



# MANAGEMENT PLAN

CROWN CASTLE  
UNMANNED TELECOMMUNICATION FACILITY  
TMK (3) 7-3-49-38

APPLICANT: CROWN CASTLE

AGENT: DANETTE MARTIN, GENERAL DYNAMICS  
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## **MANAGEMENT PLAN**

### **Introduction**

This Management Plan is prepared for the consolidation of the telecommunication facilities on this State owned property. The overall footprint of this use will be reduced from approximately 40,000 square feet to a 2,500 square foot area. This will allow the owner of the property, the Department of Land and Natural Resources, Land Division, to retain a larger portion of their natural resources on this 4 acre parcel. If this land use is approved, the Department of Land and Natural Resources, Land Division will issue a lease to Crown Castle to develop and manage this telecommunication facility.

### **1. General Description of the Proposed Use**

Crown Castle 06-2 LLC (Crown Castle) proposes to develop a telecommunication facility for wireless telecommunications within a 50' x 50' area. This facility will provide wireless broadband services for the surrounding area, including Kona Airport, Kona Palisades and the nearby agricultural lots.

As part of the project, the existing four (4) - 100' guyed radio towers will be removed along with the existing equipment shed and generator. The AM radio facility will be decommissioned.

After completion of the new facility, the Verizon cell on Wheels (COW) will be removed.

Access to the lease area will follow the existing dirt road previously used for the radio towers. The area of this non-exclusive use is 20' wide by approximately 200' long.

The power and fiber optic utility lines for this facility will be located within the access area. These lines will be brought in from overhead services along the main road fronting the property.

No other utilities (natural gas, water, wastewater or storm drains) are required for this telecommunication facility.

The infrastructure for this facility will include access along the existing dirt road, utilities (electrical and fiber optic) and installation of a 98' tall steel monopole with an overall height of 99 feet, accounting for the foundation and mounting.

As shown on the attached construction drawings, Crown Castle will develop this site and manage the facility. This development will install equipment for Verizon, T-Mobile and AT&T.

## **2. Project location (e.g., island map, location map, site plan (drawn to scale)).**

The project is located in North Kona on the mauka side of Queen Kaahumanu Highway directly behind the Hawaiian Electric power station. The Title Sheet of the drawings, sheet 001, includes the Island Map and the Vicinity Map.

## **3. Natural resource assessment including descriptive information about the natural resources in the project vicinity such as biological, archaeological, cultural, geological, coastal, recreational, and scenic resources, where applicable. The presence of any threatened or endangered species shall be disclosed.**

The Final Environmental Assessment (FEA) Report, dated May 12, 2016, by Ford Canty & Associates, Inc. provides the detailed description of the natural resources on this property. The FEA is attached for reference.

As part of the FEA (Section 6.2.4.1 on page 6), the US Fish and Wildlife noted, “[t]o the best of our knowledge, there are no federally listed or proposed species, or proposed or designated critical habitat in the immediate vicinity of project site.”

## **4. Natural hazard assessment including descriptive information of erosion, flooding, slope, tsunami, and volcanic hazards, where applicable.**

The following is provided regarding natural hazards:

- The ground consists of Pahoehoe lava flows (FEA Section 6.1.1.1 on page 4) which has no soil covering and typically bare of vegetation. Therefore the property is not susceptible to erosion.
- The subject property is located within Flood Zone X, which denotes an area outside of 0.2 percent (%) annual change (500-year) floodplain. (FEA Section 6.2.1.1 on page 6).
- The slope of the property is fairly flat (1-5% slope) as calculated from the topographic survey for this project.
- The project is outside the tsunami zone (FEA Section 6.2.1.1 on page 6).
- The proposed action is in Lava Zone 4 – Per US Geological Survey this “[i]ncludes all of Hualalai, where the frequency of eruptions is lower than on Kilauea and Mauna Loa. Lava coverage is proportionally smaller, about 5 percent since 1800, and less than 15 percent within the past 750 years.”

## **5. A description of best management practices used during project construction and implementation (e.g., mitigation measures).**

The following standard construction best management practices will be used during development of the site:

Perimeter Controls: Biosock and/or silt fences will be installed around construction area.

Stockpile Management: Surround spoils and materials with Biosock. Cover with silt fabric when stored on site.

Dust Control: Water will be used, as needed, to wet down soil to control dust.

Concrete Waste Management: Kiddie pool will be used to catch splatter, overspill, and washout of concrete.

Vehicle Tracking Control: Gravel will be placed at the in and out entry to control dirt tracking onto street. Silt fabric will be laid down under all vehicles left on site.

Sweeping up dirt on street as needed.

Solid Waste Management: Trash dumpsters will be used to store trash on site and covered with slit fabric. Portable toilets will be used on site, and surrounded with Biosock.

## **6. A description of the best management practices to be used during the lifetime of the project (e.g., mitigation measures).**

The site will be inspected as part of regular maintenance to insure there is no solid waste left behind or unexpected erosion.

## **7. A description of the conservation methods and applications to be used in the short term and long term (e.g., mitigation measures).**

The following are excerpts from the FEA identifying mitigation measures applicable to the proposed project:

As noted in the FEA (Section 6.3.2 on page 9): “During construction and installation activities, noise levels might increase slightly.” To mitigate noise conditions, Crown Castle will construct the site during normal business hours when ambient noise is higher.

The FEA continues the discussion on noise stating, “[s]ubsequent to construction, the Proposed Action will not have a significant impact on noise levels since the generator will run only during a power outage and for short periods of time during maintenance activities.” Again, the generator maintenance can be done during the day when ambient noise is higher.

With regard to grading, all work will cease in the immediate vicinity of any historic resources are found, including human remains. Consultation with the DLNR State Historic Preservation Division will be conducted prior to continuing the construction activity in that area. (FEA Section 6.2.2 on page 12).

The best management practices, list above, will be utilized during construction to mitigate impacts to air quality (FEA Section 6.9.2 on page 14). After construction there is not expected to be significant impacts to air quality.

## **8. Description of existing uses and facilities, if any.**

As shown in the attached construction drawing, Sheet A100, there are several existing structures that are part of two separate telecommunication facilities. The existing AM radio site includes four (4) – 100’ tall guyed towers, a small equipment shed and an

emergency generator. The existing Verizon Cell on Wheels (COW) includes a 60' tall guyed antenna mast with equipment cabinets and an emergency generator all located on a flatbed trailer. Both sites use overhead utility lines for their power and communication services.

These AM radio tower was approved per CDUA HA-1963 and HA 12-259. The Verizon cell on wheels was approved per CDUA HA-3656.

## **9. Description of proposed facilities and uses, including phases, if applicable.**

The simplified order for the proposed project will be to remove the existing AM radio towers, install a new steel monopole with accessory equipment and then remove the existing Verizon COW.

Once the radio facility is removed, Crown Castle will begin with the excavation for the tower foundation, grading around the equipment pads and trenching for the utilities. Concrete foundations for the tower and equipment pads will follow along with the installation of conduits for the utilities. Once the concrete is cured, the monopole, equipment cabinets and generator will be mounted to pads. And finally, antennas, cables and accessory equipment will mounted to the monopole.

After the Verizon site is tested and turned on, the COW will be removed from the property.

Similar development for ground equipment, antennas and accessory equipment is expected to follow at a later date by AT&T and T-Mobile.

## **10. Activity schedule**

**Project schedule including description of project sequencing from project construction to project completion and on-going maintenance plans, including a description and timing of natural resource monitoring and maintenance plans. A description of the annual reporting requirements.**

As described in the Conservation District Use Application for this project, the following activity schedule is expected for this project:

- Site demolition, monitoring and maintenance: 14 days
- Site Construction, monitoring and maintenance: 45-90 days
- Remote site monitoring: 24 hours a day, 7 days a week
- Site inspections and maintenance: expect quarterly site inspections
- Future site construction: 45 days follow Plan Approval and Building Permits

**11. Any other information or data, as required by the department.**

As part of this application, Crown Castle submits a follow up review of government agency records to confirm their records have not changed since the Final Environmental Assessment was completed. This is provided in a spreadsheet form as a comparison chart.

The drawings for the proposed project refer to a 98' monopole. This is reiterated throughout the plans specifically for the monopole specifications. The overall height of the monopole and antennas will be 99' above ground level to allow clearance for the foundation and mounting bolts.

Please note that the Crown Castle development differs from the initial proposal by Verizon. The location of the tower has been changed to consolidate the site at the center of the existing four (4) – 100' guyed towers that will be demolished. This utilized the existing telecommunication area and area that has previously been disturbed by construction activities. Also, Crown Castle proposed a 99' tall structure instead of the original 104' overall height proposed by Verizon. The revised location and reduced height is intended to develop the site within the envelope of the existing towers.