CROWN CASTLE SAN MATEO DAS TELECOMMUNICATION PROJECT MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

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1 INTRODUCTION

The Final Negative Declaration (ND) for the Crown Castle San Mateo Project (project), was adopted, and the construction permit issued by the California Public Utilities Commission (CPUC) on December 3, 2015. The ND includes procedures for preparing and implementing a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure compliance with Applicant Proposed Measures (APMs) approved in the Final ND. This MMCRP includes the information provided in Section G of the CEQA Guidelines (14 CCR 15000 et seq.), as well as specific protocols to be followed prior to and during construction by CPUC third-party environmental monitors (CPUC EMs) and Crown Castle project staff.

The project's MMCRP includes direct participation and commitment from Crown Castle and CPUC EMs. The success of the program depends on the project management staff, monitors, and construction contractor personnel. Therefore, the goal of the MMCRP is to provide a clear understanding of the project's organization, establish lines of communication, and effectively document and report compliance with all of the APMs.

The MMCRP was developed to provide guidelines and standardize procedures for environmental compliance on the project. The procedures have been developed in coordination with Crown Castle, CPUC, and CPUC EMs to help define the reporting relationships, provide detailed information about the roles and responsibilities of the project's environmental compliance team members, define compliance reporting procedures, and establish a communication protocol.

1.1 Authority and Purpose of the Program

The California Public Utilities Code confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures and/or APMs stipulated as conditions of approval are implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a Mitigation Monitoring, Compliance, and Reporting Program when it approves a project that is subject to preparation of a Final ND. CEQA Guidelines, Section 15097, was added in 1999 to further clarify agency requirements for mitigation monitoring or reporting (14 CCR 15097). The CPUC views the MMCRP as a working guide to facilitate not only the implementation of APMs by the project proponent, but also the monitoring, compliance, and reporting activities of the CPUC and any monitors it may designate.

1.2 Program Adoption Process

The APMs described in the Final ND were approved by the CPUC on December 3, 2015, (Decision 15-12-012). APMs for resource area can be found at the end of each resource section (Sections 5.1 through 5.18) of the Final ND, and in Table 3 in this MMCRP. A draft version of the MMCRP was distributed to Crown Castle, CPUC, and CPUC EMs for review and comment.

1.3 Project Description

1.3.1 Project Overview

The project consists of installing distributed antenna systems (DAS) network facilities, including fiber optic cable, antennas, nodes, and related facilities along approximately 14.22 miles of existing highway rights-of-way (ROW), primarily along Highway 1 (Hwy 1) in order to expand wireless broadband services in rural, coastal areas of San Mateo County, California. The project consists of the following components:

- Installation of a total of 10 antennae, pole extenders, and associated equipment, two on each of five node poles (all existing utility poles).
- Installation of 14.22 miles of fiber-optic cable (10.76 miles across approximately 258 existing utility poles and 3.46 miles underground).
- Installation of guy wires and anchors on up to 70 existing utility poles, pending further engineering analysis and structural testing.
- Replacing up to 14 existing utility poles to accommodate the new stress loads, pending further engineering analysis.

Schedule

Project-related construction activities will not begin until pre-construction APMs and submittals have been satisfied. Once pre-construction APMs have been completed, the CPUC will issue a Notice to Proceed (NTP), indicating that construction can commence. The NTP may include CPUC or other agency conditions or requirements that must be satisfied prior to the start of work or during construction. Section 4.3 of this MMCRP lists the APMs, the timing for completion, and whether CPUC review or approval is required before construction can commence. A map of the construction elements is provided in Attachment A. Table 1 shows the estimated construction schedule by activity.

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Table 1
Estimated Construction Schedule

Duration (Months)	Project Activity
July – September 2016	Pole replacement
July – September 2016	Overhead line and DAS installation
July – September 2016	Directional Drilling

Source: CPUC 2015; Crown Castle 2016.

1.3.2 Construction Components

The APMs listed in Section 4.3 of this MMCRP include the location and project component(s) in which the APM applies. In general, the APMs are applicable to all project components; however, certain biological protection measures are component specific. Crown Castle will work closely with contractor staff to ensure that site-specific APMs are clearly identified.

1.3.3 Project Documents

This document is intended to provide pertinent information necessary to successfully implement the MMCRP during construction. The APMs listed in Section 4.3 of this MMCRP can be found in the Final ND Project Description and at the end of each issue area of the Final ND (CPUC 2015). Detailed discussions on the intent of each APM and potential impacts that could result if the APMs are not implemented properly are provided in Section 4.3 of this document. Construction activities must be conducted in accordance with the requirements stipulated in the following documents as well as in the Final ND:

- San Mateo County Use Permit conditions
- CalTrans Encroachment Permit conditions

1.4 Agency Jurisdiction

In addition to the CPUC, San Mateo County has jurisdiction over the project area as the implementing entity for the Local Coastal Plan (LCP) The CPUC, as the lead agency, is responsible for ensuring that permit conditions imposed by jurisdictional agencies are implemented throughout construction. However, jurisdictional agencies may visit the project site from time to time and request information regarding the status of permit conditions. Crown Castle is responsible for satisfying requests from jurisdictional agencies and will notify and copy

the CPUC on all correspondence related to final approvals and verifications for the project if the CPUC is not otherwise copied on the correspondence. Additional information on communication protocols can be found in Section 2.3 of this MMCRP. Table 2 lists jurisdictional agencies associated with the project.

Table 2
Required Permits and Approvals for the San Mateo DAS Project

Permits	Agency	Jurisdiction/Purpose
	State Agencies	
Permit to Construct	CPUC	Overall project approval and CEQA review
Encroachment Permit	California Department of Transportation	Construction, operation, and maintenance within, under, or over state highway ROW
Use Permit and Building Permit subject to Coastal Development Review	San Mateo County Planning Department	Construction, operation, and maintenance within the coastal development zone.

CPUC = California Public Utilities Commission; CEQA = California Environmental Quality Act; ROW = right-of-way

2 ROLES AND RESPONSIBILITIES

This chapter describes the roles and responsibilities of key project personnel with respect to the MMCRP and identifies project members responsible for implementing the MMCRP and their relationship to other staff working on the project. The information in this chapter and in Attachment B also establishes preliminary lines of communication within the project team.

2.1 Organization Overview

2.1.1 Crown Castle

Crown Castle Senior Managers

District Manager - Carl Cabico and Regulatory Manager - Sharon James

Crown Castle's Senior Managers, referenced in the project contact list (Attachment B), will provide the overall direction, management, leadership, and corporate coordination for the construction project. The District Manager has overall responsibility for all aspects of the project implementation. The Regulatory Manager will ensure all environmental and permit related compliance for the project. Their responsibilities related to the environmental program include, but are not limited to, the following:

- Coordinating between financial, safety, public affairs, construction, engineering, land services, and environmental staff
- Providing direction by integrating environmental compliance into all levels of the project organization
- Communicating corporate coordination for all levels of the project organization
- Ensuring financial support and effective corporate leadership and management of staff to comply with all project policies, requirements, and procedures.

Crown Castle Project Manager – John Griffiths

Crown Castle's project managers (PM) referenced in the project contact list (Attachment B) will oversee the activities of the assigned construction components. Specific responsibilities of the PMs include, but are not limited to, the following:

- Ensuring compliance with project specifications, drawings, permit conditions, construction contracts, and applicable codes
- Notifying environmental PM and environmental compliance lead (ECL) of project schedule changes

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- Working with Crown Castle Environmental Project Management Team to evaluate and improve the implementation of the MMCRP as construction progresses
- Providing leadership for the engineering, procurement, and construction services by integrating environmental responsibility into the project organization
- Regularly facilitating project meetings.

Crown Castle Construction Managers and Construction Personnel

Construction activity may take place at any given time within multiple construction components. Construction contractors will have significant responsibilities for implementation of and compliance with the environmental requirements of the project. Crown Castle Construction Managers administrators, or CAs, referenced in the contact list (Attachment B) will oversee the day-to-day construction activities conducted by Crown Castle's construction contractors. The construction contractors will be responsible for incorporating all project environmental requirements into their day-to-day construction activities. Key environmental responsibilities for contractors' staff include, but are not limited to:

- Verifying that all construction workers attend the project's environmental awareness training prior to beginning work on the project
- Reviewing and understanding the environmental requirements
- Implementing and maintaining APM requirements and conditions during construction
- Responding to requests by Crown Castle resource leads and EMs during construction.

Crown Castle Environmental Project Manager

Crown Castle's environmental project manager (EPM) referenced in the project contact list (Attachment B) is responsible for providing the appropriate level of resources for successful implementation of the MMCRP. The EPM will provide management, direction, and leadership to the Crown Castle Environmental Project Management Team. Specific responsibilities of the EPM include, but are not limited to:

- Directing the development and implementation of the pre-construction environmental planning, permitting, and compliance activities
- Ensuring the development and implementation of environmental awareness training
- Ensuring all construction personnel receive environmental awareness training
- Providing the leadership and resources to ensure compliance with the MMCRP
- Actively communicating with the lead agencies, particularly in regard to the MMCRP

- Ensuring frequent and clear communication between Crown Castle environmental staff, construction personnel, responsible resource agencies, and EMs
- Establishing and supporting the lines of communication between the Crown Castle environmental staff, construction personnel, agencies, and EMs
- Submitting weekly compliance reports to the CPUC.

Crown Castle Environmental Compliance Lead

Crown Castle's ECL referenced in the project contact list (Attachment B) will provide oversight of all activities required for compliance with the MMCRP. The ECL's responsibilities include, but are not limited to:

- Coordinating and tracking MMCRP compliance, including the submittal weekly and biweekly compliance reports and pre-construction submittals in order to receive NTPs
- Reviewing and approving daily inspection reports
- Preparing Minor Project Refinement Request Forms or assisting Crown Castle contractors with preparation of the requests.

Crown Castle Resources Leads

Crown Castle's resources leads referenced in the contact list (Attachment B) will support the ECL for successful implementation, planning, permitting, and compliance activities required under the MMCRP. The resource leads' responsibilities include, but are not limited to, the following:

- Coordinating the activities of the aesthetics, air quality, biological, cultural, greenhouse gas, hazards, water, land use, traffic, utilities, and noise APM requirements, including environmental monitoring
- Coordinating the development and implementation of the pre-construction environmental planning, permitting, and compliance activities
- Actively communicating with all agencies respective to the above APM requirements
- Submitting summary reports to responsible resource agencies, as identified in mitigation or other applicable regulation.

Crown Castle Lead Environmental Inspector

Crown Castle's lead environmental inspector (LEI) in the project contact list (Attachment B) will support the ECL for successful day-to-day field implementation of the MMCRP. The LEI's responsibilities include, but are not limited to, the following:

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- Coordinating with CPUC EMs as appropriate
- Coordinating the mobilization of other resource specialists, including cultural, Native American, paleontological, and stormwater pollution prevention plan (SWPPP) specialists, as required
- Conducting daily inspections of construction activities and reports
- Coordinating the assessment of work area conditions ahead of construction and providing advance notice of conditions and situations that require specific awareness, planning, or notifications
- Working closely with the EPM, ECL, CAs, and CPUC EMs to evaluate the effectiveness of APMs
- Providing coordination with the CAs and construction and engineering groups to ensure APMs are understood and implemented
- Providing and documenting environmental awareness training for project personnel
- Assisting the EMP and ECL with the preparation of Minor Project Refinement Request Forms.

Crown Castle Specialty Environmental Monitors

Several APMs require a qualified specialty monitor during construction or in the event of cultural resource discoveries, as presented in Section 4.3 of this MMCRP. Crown Castle is to provide an on-site specialty monitor to meet the conditions of the APMs identified in Section 4.3.

Contact information for all specialty EMs will be made available as consultant and contract personnel are finalized. The specialty EMs will provide oversight, protection, and direction for compliance within their field of expertise for the applicable construction components.

Additional Crown Castle Roles

Crown Castle Public Affairs

The Crown Castle public affairs manager provides information and guidance to both the project construction management team and the environmental management team, as needed.

Crown Castle Environmental Law Counsel

The Crown Castle senior counsel for the Environmental Law Counsel provides information and guidance to both the project management team and the environmental management team, as needed.

APM Compliance

Crown Castle is responsible for successfully implementing all APMs in the MMCRP. The MMCRP contains criteria that define whether measures are successful. Standards for successful mitigation also are implicit in many APMs that include such requirements as obtaining nondiscretionary permits or avoiding a specific impact entirely. Additional mitigation success thresholds may be imposed by applicable agencies with jurisdiction through the discretionary permit process.

2.1.2 California Public Utilities Commission

CPUC Project Manager

The CPUC PM (see Attachment B, Project Contact List) has the overall responsibility for ensuring that APMs are implemented as adopted by the CPUC. He will determine the effectiveness of the MMCRP based on the success criteria included in the mitigation monitoring program tables. The CPUC delegates field monitoring and reporting responsibilities to Dudek. The CPUC PM will oversee Dudek's work through telephone calls and review of daily and weekly status reports. The CPUC PM will be notified of all noncompliance situations immediately by telephone call or email and may suggest measures to help resolve the issue(s). All Minor Project Refinement Request Forms will be submitted to the CPUC PM for review and approval.

The CPUC PM will issue an NTP for construction. In the event the NTP covers other jurisdictional lands, the CPUC's NTP does not authorize construction to start, but only documents compliance with all relevant APMs and permit conditions. No construction may occur on other jurisdictional lands without specific approval (i.e., issuance of permits) by those agencies.

CPUC Environmental Monitors

The overall monitoring program will be administered under the direction and oversight of the CPUC PM. The CPUC has delegated daily monitoring and reporting responsibilities to Dudek, a third-party monitoring firm. Individual roles are defined in Attachment B, Project Contact List. The number of CPUC EMs and frequency of site inspections will depend on the number of concurrent construction activities and their locations with respect to sensitive resources and land uses, and compliance with project APMs and permit conditions during construction.

Crown Castle EMs have primary responsibility for ensuring that construction activities are conducted in accordance with approved project APMs, compliance plans, and permit conditions.

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The role of the CPUC EMs (Dudek) is to ensure and document that compliance is being achieved using verbal and written communications.

- Dudek Monitoring Manager. The monitoring manager supervises Dudek's EMs, as
 well as determining the appropriate level of inspection frequency, and is responsible for
 weekly report preparation. The monitoring manager also serves as the main point of
 contact with the CPUC PM for major issues and noncompliance discussions.
- **CPUC Environmental Monitors.** CPUC EMs will be an integral part of the project team and will stay apprised of construction activities and schedule changes, and will monitor construction activities for compliance with project APMs, compliance plans, and permit conditions. The CPUC EMs will document compliance through maintaining daily logs and using an APM tracking table. The CPUC EMs will also provide input for the draft weekly or bi-weekly reports. The CPUC EMs will note problems with monitoring, notify designated project members, and report the problems to the CPUC PM. The enforcement and shut-down authority of the CPUC EMs in the field is limited to issues that address imminent danger to resources. All other issues will be brought to the attention of the Crown Castle EMs to address appropriately.

2.1.3 Mitigation Monitoring Program Contact List

A project contact list has been included as Attachment B. The contact list includes the names of Crown Castle and CPUC EMs, PMs, supervisory staff, and other members of the project team. The list also includes phone numbers, cell phone numbers, and email addresses where project members can be reached during construction. The contact list will be updated periodically and redistributed to the project team.

2.2 Responsibilities

2.2.1 Monitoring

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required APMs are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. As mentioned in Section 2.1.2, the CPUC has delegated monitoring responsibilities to a third-party monitoring firm. The CPUC EMs will be in the field on a regular basis, particularly when construction activities have the potential to impact a sensitive resource. Responsible agencies, such as the USFWS, CDFW, and RWQCB, may elect to monitor construction or conduct a site visit during construction.

Crown Castle may elect to have one or more full-time EMs on site on a daily basis to coordinate specialty monitors and assist construction crews with interpreting APMs and correcting compliance

problems in a timely manner. EMs would also provide environmental training, as required under APM BIO-4, as new workers arrive on the project.

2.2.2 Enforcement

The CPUC and other jurisdictional agencies are responsible for enforcing the procedures adopted for monitoring through the CPUC EMs assigned to each project component.

Per Resolution E-4550 (May 9, 2013), the CPUC may impose fines in the event Crown Castle does not comply with APMs. CPUC staff will determine whether a fine is appropriate for noncompliance events consistent with Resolution E-4550. Examples of noncompliance that may result in fines being issued by CPUC staff include, but are not limited to, the following:

- Continuing construction after an authorized staff person has required construction to stop
- Starting construction components that have not been approved through an NTP
- Violating nest buffer zones
- Encroachment into an exclusion zone or sensitive resource area designated for avoidance
- Grading, line work, or other ground disturbance without required biological preconstruction surveys or biological monitor on site
- Use of new access roads, overland travel routes, staging areas, or extra workspaces that have not been approved
- Failure to properly maintain an erosion or sediment control structure
- Working outside of approved work hours
- Project personnel working without training.

Other jurisdictional agencies have the independent authority to halt construction, operation, or maintenance activities associated with the project within their respective jurisdictions if the activities are determined to be a deviation from the approved project or adopted APMs or put a sensitive resource at undue risk.

2.2.3 Mitigation Compliance

Crown Castle is responsible for successfully implementing all the APMs in the MMCRP. Standards for successful mitigation also are implicit in many APMs that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds may be imposed by applicable agencies with jurisdiction through the permit process.

Crown Castle shall inform the CPUC and its monitors in writing of any APMs that are not or cannot be successfully implemented. The CPUC, in coordination with its monitors, will assess whether alternative mitigation is appropriate and specify to Crown Castle the subsequent actions required.

2.3 Communication

Communication is a critical component of a successful environmental compliance program. In order to avoid project delays and possible shut-downs, environmental and construction representatives will need to interact regularly and maintain professional, responsive communications at all times. Similarly, Crown Castle representatives will need to coordinate closely with CPUC EMs to address and resolve issues in a timely manner. Therefore, this section of the MMCRP provides a communication protocol to accurately disseminate information about ongoing surveys and APMs, construction activities, contractors, and planned or upcoming work to all levels of the project team.

2.3.1 Pre-Construction Kickoff Meeting

A pre-construction meeting will be held with the CPUC, Crown Castle, and CPUC EMs to review the MMCRP and mutually agree on the project's communication protocol. Based on discussion at the meeting and input from each party, Section 2 of this document will be finalized and incorporated into the MMCRP.

2.3.2 Construction Progress Meetings

Crown Castle will conduct field meetings with construction managers, contract administrators, contractor supervisors, and Crown Castle's environmental representatives to discuss work completed, work anticipated for the following period, and the status of APMs. The field meetings will also be a forum for discussing environmental compliance issues or concerns with the construction contractors. Crown Castle may request CPUC's EM(s) to participate in the meeting to help resolve any issue that may have arisen during the previous period. Alternatively, Crown Castle or CPUC's EM(s) may recommend a separate meeting to discuss APMs, minor project refinement requests, or other project-related issues.

In addition to construction progress meetings conducted at the field level, the Crown Castle PM, Crown Castle construction manager, Crown Castle EM, and the CPUC lead EM and/or CPUC PM may participate in a teleconference calls. The teleconference calls would be similar to construction progress meetings; however, the conference calls would focus on the MMCRP.

2.3.3 Daily Communication

Many of the problems that come up during construction can be resolved in the field through regular communication between CPUC EMs, Crown Castle, and construction contractors. Field staff will be equipped with cell phones and available to receive phone calls at all times during construction. A project contact list has been included in Attachment B. The following sections provide additional guidelines to ensure effective communication in the field.

CPUC EM

The CPUC EM's primary point of contact in the field is Crown Castle's LEI. The CPUC EM will contact Crown Castle's LEI if an activity is observed that conflicts with one or more of the APMs, so that the situation can be corrected. If the CPUC EM cannot immediately reach Crown Castle's LEI, then the Crown Castle CA, PM, EPM, or ECL will be contacted to address the problem. Similarly, the CPUC EM will contact Crown Castle's LEI for information on where construction crews are working, the status of APMs, and schedule forecasts. The CPUC EMs will not direct the contractor; however, the EMs have the authority to stop work, assuming it is safe to do so, if an activity poses an imminent threat or puts a sensitive resource at undue risk (e.g., stopping a clearing crew from unknowingly clearing vegetation in an exclusion area).

Crown Castle

Crown Castle will provide the CPUC EMs with a list of construction monitoring personnel and construction supervisory staff to contact regarding compliance issues. The contact list will include each person's title, responsibility, and whether their position is segment specific. The contact list will be updated as new personnel are assigned to the project and redistributed as necessary.

Crown Castle will prepare and distribute a weekly construction status and MMCRP compliance report (weekly report) to key project members, including the CPUC. The weekly environmental compliance status reports may be reduced to bi-weekly if construction activities warrant a reduction and is approved by the CPUC PM. The CPUC PM will review the report to ensure that the status of APMs is consistent with observations in the field. Any questions regarding the status of APMs will be directed to the Crown Castle field representative. The environmental compliance status report will also be a tool to keep all parties informed of construction progress and schedule changes.

2.3.4 Communicating Compliance Issues

Section 3.1.4 describes procedures to communicate issues/concerns with implementation of mitigation identified by the CPUC EMs during site inspections.

2.3.5 Coordination with Other Agencies

As discussed in Section 1.4, several local, state, and federal agencies have jurisdiction over portions of the project. In addition, some of the APMs were derived from specific permit conditions or agency input. Crown Castle will be responsible for contacting resource agencies and immediately notifying them of issues regarding their jurisdiction. The CPUC EMs may request copies of email correspondence, phone logs, or other documentation between Crown Castle and resource agencies to avoid direct involvement from CPUC EMs. However, if there is an unresolved issue regarding compliance with an APM or permit requirement under the jurisdiction of a resource agency, the CPUC EMs may elect to contact the agency to discuss resolution. The CPUC EMs will coordinate this call with Crown Castle and provide the opportunity to participate in the call.

3 ENVIRONMENTAL COMPLIANCE AND FIELD PROCEDURES

3.1 Applicant Proposed Measures Compliance and Reporting

3.1.1 Pre-Construction Compliance Verification

Crown Castle is required by the terms of the APMs and the permitting requirements of various other regulating agencies to prepare plans and obtain approval of these documents, in addition to performing various surveys and studies prior to construction. Copies of this documentation will be retained by the CPUC EMs and provided to the CPUC with all files at the completion of the project. The plans, surveys, studies, and other documentation required to be completed by Crown Castle before construction are listed in the APM table in Section 4.3.

While these documents are being reviewed by the approving agencies, they are also reviewed by the CPUC. Compliance with all pre-construction APMs presented will be verified prior to construction, and construction may not start on any segment before Crown Castle receives a written NTP from the CPUC PM.

The CPUC EMs, including project management staff and the technical experts, will review all mitigation plans and reports and provide comments. Resource agencies will also be involved in the review of applicable plans and reports, primarily restoration related, and will provide comments. Comments on these documents will be provided to Crown Castle to ensure that they adequately accomplish the intended reduction in impacts. For required local and state agency permitting/consultations, the CPUC EMs will track Crown Castle's progress as it relates to Crown Castle's construction plans and project mitigation and permitting requirements. Based on Crown Castle's construction plans, CPUC may authorize construction to begin on a phased basis, and the CPUC EMs will handle pre-construction compliance review accordingly. CPUC may issue NTPs for construction of each phase separately, as soon as pre-construction compliance for that phase is satisfactorily accomplished.

The CPUC will not authorize construction to begin until all pre-construction requirements for a given phase have been fulfilled. To save time, Crown Castle should identify extra workspace required for each phase of construction prior to the start of active construction, so that the locations and their use can be included in the NTP.

3.1.2 Notice to Proceed Procedures

The CPUC PM and Dudek will ensure that the NTP process is consistent with the adopted CEQA document. The NTP approval shall document that pre-construction APM

requirements, applicable surveys and studies, and project permit requirements have been met.

In general, an NTP request must include the following information:

- A description of the work
- Detailed description of the location, including maps, photos, and/or other supporting documents
- Verification that all APMs have been met or do not apply to the work covered by the NTP request
- Verification that all applicable permit conditions or requirements, project parameters, or other project stipulations have been met for the work covered by the NTP request
- A request outlining what submittals are outstanding and how they will be met and approved in a timely manner prior to construction (if some outstanding compliance items cannot be met prior to issuance of the NTP)
- Up-to-date biological resource surveys or a commitment to survey and submit results prior to construction
- Cultural resource surveys or verification that no cultural resources would be significantly impacted
- All applicable jurisdictional permits or agency approvals (if necessary)
- Date of expected construction and duration of work.

The CPUC will review the NTP request and pre-construction requirement submittals per the steps outlined below to ensure that all information required to process the approval is included.

- 1. Crown Castle submits the NTP to the CPUC PM. The CPUC will distribute the NTP request for review as follows:
 - a. To the team biological resources expert for review for biological resources. Review questions/comments will be provided in a letter or email.
 - b. To the team cultural resources expert for review of cultural resources. Review questions/comments will be provided in a letter or email.
 - c. The remaining portions of the NTP request will be sent to issue-area reviewers where appropriate.
- 2. The CPUC will also review and, if needed, will prepare a bullet list of outstanding requirements and where additional information or clarification is needed.

- 3. All questions and comments, as well as required additional information or clarifications, will be sent to Crown Castle by the CPUC in an email.
- 4. Crown Castle will supply clarifications and/or additional information to be added to the NTP request in a memo or letter format along with responses addressing all comments and questions forwarded by the CPUC.
- 5. The CPUC will complete a compliance status table documenting compliance and any outstanding requirements that can be made conditions of the NTP.
- 6. The CPUC will review the draft NTP approval letter and send the approval and an updated compliance table to Crown Castle.
- 7. The CPUC will then post the approved NTP documentation on the public CPUC project website.

3.1.3 Compliance Reporting

As described in Chapter 2, the CPUC EMs will perform compliance inspection throughout the construction period to ensure compliance with all applicable APMs, plans, permits, and conditions of approval of the CPUC. Site visits may be coordinated with Crown Castle or conducted unannounced. Supplemental information provided by Crown Castle, including preconstruction submittals, survey reports, weekly reports, meeting notes, and agency correspondence, will also be used to verify compliance.

The CPUC EMs will document observations on site through the use of field notes and digital photography. The photos will be provided in the weekly or bi-weekly reports and correlate to a discussion of specific construction or compliance activity. In addition, field inspection forms will be utilized in the field to document compliance of specific crews, construction activities, or resource protection measures. The forms will provide a standardized checklist to facilitate inspections, as well as listing APMs that were verified during the site visit. Information gathered from the inspection forms and field notes will be used to generate weekly or bi-weekly status reports and update the status of APMs listed in Section 4.3. A sample site inspection form has been included in Attachment C. Weekly or bi-weekly reports will be provided to all permitting agencies via email and/or posted on a CPUC public website during construction.

Separate enforcement actions by the regulatory agencies may not follow these steps.

3.1.4 Compliance Levels

The CPUC EMs and Crown Castle LEI shall document all observations and communications in a logbook and will determine whether the observed construction activities are consistent with

APMs and project parameters, as adopted by the CPUC. All compliance issues, regardless of level, will be documented in the daily/weekly reports, which will be provided to all agencies upon request.

The CPUC EMs will not direct the work of a construction contractor or subcontractor. A construction activity that deviates from permit conditions or APMs, particularly when the activity puts a resource at risk, would be considered a noncompliance issue. A noncompliance issue may also be reported by the Crown Castle LEI and/or a CPUC EM if an APM is not implemented according to the timing restrictions listed in the APM table. Examples of noncompliance include, but are not limited to, the following:

- Use of new access roads, staging areas, or extra workspaces not identified on the project drawings or approved for use during construction
- Encroachment into an exclusion zone or sensitive resource area designated for avoidance
- Brush clearing outside the approved work limits
- Activity during seasonal activity restrictions
- Grading, soil disturbance, or line work without required biological pre-construction surveys or a biological monitor on site
- Failure of erosion or sediment control structures if it puts a sensitive resource at risk
- Discharge of sediment-laden trench or foundation hole water into a water body or storm drain.

Crown Castle will immediately notify the CPUC EMs and the CPUC PM if any noncompliance events occur, verbally or through email. Crown Castle will follow up with a detailed written report of the event within 24 hours or at a time agreed upon with the CPUC PM. In the event the noncompliance is observed by a CPUC EM, the CPUC EM will immediately notify the designated Crown Castle representative of a noncompliance issue that requires immediate corrective action. A noncompliance report (NCR) that outlines the incident will be sent to Crown Castle from the CPUC PM. The NCR will list all actions required to bring the activity back into compliance and provide a timeline for follow-up. All NCRs and project memoranda will be made available upon request to agencies with resources that were potentially affected by activities reported in the NCR. If a construction activity or observed resource protection measure only slightly deviates from project requirements and does not put a resource at immediate risk, the CPUC EM and/or Crown Castle LEI may elect to issue a project memorandum to get the issue corrected. Construction activities that could result in a project memorandum include, but are not limited to, the following:

• Failure to properly maintain an erosion or sediment control structure, without structural failure occurring

- Use of an existing unapproved access road (first offense)
- Project personnel beginning work on site without proof of training
- Work outside the approved work limits where the incident is within a previously disturbed area, such as a gravel lot.

Through the issuance of project memoranda and NCRs, patterns of compliance issues can be discerned, preventive measures can be developed, and remedial work, if needed, can be scheduled.

Incident reports (e.g., reportable spills) would also be tracked in the weekly reports. Repeated events that individually might not be considered noncompliance may become noncompliance if continued occurrences are observed and documented after the initial incident. In other words, repeated incidents will result in noncompliance.

Compliance and Noncompliance Violation Levels

Project compliance and noncompliance violation levels and the specific corrective actions are defined below. The compliance and noncompliance violation levels should be utilized by both Crown Castle LEI and CPUC EMs to document compliance levels throughout construction.

- Level 0 Compliance. This level indicates that all APMs and permit conditions are being complied with and there are no violations. No corrective action is necessary.
- Level 1 Minor Deviation. This level indicates that a minor deviation from an APM has been identified and action is being taken in the field to immediately remedy the situation. No resources are being impacted and no potential for resource damage exists. If a minor deviation is not expeditiously corrected, it would become a Level 2 Noncompliance issue.
- Level 2 Noncompliance. One or more aspects of an APM have not been complied with, making the mitigation ineffective and resulting in minor impacts. If allowed to continue, this noncompliance could result in a significant impact over time. Noncompliance may also include one or more of the aspects of an APM not being complied with and the implementation of an APM being deficient or nonexistent, resulting in significant impact(s), or immediate threat of major, irreversible environmental damage or property loss. The protocol outlined above for an NCR shall be completed in the event noncompliance is identified by a CPUC EM and/or the Crown Castle LEI.

All noncompliance activity will be reported by Dudek and/or the Crown Castle LEI to the CPUC PM via immediate notification or daily or weekly reporting, depending on the severity of the noncompliance. Based on the severity or pattern of noncompliance activity, the CPUC PM has the authority to shut down project construction activities. If a shutdown of construction activity occurs, construction shall not resume until the CPUC PM authorizes it to do so. No

Dudek personnel have the authority to shut down or restart construction activities on a component- or project-wide scale. However, CPUC EMs have the authority to redirect work if an immediate threat to safety of a sensitive resource is imminent.

3.2 Minor Project Refinements

The CPUC Energy Division may approve requests by Crown Castle for minor project refinements that may be necessary to complete the project due to final engineering or other reasons. Minor project refinements cannot create a new significant impact or a substantial increase in the severity of a previously identified significant impact, based on the thresholds used in the environmental document. Minor project refinements cannot require new conditions for approval, without which the proposed refinements would result in a new significant impact or a substantial increase in the severity of a previously identified significant impact. Minor project refinements cannot conflict with any APM or applicable law or policy or trigger an additional permit requirement. Specifically, minor project refinements must not change APMs. Minor project refinements must be located within the geographic boundary of the project study area of the Final EIR. Crown Castle shall seek any other project refinements by a petition to modify the decision.

Requests for staff approval of a project change must be made in writing and should include the following:

- A detailed description of the proposed refinements, including:
 - An explanation of how the project refinement would deviate from the current project (include photos)
 - o The original condition as described and approved
 - Justification for change
 - Maps and figures
 - Environmental impacts
 - o Concurrence with other relevant agencies
- Whether certain resources are present within the proposed refinement (e.g. biological or cultural resources), and whether those resources were included in original baselines surveys and/or previous analysis (also include more recent preconstruction surveys, if applicable)

• Identification of applicable CEQA sections, potential impacts of proposed refinements, including original and new levels of impact and avoidance/minimization measures to be taken.

The CPUC PM may request additional information or a site visit in order to process the request. Possible examples of project refinements that may be approved by staff after final engineering include, but are not limited to:

- Adding a temporary extra work area (for the duration of construction) or substituting a work area, including lay-down and staging, for another work area that is as suitable or more suitable than the originally proposed work area The temporary extra work area or substitute work area must be located in a disturbed area with no sensitive resources or sensitive land uses adjacent to the proposed area, must not create any permanent impacts, and must be restored to either its initial condition or an improved condition.
- Adjusting the alignment of a project within the study area that was utilized in the original
 environmental analysis to avoid unanticipated impacts related to cultural artifacts, buried
 utility infrastructure, hazardous and toxic substances, and other land use impacts
 including effects on homeowners, so long as the adjustment does not create a new impact
 or a substantial increase in the severity of a previously identified impact.
- Adjusting the alignment of a project within the study area that was utilized in the original
 environmental analysis to avoid or adapt to conditions on the ground that vary from the
 conditions that existed at the time of the original environmental analysis, so long as the
 adjustment does not create a new impact or a substantial increase in the severity of a
 previously identified impact.

To initiate a project refinement request, Crown Castle will fill out a Minor Project Refinement Request Form (see Attachment D), prepare the appropriate supporting documentation, and obtain the required signatures. Crown Castle will complete and submit the Minor Project Refinement Request Form and supporting documentation by email (scanned copy) to CPUC with a copy to Dudek.

3.3 Records Management

Daily inspection and weekly status reports will be filed and used by the CPUC third-party EM firm to prepare a final environmental compliance report following the completion of construction. The final report will provide a discussion on how each APM was implemented and include copies of submittals required for compliance. In addition, the success criteria will be evaluated and used for future projects.

3.4 Public Access to Records

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available by the CPUC for public inspection on request. In order to facilitate public awareness, the CPUC will make weekly or bi-weekly reports and other pertinent project documents accessible on their website at http://www.cpuc.ca.gov/environment/info/dudek/crowncastle/CrownCastleMain.htm.

4 MITIGATION MONITORING PROGRAM TABLE

4.1 Using the Table

Section 4.3 lists the APMs included in the Final EIR, published on April 22, 2013; corrections (identified in strikeout/underline) to APMs as identified in the August 2013 errata to the Final EIR; and APMs as adopted in the CPUC Decision 15-12-012, dated December 3, 2015.

The mitigation monitoring program table is the core document for environmental requirements on the project and will be the primary guideline for determining compliance with the MMCRP. A copy of the table should be kept with each crew working on site, and all supervisory staff working on the project should be familiar with its contents.

The CPUC will use a modified version of the APM table during the pre-construction planning and construction monitoring phases of the project to accurately track the status of APMs. The tables will be sorted and divided into pre-construction measures and measures to be implemented during construction. Similarly, a separate table listing APMs that require CPUC approval may be generated.

4.2 Effectiveness Review

The CPUC may conduct a comprehensive review of conditions that are not effectively mitigating impacts at any time it deems appropriate. If in review the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts. These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

4.3 Applicant Proposed Measures

Table 3, Applicant Proposed Measures for Each Issue Area, provides the APMs that compose the mitigation monitoring program.

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table						
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location			
		Aesthetics					
APM-AES-1	Keep construction and staging areas orderly, free of trash and debris, and restore areas disturbed by project construction along the proposed route to their pre-project condition.	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	CPUC to monitor to ensure trash and debris are removed from construction areas. Crown Castle to document existing conditions of areas to be disturbed and provide a copy to CPUC. Within 30-days of construction completion, Crown Castle to restore disturbed areas to pre-project conditions. Documentation of completion to be submitted to the CPUC within 2 weeks of restoration for verification.	During and post-construction.			
APM-AES-2	 Identify and comply with local regulations and requirements concerning architectural design; Design project facilities to be unobtrusive and to not conflict with the character of the surrounding setting; restore conduit installation sites to pre-construction conditions; and Prior to construction, consult with the local agencies associated with each project area regarding the appropriate architectural design practices that will be implemented before, during, and after construction. 	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	Crown Castle to submit to the CPUC documentation of consultation with local agencies and their concurrence that that project design features are compliant with local regulations. Restoration of conduit installation sites to be documented and reported as defined for APM-AES-1.	Prior to, during, and post-construction.			
APM-AES-3	As part of its standard construction operating procedure, ensure that construction lights will be directed away from	Crown Castle to implement measure as defined and	CPUC to ensure that commitments have been	Prior to and during			

Table 3
Applicant Proposed Measures for Each Issue Area

Mitigation Monitoring Program Table					
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location	
	the visual field of motorists and pedestrians along any streets or right-of-ways.	incorporate commitments into construction contracts.	incorporated into construction contract specifications.	construction.	
			CPUC to inspect periodically to ensure correct placement of lighting to prevent impacts to motorists and pedestrians.		
	,	Air Quality			
APM AQ-1	 Implement BAAQMD basic construction measures to reduce dust emissions Crown Castle will require all construction contractors to implement the following BAAQMD emission reduction measures to reduce dust emissions. All vehicle speeds on unpaved roads shall be limited to 15 mph. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The air district's phone number shall also be visible to ensure compliance with applicable regulations. 	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contract specifications. Crown Castle to provide a copy of the contact sign to the CPUC prior to construction. CPUC to inspect periodically that dust control measures are being implemented and that signs are publicly visible.	Prior to and during construction.	
APM AQ-2	 Implement BAAQMD basic construction measures to reduce exhaust emissions Crown Castle will require all construction contractors to implement the following BAAQMD emission reduction measures to reduce exhaust emissions. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the 	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contract specifications. CPUC to inspect periodically that idling restrictions are being implemented and that signs are	Prior to and during construction.	

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table					
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location		
	California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.		visible by construction crews.			
	Biolog	gical Resources				
APM-BIO-1	 Conduct spring surveys for special-status plants within the project area Prior to construction, a qualified botanist will complete spring surveys for special-status plants within the project area to determine the presence or absence of special-status plants. The survey will be completed by qualified botanists and will be conducted during the appropriate period(s) necessary to observe special-status plants known to occur in the region. If a population of a special-status plant species occurs within the project area, the population will be clearly staked and flagged in the field by a qualified botanist prior to construction so the population can be avoided. If the population cannot be avoided during construction, Crown Castle will minimize impacts by reducing the work area to the smallest area necessary to complete the work. Crown Castle will conduct 	Crown Castle to conduct spring surveys as defined. Crown Castle to stake and flag special-status plant species occurrences, where applicable. Crown Castle to provide documentation to the CPUC of consultation with USFWS and CDFW and the identified actions resulting from consultations, as applicable.	Crown Castle to provide survey report documentation and verification to CPUC of compliance with measure as defined. CPUC to inspect periodically that staking/flagging is in place and agency requirements are being implemented, as applicable.	Prior to and during construction.		

Table 3
Applicant Proposed Measures for Each Issue Area

Mitigation Monitoring Program Table					
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location	
APM-BIO-2	project activities and necessary ground disturbance in a manner that is consistent with the successful reestablishment of the species to the extent feasible. The specific actions necessary will depend on the biology of the species, and will be determined through consultation with the USFWS and CDFW. Generally actions include waiting for the plant species to go to seed and collecting the seed for future planting and saving the top 6 inches of top soil (which contains the seed bank) separate from other excavated soil. Conduct a preconstruction nesting survey to minimize impacts to nesting birds and raptors (February through August) If the proposed project is completed outside of the nesting season of birds, no additional measures will be necessary. If construction will take place during the nesting season (generally February through August) Crown Castle will conduct preconstruction nesting bird surveys. If an active nest is identified during the surveys, Crown Castle, in consultation with CDFW and USFWS, will establish a noconstruction zone until the breeding season is completed or subsequent bird/raptor surveys confirm that all offspring have fledged and no new nests have been established. Generally, these no construction zones are 50 feet for passerine birds and 250 feet for raptors.	Crown Castle to conduct nesting survey as defined. Crown Castle to identify a noconstruction zone, as defined, and where applicable. Crown Castle to provide documentation to the CPUC of consultation with USFWS and CDFW and the identified actions resulting from consultations, as applicable.	Crown Castle to provide survey report documentation and verification to CPUC of compliance with measure as defined. CPUC to inspect periodically that no-construction zone(s) are being avoided and agency requirements are being implemented, as applicable.	Prior to and during construction.	

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table					
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location		
APM-BIO-3	 Conduct preconstruction survey to minimize impacts to wintering monarch butterflies for construction in late fall and winter months If the proposed project is scheduled to occur during the late fall and winter months and trimming of eucalyptus trees is required, a biologist will conduct a preconstruction survey to determine if the trees that require trimming and the surrounding trees support overwintering clusters of monarch butterflies. If clusters of monarch butterflies are present, Crown Castle, in consultation with CDFW, will establish a no construction zone until after the monarch butterflies have migrated. Generally, this no construction zone is 30 feet from wintering monarch butterflies. 	Crown Castle to conduct preconstruction survey as defined. Crown Castle to identify a noconstruction zone, as defined, and where applicable. Crown Castle to provide documentation to the CPUC of consultation with CDFW and the identified actions resulting from consultations, as applicable.	Crown Castle to provide survey report documentation and verification to CPUC of compliance with measure as defined. CPUC to inspect periodically that no-construction zone(s) are being avoided and agency requirements are being implemented, as applicable.	Prior to and during construction.		
APM-BIO-4	 Measures to minimize impacts to California red-legged frogs, San Francisco garter snakes, and western pond turtles Work should be avoided from October 16 (or the first measurable rainfall of 1 inch or greater) to May 14. If work cannot be avoided during this period then it is recommended that a qualified biological monitor be present for all ground-disturbing activities. It is recommended that a qualified biologist familiar with California red-legged frogs, San Francisco garter snake, and western pond turtle conduct a preconstruction survey immediately prior to construction in areas where ground disturbance will occur. During 	Crown Castle to retain qualified biological monitor(s), as applicable. Crown Castle to conduct preconstruction survey as defined and flag avoidance areas, as applicable. Crown Castle to implement a worker environmental awareness training program.	Crown Castle to provide verification to CPUC of compliance with measure as defined. Crown Castle to provide survey report documentation and verification to CPUC of compliance with measure as defined. Crown Castle to provide a copy of worker environmental awareness	Prior to and during construction.		

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table						
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location			
	the preconstruction survey, the biologist will also look for and identify burrows that could be used by California red-legged frogs. These areas will be flagged (as practical) for avoidance. The biologist will remain on site for the duration of any construction activities involving excavation or the use of heavy machinery or equipment. Prior to work the construction crew will receive worker environmental awareness training. Training will include review of environmental laws and protective measures that must be followed by all personnel to reduce or avoid effects on protected species during construction activities. Any holes, trenches, pits, and/or tanks that are left open overnight will either be covered to prevent entry or one side will be sloped to allow wildlife to escape. Open holes, trenches, pits, and/or tanks left overnight will be checked by a qualified biologist at the start of construction each day to determine whether trapped wildlife are present. If wildlife are present, they will be removed by the biologist before the hole, trench, or pit is filled. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.	Crown Castle to implement measures to minimize wildlife trapping and impacts, as defined. Crown Castle to implement wildlife handling and avoidance measures, as defined.	training materials to CPUC. Crown Castle to provide resumes of qualified biologists to CPUC. CPUC to inspect periodically that wildlife protection and avoidance measures are being implemented during construction.				

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table				
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location	
	 Handling of California red-legged frogs is prohibited without a valid federal take permit and handling of San Francisco garter snakes is prohibited without a valid federal take permit and a CESA Section 2081 Incidental Take Permit. Any California red-legged frogs or San Francisco garter snakes observed on the work site will be allowed to move offsite on their own. If California red-legged frogs, San Francisco garter snakes, and western pond turtles are observed on or adjacent to the work site, and are in danger of injury, construction in the vicinity will cease until no danger exists for California red-legged frogs or San Francisco garter snakes. 				
	Cultu	ıral Resources			
APM-CUL-1	 If buried cultural resources, such as chipped or ground stone, historic debris, building foundation, or human bone, are inadvertently discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate measures in consultation with the CPUC, State Historic Preservation Officer, and other appropriate agencies. In the event that fossil remains are encountered, either by the cultural resources monitor or by construction personnel, qualified paleontological specialists will be contacted. Construction within 100 feet of the find in non-urban areas and 50 feet in urban areas will be 	Crown Castle to retain qualified archaeological and paleontological monitor(s), as applicable. Crown Castle to implement work stop and consultation actions, as defined and as applicable. Crown Castle to provide documentation to the CPUC of consultation with SHPO and other agencies and the identified actions resulting from	Crown Castle to provide assessment documentation and verification to CPUC of compliance with measure as defined and as applicable. Crown Castle to provide resumes of qualified archaeologists/paleontologists CPUC. CPUC to inspect periodically that identified cultural resources sites are avoided and agency	During construction.	

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Mo	nitoring Program Table		
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
	temporarily halted or diverted until a qualified vertebrate paleontologist examines the discovery.	consultations, as applicable.	requirements are being implemented, as applicable.	
	Greenhou	use Gas Emissions		
APM GHG-1	Implement BAAQMD Best Management Practices to reduce GHG emissions To ensure that short-term GHG emissions are reduced as much as feasible and the proposed project does not result in a considerable contribution to GHG levels, Crown Castle will require all construction contractors to implement the following GHG emission reduction measures to the extent they are feasible. • Using alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15% of the fleet. • Recycling or reusing at least 50% of construction waste or demolition materials.	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contract specifications. Crown Castle to provide verification to CPUC of compliance with measure as defined.	During and post-construction.
	Hazards and Haza	ardous Materials/Fire Safety		
APM-HAZ-1	 Ensure proper labeling, storage, handling, and use of hazardous materials in accordance with best management practices and the Occupational Safety and Health Administration's HAZWOPER requirements. Ensure that employees are properly trained in the use and handling of hazardous materials and that each material is accompanied by a material safety data sheet. Any small quantities of hazardous materials stored temporarily in staging areas will be stored on pallets within fenced and secured areas and protected from exposure to weather. Incompatible materials will be stored separately, as appropriate. 	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	Crown Castle to document compliance with this measure. Crown Castle to provide verification to CPUC of worker training program and compliance with measure as defined. CPUC to inspect periodically that hazardous materials storage is being implemented, as defined.	During construction.

Table 3
Applicant Proposed Measures for Each Issue Area

Mitigation Monitoring Program Table				
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
	 All hazardous waste materials removed during construction will be handled and disposed of by a licensed waste disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal or recycling facility, to the extent necessary to ensure the area can be safely traversed. Significant releases or threatened releases of hazardous materials will be reported to the appropriate agencies. 			
Hydrology and Water Quality				
APM-HYD-1	Prior to non-storm discharges into surface waters, provide documentation of obtaining all necessary and applicable approvals, including the following: • Implementation of appropriate Best Management Practice (BMP's) to minimize the potential for stormwater pollutants. These BMPs may include, but not necessarily be limited to, the utilization of settling ponds or screens to reduce suspended sediment loads	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	Crown Castle to provide documentation of approvals to CPUC, including submittal of construction contracts, at least 2 weeks prior to construction of the applicable phase(s). CPUC to inspect periodically that BMPs are being implemented, as required by responsible agencies.	Prior to construction.
APM-HYD-2	Erosion Controls:	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	Crown Castle to document compliance with this measure. CPUC to inspect periodically that BMPs are being implemented, as required by responsible agencies. Crown Castle to document existing conditions of areas to be excavated and provide a copy to	During and post- construction.

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table						
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location			
	soil will be replaced and the area restored to pre- construction conditions.		CPUC. Within 30-days of construction completion, Crown Castle to restore excavated areas to pre-project conditions. Documentation of completion to be submitted to the CPUC within 2 weeks of restoration for verification.				
		Land Use					
APM-LU-1	Submit written documentation, including evidence of review by the appropriate public works, planning, and/or community development agency for the applicable jurisdictions. This documentation will include the following: • Site plan showing the dimensions and location of the finalized alignment; • Evidence that the project meets all necessary requirements; • Evidence of compliance with design standards; • Copies of any necessary permits or conditions of approval; and • Records of any discretionary decisions made by of the applicable jurisdictions.	Crown Castle to provide written documentation of agency review to the CPUC, as defined.	CPUC to review agency responses to Crown Castle submittals.	Prior to construction.			
		Noise					
APM-NOI-1	 Require construction contractors to comply with the construction-hour limitations and construction equipment standards set forth by each local jurisdiction. All equipment will have sound-control devices no less 	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	Crown Castle to document compliance with this measure. CPUC to inspect periodically that noise reduction measures are	During construction.			

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Monitoring Program Table					
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location		
	 effective than those provided on original equipment; No equipment will have an unmuffled exhaust; Construction equipment will be located as far from sensitive receptors (e.g., residences, schools, places of worship, and hospitals) as possible; and If traffic control devices requiring electrical power are employed within 500 feet of sensitive receptors, the devices will be battery/solar powered instead of powered by electrical generators. In addition, implement a variety of measures to reduce noise levels from directional boring where noise levels of 60 dBA or greater will be experienced at sensitive receptor locations. For example: Special mufflers can be applied to the boring rig exhaust; Shielding can be erected between the noise source and the receptor; or As an extreme measure, a temporary enclosure can be erected to house the boring operation. Implement all reasonable and customary noise reduction measures and post the name and telephone number of a person for the public to contact to resolve noise-related problems. 		being implemented, as defined.			
		Traffic				

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Mo	nitoring Program Table		
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
APM-TRA-1	 As deemed necessary by the applicable jurisdiction, the road encroachment permits may require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction. Identify all roadway locations where special construction techniques (e.g., directional drilling or night construction) will be used to minimize impacts to traffic flow. Develop circulation and detour plans to minimize impacts to local street circulation. This will include the use of signage and flagging to guide vehicles through and/or around the construction zone. Schedule truck trips outside of peak morning and evening commute hours. Limit lane closures during peak hours to the extent possible. Use haul routes minimizing truck traffic on local roadways to the extent possible. Include detours for bicycles and pedestrians in all areas potentially affected by project construction. Install traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones. Store construction materials only in designated areas. Coordinate with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. 	Crown Castle to prepare construction traffic plan, as defined, if required by the applicable jurisdiction. Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	Crown Castle to provide documentation to the CPUC of either: approval of the traffic control plan by the applicable jurisdiction or written documentation from the applicable jurisdiction that a traffic control plan is not required prior to construction. Crown Castle to implement measure, as defined. CPUC to inspect periodically that traffic control measures are being implemented, as defined.	Prior to and during construction.
APM-TRA-2	To avoid impeding emergency vehicle traffic around the	Crown Castle to prepare an	Crown Castle to provide a copy of	Prior to and

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Mo	nitoring Program Table		
APM No.	Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
	 construction activities, develop an Emergency Vehicle Access Plan that includes the following: Evidence of advanced coordination with emergency service providers, including but not necessarily limited to police departments, fire departments, ambulance services, and paramedic services; Emergency service providers will be notified of the proposed project locations, nature, timing, and duration of any construction activities, and will be asked for advice about any road access restrictions that could impact their response effectiveness; and Project construction schedules and routes designed to avoid restricting movement of emergency vehicles to the best extent possible. Provisions to be ready at all times to accommodate emergency vehicles at locations where access to nearby properties may be blocked. Provisions could include the use of platings over excavations, short detours, and/or alternate routes. 	emergency vehicle access plan, as defined, with documentation of coordination with emergency service providers. Crown Castle to implement plan measures as defined and incorporate commitments into construction contracts.	the emergency vehicle access plan and documentation of agency approval to the CPUC prior to construction. Crown Castle to implement emergency vehicle access plan measures. CPUC to inspect periodically that emergency vehicle access plan measures are being implemented.	during construction.
APM-TRA-3	Prepare and implement a traffic safety plan and coordinate with local transportation and emergency response agencies to avoid potential roadway safety hazards.	Crown Castle to prepare a traffic safety plan, as defined, and coordinate with local agencies.	Crown Castle to provide a copy of the traffic safety plan and documentation of agency approval to the CPUC. Crown Castle to implement traffic safety plan measures. CPUC to inspect periodically that traffic safety plan measures are	Prior to and during construction.

Table 3
Applicant Proposed Measures for Each Issue Area

	Mitigation Mo	nitoring Program Table		
APM No.	Applicant Proposed Measure	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location	
APM-TRA-4	Limit all parking to right-of-way and pre-approved staging areas to address the increased parking demand created by construction activities. Crown Castle to impleme measure as defined and incorporate commitments construction contracts.		being implemented. CPUC to ensure that commitments have been incorporated into construction contract specifications. Crown Castle to provide verification to CPUC of compliance with measure as defined.	During construction.
	Utilities a	nd Service Systems		
APM-USS-1	Recycle and dispose of construction materials to minimize generation of solid waste resulting from construction activities.	Crown Castle to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contract specifications. Crown Castle to provide verification to CPUC of compliance with measure as defined.	During and post- construction.

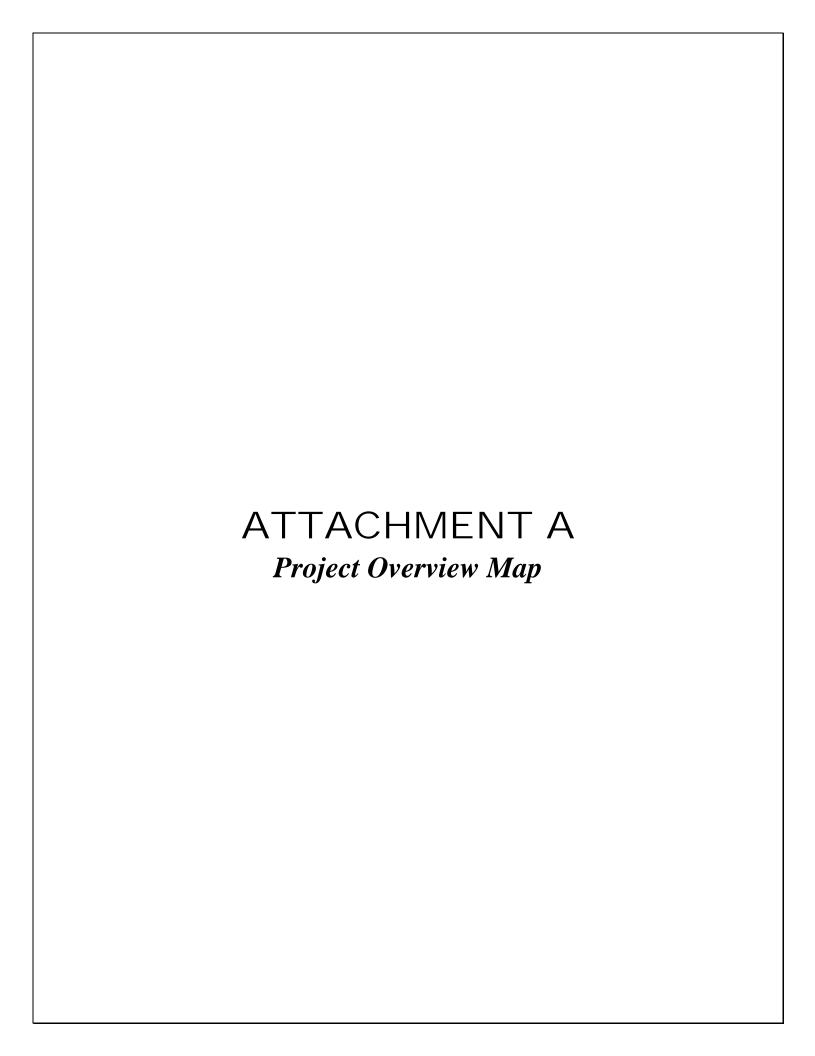
Note: APMs are considered part of the project design, but project approval is contingent upon Crown Castle's adherence to all aspects of the proposed project as described in this document, including project description, and APMs.

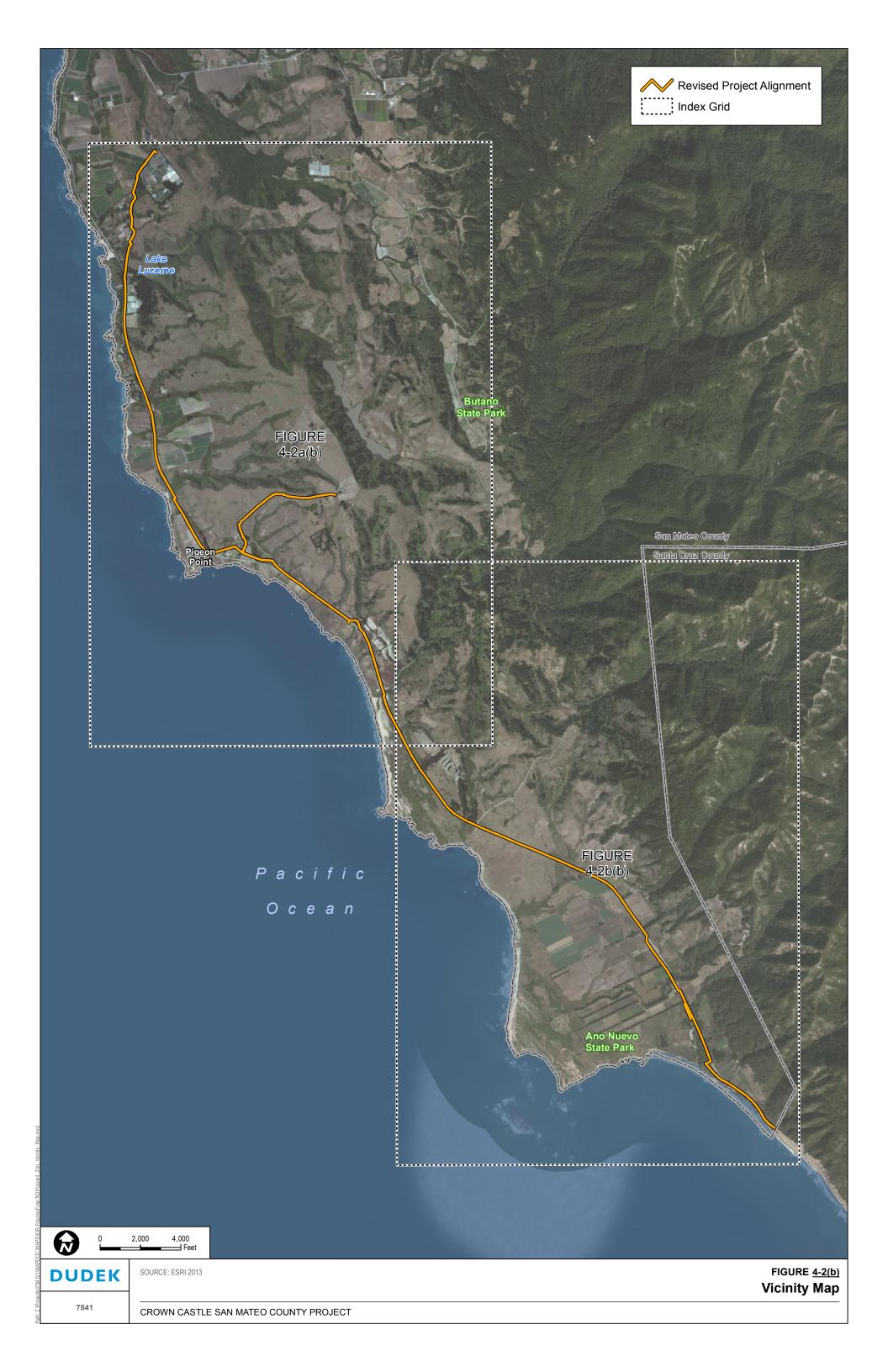
5 REFERENCES

- 14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- CPUC (California Public Utilities Commission). 2015. *Final Negative Declaration*. Prepared by Dudek for CPUC. San Francisco, California: Dudek. May 2015.

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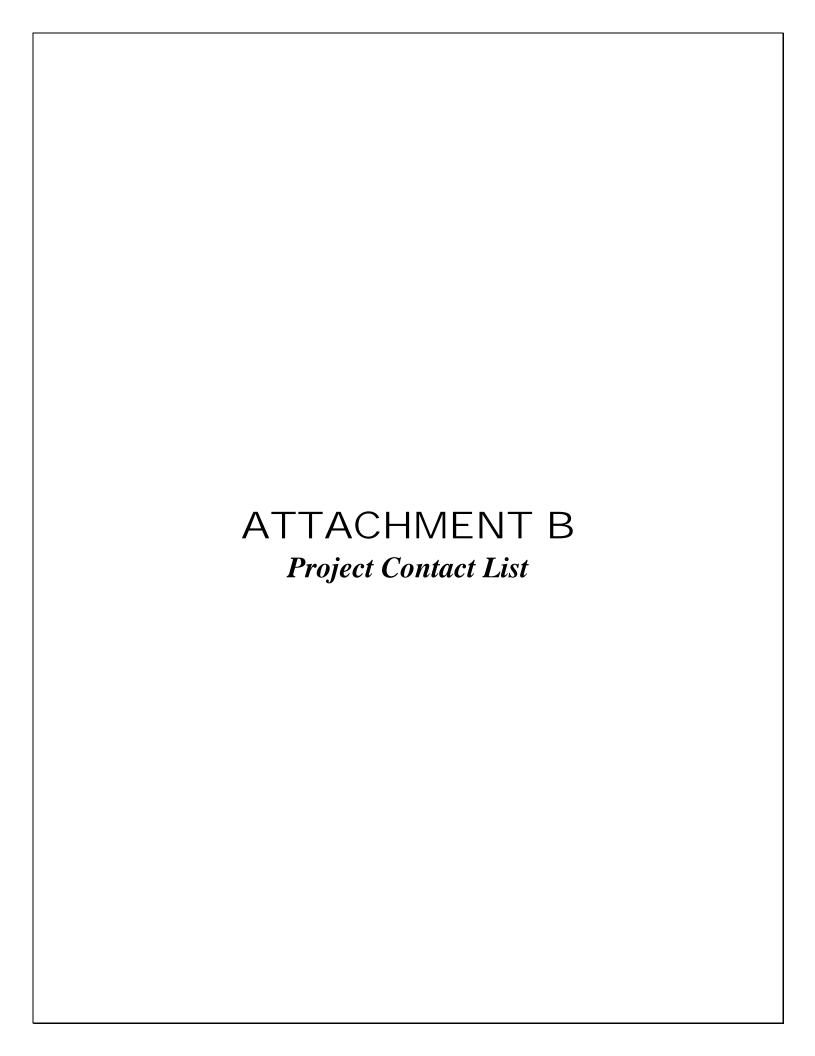
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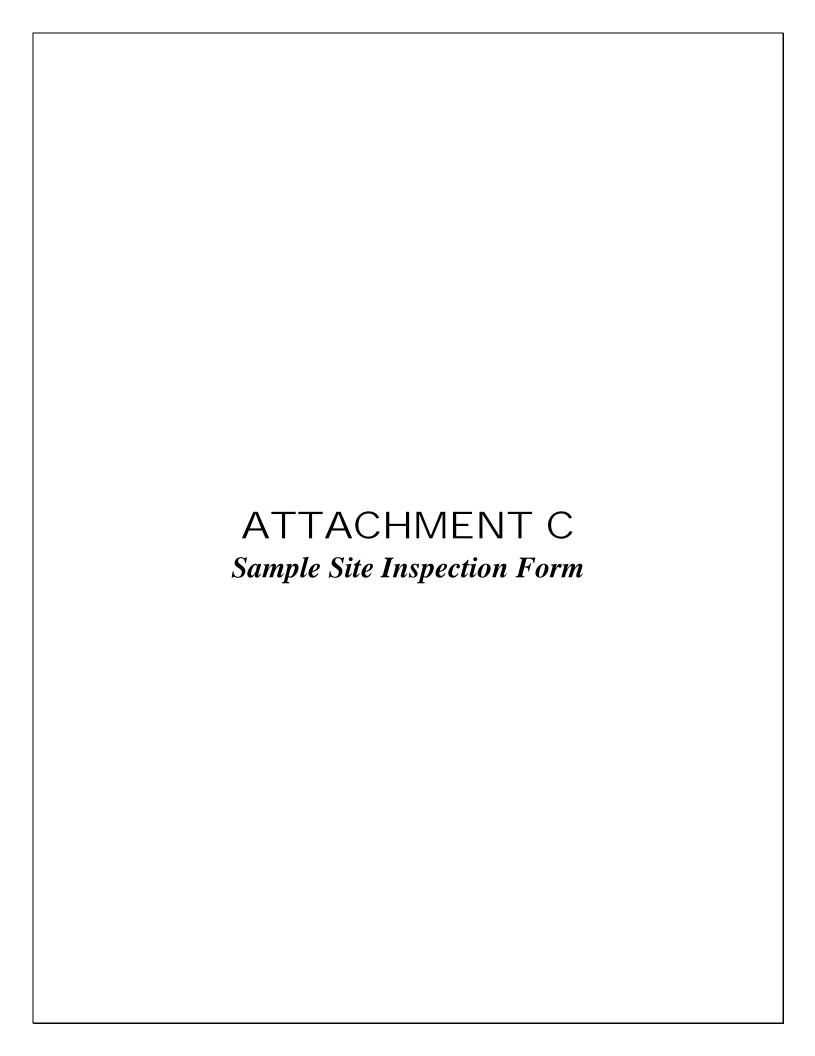






Crown Castle: San Mateo Project PROJECT CONTACT LIST

Title	Name/ Contact Information
Crown Castle Management Team	
District Manager	Carl Cabico, Crown Castle
	Carl.Cabico@crowncastle.com
Regulatory Manager	Sharon James, Crown Castle.
	(408) 468-5553
	<u>Sharon.James@crowncastle.com</u>
Project Manager	John Griffiths, Crown Castle
	(707)756- 3030
	John.Griffiths@crowncastle.com
Aerial/Underground Fiber Lead	Larry Thorne, Crown Castle
	Fiber Engineer 805-704-4909
	Larry.Thorne@crowncastle.com
Project Coordinator	Nicole Akhverdiyeva, Crown Castle
1 Toject Goordinator	408-468-5533
	Nicole.Akhverdiyeva@crowncastle.com
Environmental Monitoring Team	
Environmental Project Manager	John Howe, ICF International
	Office: (916) 231-9567
	Cell: (916) 798-5923
	John.Howe@icfi.com
Environmental Compliance Lead	Torrey Edell, ICF International
	Cell: (408) 216-2829
	Torrey.Edell@icfi.com
Environmental Monitor	John Holson, ICF International
	Office: (916) 231-9557
	Cell: (916) 320-6953 John.Holson@icif.com
Archaeological or Biological Specialists	To be identified as needed.
Construction Contractor: HP Communications	TO be lucitified as freeded.
	TDD UD Comm
Superintendent and other positions	TBD, HP Comm.





MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

Site Inspection Form

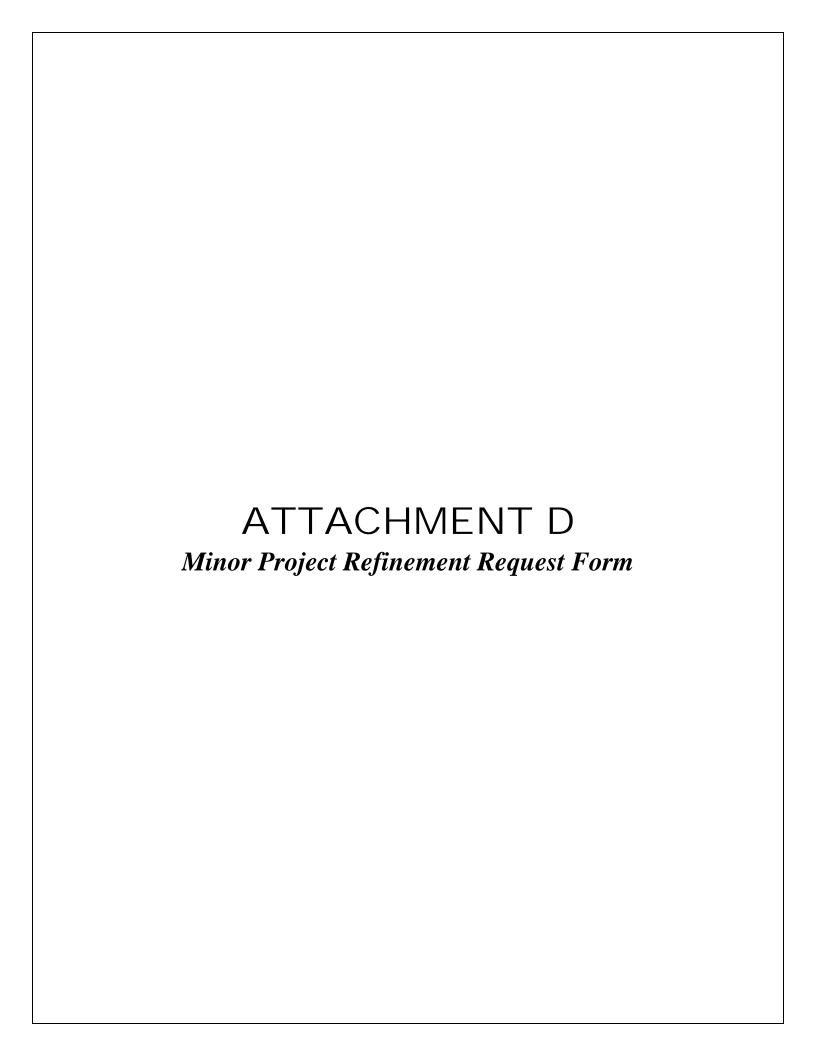
Project:	San Mateo County Project (Application No. 13-02-007)	Date:	
Owner:	Crown Castle NG West, Inc.	Project Component:	
Project Manager:	TBD	Report Number:	
Lead Agency:	California Public Utilities Commission	Representative:	Jensen Uchida

SITE INSPECTION CHECKLIST

Air Quality	Yes	No
Is dust control being implemented (i.e., access roads watered, haul trucks covered, streets		
cleaned on a regular basis)?		
Do vehicles or equipment appear to be idling unnecessarily?		
Biology	Yes	No
Are appropriate measures in place to protect sensitive habitat (i.e., flagging, signage, exclusion fencing, biological monitor)?		
Are all activities being conducted within the approved work limits?		
Have impacts occurred to adjacent habitat (sensitive or non-sensitive)?		
Cultural and Paleontological Resources	Yes	No
Are known cultural resources clearly marked for exclusion?		
Is a cultural monitor on site if grading is occurring near known cultural sites?		
Is a paleontological monitor on site if grading is occurring (see mitigation measure for specifications)?		
Hazardous Materials	Yes	No
Have all spills been cleaned up in accordance with the project's SPCC?		
Are fuels, oils, lubricants, and other hazardous materials on site labeled and stored in appropriate containers?		
Water Quality	Yes	No
Have temporary erosion and sediment control measures been installed?		
Are BMPs in good condition and functional?		
Is mud tracked onto roadways cleaned up in accordance with the project's SWPPP?		

DESCRIPTION OF OBSERVED ACTIV	/ITY	
MITIGATION MEASURES VERIFIED		
COMPLIANCE		
Project is in compliance with	environmental mitigation measur	res
☐ Minor Deviation		
Non-Compliance Report		
ISSUES REQUIRING FOLLOW-UP:		
Issue Requiring Follow-Up	SDG&E Notification	Corrective Actions Implemented by SDG&E

FIIOLOS.		
	<u>_</u>	
Completed by: Name: Firm: Date:		Distribution:



CROWN CASTLE NG WEST, INC. SAN MATEO COUNTY PROJECT MINOR PROJECT REFINEMENT REQUEST FORM

Date Submitted:			Request #:				
Date Approval Required:			Landowner:				
APN:							
Refinement from (check all tha	t apply):						
☐ Mitigation Measure	☐ APM ☐ Project Description ☐ Drawing ☐ Other						
Identify source (mitigation mea	Identify source (mitigation measure, project description, etc.):						
Attachments (check all that app	oly):						
☐ Refinement Screening Form (see Attachment A)	☐ Photos		□ Maps			Other	
As identified in Section 5.2 of the circumstances. In accordance we (a) through (d).							
(a) Is the proposed refinement of	outside the geogra	phic bou	ındary of the IS/N	D stud	y area?		
(b) Will the proposed refinement previously identified signific						the severity of a	
(c) Does the proposed refinement						cy?	
(d) Does the proposed refineme	nt trigger an addi	itional pe	ermit requirement	?			
Describe refinement being requ	ested (attach dra	wings an	d photos as needed	d):			

Provide need for refinement (attach drav	vings and	l pho	tos as needed)	:			
D-4	- h - !1	43-						
Date refinement is expected to	o be implem	entea:						
Crown Castle Approvals	3							
Title	Title				Approval Initials	Date		ditions ttached)
District Manager							□ Yes	□No
Regulatory Manager							□ Yes	□No
Landowner Approval (if	required)						
Landowner Nam	ie		Si	gnature or O (see atta		t	Г	Date
Resource Agency Coord	ination							
Resource Agency	Na	ame		Action Required	Date		Documentation (see attached if yes)	
						□ Y	Zes	□ No
							Zes	□No
						□ Y	/es	□ No

ATTACHMENT A: REFINEMENT REQUE	EST SCREENING FORM

MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

RESOURCE EVALUATION

The proposed minor project refinement was evaluated to verify that the minor project refinement would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the IS/ND. The following table provides a brief summary of the potential impact for each resource area analyzed in the IS/ND.

IS/ND Section	Summary of Potential Impacts
Aesthetics	
Agriculture and Forestry Resources	
Air Quality	
Biological Resources	
Cultural Resources	
Geology and Soils	
Greenhouse Gas Emissions	
Hazards and Hazardous Materials	
Hydrology and Water Quality	
Land Use and Planning	
Mineral Resources	
Noise	
Population and Housing	
Public Services	
Recreation	
Transportation and Traffic	
Utilities and Service Systems	

ATTACHMENT B: SITE MAP

ATTACHMENT C: REPRESENTATIVE PHOTOGRAPHS

	Minor Project Refinement Request # Attachment C: Representative Photographs	
Photograph 1:		
Photograph 2:		