# WIRELESS COMMUNICATIONS FACILITIES LIST OF REQUIRED INFORMATION

Submitted materials shall include the following information.

Plans shall be submitted in full size plan sets (24" x 36" or 18" x 24" format) If comprising multiple sheets, plans must be stapled together with site plan on top and folded (as shown on the plan folding instructions brochure).

In addition to full size plan sets, two (2) 8½" x 11" reduction (reproducible quality) required for a Level 4 and higher permits. Level 4 applications will not be taken in without two reduced sets of plans.

Plans submitted for review must include the following information at minimum. Additional information may be required based on site specific conditions. 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. (ref. Sect. 13.10.662, "application requirements for wireless communication facilities.")

**Pre-Application Meeting.** All applicants for new wireless communication sites are encouraged to apply for the Development Review Group process or Project Review Consultation, in order to allow Planning staff to provide feedback to the applicant regarding facility siting and design prior to submittal.

The following forms must be completed and provided with all application submittals:

- Application packet including Disclosure of Common Interest Ownership, Disclosure Statement for Hazardous Materials and if person other than owner is applying, an Owner-Agent Approval form.
- Owner and agent names, address, phone, fax and cell numbers, and e-mail address.

## **DOCUMENTATION**

- (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) A 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, assessor's parcel number, site names/identification, facility types, and precise latitude/longitude coordinates (NAD 83) in degrees-minutes-seconds 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 and/or 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 communications facility. At the time of application, submit two copies of a written opinion by a professional engineer, registered in the State of California, documenting the maximum expected possible NEIR exposures from the proposed WCF (as a percentage of the FCC limit) at locations where the public exposure levels are expected to be the highest.
- (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-four-hour-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 RF-related 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 devices/components.
- (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. Photo-simulations 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 Plan/LCP. 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 1" = 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 tower/facility site parcel and of all parcels and right-of-ways abutting the tower/facility site parcel.

#### **PLANS**

Please provide 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 at scales which are no smaller than those listed below. Quantities are indicated at the top of this form. Each plan/cross 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:

#### **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 and/or 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 and/or component. Include dimensions of all proposed improvements.
- (ii) Indicate existing and proposed grade elevations where the existing and proposed grade intersects the proposed tower/mast, any guy wires, and all facility-related structures and/or 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.
- (ix) 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 Plan/LCP environmentally sensitive habitat area, wetland, and other similar resource protection requirements; these requirements are not suspended in any way by this section.

# **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 tower/mast, whichever is greater, and showing any guy wires or supports. Dimension the proposed height of the tower/mast above average grade at tower/mast base. Show all proposed antennas including their location on the tower/facility.

- (iii) Detail proposed exterior finish of the tower/facility. Provide precise depictions, photo examples, and/or detail drawings for all stealth features (such as "monopine" branches).
- (iv) Indicate relative height of the tower/facility 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 colocated wireless communication facilities which could be mounted on the structure.
- (viii) Photographs precisely depicting the tower/facility type to be installed.

## **Proposed Communications Equipment Shelter**

Include (a) floor plans, elevations and cross sections at a scale of no smaller than ½" =1' (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.

## **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.

## FACILITIES THAT ARE NOT CO-LOCATED

(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 communication facility 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.

## **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 establishing that 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 often 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 location/design 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) and/or 13.10.661(c), such as visual resource areas as identified in General Plan/LCP Section 5.10.

## 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 co-located and microcell facilities that do not represent a major modification to visual impact as defined in Section 13.10.660(d). For proposed rooftop or ground-mounted antennas, a temporary mast approximating the dimensions of the proposed facility shall be raised at the proposed antenna/mast 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 his/her 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.

## **AMENDMENT**

Each applicant/registrant 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.

### 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 him/her 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 information/data shall be undertaken for all applications that seek approval of a facility in a Prohibited or Restricted Area, unless the Planning Director, his/her 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.

## **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.

NOTE: For applications processed at Level 5 or 6, before your application can be considered to be complete for processing, you will be required to post a public-notice sign on your site with information about your project. Please see the brochure on public notice requirements for your project.