ch is portab i pagers, faxes and computers. Also known as personal communications network (PCN).

"PUC" or "CPUC" I: California Public Utilities Commission.

"Personal wireless services" means commercial mobile H ric unlicensed wireless services, and common carrier wireless exchange access services. These services include: cellular services in communication services, H mobile radio i H igh services.

"Radio-frequency (RF) radiation" means radiation from the portion of the ig spectrum with frequencies below the infrared range (approximately one hundred (100) GL and b (c) including microwaves, t L risti VHF d UHF si is idi ic it and low to u tra low frequencies.

"R ite" means a a lay tra smitter of relative low power output designed to provide service to areas which are not able to in the coverage directly from a term or primary station

technology/techniques" means camouflaging methods applied to wireless
 col
 col

"Sin (ear a appin the serie pinite station"s) /r pisse vire services network within the County of Santa Cruz applefined in Federal case law interpretations fith Felle al Telecommunications A :1 if 1996 including Sprint S action in Willoth (1999) 176

3d 630 and Cellular Telepi C v. Z ind Boa J f Adjustment of the Bi I f i Ho-Kus (1999) 197 F.3d 64.

"Structurally able" means the determination that a tower or structure is capable of carrying the d i t sed by the new antennas under all reasonably predictable to as ermit by professional structure engineering analysis.

"St icl mounted wireless communication ilit i any immobile antenna (including els and directional antennas) attached to a structure, ch as a building façade or a wate

tower, or mounted upon a roof.

"Technically feasible" means capable of being accomplished based on existing technology compatible with an applicant's existing network.

"Telecommunication tower (tower)" means a mast, pole, monopole, guyed tower, lattice tower, free-standing tower, or other structure designed and primarily used to support antennas.

"Viable." Primarily in reference to the Alternatives Analysis, an alternative site for which there is a property owner/manager interested in'renting, leasing, selling, or otherwise making available, space for one or more wireless communication facilities upon said site on reasonable terms commensurate with the market in Santa Cruz County.

"Visual impact" means an adverse effect on the visual andlor aesthetic environment. This may derive from blocking of a view, or introduction of elements that are incompatible with the scale, texture, form or color of the existing natural or human-made landscape, including the existing community character of the neighborhood.

"Wireless communication (or "telecommunications") facility" means a facility, including all associated equipment, that supports the transmission andlor receipt of electromagnetic/radio signals. Wireless communication facilities include cellular radio-telephone service facilities; personal communications service facilities (including wireless internet); specialized mobile radio service facilities and commercial paging service facilities. These types of facilities can include, but are not limited to, the following: antennas, repeaters, microwave dishes, horns, and other types of equipment for the transmission or receipt of such signals, telecommunication towers or similar structures supporting said equipment, equipment buildings, parking areas, and other accessory development.

"Wireless communication facilities GIS map" means a map maintained by the County in Geographic Information System (GIS) format that includes location and other identifying information about wireless communication facilities in the County

(e) Exemptions. The types of wireless communications facilities, devices and activities listed below are exempt from the provisions of Sections 13.10.660 through 13.10.668, inclusive, except that Sections 13.10.663(a)(1) through 13.10.663(a)(8) shall continue to apply if the facility, device andlor activity requires a Coastal Zone Approval pursuant to Chapter 13.20. This exemption is not intended to limit or expand the scope of other Federal, state and local policies and regulations, including but not limited to the General Plan/Local Coastal Program, which apply to these facilities, devices andlor activities.

(1) A ground- or building-mounted citizens band or two-way radio antenna including any mast that is operated on a non-commercial basis.

(2) A ground-, building- or tower-mounted antenna operated on a non-commercial basis by a federally licensed amateur radio operator as part of the Amateur or Business Radio Service.
(3) A ground- or building-mounted receive-only radio or television antenna which does not exceed the height requirements of the zoning district, and which, for a television dish antenna, does not exceed three feet in diameter if located on residential property within the exclusive use or control of the antenna user.

(4) A television dish antenna that is no more than six feet in diameter and is located in any area where commercial or industrial uses are allowed by the land use designation.

(5)Temporary mobile wireless services, including mobile wireless communication facilities and services providing public information coverage of news events, of less than two-weeks duration. Any mobile wireless service facility intended to operate in any given location for more than two weeks is subject to the provisions of Sections 13.10.660 through 13.10.668, inclusive.
 (6) Hand held devices such as cell phones, business-band mobile radios, walkie-talkies, cordless

(6) Hand held devices such as cell phones, business-band mobile radios, walkie-taikies, cordiess telephones, garage door openers ar d similar devices.

(7) Wireless communication facilities and/or components of such facilities to be used solely for public safety purposes, installed and operated by authorized public safety agencies (e.g., County 911 Emergency Services, police, sheriff, and/or fire departments, first responder medical services, hospitals, etc.). Unless otherwise prohibited by law or exempted by action of the Board of Supervisors, public safety agencies shall be required to provide a map of facility locations for inclusion in the County's Wireless Communication Facilities GIS map. If a wireless communication facility approved for an authorized public safety agency is not or ceases to be operated by an authorized public safety agency, and if a non-public safety agency operator proposes to use the approved facility, then the change in operator shall require that the new operator submit an application for the wireless communication facility to be evaluated as if it were a new facility subject to Sections 13.10.660 through 13.10.668, inclusive, and the General Plan/Local Coastal Program. The facility shall not be operated by the new operator until a final decision has been rendered on the application.

- 5 -

(8) Any "minor" antenna or facility described under Section 13.10.660(d)(24).

(9) Any "non-major" modification or maintenance activities, as defined by Section 13.10.660(d)
 (31). carried out as part of the routine operation of existing permitted wireless communication facilities.

(10) Small scale, low powered, short-range and visually inconspicuous, wireless internet transmitter/receivers (e.g., "Wi-Fi hotspots"). (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

## 13.10.661 General requirements for wireless communications facilities.

All wireless communications facilities shall comply with all applicable goals, objectives and policies of the General Plan/Local Coastal Program, area plans, zoning regulations and development standards; are subject to Level **V** review (Zoning Administrator public hearing pursuant to County Code Chapter 18.10); are subject to the California Environmental Quality Act (CEQA); and shall comply with the following requirements:

(a) Required Permits. All new wireless communication facilities shall be subject to a Commercial Development Permit, and also a Coastal Development Permit if in the Coastal Zone. Additionally, a building permit will be required for construction of new wireless communication facilities.
 (b) Prohibited Areas.

(1) P<u>rohibited Zoning Districts</u>. Wireless communication facilities are prohibited in the following zoning districts, unless a Telecommunications Act Exception is approved pursuant to Section 13.10.668(a):

(A) Single-Family Residential (R-I),

(B) Multi-Family Residential (RM),

(C) Single-Family Ocean Beach Residential (RB),

(D) Commercial Agriculture (CA), and

(E) the Combining Zone overlays for:

(i) Mobile Home Parks (MH)

(2) Prohibited Coastal Areas. Wireless communication facilities are prohibited in areas that are located between the sea and the seaward side of the right-of-way of the first through public road parallel to the sea, unless a Telecommunications Act Exception is approved pursuant to Section 13.10.668(a).

(3) Prohibited School Grounds. Wireless communication facilities are prohibited on all public and private K-12 school sites, unless a Telecommunications Act Exception is approved pursuant to Section 13.10.668(a).

(4) Exceptions to Prohibited Areas Prohibition. If a Telecommunications Act Exception is approved pursuant to Section <u>13.10.668(a)</u> that allows for siting a wireless communications facility within any of the above-listed prohibited areas, then such facility shall comply with the remainder of Sections 13.10.660 through 13.10.668, inclusive, and shall be co-located. Applicants proposing new wireless communication facilities in any of the above-listed prohibited areas must submit as part of their application an Alternatives Analysis, as described in Section 13.10.662(c) below. Non-collocated wireless communication facilities may be sited in the prohibited areas listed above only in situations where the applicant can prove that:

(A) The proposed wireless communication facility would eliminate or substantially reduce one or more significant gaps in the applicant carrier's network; and

(B) There are no viable, technically feasible, and environmentally (e.g., visually) equivalent or superior potential alternatives (i.e., sites and/or facility types and/or designs) outside the prohibited areas identified in Section 13.10.661(b) that could eliminate or substantially reduce said significant gap(s).

Any wireless communications facility and any associated development allowed in a prohibited area: (1) shall be sited and designed so that it is not visible from public vantage points to the maximum extent feasible; or (2) where some portion or all of such a facility and/or any associated development is unavoidably sited and/or designed in a manner that makes it visible from public vantage points (and cannot be sited and/or designed to not be visible), that portion shall be screened and/or camouflaged so that it is inconspicuous and designed to blend seamlessly into the existing public view.

(c) Restricted Areas.

(1) Restricted Zoning Districts. Non-collocated wireless communication facilities are discouraged in the following zoning districts, subject to the exceptions described in Section 13.10.661(c)(3) and/or unless a Telecommunications Act Exception is approved pursuant to Section 13.10.668

(a):

(A) Residential Agricultural (RA),

(B) Rural Residential (RR),

(C) Special Use (SU) with a Residential General Plan designation, and

(D) the Combining Zone overlays for:

(i) Historic Landmarks (L), and

(ii) Salamander Protection areas (SP).

(2) Restricted Coastal Right-of-way Area. Wireless communications facilities are discouraged in the right-of-way of the first through public road parallel to the sea, subject to the exceptions described in Section 13.10.661(c)(3). If a wireless communications facility is allowed within said right-of-way pursuant to Section 13.10.661(c)(3), then the wireless communicationsfacility shall, in addition to complying with the remainder of Sections 13.10.660 through 13.10.668, inclusive, comply with all of the following:

(A) The facility shall be of the microcell site type (as defined in Section 13.10.660(d)), and: (i) Shall be mounted upon an existing or replacement utility pole (where "replacement" means that there exists a utility pole in that location and it is immediately replaced with a pole that has the same or a reduced visual impact, and has the same or lesser dimensions as the existing utility pole), and

(ii) Shall have antennas no larger than  $1' \times 2'$  that are flush mounted and of a color that blends with that of the supporting utility pole, and

(iii) Shall have an equipment cabinet that is no more than twenty-four **(24)** inches high, eighteen (18) inches wide, and ten **(10)** inches deep if mounted upon the utility pole or on the ground, **or** is located in an underground vault, and

(iv) Shall be fully camouflaged through stealth techniques to render the facility as visually inconspicuous **as** possible.

(B) The facility shall be located on the inland side of the right-of-way unless a location on the seaward side of the right-of-way would result in **less** visual impact; and

(C) The facility shall only be allowed in the coastal right-of-way provided the applicant's agreement(s) with the owner and operator of the right-of-way and the utility pole specifies that the facility shall be removed and the site restored by the applicant if informed by the owner and operator that the utility pole is to be removed because the utilities the pole supports are to be relocated underground.

(3) Exceptions to Restricted Area Prohibition. Wireless communication facilities that are colocated upon existing wireless communication facilities/towers or other utility towerslpoles (e.g., P.G.& E. poles), and which do not significantly increase the visual impact of the existing facility/tower/pole, are allowed in the restricted zoning districts listed above. Applicants proposing new non-collocated wireless communication facilities in the Restricted Areas must submit as part of their application an Alternatives Analysis, as described in Section 13.10.662(c) below. In addition to complying with the remainder of Sections 13.10.660 through 13.10.668, inclusive, non-collocated wireless communication facilities may be sited in the restricted zoning districts listed above only in situations where the applicant can prove that:

(A) The proposed wireless communication facility would eliminate or substantially reduce one or more significant gaps in the applicant carrier's network; and

(B) There are no viable, technically feasible, and environmentally (e.g., visually) equivalent or superior potential alternatives (i.e., sites and/or facility types and/or designs) outside the prohibited and restricted areas identified in Sections 13.10.661(b) and 13.10.661(c)) that could eliminate or substantially reduce said significant gap(s).

(d) Compliance with FCC Regulations. Wireless communication facilities shall comply with all Federal Communication Commission (FCC) rules, regulations, and standards. Inhabitants of the County shall be protected from the possible adverse health effects associated with exposure to harmful levels of NER (non-ionizing electromagnetic radiation) by ensuring that all wireless communication facilities comply with NIER standards set by the FCC.

(e) Compliance with FAA Regulations. Wireless communication facilities shall comply with all applicable criteria from the Federal Aviation Administration (FAA) and shall comply with adopted airport safety regulations for Watsonville Municipal Airport (County Code Section 13.12).

(f) Site Selection--Visual Impacts. Wireless communication facilities shall be sited in the least visually obtrusive location that is technically feasible, unless such site selection leads to other resource impacts that make such a site the more environmentally damaging location overall.
(g) Co-Location. Co-location of new wireless communication facilities intolonto existing wireless communication facilities and/or existing telecommunication towers is generally encouraged. Co-location may require that height extensions be made to existing towers to accommodate

additional users, or may involve constructing new multi-user capacity towers that replace existing single-user capacity towers. Where the visual impact of an existing towerlfacility must be increased to allow for co-location, the potential increased visual impact shall be weighed against the potential visual impact **of** constructing a new separate **tower/facility** nearby. Where one or more wireless communication tower/facilities already exist on the proposed site location, co-location shall be required if it will not significantly increase the visual impact of the existing facilities. This may require that the existing tower(s) on the site be dismantled and its antennas be mounted upon the new tower, particularly if the new tower would be less visually obtrusive than the existing tower(s). If a co-location agreement cannot **be** obtained, or if co-location is determined to be technically infeasible, documentation of the effort and the reasons why co-location was not possible shall be submitted.

(h) Public Notification. Public hearing notice shall be provided pursuant to Section 18.10.223. However, due to the potential adverse visual impacts of wireless communication facilities the neighboring parcel notification distance for wireless communication facility applications is increased from the normal three hundred (300) feet to one thousand (1,000) feet from the outer boundary of the subject parcel. To further increase public notification, onsite visual mock-ups as described below in Section 13.10.662(d) are also required for all proposed wireless communication facilities, except for co-located and microcell facilities that do not represent a major modification to visual impact as defined in Section 13.10.660(d).

(i) Major Modification to Power Output. Any proposed major modification that would increase the power output of a wireless communication facility, as defined in Section 13.10.660(d), shall require the submission of an affidavit by a professional engineer registered in the State of California that the proposed facility improvements will not result in RF exposure levels to the public in excess of FCC's NIER exposure standard. In addition, within ninety (90) days of commencement of operation of the modified facility, the applicant shall conduct RF exposure level monitoring at the site, utilizing the Monitoring Protocol, and shall submit a report to the Planning Department documenting the results of said monitoring.

(1) Major Modification to Visual Impact. Any proposed major modification that would increase the visual impact of a wireless communication facility, as defined in Section 13.10.660(d), shall be subject to all requirements of Sections 13.10.660 through 13.10.668, inclusive.

(k) Transfer of Ownership. In the event that the original permittee sells its interest in a wireless communication 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. A new contact name for the project shall be provided by the succeeding carrier to the Planning Department within thirty (30) days of transfer of interest of the facility. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

13.10.662 Application requirements for wireless communication facilities.

**All** new wireless communication facilities must be authorized by a Commercial Development Permit, and also by a Coastal Development Permit if located in the coastal zone, and are subject to the following permit application requirements:

(a) Pre-Application Meeting. All applicants for proposed wireless communication facilities are encouraged to apply for the Development Review Group process, pursuant to County Code Chapter 18.10, in order to allow Planning Department staff to provide feedback **to** the applicant regarding facility siting and design prior to formal application submittal.

(b) Submittal Information–AllApplications. For all wireless communication facilities, in addition to the submittal requirements for Level V projects as specified in Section 18.10.210(b), the information listed below must accompany each application (for the purpose of permit processing, the Planning Director or his/her designee may release an applicant from having to provide one or more of the pieces of information on this list upon a written finding that in the specific case involved said information is not necessary to process or make a decision on the application being submitted):

(1) The identity and legal status of the applicant, including any affiliates.

(2) The name, address, and telephone number of the officer, agent or employee responsible for the accuracy of the application information.

(3) The name, address, and telephone number of the owner, and agent representing the owner, if applicable, of the property upon which the proposed wireless communication facility is to be built and title reports identifying legal access.

(4) The address and assessor parcel number(s) of the proposed wireless communication facility site, including the precise latitude/longitude coordinates (NAD 83) in decimal degree format, of the proposed facility location on the site.

(5) À description of the applicant service provider's existing wireless communication facilities network, and the provider's currently proposed facilities and anticipated future facilities for all proposed sites for which an application has been submitted, and for all proposed sites for which site access rights or agreements have been secured by the provider. This must include a map, and a table (in hardcopy and digital formats) listing facility sites/addresses, site

names/identification, facility types, and precise latitude/longitude coordinates (NAD 83) in decimal degree format, for all of the applicant carrier's existing and proposed facilities, within both the unincorporated and incorporated areas of Santa Cruz County, for inclusion on the County's Wireless Communication Facility GIS Map. In lieu of submitting this information with multiple applications, if this information has been previously submitted by the applicant, the applicant alternatively may certify in writing that none of the submitted information has changed. Information regarding proposed network expansions will be kept confidential by the County if identified in writing as trade secrets by the applicant.

(6) A description of the wireless communication services that the applicant intends to offer to provide, or is currently offering or providing, to persons, firms, businesses or institutions within both the unincorporated and incorporated areas of Santa Cruz County.

(7) Information sufficient to determine that the applicant has applied for and/or received any certificate of authority required by the California Public Utilities Commission (if applicable) to provide wireless communications services or facilities within the unincorporated areas of the County of Santa Cruz.

(8) Information sufficient to determine that the applicant has applied for andlor received any building permit, operating license or other approvals required by the Federal Communications Commission (FCC) to provide services or facilities within the unincorporated areas of the County of Santa Cruz.

(9) 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 of a written opinion submitted, by a professional engineer registered in the State of California, at the time of application.

(10) A plan for safety/security considerations, consistent with Section 13.10.664. A detailed description of the proposed measures 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 superseding standards, must be submitted as part of the application. The submitted plans must also show that the outer perimeter of the facility site (or NIER hazard zone in the case of rooftop antennas) will be posted with bilingual NIER hazard warning signage that also indicates the facility operator and an emergency contact. The emergency contact shall be someone available on a twenty-fourhour-a-day basis who is authorized by the applicant to act on behalf of the applicant regarding an emergency situation. For the protection of emergency response personnel, each wireless communication facility shall have an on-site emergency shut-off switch to de-energize all RFrelated circuitry/componentry at the base station site (including a single shut off switch for all facilities at a co-location site), or some other type of emergency shut-off by emergency personnel acceptable to the local Fire Chief, unless the applicant can prove that the FCC public exposure limits cannot be exceeded in the vicinity of the proposed facility, even if firefighters or other personnel work in close proximity to the antenna(s) or other RF radiation emitting deviceslcomponents.

(11) A detailed Visual Analysis, including computer photo simulations of the proposed wireless communication facility, shall be provided along with a written description from the installer. Photosimulations shall be submitted of the proposed wireless communication facility from various locations and/or angles from which the public would typically view the site. All photo simulations shall include a site map indicating the location from which the photo was taken, and a description of the methodology and equipment used to generate the simulation. More in-depth visual analyses shall be required for facilities proposed in visual resource areas designated in Section 5.10 of the County General PlanILCP. The Visual Analysis shall identify and include all potential mitigation measures for visual impacts, consistent with the technological requirements of the proposed telecommunication service.

(12) Detailed maps of proposed wireless communication facility site and vicinity, in full-size and 8.5" x **11**" reduction formats. Reduced plans shall include a graphic scale to allow for direct measurement from them. The following maps are required at the time of application submittal:

(A) Topographic/Area Map. Copy a portion of the most recent U.S.G.S. Quadrangle topographical map (with twenty **(20)** foot contour intervals), at a scale of **1:24,000**, indicating the proposed wireless communication facility site, and showing the area within at least two miles from the proposed site.

(B) Proximity Map and Aerial Photo. Prepare a map and an aerial photo at a scale of approximately I" = 200 (1:2,400), with contour intervals (for map only) no greater than twenty (20) feet, showing the entire vicinity within a one thousand five hundred (1,500) foot radius of the wireless communication facility site, and including topography (map only), public and private roads, driveways on the subject parcel, buildings and structures, bodies of water, wetlands, landscape features, and historic sites. Draw a one thousand five hundred (1,500) foot radius circle on the map and aerial photo with the proposed facility at its center and indicate all structures within one thousand five hundred (1,500) feet of the proposed tower/antennas. Indicate property lines of the proposed towerlfacility site parcel and of all parcels and right-of-ways abutting the tower/facility site parcel.

(13) Detailed plans and cross sections of proposed wireless communication facility and site, in full-size and **8.5**" x 11" reduction formats. Reduced plans shall include a graphic scale to allow for direct measurement from them. Full-size plans shall be on **24**" x 36" sheets, on as many as necessary, and at scales which are no smaller than those listed below. Each planlcross section sheet shall have a title block indicating the project title, sheet title, sheet number, date, revision dates, scale(s), and signature(s) of the professional(s) who prepared the plan. The following plans and cross sections are required at the time of application submittal:

(A) Proposed Site Plan. Proposed wireless communication facility site layout, grading and utilities at a scale no smaller than 1" = 40 (1:480) with topography drawn at a minimum of ten (10) foot contour intervals, showing existing utilities, property lines, existing buildings or structures, walls or fence lines, existing trees, areas with natural vegetation, existing water wells, springs, and the boundaries of any wetlands, watercourses andlor floodplains.

(i) Proposed tower/facility location and any associated components, including supports and guy wires, if any, and any accessory building (communication equipment shelter or other). Indicate property boundaries and setback distances from those boundaries to the base(s) of the tower/mast and to each facility-related structure andlor component. Include dimensions of all proposed improvements.

(ii) Indicate existing and proposed grade elevations where the existing and proposed grade intersects the proposed towerhast, any guy wires, and all facility-related structures and lor components.

(iii) Proposed utilities, including distance from source of power, sizes of service available and required, locations of any proposed utility or communication lines, and whether underground or above ground.

(iv) Limits of area where vegetation is to be cleared or altered, and justification for any such clearing or alteration.

(v) Any direct or indirect alteration proposed to environmentally sensitive habitat areas, including wetlands and riparian corridors. Note that such alteration is only allowed under very specific circumstances and subject to specific requirements governed by the LCPs environmentally sensitive habitat area, wetland, riparian corridor, and other similar resource protection requirements; these requirements are not suspended in any way by this section.

(vi) Detailed drainage plans designed to control and direct all site runoff, including specific measures to control erosion and sedimentation, both during construction and as a permanent measure. The plan shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater and other runoff leaving the site.

(vii) Plans indicating locations and descriptions of proposed screening, landscaping, ground cover, irrigation systems, fencing, and any exterior lighting or signs. For any vegetation proposed to be used for screening purposes, the plans shall identify the expected dimensions and other characteristics of each individual species over time (including, at a minimum, on a yearly basis until maturity and/or maximum size is reached), and the expected dimensions and other characteristics of any overall vegetation screen over time (including, at a minimum, on a yearly basis until maturity and/or maximum size is reached). All species to be planted shall be non-invasive species native to Santa Cruz County, and specifically native to the project location. See also Section 13.10.663(b)(9).

(viii) Plans of proposed access driveway or roadway and parking area at the facility site. Include grading, drainage, and traveled width. Include a cross section of the access drive indicating the width, depth of gravel, paving or surface materials.

Plans showing any changes to be made to an existing facility's landscaping, screening, fencing, lighting, drainage, wetlands, grading, driveways or roadways, parking, or other infrastructure as a result of a proposed modification of the facility. Note that changes to wetlands and other sensitive habitat areas are only allowed under very specific circumstances and subject to specific requirements governed by the General PlanILCP environmentally sensitive habitat area, wetland, and other similar resource protection requirements; these requirements are not suspended in any way by this section.

(B) Proposed Tower/Facility and Related Structures and/or Components.

(i) Plans, elevations, sections and details at appropriate scales, but no smaller than 1" = 10.
(ii). Two cross sections through proposed tower/facility drawn at right angles to each other, and showing the ground profile to at least one hundred (100) feet beyond the limit of any vegetation clearing or beyond the fall zone of the towerhast, whichever is greater, and showing any guy wires or supports. Dimension the proposed height of the towerlmast above average grade at towerlmast base. Show all proposed antennas including their location on the towerlfacility.
(iii) Detail proposed exterior finish of the towerlfacility. Provide precise depictions, photo examples, and/or detail drawings for all stealth features (such as 'monopine" branches).

(iv) Indicate relative height of the towerlfacility as compared to the tops of surrounding trees as they presently exist, and to existing and proposed finished grades.

(v) Illustration of the modular structure of the proposed tower/facility indicating the heights of sections which could be removed or added in the future to adapt to changing communications conditions or demands (including potential future co-location).

(vi) A Structural Professional Engineer's written description of the proposed **tower/facility** structure and its capacity to support additional antennas or other communication facilities at different heights and the ability of the tower to be shortened if future communication facilities no longer require the original height.

(vii) A description of the available space on the tower, providing illustrations and examples of the type and number of co-located wireless communication facilities which could be mounted on the structure.

(viii) Photographs precisely depicting the tower/facility type to be installed.

(C) Proposed Communications Equipment Shelter. Including (a) floor plans, elevations and cross sections at a scale of no smaller than  $\frac{1}{4}$ " =I(1:48) of any proposed structural component (b) representative elevation views, indicating the roof, facades, doors and other exterior appearance and materials, and (c) a description of all equipment to be contained therein, including number, make and model of each electromagnetic and radiofrequency apparatus to be installed. (D) Proposed Equipment Plan.

(i) Plans, elevations, sections and details at appropriate scales but no smaller than 1\*=10'.

(ii) Number of antennas and repeaters, as well as the exact locations, of antenna(s) and all repeaters (if any) located on a map as well as by degrees, minutes and seconds of Latitude and Longitude (in decimal degree format).

(iii) Mounting locations on tower or structure, including height above existing and proposed finished grades.

(iv) A recent survey of the facility site at a scale no smaller than 1"=40' (1:480) showing horizontal and radial distances of antenna(s) to nearest point on property line, and to the nearest dwelling unit.

(v) For applications for new wireless communication facilities in any of the prohibited or restricted areas, as set forth in Sections 13.10.661(b) and 13.10.661(c), the applicant must also disclose: a. Number, type(s), manufacturer(s) and model number(s) for all antennas and other RF-generating equipment.

b. For each antenna, the antenna gain and antenna radiation pattern.

c. Number of channels per antenna, projected and maximum.

d. Power input to each antenna.

e. Power output, in normal use and at maximum output for each antenna and all antennas as an aggregate.

f. Output frequency of the transmitter(s).

(vi) For modification of an existing facility with multiple emitters, the results of an intermodulation study to predict the interaction of the additional equipment with existing equipment.

(14) If co-location is not proposed, the applicant shall provide information pertaining to the feasibility of joint-use antenna facilities, and discuss the reasons why such joint use is not a viable option or alternative to a new facility site. Such information shall include:

(A) Whether it is feasible to locate proposed sites where facilities currently exist;

(B) Information on the existing structure that is closest to the site of the applicants proposed

facility relative to the existing structure's structural capacity, radio frequency interface. or incompatibility of different technologies, which would include mechanical or electrical incompatibilities; and

(C) Written notification of refusal of the existing structure owner to lease space on the structure. (15) For any application that involves a major modification to, or replacement of, an applicant's wireless communication facility, the applicant shall submit a brief narrative description and any supporting graphics (such as plans, photos, relevant literature, etc.) detailing any changes in wireless communicationfacility technologies that would allow the existing facility to be modified to provide for the same or increased level of **service** with less environmental impact, including less visual resource impact, as technically feasible.

(c) Alternatives Analysis. For applications for wireless communication facilities proposed to be located in any of the prohibited areas specified in Sections 13.10.661(b) and non-collocated wireless communication facilities proposed to be located in any of the restricted areas specified in 13.10.661(c), an Alternatives Analysis must be submitted by the applicant, subject to independent RF engineering review, which shall at a minimum:

(1) Identify and indicate on a map, at a minimum two viable, technically feasible, and potentially environmentally equivalent or superior alternative locations outside the prohibited and restricted areas which could eliminate or substantially reduce the significant gap(s) in the applicant carrier's network intended to be eliminated or substantially reduced by the proposed facility. If there are fewer than two such alternative locations, the applicant must provide evidence establishingthat fact. The map shall also identify all locations where an unimpaired signal can be received to eliminate or substantially reduce the significant gap(s). For all non-collocated wireless communication facilities proposed in a restricted/prohibited area, the applicant must also evaluate the potential use of one or more microcell sites (i.e., smaller facilities oflen mounted upon existing or replacement utility poles), and the use of repeaters, to eliminate or substantially reduce said significant gaps in lieu of the proposed facility. For each alternative location so-identified, the applicant shall describe the type of facility and design measures that could be used at that location **so** as to minimize negative resource impacts (e.g., the use of stealth camouflaging techniques).

(2) Evaluate the potential for co-location with existing wireless communication facilities as a means to eliminate or substantially reduce the significant gap(s) in the applicant carrier's network intended to be eliminated or substantially reduced by the proposed facility.

(3) Compare, across the same set of evaluation criteria and to similar levels of description and detail, the relative merits of the proposed site with those of each of the identified technically feasible alternative locations and facility designs. Such comparison analysis shall rank each of the alternatives (i.e., the proposed location/facility and each of the technically feasible locationldesign alternatives) in terms of impacts (i.e. from least to most environmentally damaging), and shall support such ranking with clear analysis and evidence.

(4) Include photo-simulations of each of the alternatives (i.e., the proposed location/facility and each of the technically feasible location/design alternatives).

(5) Document good faith and diligent attempts to rent, lease, purchase or otherwise obtain the use of at least two of the viable, technically feasible alternative sites which may be environmentally equivalent or superior to the proposed project site. The decision making body may determine that an alternative site is not viable if good faith attempts to rent, lease, purchase or otherwise obtain the site have been unsuccessful.

The Planning Director (or his/her designee) or the decision making body may also require an Alternatives Analysis for proposed wireless communication facility projects that are located in environmentally sensitive areas other than those set forth in Sections 13.10.661(b) andlor 13.10.661(c), such as visual resource areas as identified in General Plan/LCP Section 5.10. (d) Onsite Visual Demonstration Structures (Mock-Ups). Onsite visual demonstration structures (i.e., mock-ups) shall be required for all proposed wireless communication facilities, except for colocated and microcell facilities that do not represent a major modification to visual impact as defined in Section 13.10.660(d). For proposed rooflop or ground-mounted antennas, a temporary mast approximating the dimensions of the proposed facility shall be raised at the proposed antennalmast location. For proposed new telecommunications towers the applicant will be required to raise a temporary mast at the maximum height and at the location of the proposed tower. At minimum, the onsite demonstration structure shall be in place prior to the first public hearing to consider project approval, on at least two weekend days and two weekdays between the hours of eight a.m. to six p.m., for a minimum of ten (10) hours each day. A project description, including photo simulations of the proposed facility, shall be posted at the proposed project site for the duration of the mock-up display. The Planning Director or hislher designee

may release an applicant from the requirement to conduct on-site visual mock-ups upon a written finding that in the specific case involved said mock-ups are not necessary to process or make a decision on the application and would not serve as effective public notice of the proposed facility. (e) Amendment. Each applicant fregistrant shall inform the County, within thirty (30) days of any change of the information required pursuant to Sections 13.10.660 through 13.10.668, inclusive. (f) Technical Review. The applicant will be notified if an independent technical review of any submitted technical materials is required. The Planning Director or his/her designee shall review and, in his or her discretion, procure additional information and data as may assist himlher in reviewing the following: (1) reports concerning conformance with the FCC RF radiation exposure levels; (2) reports concerning the need for a facility; and/or (3) reports concerning availability or suitability of alternatives to a proposed facility. The Planning Director may employ, on behalf of the County, an independent technical expert or experts to review any technical materials submitted including but not limited to those required under this Section, and in those cases where a technical demonstration of unavoidable need or unavailability of alternatives is required. The review and procurement of such additional informationIdata shall be undertaken for all applications that seek approval of a facility in a Prohibited or Restricted Area, unless the Planning Director, hislher designee, or the approving body determines in writing that such review is unnecessary to inform the decision-making process. In addition, the review and procurement of information for applications in other areas may be required if the Planning Director determines that such review is necessary to inform the decision-making process. The applicant shall pay all the costs of said review and may be required to deposit funds in advance to cover the estimated costs of said review. If clearly marked as such by the applicant, any trade secrets or proprietary information disclosed to the County, the applicant, or the expert hired shall remain confidential and shall not be disclosed to any third party.

(g) Technical Feasibility. For any technical infeasibility claims made, the applicant shall be required to conclusively demonstrate, including submitting adequate evidence to that effect, the reasons for the technical infeasibility.

(h) Fees for review of all Commercial Development Permits for wireless communication facilities shall be established by Resolution of the Board of Supervisors. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

# 13.10.663 General development performance standards for wireless communication facilities.

(a) Site Location. The following criteria shall govern appropriate locations and designs for wireless communication facilities, including dish antennas and Multi-channel, multi-point distribution services (MMDS)/wireless cable antennas, and may require the applicant to select an alternative site other than the site shown on an initial permit application for a wireless facility: (1) Visual Character of Site. Site location and development of wireless 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. 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 andlor stealth techniques shall be encouraged where appropriate. Support facilities shall be integrated to the existing characteristics of the site, and every effort shall be character.

(2) Co-Location. 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.

(3) Ridgeline Visual Impacts. Wireless communication facilities proposed for 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 towerlfacility 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.
(4) 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 (5) Exterior Lighting. Any exterior lighting, except as required for FAA regulations for airport

safety, shall be manually operated and used only during night maintenance checks or in emergencies. The lighting shall be constructed or located *so* that only the intended area is illuminated and off-site glare is fully controlled.

(6) Aviation Safety. No wireless communication facility shall be installed within the safety zone or runway protection zone of any airport, airstrip or helipad within Santa Cruz County unless the airport owner/operator indicates that it will not adversely affect the operation of the airport, airstrip or helipad. In addition, no wireless communication facility shall be installed at a location where special painting or lighting will be required by the FAA regulations unless the applicant has demonstrated to the Planning Director that the proposed location is the only technically feasible location for the provision of personal wireless services as required by the FCC.

(7) Coastal Zone Considerations. 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 underground. (8) Consistency with Other County Land Use Regulations. All proposed wireless communication facilities 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.

(9) 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).

(10) Setbacks. All components of new wireless communication facilities must comply with the setback standards for the applicable zoning district. Depending upon specific site constraints and circumstances, this requirement may not apply to antennas proposed to be co-located on existing towers or utility poles (e.g., microcelt sites), nor to underground equipment shelters, if it would prohibit use of the proposed facility site.

(b) Design Review Criteria. The following criteria apply to all wireless communication facilities: (1) 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).

(2) 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.

(3) 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. 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 existing architecture and/or the natural surroundings in the area or shall be screened from sight by mature landscaping.

(4) Exterior Finish. All support facilities, poles, towers, antenna supports, antennas, and other components of communication facilities shall be of a color approved by the decision making body. If a facility is conditioned to require paint, it shall initially be painted with a flat (i.e., non-reflective) paint color approved by the decision making body, and thereafter repainted as necessary with a flat paint color, unless it is determined that flat paint color would lead to more adverse impact than would another type of paint color. Components of a wireless communication facilitywhich 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.

(5) Visual Impact Mitigation. Special design of wireless communication facilities may be required to 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 andlor mimic the existing similar looking trees where they can be designed to adequately blend with andlor 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. Ownersloperators of wireless communication towers/facilities are required to maintain the appearance of the towerlfacility, as approved, throughout its operational life. Public vistas from scenic roads, as designated in General PlanILCP Section 5.10.10, shall be afforded the highest level of protection.

(6) Height. The height of a wireless communication tower shall be measured from the existing undisturbed ground surface below the center **of** the base of said tower to the top of the tower itself or, if higher, to the tip of the highest antenna or piece of equipment attached thereto. In the case of building-mountedtowers the height of the tower includes the height of the portion of the building on which it is mounted. In the case of "crank-up" or **other** similar towers whose height can be adjusted, the height of the tower shall be the maximum height to which it is capable of being raised. 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 district 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 shall, in addition to any other required findings andlor requirements, require a variance approval pursuant to County Code Section 13.10.230.

(7) Lighting. 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.

(8) Roads and Parking. All wireless communication facilities shall be served by the minimum sized roads and parking areas feasible.

(9) Vegetation Protection and Facility Screening.

(A) 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 capabilities of the vegetation at maturity to provide the required immediate screening).

(B) Because Santa Cruz County contains many unique and threatened plant species and habitat areas, 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 andlor required to be planted that is associated with a wireless communication facility shall be noninvasive species native to Santa Cruz County, and specifically native to the project location. Nonnative andlor 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 andlor 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 landscapelvegetation 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 landscapelvegetation 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.

(C) No actions shall be taken subsequent to project completion with respect to the vegetation present that would increase the visibility of the facility itself or the access road and **power/telecommunication** lines serving it. All owners of the property and all operators of the facility shall be jointly and severally responsible for maintenance (including inigation) and replacement of all required landscaping for as long as the permitted facility exists on the site. (10) Fire Prevention/Emergency Response. All wireless communication facilities shall be designed and operated in such a manner *so* as to minimize the risk of igniting a fire or intensifyingone that otherwise occurs. To this end, all of the following measures shall be implemented for all wireless communication facilities, when determined necessary by the Fire Chief:

(A) At least one-hour fire resistant interior surfaces shall be used in the construction of all buildings;

(B) Rapid entry (KNOX) systems shall be installed as required by the Fire Chief;

(C) Type and location of vegetation, screening materials and other materials within ten (10) feet of the facility and all new structures, including telecommunication lowers, shall have review for fire safety purposes by the Fire Chief Requirements established by the Fire Chief shall be followed;

(D) All tree trimmings and trash generated by construction of the facility shall be removed from the property and properly disposed of prior to building permit finalization or commencement of operation, whichever comes first; and

(É) For the protection of emergency response personnel, at any wireless communication facility where there is the possibility that RF radiation levels in excess of the FCC public exposure limit could be experienced by emergency response personnel working in close proximity to antennas/RF-emitting devices, said facility shall have an on-site emergency power shut-off (e.g., "kill switch") to de-energize all RF-related circuitry/componentry at the base station site, or some other method (acceptable to the local Fire Chief) for de-energizing the facility. For multi-facility (co-location) sites where there is a possibility that RF radiation levels in excess of the FCC public exposure limit could be experienced by emergency response personnel working in close proximity to antennas/RF-emitting devices, a single power shut off switch (or other method acceptable to the local Fire Chief) shall be installed that will de-energize all facilities at the site in the event of an emergency.

(11) Noise and Traffic. All wireless communication facilities shall be constructed and operated in such a manner as to minimize the amount of disruption caused to nearby properties. To that end all the following measures shall be implemented for all wireless communication facilities:
 (A) Outdoor noise producing construction activities shall only take place on non-holiday

weekdays between the hours of eight a.m. and six p.m. unless allowed at other times by the approving body; and

(B) Backup generators shall only be operated during power outages and for testing and maintenance purposes. If the facility is located within one hundred (100) feet of a residential dwelling unit, noise attenuation measures shall be included to reduce noise levels at the facility to a maximum exterior noise level of sixty (60) Ldn at the property line and a maximum interior noise level of forty-five **(45)** Ldn within nearby residences.

(12) Facility and Site Sharing (Co-Location). New wireless communication towers should be designed to accommodate multiple carriers, and/or to be readily modified to accommodate multiple carriers, so as to facilitate future co-locations and thus minimize the need to construct additional towers. New telecommunications towers should be designed and constructed to accommodate future additional antennas andlor height extensions, as technically feasible. New wireless communication facility components, including but not limited to parking areas, access roads, and utilities should also be designed **so** as not to preclude site sharing by multiple users, as technically feasible, in order to remove potential obstacles to future co-location opportunities. The decision making body may require the facility and site sharing (co-location) measures specified in this section if necessary to comply with the purpose, goals, objectives, policies, standards, and/or requirements of the General Plan/Local Coastal Program, including Sections

13.10.660 through 13.10.668, inclusive, and the applicable zoning district standards in any particular case. However, a wireless service provider will not be required to lease more land than is necessary for the proposed use. If room for potential future additional users cannot, for technical reasons, be accommodated on a new wireless communication tower/facility, written justification stating the reasons why shall be submitted by the applicant. Approvals of wireless communication facilities shall include a requirement that the owner/operator agrees to the following co-location parameters:

(A) To respond in a timely, comprehensive manner to a request for information from a potential co-location applicant, in exchange for a reasonable fee not in excess of the actual cost of preparing a response;

(B) To negotiate in good faith for shared use of the wireless communication facility by third parties; and

(C) To allow shared use of the wireless communication facility if an applicant agrees in writing to pay reasonable charges for co-location.

(13) Coastal Zone Design Criteria. In addition to the requirements set forth herein, all wireless communication facilities requiring a Coastal Development Permit shall conform with the Coastal Zone design criteria requirements of County Code Section 13.20.130.

(14) Signage. A notice shall be posted at the main entrance of all buildings or structures where structure-mounted or freestanding wireless communication facilities are located on the same parcel. The notice shall be 12" x 12" and shall inform the public that a wireless communication facility is located on the building, structure or property and shall be consistent with the requirements of Federal law.

(15) Existing Facilities. Where applications involve existing wireless communication facilities, modifications to the existing facilities to reduce environmental impacts, including visual impacts, shall be pursued as technically feasible. If such modifications would reduce impacts, then such modifications shall be made as feasible, technically and otherwise, provided the reduction in impact is roughly commensurate with the cost to make the modifications.

(16) Approved Project. Approvals of wireless communication facilities shall require that the facility, including, but not limited to, all stealth design measures and vegetation screening, be maintained in its approved state for as long as it exists on the site. Approved facility plans, detailing the approved facility and all camouflaging elements, and including all maintenance parameters designed to ensure that camouflaging is maintained over the fife of the project. shall be required for all approvals.

(17) Ongoing Evaluation. Wireless communication service providers are encouraged to evaluate their wireless communication facilities on a regular basis to ensure that they are consistent with the goals, objectives, policies, and requirements of the General Plan/Local Coastal Program, including specifically siting and design standards meant to minimize any negative impacts to visual resources and the character of the built and natural environment. Wireless service providers are encouraged to individually and collectively pursue modifications to their networks andlor individual facilities to reduce environmental impacts, including visual impacts; particularly over time as new technologies may be developed that allow for less visually intrusive wireless communication facilities, andlor a lesser number of them, while still allowing for the same or better level of wireless communication service associated with both any individual wireless service provider's facilities and the overall universe of wireless communication facilities in the County. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

# 13.10.664 Non-ionizing electromagnetic radiation (NIER) safety and monitoring requirements for wireless communication facilities.

Initial post-construction monitoring of wireless communication facility NIER/radio-frequency (RF) radiation exposures is required for all wireless communication facilities constructed under the auspices of Sections 13.10.660 through 13.10.668, inclusive, to prove that all new wireless communication facilities operate in compliance with the FCC RF radiation exposure standards. NIER monitoring is to be conducted utilizing the Monitoring Protocol described in Section 13.10.660(d) above. The County may require that the required NIER/RF radiation monitoring reports described below may be independently reviewed by a qualified telecommunications/RF engineer, at the applicant's expense. The following applies to all wireless communication facilities:

(a) Public Health and Safety. No wireless communication facility shall be located or operated in

such a manner that it poses, either by itself or in combination with other such facilities, a potential threat to public health. To that end, no telecommunication facility or combination of facilities shall produce at any time power densities in any area that exceed the FCC-adopted standard for human exposure, as amended, or any more restrictive standard subsequently adopted or promulgated by the Federal government. Areas in the immediate vicinity of all antennas or other transmitting devices in which the FCC RF radiation exposure standards could potentially be exceeded, especially near rooflop antennas, must be clearly demarcated and/or fenced off, with warning signs in English, Spanish and international symbols clearly visible.

(b) Non-Ionizing Electromagnetic Radiation (NIER) Measurements.

(1) Consistent with Section 13.10.662(b)(9) above, all applications for new wireless communication facilities must include written certification by a professional engineer registered in the State of California that the proposed facility will comply with the FCC's RF radiation exposure standard.

(2) Post-Construction NIER Measurement and Reporting. Monitoring of NIER/RF radiation to verify compliance with the FCC's NIER standards is required for all new wireless communication facilities and for all wireless communication facilities proposing to undergo a major modification of power output (as defined in Section 13.10.660(d)). This requirement shall be met through submission of a report documenting NIER measurements at the facility site within ninety (90) days after the commencement of normal operations, or within ninety (90) days afler any major modification to power output of the facility. The NIER measurements shall be made, at the applicant's expense, by a qualified third-party telecommunications or radio-frequency engineer, during typical peak-use periods, utilizing the Monitoring Protocol described in Section 13.10.660 (d). The report shall list and describe each transmitter/antenna present at the facility, indicating the effective radiated power of each (for co-located facilities this would include the antennas of all other carriers at the site). The report shall include field measurements of NIER emissions generated by the facility and also other emission sources, from various directions and particularly from adjacent areas with residential dwellings. The report shall compare the measured results to the FCC NIER standards for such facilities.

The report documenting the measurements and the findings with respect to compliance with the established FCC NIER exposure standard, shall be submitted to the Planning Director within ninety (90) days of commencement of facility operation. Failure to comply with this requirement may result in the initiation of permit revocation proceedings by the County.

(3) Failed Compliance. Failure to supply the required reports, or to remain in continued compliance with the NIER standard established by the FCC. or other regulatory agency if applicable shall be grounds for review of the use permit or other entitlement and other remedy provisions. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

## 13.10.665 Required findings for wireless communication facilities.

In order to grant any Commercial Development Permitfor a wireless communication facility and/or any Coastal Development Permit if the facility is located in the Coastal Zone, the approving body shall make the required development permit findings (Section 18.10.230) and the required coastal development permit findings if in the coastal zone (Section 13.20.110) as well as the following findings:

(a) That either: (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 (2) 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.

(b) That 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; andlor (2) alternative designs for the proposed facility **as** conditioned.

(c) That 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 and that all zoning violation abatement costs, if any, have been paid.

(d) That the proposed wireless communication facility as conditioned will not create a hazard for aircraft in flight.

(e) That the proposed wireless communication facility as conditioned is in compliance with all FCC and California PUC standards and requirements.

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

Any decision to deny a permit for a wireless communication facility shall be in writing and shall be supported by substantial evidence and shall specifically identify the reasons for the decision, the evidence that led to the decision and the written record of all evidence. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8110104)

# **13.10.666** Site restoration upon **termination/abandonment** of wireless communication facilities.

(a) The site shall be restored as nearly as possible to its natural or pre-construction state within six months of termination of use or abandonment of the site.

(b) Applicant shall enter into a site restoration agreement, consistent with Section 13.10.666(a), subject to the approval of the Planning Director. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

13.10.667 Indemnification for wireless communication facilities.

Each permit issued pursuant to Sections 13.10.660 through 13.10.668, inclusive, shall have as a condition of the permit, a requirement that the applicant defend, indemnify and hold harmless the County and its officers, agents, and employees from and against any claim (including attorney fees) against the County, its officers, employees or agents to attack, set aside, void or annul the approval of the permit or any subsequent amendment of the permit. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

**13.10.668** Telecommunication act exception procedure.

If the application of the requirements or limitations set forth in Sections 13.10.660 through 13.10.668, inclusive, including but not limited to applicable limitations on allowed land uses, would have the effect of violating the Federal TelecommunicationsAct as amended, the approving body shall grant a TelecommunicationsAct Exception to allow an exception to the offending requirement or application. The applicant shall have the burden of proving that application of the requirement or limitationwould violate the Federal TelecommunicationsAct, and that no alternatives exist which would render the approval of a TelecommunicationsAct Exception unnecessary. (Ord. 4714 § 2 (part), 4/29/03; Ord. 4743 § 2 (part), 11/18/03; Ord. 4769 § 2 (part), 8/10/04)

Article VI Open Space Regulations

13.10.671 Use of nondevelopable land.

Development or uses within areas identified on the General Plan and Local Coastal Program Land Use Plan as non-developable land (see definition Section 13.10.700-DDevelopable Land) shall be considered only when consistent with all General Plan and County Code resource protection and hazard mitigation requirements where applicable, and only in the following circumstances:

(a) For development or uses consistent with the maintenance of the area as open space.