

## **ATTACHMENT C**


# **AT&T Corporation NexGen/Core Fiber Optic Telecommunications System Project**

## **Mitigation, Monitoring and Reporting Plan**

**(Presented by the applicant as the Mitigation and Monitoring Plan)**

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EXHIBIT NO. 7
APPLICATION NO. <b>6-01-104</b>
Mitigation and Monitoring Report
 California Coastal Commission

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## MITIGATION AND MONITORING PLAN

### 1. INTRODUCTION

#### 1.1 PURPOSE

The purpose of this Mitigation and Monitoring Plan is to describe the mitigation monitoring process of AT&T NexGen/Core Project in detail, including the mitigation measures involved. The mitigation monitoring process is vital for ensuring that measures proposed to mitigate significant environmental impacts are implemented.

Important criteria for the success of the plan include:

- Ensuring that all environmental requirements are met during the preconstruction, construction, post-construction/restoration and post-construction/operational phases of the project.
- Coordinating inspection, monitoring and enforcement activities of the agencies, who, since project activities would simultaneously affect various environmental resources, may have overlapping jurisdictions.
- Establish clear roles and responsibilities and lines of authority for agency and proponent personnel involved in the project.

#### 1.2 SCOPE

This plan incorporates the mitigation measures that will be implemented for the protection of environmental resources as determined by the California Environmental Quality Act (CEQA). The mitigation measures adopted for the project by the California State Lands Commission (CSLC) were derived from mitigation measures proposed by CSLC and through the environmental analysis culminating in the project's Draft Mitigated Negative Declaration/Initial Study. This Plan involves all of the measures that meet the requirements of the CSLC, and incorporates other mitigation as required by federal, state, or local actions on the project.

#### 1.3 AGENCY REQUIREMENTS

It is the standard practice of the CSLC to require that mitigation measures predetermined as conditions of approval be implemented properly, monitored, and reported on. This Mitigation Monitoring Plan represents the CSLC regulation of the project. To the extent authorized, the plan can also be a means of enforcement of certain requirements of individual agencies. A well-organized compliance monitoring plan is essential to the successful planning and completion of the AT&T NexGen/Core Project.

## 2. PROJECT SUMMARY

### 2.1 PROJECT PROPONENT

AT&T Corp. (AT&T) is a telecommunications company incorporated in the state of New York with a certificate from the State of California as a foreign corporation in good standing. AT&T is in the process of greatly expanding its nationwide telecommunication system to meet customers' demands for high-speed bandwidth and Internet-based services nationwide. AT&T in proposes to develop a new fiber optic telecommunications system in five links from Lamesa, Texas to Los Angeles, California. Two links are entirely in California and the other has a small portion in California. They are:

Link Three: Colorado River to Blythe, California (2.3 miles)

Link Four: Blythe, California, to San Diego, California (220 miles)

Link Five: San Diego, California, to Los Angeles, California (151 miles)

### 2.2 PROJECT LOCATION

The route in California covers 374 miles from the border with Arizona on the bridge over the Colorado River on the Interstate 10 (I-10) freeway to Los Angeles, California via El Centro and San Diego, California (Figure B-1). The route begins as a rural build, enters the city of Blythe to connect the local Point of Presence (POP) at 217 7th Street in Blythe, California with the nationwide system. From Blythe to the regional POP in San Diego at 650 Robinson Street, the route is a rural build and will follow public road ROW for the entire link. The proposed route travels in a southwesterly direction along Highway 78 and old Highway 80 through the following city jurisdictions: Blythe, Brawley, El Centro, El Cajon, Lamesa, and San Diego. In addition, the route will pass through large portions of unincorporated areas in all three counties and will also cross Cleveland National Forest, BLM land, and the La Posta and Campo Indian Reservations.

The proposed project will continue north from San Diego and add to the existing AT&T system infrastructure between the following seven regional POPs:

- 650 Robinson Street, San Diego, CA
- 2225 Mission Avenue, Oceanside, CA
- 28302 Marguerite Parkway, Mission Viejo, CA
- 1241 West Alton Street, Santa Ana, CA
- 217 Lemon Street, Anaheim, CA
- 5077 East Lew Davis, Long Beach, CA
- South Grand Avenue, Los Angeles, CA

From the POP in San Diego the route moves north as a mixture of urban and suburban build through the cities of Encinitas, Carlsbad, and Oceanside to the southern boundary of Camp

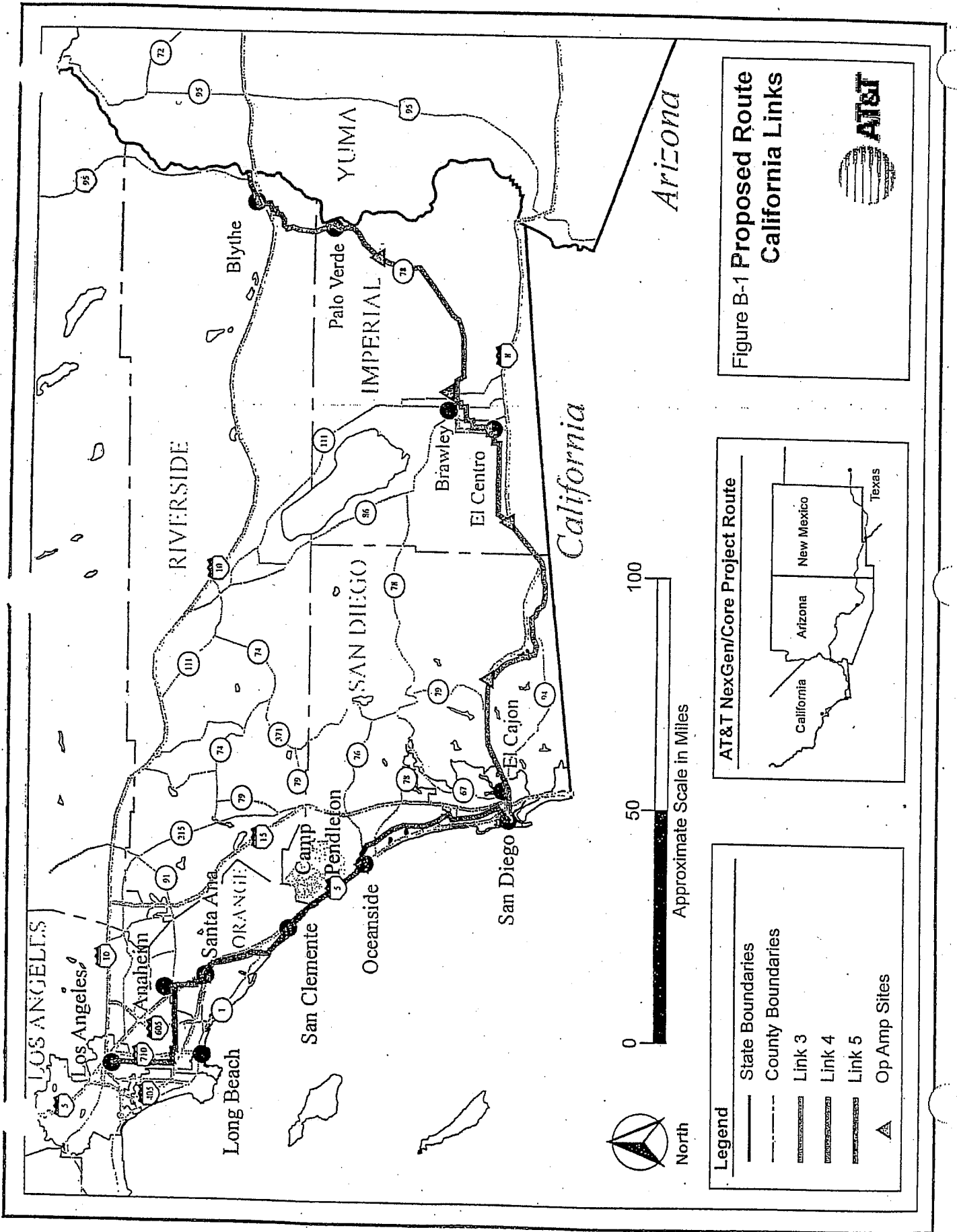
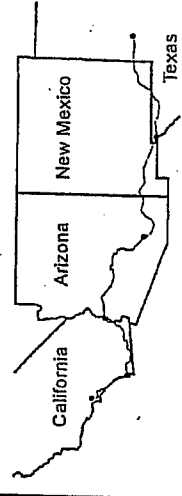


Figure B-1 Proposed Route California Links



AT&T NexGen/Core Project Route



**Legend**

- State Boundaries
- - - County Boundaries
- ▬ Link 3
- ▬ Link 4
- ▬ Link 5
- ▲ Op Amp Sites

North

0 50 100

Approximate Scale in Miles

Pendleton. Within Camp Pendleton, the route is on or immediately adjacent to Stuart Mesa Road and El Camino Real. At the north end of Camp Pendleton, the route follows El Camino Real (old Highway 101) through the San Onofre State Park, crossing into Orange County and the City of San Clemente on Avenida Del Presidente. It travels north in an urban build through San Clemente and Dana Point to the POP in Mission Viejo. From there it proceeds north as an urban build through Mission Viejo, Laguna Hills, Irvine, Santa Ana, Garden Grove, and Anaheim in Orange County. It then crosses into Los Angeles County and through the cities of Cypress, Hawaiian Gardens, Lakewood, Long Beach, Compton, Lynwood, South Gate, Huntington Park, and Vernon before terminating in the City of Los Angeles at the POP.

### 3. RESOURCE IMPACT AND MITIGATION TABLE

Table B-1 of this plan presents the mitigation measures that apply to the AT&T NexGen/Core Project. The table has been developed based on the environmental impacts and mitigation measures presented in the AT&T's application and supporting documentation the environmental review conducted by CSLC resulting in the Draft Mitigated Negative Declaration/Initial Study. The CSLC has determined that with the implementation of the mitigation measures presented in the table, no significant impacts will occur as a result of construction and operation of the AT&T NexGen/Core Project.

The table provides a brief description of the potential impact, the mitigation measure(s) developed to reduce or avoid the impact, the specific area(s) (OpAmp site, stream crossings, etc.) that the mitigation measure needs to be applied to, the monitoring/reporting action required to document compliance with the measure, any performance criteria that applies to demonstrate success of the mitigation measure, the responsible agency overseeing implementation or compliance, and the timing (before, during, or after construction) in which the mitigation measure needs to be implemented.

Table B-2 is the source for the complete text of all mitigation measures.



## 4. RESPONSIBILITIES

### 4.1 ORGANIZATION

This Mitigation Monitoring Plan has three organizational elements (Figure B-2). The first element includes the CSLC as the lead agency under the CEQA. The second element includes the applicant's environmental compliance inspectors. The third element includes various Federal, State, and local agencies acting with permit responsibilities assuring the overall quality and effectiveness of the plan.

Prior to construction and shortly after construction contracts are awarded, CSLC will hold a meeting between the AT&T Environmental Manager and their designated Environmental Inspector to implementation of the Mitigation Monitoring Plan, the site-specific mitigation measures, and to complete the list of individuals participating in environmental compliance monitoring process.

The CSLC Project Manager and AT&T Environmental Manager will develop a process for briefings and reports of environmental monitoring activities, construction progress, and other pertinent items. Such reports may either be provided personally, via telephone, or via computer modem.

Review of the Construction, Operation and Maintenance Plan will be completed prior to the initiation of construction. These reviews would be completed by CSLC Project Manager, and AT&T Environmental Manager.

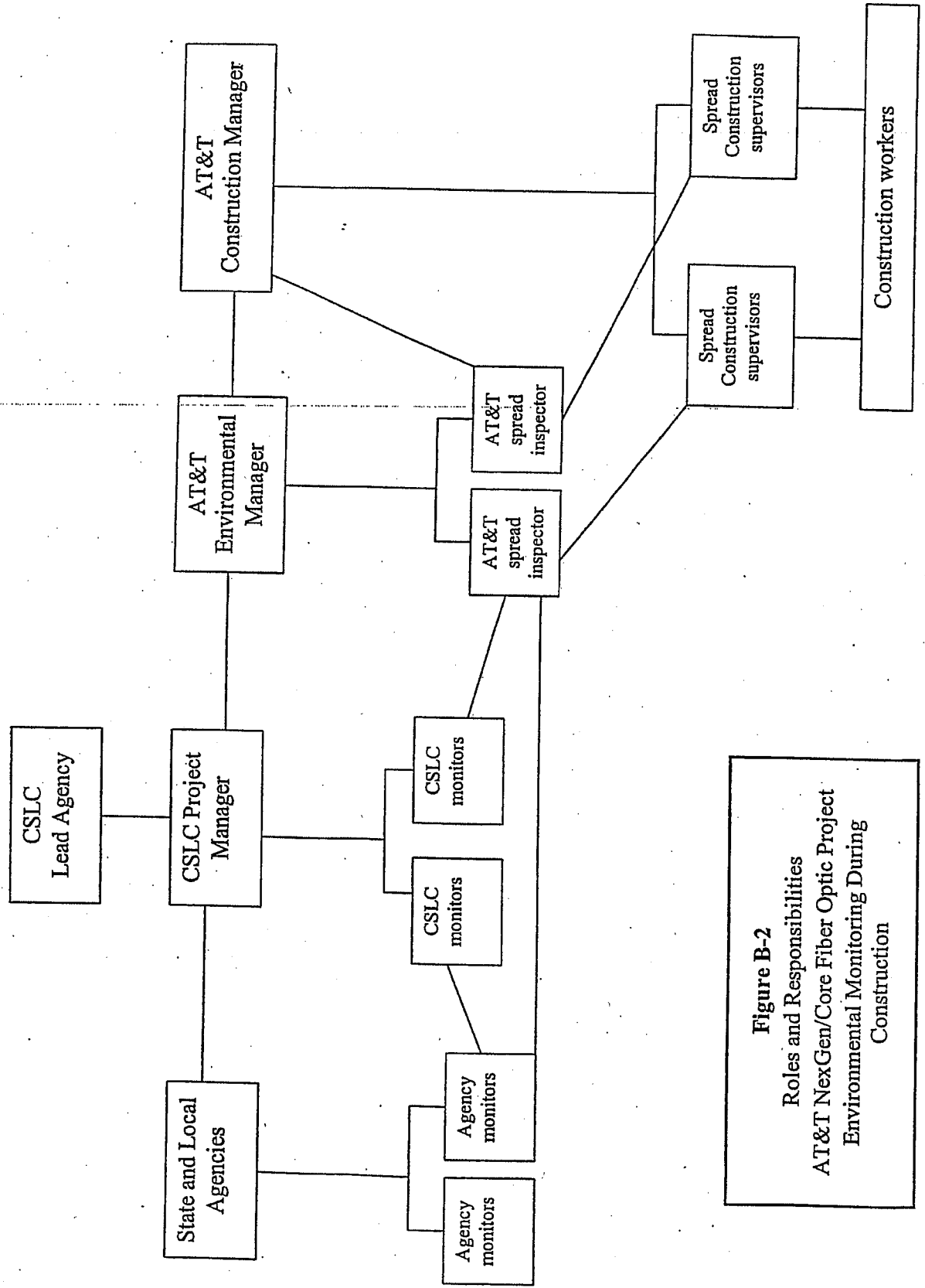
AT&T will conduct training of the in-field inspectors. This training should include information on the species and resources of concern, recognition of those species and resources, the approved mitigation measures for the species/resources, compensation measures and procedures which should be followed. As part of the assurance role, the agencies will conduct oversight inspection and monitoring activities to the extent determined necessary by the individual agencies. For example, the Bureau of Land Management (BLM) might perform oversight on federal lands.

#### 4.1.1 Role of the California State Lands Commission

The lead agency under CEQA, the CSLC, is responsible for overseeing this project to make sure that required mitigation measures are implemented. The CSLC will be responsible for ensuring compliance with the requirements in this monitoring plan.

The CSLC has the definitive authority to stop any construction, operation, or maintenance activity associated with the NexGen/Core Project if an activity is decided to be a deviation from the approved project or the adopted mitigation measures.

CSLC will be responsible for the implementation of the Mitigation Monitoring Plan. The environmental mitigation monitoring team will be comprised of a CSLC Project Manager and one or more Environmental Monitors.



**Figure B-2**  
 Roles and Responsibilities  
 AT&T NexGen/Core Fiber Optic Project  
 Environmental Monitoring During  
 Construction

*The CSLC Project Manager will:*

- Supervise the implementation of the Mitigation Monitoring Plan with respect to compliance with the CSLC decisions, adopted mitigation measures, permits from authorizing agencies, and appropriate laws and regulations.
- Supervise the development of CSLC monitoring activities and schedules.
- Directly supervise the CSLC Environmental Monitors.
- Be responsible for monitoring significant impact incidences and follow-up measures.

*The Environmental Monitors will:*

Monitor mitigation activities and the activities of AT&T inspectors and other technical specialists.

- Maintain daily contact with AT&T inspectors.
- Maintain regular contact with field personnel of permitting agencies, land management agencies, and other regulatory agencies.

Regularly inspect environmentally sensitive areas to ensure compliance and protection

## 5. COORDINATION

### 5.1 APPROACH

Environmental protection measures are most effective when they are incorporated early into the engineering design, construction planning, and daily construction effort of the project. CSLC will work with AT&T and their construction contractors to ensure that an environmental education program for construction personnel is implemented, and that specific mitigation measures are shown clearly on construction drawings and the specific environmental requirements are clearly understood. As part of the environmental education program, copies of the Mitigation Monitoring Plan will be distributed and discussed in detail.

The CSLC environmental mitigation monitoring team will serve as a bridge between the various Federal and State agency requirements on one side, and AT&T and its construction contractors on the other. The bridge represents both:

- an understanding of how CSLC and other agency requirements can be effectively incorporated into the project; and
- close daily working relationship between the environmental monitoring team and the AT&T/contractor team.

During the construction phase, CSLC's trained field monitors would inspect and monitor mitigation activities to ensure compliance with plans, permits and conditions. Some of the goals for the monitoring during the construction period would be to:

### 5.2 COMMUNICATION

A critical component of a successful environmental mitigation monitoring plan is timely, open, and regular communication between all parties. Regular meetings will be held between AT&T, CSLC environmental monitors, and the construction supervisors to discuss the environmental implications of the day's construction activities, and to check on the adequacy of progress in resolving outstanding special reports on noncompliance events. These meetings would also be an opportunity for the environmental monitors to establish mitigation requirements for advance notice of certain construction activities or entry into certain areas.

Should a situation arise in which there is a clear infringement of environmental requirements and the time necessary for standard communications could result in an unacceptable environmental impact, the CSLC environmental monitors will take immediate action to have the specific tasks discontinued or redirected, and notify appropriate AT&T and agency personnel.

## 6. DISPUTE RESOLUTION PROCESS

In order to ensure that the mitigation measures are fulfilled, the CSLC will make periodic reviews of the project (G-1 in Table B-1). The reviews will follow-up with the local jurisdictions so that all applicable mitigation measures are addressed.

If the project is expected to go outside or beyond the existing route presented in the AT&T NexGen/Core Project Draft Mitigated Negative Declaration/Initial Study, AT&T will be required to file a variance with the CSLC. AT&T would also be responsible for informing affected local agencies in writing of any project changes. AT&T is responsible for informing the CSLC of any request by local agencies for the project to deviate from the existing ROWs. As discussed in Mitigation Measure G-1, if the project extends beyond the existing right-of-way, a complete environmental review of the proposed change will be triggered under CEQA, with the CSLC as the lead agency.

In the event that the AT&T and a local agency do not agree if a project results in work outside of the existing ROW, or if AT&T fails to comply with local regulatory standards (by neglecting to obtain the correct permits or not fulfilling the conditions of the permits), the CSLC will review the project in order to make a final determination. Violation of a required mitigation or permit condition can result in a CSLC stop work order that could remain in effect until AT&T and the local agency have resolved the issue.

The Mitigation Monitoring Plan is expected to reduce or eliminate many potential disputes. However, in the event that a dispute occurs, the following procedures will be practiced:

*Step 1:* Disputes and complaints (including those of the public) shall be directed first to the CSLC's Project Manager for resolution. The Project Manager will attempt to resolve the dispute.

*Step 2:* Should this first step not succeed, the CSLC Project Manager may enforce compliance to address the deviation.

*Step 3:* If a dispute or complaint regarding the implementation or evaluation of the Mitigation Monitoring Program or the Mitigation Measures cannot be resolved informally or through enforcement by the CSLC, any affected party in the dispute may file a written "notice of dispute" with the CSLC's Executive Director. Within 10 days of receipt, the Executive Director will meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director will issue an Executive Resolution describing a decision, and serve it on the party who filed the complaint and the other participants.

The CSLC is the final judge for all disputes between the local agencies and the petitioners. If the Commission finds that AT&T has not complied with the Mitigation Measures in this plan, it may stop and/or terminate the project.

## 7. EVALUATING MITIGATION EFFECTIVENESS

### 7.1 PRIOR TO CONSTRUCTION

Prior to the commencement of construction, the CSLC Project Manager will review the permits obtained from the respective permitting agencies. Requirements and/or restrictions will be incorporated into this mitigation monitoring plan. The monitoring schedule will delineate these requirements and any reports to be provided to the permitting agencies will be noted.

Using the information gathered in the initial review of AT&T's environmental compliance plan, including any revisions directed by the CSLC Project Manager, the Environmental Monitors will review plans for the delineation and protection of sensitive resources within the project area. This effort will involve contacts between the technical review staff, AT&T field staff, and any sub-contractors retained by AT&T for this work.

### 7.2 CONSTRUCTION PHASE

Upon commencement of construction, the Project Manager will serve as the CSLC's direct link to AT&T's environmental mitigation compliance monitoring process. Through the Environmental Monitors and technical review staff, the CSLC Project Manager will evaluate:

- the extent to which AT&T environmental mitigation activities are being complied with, and
- that monitoring by AT&T staff is being carried out in compliance with the respective directives.

The Project Manager will meet with the AT&T environmental inspector(s) prior to construction to discuss environmental mitigation requirements. If there appear to be elements that are not being adequately applied, a report will be filed as directed by the CSLC mitigation measure levels of violations. Actions will be taken to resolve noncompliance and environmental degradation problems.

In the event of a violation on the Project, CSLC will notify appropriate agencies. Additional reporting requirements will be related to the exact nature of the violation as necessary. Any violation which affect biological resources will be reported to both CSLC and CDFG immediately.

The Project Manager will establish regular contacts with public resource agency representatives. These contacts will review compliance with both the environmental mitigation efforts and with the various operating plans and permits administered by these agencies. Lead agency representatives will directly deal with the Project Manager or his or her designated alternate.

The Environmental Monitors will inspect sensitive resource areas, especially during construction activities in the vicinity. Protective structures, flagging, or other necessary elements will be inspected and any violations or corrective action will be noted. If the activity is not in

compliance, then a noncompliance report and recommendations will be undertaken to bring the activity back into compliance.

### **7.3 AFTER CONSTRUCTION**

Following the completion of the construction phase of the Project, the Project Manager will evaluate the success of implementing the environmental mitigation plan. An interim report will be prepared documenting the compliance of the environmental mitigation measures, specifying any noncompliance elements which remain and outlining any corrective actions needed. This report will also summarize the required site restoration work to be conducted and the monitoring requirements for those activities. This report will be delivered to AT&T within 30 days of completion of construction.

## 8. REPORTING

### 8.1 CONSTRUCTION PHASE

The environmental reporting requirements for the project are separated into two major categories: daily monitoring reports and progress reports. This two-component strategy has been used by CSLC to review the adequacy of environmental compliance for the monitoring requirements of other linear projects, and has been found to be effective.

### 8.2 DAILY MONITORING REPORTS

The results of the environmental Mitigation and Monitoring plan will be recorded through a diligent reporting process. The field environmental monitor will complete two types of reports: Regular Reports, which document and comment on mitigation activities inspected on a regular basis and provide a check on the completeness of the overall plan; and Special Reports, which document unsatisfactory or noncompliance conditions.

All daily reports will be reviewed promptly by the environmental Project Manager, and will also promptly be made available to the CSLC. Based on the manager's perspective of all field activities, the manager may generate a special report as needed. A coding and filing system of daily reports will allow for tracking of activities and areas for subsequent review.

A special report represents a potentially serious problem that deserves immediate and higher level attention. The following requirements will apply to all Special Reports:

- Special reports will promptly be made electronically available to all agencies within one hour of the report and will be accompanied by an alert.
- Special reports can be opened by field monitors or by managers, but they may be closed only by specifically authorized agency personnel.
- Special reports may lead to remedial actions that will be documented as new requirements.

Daily forms will be used to document AT&T's compliance with all mitigation measures. The Project Manager will review violation reports and fax them to the CSLC and the AT&T Environmental Manager as soon as possible. AT&T will be issued violation reports at the time of the violation or as soon as possible following the event. Additional reports and notifications will be initiated depending on the level of violation. Each week, copies of daily monitoring reports generated during that week will be sent to the AT&T Environmental Manager, the CSLC Contract Administrator, and other agencies, as appropriate. Special reports will be generated as appropriate to discuss noncompliance situations. All daily monitoring reports will be provided on the project web site.



### **8.3 MONTHLY REPORTS**

Monthly progress reports will be submitted to the CSLC Project Manager with a concise summary of the previous months compliance status and events. The reports will include information regarding completion of mitigation measures, violations and analyses of potential remediation; mitigation successes, status of contract cost schedule including cost expended to the reporting date, actual or anticipated monitoring plan problems, and additional information required by the CSLC Project Manager. A copy of the monthly report will also be submitted to CDFG.

CSLC has found from previous environmental monitoring projects that a process of monthly reporting has proven very useful for keeping management informed of work progress, problems, and possible need for early remedial action. The reports are also useful as a concise chronology of compliance events along the Project route.

### **8.4 QUARTERLY REPORTS**

The information contained within the monthly reports will be further summarized in quarterly progress reports. These reports will be submitted to the CSLC throughout the duration of the contract. The quarterly reporting process will be useful in identifying the need for adjustments to monitoring procedures in response to problems and/or violations occurring in the field.

**TABLE B-1  
RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project construction and operation requires monitoring to avoid or reduce potential impacts to environmental resources.	G-1	AT&T will provide environmental monitoring for all aspects of this job.	ROW and Op Amp Sites	Daily reports	Environmental Inspectors retained.	Before construction	1
	<b>General Measures</b>						
Project may introduce industrial features to a natural area or may degrade existing visual character of surrounding area.	AE-1	Set back the fenced Op Amp site at least 200 feet from the edge of pavement of Highway 78.	Mitchell's Camp Op Amp Site	Preconstruction filing	Blend facility to surroundings.	Before construction	Imperial Co.
	AE-2	At Mitchell's Camp Op Amp site, all fencing will be covered with a nonreflecting coating of natural color.	Mitchell's Camp Op Amp Site	Preconstruction filing	Blend facility to surroundings.	Before construction	Imperial Co.
	AE-3	At Mitchell's Camp Op Amp site, the buildings will be neutral color.	Mitchell's Camp Op Amp Site	Preconstruction filing	Blend facility to surroundings.	Before construction	Imperial Co.
<b>Aesthetics</b>							
Construction vehicles may cause impacts from fugitive dust.	AQ-1	Speed of vehicle traffic associated with the project on unsurfaced roads will be limited to 20 miles per hour (mph).	ROW	No	No excessive dust emissions.	During construction	2
	AQ-2	Disturbances to the soil will be minimized by limiting the construction corridor to 40 feet in width.	ROW	Daily reports	No work outside of work limits.	During construction	2
	AQ-3	Meet federal, state, and local emission standards for air quality.	ROW and Op Amp Sites	Quarterly reports	Air quality standards are met.	During construction	Regional air quality management districts
	AQ-4	Limit air quality impacts through good maintenance practices on all construction and maintenance equipment.	ROW and Op Amp Sites	Daily reports	Pollutants are contained.	During construction	Regional air quality management districts
	AQ-5	Equipment will be maintained and properly tuned.	ROW and Op Amp Sites	Daily reports	Pollutants are contained.	During construction	Regional air quality management districts
	AQ-6	In populated locations watering of access roads will be conducted as specified in locally-obtained permits.	ROW and Op Amp Sites	Daily reports	No excessive dust emissions.	During construction	County & city permitting agencies
	AQ-7	Burning of construction debris will not be allowed in the project area.	ROW and Op Amp Sites	Daily reports	Pollutants are contained.	During construction	2
<b>Air Quality</b>							
Project construction and operation may result in emissions of CO, ozone precursors, or PM <sub>10</sub> .	<p>On federal land, the land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CDFG is responsible.</p> <p>On federal land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CDFG is responsible.</p>						

1 On federal land, the land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CDFG is responsible.  
 2 On federal land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CDFG is responsible.

**TABLE B-1  
RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Construction equipment may emit CO, ozone precursors, and PM <sub>10</sub> .	AQ-8	Use low-emission construction equipment or use reformulated fuel.	Op Amp Sites	Quarterly reports	Pollutants are contained.	During construction	Regional air quality management districts 2
Construction activities may cause fugitive dust emissions.	AQ-9	Construction areas will be watered as needed to minimize dust emissions.	Op Amp Sites	Daily reports	No excessive dust emissions.	During construction	2
	AQ-10	Limit grading and soil movement to that necessary to construct the fenced areas on each site.	Op Amp Sites	Daily reports	No excessive dust emissions.	During construction	2
Emergency generators may contribute to net increase in criteria pollutants.	AQ-11	Emergency generators will meet the terms and conditions of air quality management district permit requirements.	Op Amp Sites	Quarterly reports	Air quality standards are met.	During operation	Regional air quality management districts
<b>Biological Resources</b>							
Project may have a direct or indirect impact on wetlands or wetland species.	BIO-1	All wetlands and a 20-foot exclusion zone around them will be flagged and staked in the field and marked on maps prior to construction. Wetland areas and their exclusion zones will always be avoided by conduit shifting outside the exclusion zone or by directional drilling.	See Line List (Attachment C-2, Appendix C) and resource maps (Volume 3)	Daily reports	No surface disturbing activity will be permitted within the exclusion zones.	During construction	1
Project may have a direct or indirect impact on riparian habitats.	BIO-2	Riparian areas with the potential to provide habitat for species of concern will be identified prior to construction, and buffer zones of at least 20 feet will be established around these areas. Temporary construction fencing will be used to establish the buffer zones. If avoidance is not possible, conduits will be installed by directional bore or bridge hang.	See Line List (Attachment C-2, Appendix C) and resource maps (Volume 3)	Daily reports	No surface disturbing activity will be permitted within the exclusion zones.	During construction	1
Project may have a direct or indirect impact on ephemeral washes.	BIO-3	Ephemeral washes crossed by trenching or plowing, preconstruction contours and compaction will be restored within 48 hours after the conduit installation is complete. Trenching or plowing will only be used where riparian vegetation can be successfully avoided and when the wash is dry or no rain event is predicted within 72 hours.	ROW in desert areas	Daily reports	Restoration within 48 hours and no construction within 72 hours of a predicted rain event.	During construction	1
Project may have a direct or indirect impact on waterbodies	BIO-4	Except for ephemeral washes, all other uncontained water bodies will be directionally drilled at least 10 feet below the bottom of the watercourse, or the conduit will be hung from existing bridge structures.	See Line List (Attachment C-2, Appendix C) and resource maps (Volume 3)		No impact to flowing waters.	During construction	1

1 On federal land, the land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CDFG is responsible.  
 2 On federal land, the land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CSLC is responsible.

**TABLE B-1  
RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have direct impact on native trees	BIO-5	Native trees in the construction corridor over 5 inches DBH or 4.5 feet (above ground) will be staked and flagged around the dripline. Trees with trunks outside the corridor, but with parts within the construction corridor, and multiple-stem shrubs with 5 or more stems 1 inch or more DBH, are included. Staking and flagging will be conducted prior to construction.	ROW and Op Amp Sites	Daily reports	No loss of large diameter trees and shrubs	Before construction	1
Project may have direct impact on native trees	BIO-6	All flagged trees and shrubs will be avoided wherever feasible. Avoidance may be accomplished by rerouting the conduits outside the dripline of the plants or directionally drilling beneath them at least 10 feet. Where the entire plant cannot be avoided, the plant may be pruned of up to one third its live crown ratio. Where pruning will not suffice, the tree or shrub will be cut off at ground level. The roots will be left in place to encourage resprouting.	ROW and Op Amp Sites	Daily reports	No loss of large diameter trees and shrubs	During construction	1
Project may have direct impact on native trees	BIO-7	For each flagged tree or shrub cut down, five seedlings of the same species as removed will be planted. Plants derived from seed collected near the construction corridor will be used. AT&T will be responsible for the planting out, monitoring, and replacement if necessary of the planted seedlings as specified in Appendix J.	ROW and Op Amp Sites	Daily reports	No loss of large diameter trees and shrubs	During construction	1
Project may have direct impact on native trees	BIO-8	An annual report will be submitted to USFWS and CDFG to document success of any revegetation efforts for three years. Success of revegetation will be determined by 100 percent surveys of planted specimens. Survival of 2 out of 5 of the seedlings planted will constitute success. If survival drops below 40 percent at any of the annual surveys, new seedlings will be planted (5 seedling to one tree removed ratio).	ROW and Op Amp Sites	Annual reports	40% success of seedlings annually	After construction	1
Project may have direct impact on native trees	BIO-9	If revegetation is needed, all planted seedlings will be protected with one of the following measures: screening of seedlings with heavy wire, tree shelters, rock mulch, plastic mesh, plant collars of plastic, peat, or paper, or chemical repellent.	ROW and Op Amp Sites	Annual reports	40% success of seedlings annually	After construction	1

1 On federal land, the land management agency (BLM, USFS, BIA, or Camp Pendleton) is responsible; off federal land, CDFG is responsible.  
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**TABLE B-1  
RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have direct impact on federally or state listed threatened or endangered plant species.	BIO-10	For plant species listed as threatened or endangered (federal or state), qualified botanists will establish 20-foot exclusion zones. Exclusion zones around Peirson's milk-vetch will be 25 feet in radius. Exclusion zones will be flagged and staked in the field and marked on maps prior to construction. Impacts on exclusion zones will be avoided by shifting the conduits or by directionally drilling at least 10 feet beneath them.	ROW	Quarterly reports	No surface disturbance activity within exclusion zones	Before construction	1
Project may have direct impact in designated sensitive resource areas	BIO-11	Flowing and trenching activities will be limited to a 40-foot-wide area of maximum disturbance except in designated sensitive resource areas where the construction corridor will be limited to 25 feet wide and staked to indicate corridor limits. The corridor will be limited to 25-foot width throughout desert habitats.	ROW	Quarterly reports	Disturbance within <25 feet	During construction	1
Project may contribute to the spread of noxious weeds	BIO-12	The project area within lands administered by the BLM will be surveyed by a qualified noxious weed authority who will identify all noxious weeds present and provide a list to the authorized officer. A determination will be made by the authorized officer of any noxious weeds that may require flagging for treatment. Treatment will be according to instruction of the authorized officer.	BLM Lands	Quarterly reports	BLM concurrence	Before construction	BLM
Project may contribute to the spread of noxious weeds	BIO-13	Prior to construction, plants listed as invasive exotics by the California Exotic Plant Pest Council in the most recent "CalEPPC" A or Red Alert list, already existing in native desert habitat where construction is planned, will be identified on the ground and on maps through a preconstruction survey. This will establish a baseline of invasive exotics present from which to evaluate the possible impacts of this construction.	Outside BLM Land	Quarterly reports	Identifying weeds properly removed	Before construction	1
Project may contribute to the spread of noxious weeds	BIO-14	Disposal of soil and plant materials from non-native areas will not be allowed in native areas.	ROW and Op Amp Sites	Quarterly reports	No effect on sensitive resource areas	During construction	1

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**TABLE B-1  
RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may contribute to the spread of noxious weeds	BIO-15	All equipment will be washed prior to entering the project area to prevent the spread of invasive weeds from other areas. Construction supervisors and managers will be educated on weed identification and preventing the spread of invasive non-native species infestations. Gravel and/or fill material to be placed in relatively weed-free areas will come from weed free sources. Certified weed-free imported materials will be used.	ROW and Op Amp Sites	Quarterly reports	Equipment weed free when it enters project area; training documented	During construction	1
Project may contribute to the spread of noxious weeds	BIO-16	Wash stations will be established to clean equipment of noxious weed seed and plant parts. These stations will be located in commercial truck-washing facilities.	Flying J Ehrenberg, Texaco, El Centro, Pacific Fleet, El Cajon	Quarterly reports	Equipment cleaned of weeds and seeds at these locations	Before and during construction	1
Project may contribute to the spread of noxious weeds	BIO-17	A three-year program of invasive exotic plant monitoring and control will be conducted every two months for three years. Where invasive exotic plants were detected in the construction corridor prior to construction, the percent cover of invasive exotic plant species within the construction corridor must be equal to or less than the cover of invasive exotic plant species outside the construction corridor but within the highway ROW. Invasive exotic plants established only where ground was disturbed within the construction corridor after construction, or invasive exotic plant cover 20 percent or more greater in the construction corridor than the surrounding areas are the responsibility of AT&T.	ROW and Op Amp	Quarterly reports	BLM/CDFG concurrence	Before and after construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may contribute to the spread of noxious weeds	BIO-18	Invasive exotic plant populations within the construction corridor will be controlled in coordination with the road management agency. At least one transect per preconstruction invasive exotic plant population will be established and remeasured each of the three years. In addition, one transect will be established at each end of preconstruction invasive exotic plant populations to determine possible spread along the disturbed construction corridor. The entire route through native desert vegetation will be inspected every two months. Where a new invasive exotic plant population is noted, a transect will be established to determine percent cover of invasive exotic plants inside and outside the construction disturbance zone. Responsibility and control criteria as defined above would apply to new invasive exotic plant populations. The same crew that documents the transect will remove exotics by hand from the construction corridor as indicated by the transect results. Photo documentation, collected from permanently marked or flagged locations, along with the monitoring results, shall be submitted annually to the USFWS, BLM, and CDFG.	ROW and Op Amp Sites	Annual reports	BLM/CDFG concurrence	Before and after construction	1
Use of temporary construction areas could impact species of concern	BIO-19	Surveys for all species of concern analyzed in this document will be conducted for any temporary use areas that may be proposed during construction. Only areas not supporting species of concern will be approved for temporary use areas.	All temporary use areas	Daily reports	No significant impact to species of concern	During construction	1
Material staging and stockpile areas could impact species of concern	BIO-20	All material stockpiling areas and staging areas will be located within the construction corridor on nonsensitive areas, or at designated and approved off-ROW disturbed sites.	ROW	Daily reports	No significant impact on sensitive areas	During construction	1
Wildlife may become entrapped in open trenches	BIO-21	Any open trenches will be filled with existing spoils or material imported from an existing commercial borrow site or covered with plywood or other plate at the end of each workday. If a trench is covered with plywood or other plate, both ends of the trench will be sloped. If any wildlife is found in the trench, it will be removed by a qualified biological monitor before resumption of work in that trench segment.	ROW and Op Amp Sites	Daily reports	No trenches open at night	During construction	1
Project may interfere with movement of resident wildlife	BIO-22	Construction activities in desert areas (Palo Verde to Brunt's Corner and Octofllo to Pine Valley) will be restricted to daylight hours to minimize impacts on nocturnal and migratory species.	Blythe to San Diego ROW and associated Op Amp Sites	Quarterly reports	Minimal impact to nocturnal and migratory species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Environmental protection flagging could draw unwanted attention to sensitive resources	BIO-23	All stakes, flagging, and fencing used to delineate and protect any environmental or cultural feature in the project area will be removed no later than 30 days after construction and restoration are complete.	ROW and Op Amp Sites	Quarterly reports	All stakes removed within 30 days	After construction	1
Project may have direct impact on vegetation	BIO-24	To compensate for the long-term but temporary loss of creosote bush scrub habitat in the construction corridor, AT&T will purchase land or land credits for a total of 148 acres. To the extent available on the market, the land will contain habitat for fairyduster ( <i>Calliandra eriophylla</i> ).	ROW and Op Amp Sites	Quarterly reports	BLM/CDFG occurrence	After construction	1
Project may have direct impact on vegetation	BIO-25	AT&T will post a reclamation bond in an amount adequate to cover the potential failure of either revegetation or exotic control measures. The amount of this bond will be agreed to in writing prior to the initiation of construction, but may be modified by mutual consent throughout the project. This bond will be held by BLM for the three-year period subsequent to construction during which AT&T is responsible for revegetation and exotic plant control.	ROW and Op Amp Sites	Quarterly reports	BLM concurrence	Before, and during construction	1
Project may have indirect impact on Southwestern Willow Flycatcher	BIO-26	Southwestern willow flycatcher habitat in riparian areas will be avoided by one of the following methods: constructing in the pavement; boring beneath the drainage and riparian area; or use of a bridge hang over the riparian area.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect impact on Southwestern Willow Flycatcher	BIO-27	<p>Any construction or installation work performed within 1,000 feet of potential habitat for Southwestern willow flycatcher during the period of April 1 to June 15 will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible.</p> <ul style="list-style-type: none"> <li>- From April 1 to June 15, no operations will be conducted within 1,000 feet of potential habitat after dark.</li> <li>- Noise levels will be controlled with residential or better level mufflers or engine enclosures for trenching and other mobile equipment. Boring machine noise will be restricted by use of residential or better mufflers or engine enclosures or portable sound walls.</li> <li>- There will be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response.</li> <li>- Dust will be strictly controlled by watering within 1,000 feet of potential habitat.</li> </ul> <p>Construction or installation work performed within 1,000 feet of potential habitat for the southwestern willow flycatcher during the period of April 1 to June 15 will be monitored daily by a qualified biologist or as coordinated with existing Camp Pendleton monitoring, where applicable. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, U.S. Army Corps of Engineers (Corps), and USFWS. From May 1 through June 15, dawn surveys for the flycatcher will be conducted three times weekly while construction or installation work is occurring within 1,000 feet of potential habitat for southwestern willow flycatcher.</p>	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Southwestern Willow Flycatcher	BIO-28	<p>No night lighting will be used within 1,000 feet of potential habitat during the breeding season.</p>	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect impact on Southwestern Willow Flycatcher	BIO-29	Any work that would subject potential habitat for southwestern willow flycatcher in critical areas as directed by the USFWS to sound levels above 60 dBA L <sub>eq</sub> or background, whichever is higher, will be completed between September 16 and June 15.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Least Bell's Vireo	BIO-30	Least Bell's vireo habitat in riparian areas will be avoided by one of the following methods: - constructing in the pavement; boring beneath the drainage and riparian area; or use of a bridge hang over the riparian area.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Least Bell's Vireo	BIO-31	<p>Any construction or installation work performed within 1,000 feet of potential habitat for least Bell's vireo during the period of March 15 to June 15 will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible.</p> <ul style="list-style-type: none"> <li>- From March 1 to June 1, no operations will be conducted within 1,000 feet of potential habitat after dark.</li> <li>- Noise levels will be controlled with residential or better level mufflers or engine enclosures for trenching and other mobile equipment. Boring machine noise will be restricted by use of residential or better mufflers or engine enclosures or portable sound walls.</li> <li>- There will be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response.</li> <li>- Dust will be strictly controlled by watering within 1,000 feet of potential habitat.</li> </ul> <p>Construction or installation work performed within 1,000 feet of potential habitat for least Bell's vireo during the period of March 15 to June 15 will be monitored daily by a qualified biologist or as coordinated with existing Camp Pendleton monitoring, where applicable. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, Corps, and USFWS.</p>	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect impact on Least Bell's Vireo	BIO-32	No night lighting will be used within 1,000 feet of potential habitat during the breeding season.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Least Bell's Vireo	BIO-33	Any work that would subject potential habitat for least Bell's vireo in critical areas as directed by the USFWS to sound levels above 60 dBA L <sub>eq</sub> or background, whichever is higher, will be completed between September 16 and June 15.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Least Bell's Vireo	BIO-34	Construction within 1,000 feet of potential vireo habitat at Las Flores Creek in Camp Pendleton will be prioritized to be completed first provided construction can begin by March 15. If construction start is delayed past April 15, then construction will not occur until September 16 unless noise levels can be controlled at or below 60 dBA at the edge of potential habitat.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Coastal California Gnatcatcher	BIO-35	Coastal sage scrub areas will be avoided by constructing in the pavement or 1 to 3 feet off the edge of pavement in the disturbed shoulder, boring the fiber optic conduit and cable beneath coastal sage scrub plant communities, or hanging the conduit from a bridge.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect impact on Coastal California Gnatcatcher	BIO-36	<p>Any construction or installation work performed within 1,000 feet of potential habitat for California coastal gnatcatcher during the period of February 15 to June 1 will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. No night lighting will be used within 1,000 feet of potential habitat during the breeding season.</p> <ul style="list-style-type: none"> <li>- From February 15 to June 1, no operations will be conducted within 1,000 feet of potential habitat after dark.</li> <li>- Noise levels will be controlled with residential or better level mufflers or engine enclosures for trenching and other mobile equipment. Boring machine noise will be restricted by use of residential or better mufflers or engine enclosures or portable sound walls.</li> <li>- There will be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency track-out response.</li> <li>- Dust will be strictly controlled by watering within 1,000 feet of potential habitat.</li> </ul> <p>Construction or installation work performed within 1,000 feet of potential habitat for California coastal gnatcatcher during the period of February 15 to June 1 will be monitored daily by a qualified biologist or as coordinated with existing Camp Pendleton monitoring, where applicable. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, Corps, and USFWS.</p>	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Coastal California Gnatcatcher	BIO-37	No night lighting will be used within 1,000 feet of potential habitat during the breeding season.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Coastal California Gnatcatcher	BIO-38	Any work that would subject potential habitat for gnatcatcher in critical areas as directed by the USFWS to sound levels above 60 dBA L <sub>eq</sub> or background, whichever is higher, will be completed between September 1 and June 1.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect impact on Burrowing Owl	BIO-39	Preconstruction surveys during the breeding season (February 1 to August 31) will be conducted by biologists who will check all potential habitats within 250 feet of both sides of the proposed fiber optic cable construction corridor. If active burrowing owl nests are found, biologists will establish a 250-foot buffer zone around the active burrow. No installation activities will be permitted within the specified buffer zone until after the breeding season or until it is determined that young have fledged.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	Before and during construction	1
Project may have indirect impact on Burrowing Owl	BIO-40	Preconstruction surveys during the wintering season (September 1 to January 31) will be conducted by checking all potential habitat in areas where there will be some ground disturbance. Qualified biologists will conduct preconstruction surveys for burrowing owls within 2 weeks of construction activities.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	Before and during construction	1
Project may have indirect impact on Burrowing Owl	BIO-41	The CDFG guidelines require that one-way doors be installed at least 48 hours before construction at all active burrows that exist within the construction area. The one-way doors will be installed at that time to ensure that the owls can get out of the burrows but cannot get back in. The CDFG guidelines also require the installation of two artificial burrows for each occupied burrow that is removed. Artificial burrows will be constructed prior to installation of one-way doors.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	Before and during construction	1
Project may have indirect impact on Burrowing Owl	BIO-42	If any active burrows are damaged by construction activities, compensation will be paid at the equivalency rate of 6.5 acres of foraging habitat for burrowing owls for each active burrow damaged.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Swallows	BIO-43	If activities to attach fiber optic cable to bridges occur when swallows are not breeding (September 1 through February 28), activities can proceed with no further mitigation.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Swallows	BIO-44	If proposed bridge attachments are planned to occur during the swallows' breeding season, the prior year's nests will be removed before March 1, and the bridge area will be hosed at least weekly to remove new mud and prevent swallows from completing their nests until the bridge attachment is complete or until swallows desist nesting attempts.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	Before and during construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect impact on Swallows	BIO-45	If a swallow successfully completes a nest, attachment to the bridge will stop and will not resume before September 1 unless a qualified biologist determines that the young have fledged.	See Line List (Attachment C-2, Appendix C)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Peninsular Bighorn Sheep	BIO-46	A trained biological monitor will be on-site for activities conducted along I-8 within the boundaries of proposed critical habitat for the peninsular bighorn sheep.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Peninsular Bighorn Sheep	BIO-47	The monitor will perform pre-construction surveys of the alignment in areas adjoining potential or known bighorn sheep habitat.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Peninsular Bighorn Sheep	BIO-48	Peninsular bighorn sheep sightings will be reported to the USFWS within 24 hours.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect impact on Peninsular Bighorn Sheep	BIO-49	If a bighorn sheep is noted within 300 feet of ongoing construction, then all operations will cease until the individual/group has moved 300 feet beyond the construction corridor.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-50	A biological monitor will be present during construction in all areas of potential desert tortoise habitat.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-51	Should a tortoise wander onto the project site during construction, adjacent activities will be halted until the tortoise has been moved off the project site.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-52	If a tortoise is located on the project site and is not moving, construction will be halted until an authorized biologist is able to move it.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-53	The USFWS will approve and authorize biologists responsible for moving tortoises.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-54	The project proponent will submit the names of all proposed, authorized biologist(s) to BLM for review and approval at least 30 days prior to initiation of any desert tortoise clearance surveys. Project activities will not begin until authorized biologist(s) have been approved.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-55	A clearance survey for the desert tortoise will be conducted within 48 hours prior to construction.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-56	When burrows are found, they will be checked for desert tortoises. When tortoises are found, such burrows will be flagged.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1

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Project may have indirect or direct impact on Desert Tortoise	BIO-57	All unoccupied burrows will also be flagged, but in a different manner than the occupied burrows. Burrows outside of the limits of construction will be flagged.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-58	All desert tortoise burrows and pallets will be flagged for avoidance. All desert tortoise burrows or pallets in the construction zone that cannot be avoided will be excavated by a qualified biologist or blocked. All desert tortoise handling and burrow excavation will be in accordance with handling procedures developed by the USFWS.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-59	Desert tortoises that are found aboveground and need to be moved will be placed in the shade of a shrub. All desert tortoises removed from burrows will be placed in an unoccupied burrow of approximately the same size as the one from which it was removed.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-60	If an existing burrow is unavailable, the authorized biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows. The authorized biologist will be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-61	All persons authorized by the USFWS to handle desert tortoise will follow the guidelines established in the <i>Guidelines for Handling Desert Tortoises During Construction Projects</i> (Desert Tortoise Council 1994, revised 1999).	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-62	Op Amp locations will be fenced with chain link. Within desert tortoise habitat, the lower 18 inches of the fence will be "tortoise-proof" to prevent tortoise access to the Op Amp facility).	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-63	All fiber-optic line marker signs within desert tortoise habitat will be fitted with bird repellent devices.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect or direct impact on Desert Tortoise	BIO-64	Existing routes of travel will be used whenever possible. To the extent possible, previously disturbed areas within the project sites will be used for temporary storage areas, laydown sites, and any other surface-disturbing activities. Any routes of travel that require construction or modification will have a qualified biologist(s) survey the area for tortoises prior to modification or construction of route.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-65	Trench segments or other excavations will be fenced with temporary tortoise-proof fencing, covered at the close of each working day, or provided with escape ramps. All excavations will be inspected for tortoises prior to filling.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-66	Anytime a vehicle is parked, the ground around and under the vehicle will be inspected for desert tortoises before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If this does not occur within 15 minutes, an authorized biologist will remove and relocate the tortoise. Within desert tortoise habitat, any construction pipe, culverts, or similar structures with a diameter of 3 to 12 inches that are stored on the construction site for one or more nights will be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-67	All construction related activities in desert tortoise habitat will be conducted from dawn until dusk.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Desert Tortoise	BIO-68	A speed limit of 20 mph will be maintained while on the construction site, dirt or unposted access roads, and storage areas.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1

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**TABLE B-1**  
**RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect or direct impact on Desert Tortoise	BIO-69	Impacts to desert tortoise habitat will be offset through either an acceptable land acquisition or an assessed financial contribution. To offset the temporary impact of construction on, and the 2-acre loss of, desert tortoise habitat, AT&T will acquire 193 acres of desert tortoise habitat in designated critical habitat of the Chuckwalla unit. The compensation must be secured prior to the onset of any project-related construction activities. Additionally, a \$200/acre management rate and \$95 enhancement fee will be given to the CDFG to manage acquired lands. The property shall be protected in perpetuity for the benefit of the desert tortoise.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Flat-Tailed Horned Lizard/Colorado Desert Fringed Toed Lizard (FTHL/CFTL)	BIO-70	Qualified biologists will conduct preconstruction surveys to identify all potential habitat along the construction area. Within 7 days before construction, biologists will identify habitat areas subject to direct construction-related disturbance.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on FTHL/CFTL	BIO-71	Seven days before construction, biologists will establish exclusion zones in the project construction corridor near potential habitat. Exclusion zones are 50 feet from the work area.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on FTHL/CFTL	BIO-72	Biologists will conduct a final clearance survey 1 to 2 days prior to construction activities, excavate potential burrows, and relocate the lizard to nearby suitable habitat in the exclusion zones. The management strategy guidelines for relocation of flat-tailed horned lizards described in Working Group of Flat-Tailed Horned Lizard Interagency Committee (Foreman 1997) shall be utilized.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on FTHL/CFTL	BIO-73	Construction areas will be periodically examined (at least hourly when surface temperatures exceed 30 degrees Celsius) for the presence of FTHL/CFTL. All trenches, holes, or deep excavations will be examined for the presence of FTHL/CFTL prior to filling. If lizards are found they will be relocated to nearby suitable habitat.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on FTHL/CFTL	BIO-74	A field contact representative will have the authority to ensure compliance with protective measures for FTHL/CFTL, and will initiate a worker education program.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1

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**RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect or direct impact on FTHL/CFTL	BIO-75	<p>A biological monitor shall be present in each area of active construction within FTHL/CFTL habitat throughout the work day from initial clearing through habitat restoration. The biological monitor shall have sufficient education and field experience or training with the FTHL/CFTL to understand its biology and behavior. The monitors shall ensure that all activities are in compliance with the FTHL Rangewide Management Strategy. The biological monitor shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.</p> <ul style="list-style-type: none"> <li>- Examine construction area periodically (at least hourly when surface temperatures exceed thirty degrees Celsius) for the presence of FTHL/CFTL. In addition, all open pipes, trenches, holes, or deep excavations shall be inspected for the presence of FTHL/CFTL prior to backfilling.</li> <li>- Work with the construction supervisor to avoid disturbance to FTHL/CFTL and their habitat. If avoiding disturbance is not possible or if FTHL/CFTL is found trapped in an excavation, the affected lizard will be captured by hand and relocated.</li> <li>- Relocated FTHL/CFTL shall be placed in the shade of a large shrub a short distance from the construction ROW and in the direction of undisturbed habitat. If the surface temperature in the sun is less than 30 degrees Celsius, or greater than 50 degrees Celsius, the biological monitor authorized to handle the FTHL/CFTL will hold the lizard for later release.</li> <li>- Initially captured FTHL/CFTL shall be held in an appropriate clean dry container from which the lizard cannot escape. Lizards shall be held at temperatures between 25 and 35 degrees Celsius and shall not be exposed to direct sunlight. Release shall occur as soon as possible after capture and during daylight hours when surface temperatures range from 32 to 40 degrees.</li> </ul>	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-76	<p>Daily pre-construction sweeps of the construction area will be conducted.</p>	See resource maps (Volume 3)	Quarterly reports	No impact to species	Before and during construction	1

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TABLE B-1

RESOURCE IMPACT, MITIGATION, AND MONITORING

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-77	A "drift fence" of silt fence material will be installed wherever construction is taking place within suitable arroyo toad habitat. The fence will be in place to effectively exclude toads from the work space for a period of 24 hours prior to construction. The fence may be removed progressively behind equipment as the line is buried and the trench re-graded. This fence will exclude foraging arroyo toads from the work area and will be cleared before construction begins every morning by a biological monitor. This process will proceed every hour if there is any measurable precipitation. Toads found on the inside of the enclosure will be placed outside the enclosure on the stream side. Toads found on the outside of the enclosure will be placed out of harm's way and in such a manner as to facilitate the toads' presumed trajectory.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-78	The USFWS will approve in writing those monitors who will be permitted to handle arroyo toads. AT&T will submit to BLM, which will forward to the USFWS a list of monitors with their credentials regarding their experience in identification and handling of herpetofauna. The applicant is encouraged to provide to the USFWS the training schedule and curriculum that is proposed for training said monitors. The USFWS will respond with a list of the approved monitors.	See resource maps (Volume 3)	Quarterly reports	No impact to species	Before and during construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-79	There will be continuous biological monitoring of all construction within arroyo toad habitat.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-80	There will be no construction within 0.6 miles of arroyo toad habitat after dark.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-81	No night lighting will be used within 1,000 feet of potential habitat during the breeding season.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-82	During periods of precipitation within 0.6 miles of arroyo toad habitat, vehicle speeds will be 20 mph or below within the work zone.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-83	The project construction will avoid stream channels entirely.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1

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RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-84	Construction personnel and the biological monitors will be trained by a qualified herpetologist on the identification and avoidance of the arroyo toad.	See resource maps (Volume 3)	Quarterly reports	No impact to species	Before and during construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-85	Directional drilling at Pine Creek, Cottonwood Creek, and Kitchen Creek will take place outside arroyo toad breeding season.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
Project may have indirect or direct impact on Arroyo Southwestern Toad	BIO-86	All construction activity is limited to the south side from Glamis to Milpitas Wash of Highway 78 to avoid impacts to this species.	See resource maps (Volume 3)	Quarterly reports	No impact to species	During construction	1
<b>Cultural Resources</b>							
Project could cause adverse impacts to historical or archaeological resource.	C-1	Procedures for reducing impacts on significant cultural resources will be determined in consultation with the BLM, Advisory Council on Historic Preservation, and state agencies pursuant to Section 106 of the NHPA.	ROW and Op Amp Sites	Quarterly Report	No impact to sites.	During construction	2
	C-2	A specific Cultural Resources Monitoring and Mitigation Plan will be prepared that identifies sensitive measures to minimize potential impacts on sensitive cultural resources.	ROW and Op Amp Site	Preconstruction filing	Plan prepared.	Prior to construction	2
	C-3	AT&T will provide on-site monitoring of construction activities supervised by a qualified archaeologist at all eligible sites on the NRHP. Through consultation, additional sites may be added for monitoring.	ROW and Op Amp Sites	Daily reports	Impact to eligible sites minimized.	During construction	2
	C-4	When disturbance of NRHP eligible sites is unavoidable, impacts will be mitigated according to a site-specific treatment plan that will be formulated in consultation with the proponent, BLM, SHPO, and State lands agency representatives. Mitigation measures include monitoring of construction activities, additional surface documentation, collection, and partial or complete excavation.	ROW	Daily reports	Conformance with treatment plan.	During construction	2
	C-5	Indirect impacts will be controlled by educating employees about the significance of cultural resources and implementing a strict management policy restricting the casual collection of artifacts from the project area.	ROW and Op Amp Sites	Quarterly report	Training records.	Prior to construction	2
Temporary use areas requested during construction could cause adverse impacts to archaeological resources.	C-6	Project implementation includes intensive surveys to inventory and evaluate cultural resources for any new area proposed for temporary use. Areas that are determined to contain significant or potentially significant cultural resources will not be used for temporary work areas.	Temporary work spaces	Quarterly report	Sites with sensitive resources not used.	During construction	2

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RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project could cause adverse impacts to historical or archaeological resources.	C-7	Prior to construction, known cultural resource sites to be avoided will be flagged and staked on the ground and marked on maps as sensitive resources. No further description will be provided to preserve confidentiality of the site. Ground disturbance activities will be prohibited within the flagged area.	ROW and Op Amp sites	Quarterly report	Sensitive sites flagged and marked on maps as sensitive avoided.	Prior to construction	2
	C-8	If previously undocumented sites or subsurface components of documented sites are discovered during construction, activities will be halted until a qualified archaeologist reviews the resources and a construction method is developed according to the state-specific treatment plan approved by the SHPO.	ROW and Op Amp Sites	Quarterly reports	SHPO approval.	During construction	2
	C-9	If human remains are encountered during construction, all work will immediately halt in the vicinity of the discovery and the county sheriff or coroner will be immediately notified. If the coroner determines that the remains are historic or prehistoric, construction in the immediate area of the burial will not continue until the nature of the burial and an appropriate course of action are determined in consultation with the landowner and the SHPO.	ROW and Op Amp sites	Daily reports	Appropriate consultation implemented.	During construction	2
<b>Geology/Soils</b>							
The project could result in soil erosion or loss of top soil.	GS-1	Temporary water bars or baffles will be used to direct water runoff away from the construction ROW into energy-dissipating devices.	ROW	Daily reports	Minimum disturbance to surface waters.	During construction	2
The project could result in soil erosion or loss of top soil.	GS-2	Temporary sediment barriers will be placed at the base of slopes adjacent to all road or waterbody crossings where vegetation has been disturbed, to prevent sediment migration off site. These barriers will remain in place until revegetation measures are judged successful.	ROW	Daily reports	Minimum disturbance to surface waters.	During construction	2
The project could result in soil erosion or loss of top soil.	GS-3	Where trenching is necessary on steep slopes, erosion control measures (such as trench plugs, water bars, or baffles) will be placed in the trench.	ROW	Daily reports	Minimum disturbance to surface waters.	During construction	2
The project could result in soil erosion or loss of top soil.	GS-4	Trench plugs will be used on slopes adjacent to water bodies and wetlands or in agricultural fields and residential areas, if needed.	ROW	Daily reports	Minimum disturbance to surface waters.	During construction	2
Sediment could be tracked on to pavement.	GS-5	Where sediment is transported onto a public road surface or other paved area by equipment or vehicles accessing the construction site, sediment will be removed immediately by mechanical means.	ROW and Op Amp Sites	Daily reports	Minimum sediment on roadways.	During construction	2

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RESOURCE IMPACT, MITIGATION, AND MONITORING**

Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
The project could result in sedimentation of surface waters.	GS-6	The conditions of the Storm Water Pollution Prevention Plan (SWPPP) will be imposed on all construction activities to limit sedimentation of surface waters (Appendix D).	ROW and Op Amp Sites	Daily reports	Reduce sedimentation to surface waters.	During construction	2
The project could result in soil erosion or loss of top soil.	GS-7	As weather conditions dictate, temporary sediment barriers will be strategically placed to prevent water flow off-site into waterways or storm drain inlets.	ROW and Op Amp Sites	Daily reports	Minimum flow off-site.	During construction	2
The project could result in soil erosion or loss of top soil.	GS-8	Dust and blowing sand caused by construction activity will be controlled through watering where needed.	ROW and Op Amp Site	Daily reports	Minimize soil movement.	During construction	2
Project may expose people or structures to risk from seismic activity.	GS-9	Construct all structures to seismic standards in local building codes.	Brunts Corner, Ocotillo, Oceanside, and Santa Ana Op Amp Sites	Preconstruction filing	Minimize earthquake hazard.	Prior to construction	Local building permit departments
Project could result in soil erosion or loss of top soil	GS-10	Following duct installation, the fiber optic alignment and working space will be recontoured to approximate original contours. Recontouring to natural lines and grade will be accomplished without disruption to adjacent undisturbed habitat. Mechanical roughening/resurfacing will be utilized to recontour the substrate and decompact the soil in native desert vegetation areas.	ROW and Op Amp Sites	Preconstruction filing	Minimize soil movement	After construction	1
<b>Hazardous/Hazardous Materials</b>							
Project could create a hazard involving accidental release of hazardous material.	HAZ-1	Prepare and implement SPOCP.	ROW and Op Amp Sites.	Preconstruction filing	Releases minimized; spills contained.	Prior to construction	2
Project could create a hazard involving accidental release of hazardous material.	HAZ-2	The contractor will be required to have a continuous cleanup program throughout construction, and restore land crossed to its preconstruction condition. Restoration also will include the removal of ruts deeper than 4 inches and the disposal of foreign objects. Restoration will include recontouring and reseeding impacted areas with native vegetation and removing trash. The contractor will be required to keep a clear work area. After completion of the project a final walk-through will be completed on BLM lands to ensure that no waste or material is left on site and that all ruts or terrain damage or vegetation disturbance has been repaired to the satisfaction of the BLM Authorized Officer.	Row and Op Amp Sites	Quarterly reports	Restoration of lands to preconstruction condition.	During construction	2
Project could create a hazard involving accidental release of hazardous material.	HAZ-3	No nonbiodegradable debris will be deposited in the ROW or temporary use areas.	ROW and Op Amp Sites	Daily reports	Debris free work areas.	During construction	2

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Improper disposal of human waste.	HAZ-4	The contractor will be required to transport one portable chemical toilet for each construction crew or group of crews of at least five persons during construction.	ROW and Op Amp Sites	Daily reports	Adequate sanitation on work sites.	During construction	2
Project could create a safety or health hazard.	HAZ-5	A Safety and Health Plan will be developed, and construction practices will be used that follow recommendations regarding fire hazards and accident prevention. The Safety and Health Plan will be consistent with 29 CFR 1910 (OSHA Occupational Safety and Health Standards) and 29 CFR 1926 (OSHA Safety and Health Regulations for Construction). It will conform to California Occupational Safety and Health Administration (CalOSHA) regulations. The Safety and Health Plan will identify the site physical hazards, site chemical hazards, and the physical hazards of the proposed operations. UXO training will be included.	ROW and Op Amp Sites	Preconstruction filing	Minimize health and safety incidents.	Prior to construction	2
Project may cause wildfires.	HAZ-6	Construction contractors will follow fire management protocols as specified in their contracts. Contractors will be responsible for determining the fire activity level for the next day and complying with contract provisions for that predicted activity level, including equipment for each crew and the types of activities that will be restricted during high activity levels.	ROW, eastern San Diego county	Daily reports	Wildland fires will be avoided.	During construction	2
Project may cause wildfires.	HAZ-7	As part of construction, each contractor will designate a person to contact the BLM Fire Management Officer daily to determine the fire activity level for the next day's work. During construction scheduling, project engineers will coordinate the construction schedule to minimize fire season conflicts by coordinating with BLM Field Offices.	BLM lands and National Forest	Quarterly reports, daily reports	Wildland fires will be avoided.	Prior to construction, during construction	BLM or USFS
Project may cause wildfires.	HAZ-8	A fire prevention plan will be prepared and will include potential fire hazards, names or job titles of key fire prevention personnel, and housekeeping procedures. Training and maintenance procedures also will be identified. [8 CFR 3221 Fire Prevention Plan]	ROW and Op Amp Sites	Preconstruction filing	Minimize fire hazards.	Prior to construction	2

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
			Transportation/Traffic				
Project may impair implementation or interfere with an emergency response plan.	TR-1	A traffic control plan conforming to Caltrans standards will be in place prior to beginning construction.	ROW and Op Amp Sites	Preconstruction filing	Plan implemented.	Prior to construction	Caltrans, County and City Road Departments
Project may impair implementation or interfere with an emergency response plan.	TR-2	Appropriate traffic control measures will be instituted whenever required by the plan and will be in accordance with U.S. Department of Transportation standards for traffic control to protect worker and public safety.	ROW and Op Amp Sites	Daily reports	Control measures implemented.	During construction	Caltrans, County and City Road Departments
Project may impair implementation or interfere with an emergency response plan.	TR-3	All personnel will be safety-trained prior to beginning work on this project, including construction workers as well as supervisors and monitors.	ROW and Op Amp Sites	Quarterly reports	All staff trained	During construction	2
Project may impair implementation or interfere with an emergency response plan.	TR-4	At locations where access to nearby property is blocked, contractor shall be prepared at all times to accommodate emergency vehicle passage, including plating over excavations or providing detours.	ROW and Op Amp Sites	Quarterly reports	All staff trained	During construction	2
			Hydrology/Water Quality				
Project could violate water quality standards.	GS-6	The conditions of the Storm Water Pollution Prevention Plan (SWPPP) will be imposed on all construction activities to limit sedimentation of surface waters (Appendix D).	ROW and Op Amp Sites	Daily reports	SWPPP implemented.	During construction	2
Project could result in erosion or siltation on- or off-site.	BIO-1	All wetlands and a 20-foot exclusion zone around them will be flagged and staked in the field and marked on maps prior to construction. Wetland areas and their exclusion zones will always be avoided by conduit shifting outside the exclusion zone or by directional drilling.	All wetlands See Line List (Attachment C-2, Appendix C) and resource maps (Volume 3) of the AT&T NexGen/ Core Project, December 2000	Daily reports	No surface disturbing activity will be permitted within exclusion zones.	During construction	1
Project could result in erosion or siltation on- or off-site.	BIO-2	Riparian areas with the potential to provide habitat for species of concern will be identified prior to construction, and buffer zones of at least 20 feet will be established around these areas. Temporary construction fencing will be used to establish the buffer zones. If avoidance is not possible, conduits will be installed by directional bore or bridge hang.	See Line List (Attachment C-2, Appendix C) and resource maps (Volume 3) of the AT&T NexGen/ Core Project, December 2000	Daily reports	No surface disturbing activity will be permitted within exclusion zones.	During construction	1

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Project could result in erosion or siltation on- or off-site.	BIO-3	Ephemeral washes crossed by trenching or plowing, preconstruction contours and compaction will be restored within 48 hours after the conduit installation is complete. Trenching or plowing will only be used where riparian vegetation can be successfully avoided and when the wash is dry or no rain event is predicted within 72 hours.	ROW in desert areas	Daily reports	Restoration within 48 hours and no construction within 72 hours of a predicted rain event.	During construction	1
Project could result in erosion or siltation on- or off-site.	BIO-4	Except for ephemeral washes, all other uncontained water bodies will be directionally drilled at least 10 feet below the bottom of the watercourse, or the conduit will be hung from existing bridge structures.	All uncontained water bodies	Daily reports	No impact to flowing waters.	During construction	1
Project could result in erosion or siltation on- or off-site.	HY-1	Contained waters may be crossed by trenching over or beneath the culverts where trenching can occur without risk of damage to the culvert and is approved by the culvert manager or owner. Otherwise such waters will be directionally drilled.	ROW flood control structures, irrigation canals and drainage ditches in culverts	Daily reports	No impact to flowing waters.	During construction	2
Project could degrade water quality.	HY-2	On Camp Pendleton, all water bodies will be directionally drilled with the exception of San Mateo Creek, San Onofre Creek, and the Santa Margarita River, which will be crossed using bridge hangs existing bridges.	Camp Pendleton	Daily reports	Minimize impact to surface waters.	During construction	Camp Pendleton
	HY-3	Water to be used during the construction phase includes water needed for directional drilling and for dust control. All water used will be obtained from private sources off-ROW, and no natural water sources will be tapped for construction use.	ROW and Op Amp Sites	Daily reports	No water withdrawal from natural water sources.	During construction	2
	HY-4	During construction, equipment will be refueled on the ROW by a fuel truck. Refueling will take place no closer than 100 feet from a wetland or riparian zone. Full spill containment kits will be stored at the nearest staging areas. The fuel truck will contain an emergency spill kit to capture any spillage. Contents of the Spill Kit are specified in the SPOC Plan.	ROW and Op Amp Sites	Daily reports	Minimize spills to land and water.	During construction	2
Noise							
Potential for emergency generators to expose persons or nearby residents to excess noise during emergency operation.	NO-1	Emergency generators for Op Amp facilities will be enclosed in an insulating shelter that limits noise levels to 85 dBA at 5 feet from the shelter.	Op Amp Sites	Preconstruction filing	Minimize loud noises.	Prior to construction	Caltrans, County and City Road Departments

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Potential Impact	Mitigation Measure No.	Mitigation Measure	Location	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Responsible Agencies
Potential to expose persons or nearby residents to excess noise during construction.	NO-2	Construction of Op Amp facilities will be limited to Monday through Saturday from 6 am to 7 pm.	Op Amp Sites	Daily reports	Limit noise impact to neighbors.	During construction	Caltrans, County and City Road Departments
Potential to expose persons or nearby residents to excess noise during construction.	NO-3	On-ROW construction will be limited by local permitting agencies, including counties and municipalities, according to the local ordinances. All on-ROW construction will conform to local noise ordinances.	ROW and Op Amp Sites	Preconstruction filing	Limit noise impact to neighbors.	During construction	Caltrans, County and City Road Departments
<b>Recreation</b>							
Project could impact recreational use on BLM lands.	REC-1	In the vicinity of Algodones Dunes Recreation Area, construction activities will be limited from November 16 through June 14 to work only Tuesday through Thursday to avoid OHV south of Highway 78.	In the vicinity of Algodones Dunes Recreation Area	Daily reports	Minimize conflict with OHV users.	During construction	BLM
	REC-2	No construction equipment will be staged over the weekend in the dunes area.	Algodones Dunes	Daily reports	Minimize conflict with OHV users.	During construction	BLM
<b>Transportation/Traffic</b>							
Potential to block emergency access to nearby properties during construction; project may disrupt traffic flow.	TR-1	A traffic control plan conforming to Caltrans standards will be in place prior to beginning construction.	ROW and Op Amp Sites	Preconstruction filing	Minimize traffic impacts.	Before construction	Caltrans, County and City Road Departments
	TR-2	Appropriate traffic control measures will be instituted whenever required by the plan and will be in accordance with U.S. Department of Transportation standards for traffic control to protect worker and public safety.	ROW and Op Amp Sites	Daily reports	Minimize traffic impacts.	During construction	Caltrans, County and City Road Departments
Potential to block emergency access to nearby properties during construction.	TR-3	All personnel will be safety-trained prior to beginning work on this project, including construction workers as well as supervisors and monitors.	ROW and Op Amp Sites	Training records	Minimize health and safety impacts.	Before construction	2
	TR-4	At locations where access to nearby property is blocked, contractor shall be prepared at all times to accommodate emergency vehicle passage, including plating over excavations or providing detours.	ROW and Op Amp Sites	Daily reports	No delays to emergency vehicles.	During construction	2

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**TABLE B-2.**  
**MITIGATION MEASURES**

**GENERAL**

- G-1. AT&T will provide environmental monitoring for all aspects of this job. Construction will be monitored to ensure that impacts are minimized.

**AESTHETICS**

- AE-1. At Mitchell's Camp, the fenced Op Amp site will be set back at least 200 feet from the edge of pavement of Highway 78.
- AE-2. At Mitchell's Camp Op Amp site, all fencing will be covered with a nonreflecting coating of natural color.
- AE-3. At Mitchell's Camp Op Amp site, the buildings will be neutral color.

**AIR QUALITY**

- AQ-1. Speed of vehicle traffic associated with the project on unsurfaced roads will be limited to 20 miles per hour (mph).
- AQ-2. Disturbances to the soil protective mechanisms (i.e., the algal crusts, desert pavement, and vegetation) will be minimized by limiting the construction corridor to 40 feet in width.
- AQ-3. The project will meet federal, state, and local emission standards for air quality.
- AQ-4. Air quality impacts will be limited through good maintenance practices on all construction, backup generators, and maintenance equipment.
- AQ-5. Equipment will be maintained and properly tuned.
- AQ-6. In populated locations watering of access roads will be conducted as specified in locally-obtained permits to control particulate emissions during construction.
- AQ-7. Burning of construction debris will not be allowed in the project area.
- AQ-8. Construction equipment for Op Amp sites will be low-emission or use reformulated fuel.
- AQ-9. Construction areas at Op Amp sites will be watered as needed to minimize dust emissions.
- AQ-10. Grading and soil movement will be limited to that necessary to construct the fenced Op Amp sites.
- AQ-11. Generators used for emergency power supply at all Op Amp sites will meet the terms and conditions of an Authority to Construct and Permit to Operate issued by the regional air quality management district.

**BIOLOGICAL RESOURCES**

- BIO-1. All wetlands and a 20-foot exclusion zone around them will be flagged and staked in the field and marked on maps prior to construction. No surface disturbing activity will be permitted within the exclusion zones. Wetland areas and their exclusion zones will be avoided by conduit shifting outside the exclusion zone or by directional drilling.
- BIO-2. All areas with riparian vegetation have been identified (see Volume 2, Appendix C, and Volume 3, resource maps, for specific locations). Riparian areas with the potential to provide habitat for species of concern will be identified prior to construction, and buffer zones of at least 6.1 meters (20 feet) will be established around these areas. Temporary construction fencing will be used to establish the buffer zones. In areas of scattered riparian vegetation it may be possible to plow or trench a dry wash and avoid the buffered riparian vegetation. If such avoidance is not possible, conduits will be installed by directional bore or bridge hang.
- BIO-3. Where ephemeral washes are to be crossed by trenching or plowing, preconstruction contours and compaction will be restored within 48 hours after the conduit installation is complete. Trenching or plowing will only be used where riparian vegetation can be successfully avoided and will occur only when the wash is dry and no rain event is predicted within 72 hours.
- BIO-4. Except for ephemeral washes, all other uncontained water bodies will be directionally drilled at least 10 feet below the bottom of the water body or watercourse, or the conduit will be hung from existing bridge structures.
- BIO-5. Native trees in the construction corridor over 5 inches DBH (diameter at breast height or 4.5 feet (1.2 m) above ground) will be staked and flagged around the dripline. Trees with trunks outside the corridor, but with parts of their canopies within the construction corridor, and multiple-stem shrubs with 5 or more stems 1 inch or more DBH, are included. Staking and flagging will be conducted prior to ground disturbing activities.
- BIO-6. All flagged trees and shrubs will be avoided wherever feasible during construction. Avoidance may be accomplished by rerouting the conduits outside the dripline of the plants or directionally drilling beneath them at least 10 feet. Where the entire plant cannot be avoided, the plant may be pruned of up to one third its live crown ratio, keeping pruning cuts outside of branch collars. Where pruning will not suffice to allow equipment to pass, the tree or shrub will be cut off at ground level. The roots will be left in place to encourage resprouting.
- BIO-7. For each flagged tree or shrub cut down, AT&T will plant five seedlings of the same species as removed. Plants derived from seed collected near the construction corridor will be used. Seed will be collected by BLM El Centro Field Office under agreement with AT&T and grown at the Joshua Tree National Park nursery specifically for this project. AT&T will be responsible for the planting out, monitoring, and replacement if necessary of the planted seedlings as specified in "Evaluating Revegetation Success," Appendix J.
- BIO-8. An annual report will be submitted to USFWS and CDFG to document success of any revegetation efforts for each of three years. The success of revegetation will be determined by 100 percent surveys of planted specimens. Survival of 2 out of 5 of the seedlings planted will constitute success at the end of the three year period. If survival

drops below 40 percent (2 out of 5 planted) at any of the annual surveys, new seedlings will be planted to replenish the 5 seedling to one tree removed ratio.

- BIO-9. If revegetation is needed, all planted seedlings will be protected with one of the following measures: screening of seedlings with heavy wire, tree shelters (e.g., Tubex, Tree Pro, Tree Sentry, and BLUE-X), rock mulch, plastic mesh, plant collars of plastic, peat, or paper, or chemical repellent.
- BIO-10. For plant species listed as threatened or endangered (federal or state), qualified botanists will establish 6.1-meter (20-foot) exclusion zones around individuals and populations. Exclusion zones around Peirson's milk-vetch will be 7.6 meters (25 feet) in radius. Exclusion zones will be flagged and staked in the field and marked on maps prior to construction. No surface disturbing activity will be permitted within the exclusion zones. Impacts on exclusion zones will be avoided by shifting the conduits or by directionally drilling at least 10 feet beneath them.
- BIO-11. Plowing and trenching activities along the fiber optic cable system route will be limited to a 40-foot-wide area of maximum disturbance except in designated sensitive resource areas (e.g., threatened, endangered, and special status species habitat, wetlands, and seasonal drainages), where the construction corridor will be limited to 25 feet wide and staked to indicate corridor limits. The corridor will be limited to 25-foot width throughout desert habitats.
- BIO-12. In accordance with Executive Order 13112, the project area within lands administered by the BLM will be surveyed by a qualified noxious weed authority who will identify all noxious weeds present and provide a list to the authorized officer. A determination will be made by the authorized officer of any noxious weeds that may require flagging for treatment. Treatment will be according to instruction of the authorized officer. Any use of herbicides in California will be handled by properly-licensed county agricultural agents.
- BIO-13. Prior to construction, populations of plants listed as invasive exotics by the California Exotic Plant Pest Council in the most recent "CalEPPC" A or Red Alert list, already existing in native desert habitat where construction is planned, will be identified on the ground and on maps through a preconstruction survey. This will establish a baseline from which to evaluate the possible impacts of this construction on the spread of these invasive exotic plants or the establishment of other invasive exotic plants.
- BIO-14. Disposal of soil and plant materials from non-native areas will not be allowed in native areas. That is, no disposal or transfer for excess spoils or plant materials from non-native areas will be allowed into native cover type areas.
- BIO-15. All equipment will be washed prior to entering the project area to prevent the spread of invasive weeds from other areas. Construction supervisors and managers will be educated on weed identification and the importance of controlling and preventing the spread of invasive non-native species infestations. Gravel and/or fill material to be placed in relatively weed-free areas will come from weed free sources. Certified weed-free imported materials (or rice straw in upland areas) will be used.
- BIO-16. Wash stations will be established to clean equipment of noxious weed seed and plant parts. These stations will be located in commercial truck-washing facilities. The table below shows the proposed commercial wash stations to be used.

## Wash Stations for Equipment Working Outside of Pavement

Wash Station Name	Milepost	Station Area Address	City	Type of Facility	Surfacing	Needed Surveys
Flying J. Service	L3-0 (off-ROW)	I-10, exit 1, south frontage road	Ehrenberg, AZ	commercial wash station	paved	none
Texaco Car Wash	L4-97 (off-ROW)	Highway 10	El Centro	commercial wash station	paved	none
Pacific Fleet Wash	L4-204 (off-ROW)	2514 Jamacha Rd # 138	El Cajon	commercial wash station	paved	none

- BIO-17. A three-year program of invasive exotic plant monitoring and control will be conducted every two months for three years. Where invasive exotic plants were detected in the construction corridor prior to construction, the percent cover of invasive exotic plant species within the construction corridor must be equal to or less than the cover of invasive exotic plant species outside the construction corridor but within the highway ROW. Invasive exotic plants established only where ground was disturbed within the construction corridor after construction, or invasive exotic plant cover 20 percent or more greater in the construction corridor than the surrounding areas are the responsibility of AT&T.
- BIO-18. AT&T will control those invasive exotic plant populations within the construction corridor in coordination with the road management agency (CalTrans or Imperial County) with eradication of the invasive exotic population as a goal. At least one transect per preconstruction invasive exotic plant population will be established and remeasured each of the three years. In addition, one transect will be established at each end of preconstruction invasive exotic plant populations to determine possible spread along the disturbed construction corridor. The entire route through native desert vegetation will be inspected every two months and any new invasive exotic plant populations noted. Where a new invasive exotic plant population is noted, a transect will be established to determine percent cover of invasive exotic plants inside and outside the construction disturbance zone. Responsibility and control criteria as defined above would apply to new invasive exotic plant populations. The same crew that documents the transect will remove exotics by hand from the construction corridor as indicated by the transect results. Photo documentation, collected from permanently marked or flagged locations, along with the monitoring results, shall be submitted annually to the USFWS, BLM, and CDFG.
- BIO-19. Surveys for all species of concern analyzed in this document will be conducted for any temporary use areas that may be proposed during construction. Only areas not supporting species of concern will be approved for temporary use areas.
- BIO-20. All material stockpiling areas and staging areas will be located within the construction corridor on nonsensitive areas, or at designated and approved off-ROW disturbed sites. Nonsensitive areas are those that do not support species of concern and are outside of riparian and wetland exclusion zones.
- BIO-21. Any open trenches will be filled with existing spoils or material imported from an existing commercial borrow site or covered with plywood or other plate at the end of each workday. If a trench is covered with plywood or other plate, both ends of the

trench will be sloped to form escape ramps. If any wildlife is found in the trench, it will be removed by a qualified permitted biological monitor before resumption of work in that trench segment. AT&T will specify this requirement in the agreements with all construction contractors.

- BIO-22. Construction activities in desert areas (Palo Verde to Brunt's Corner and Octotillo to Pine Valley) will be restricted to daylight hours to minimize impacts on nocturnal and migratory species.
- BIO-23. All stakes, flagging, and fencing used to delineate and protect any environmental or cultural feature in the project area will be removed no later than 30 days after construction and restoration are complete.
- BIO-24. To compensate for the long-term but temporary loss of creosote bush scrub habitat in the construction corridor, AT&T will purchase land or land credits for a total of 148 acres. To the extent available on the market, the land will contain habitat for fairyduster (*Calliandra eriophylla*). This total acquisition will also compensate for temporary loss of habitat for desert tortoise, Crissal and LeConte's Thrasher, and flat-tailed horned lizard. Desert tortoise habitat compensation accounts for 108 acres (see measure BIO-48); therefore an additional compensation must be purchased for 40 acres.
- BIO-25. AT&T will post a reclamation bond in an amount adequate to cover the potential failure of either revegetation or exotic control measures. The amount of this bond will be agreed to in writing prior to the initiation of construction, but may be modified by mutual consent throughout the project. This bond will be held by BLM for the three-year period subsequent to construction during which AT&T is responsible for revegetation and exotic plant control. In the event that any revegetation or exotic control measure should fail as defined within the criteria defined above, all or part of the bond may be forfeit to cover the costs of completing the required mitigation measures.

### Special Status Wildlife Species

#### Southwestern Willow Flycatcher

- BIO-26. Southwestern willow flycatcher habitat in riparian areas will be avoided by one of the following methods: constructing in the pavement; boring beneath the drainage and riparian area; or use of a bridge hang over the riparian area.
- BIO-27. Any construction or installation work performed within 305 meters (1,000 feet) of potential habitat for Southwestern willow flycatcher during the period of April 1 to June 15 of any given year will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. Noise, dust, nighttime lighting, and human presence will be limited as follows:
- From April 1 to June 15, no operations will be conducted within 305 meters (1,000 feet) of potential habitat after dark.
  - Noise levels will be controlled with residential or better level mufflers or engine enclosures for trenching and other mobile equipment. Boring machine noise will be restricted by use of residential or better mufflers or engine enclosures or portable sound walls. Noise reduction methods may be used in conjunction with one another,

or other noise reduction methods may be used to reduce noise impacts. Noise levels as measured at the edge of potential habitat will always be below 90 dBA, or ambient, whichever is higher, with a goal of reducing noise to below 60 dBA whenever and wherever possible.

- There will be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response.
- Dust will be strictly controlled by watering within 305 meters (1,000 feet) of potential habitat.

Construction or installation work performed within 305 meters (1,000 feet) of potential habitat for the southwestern willow flycatcher during the period of April 1 to June 15 will be monitored daily by a qualified biologist or as coordinated with existing Camp Pendleton monitoring, where applicable. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, U.S. Army Corps of Engineers (Corps), and USFWS. In addition, from May 1 through June 15, dawn surveys for the flycatcher will be conducted three times weekly while construction or installation work is occurring within 305 meters (1,000 feet) of potential habitat for southwestern willow flycatcher.

- BIO-28. No night lighting will be used within 1,000 feet of potential habitat during the breeding season.
- BIO-29. Any work that would subject potential habitat for southwestern willow flycatcher in critical areas as directed by the USFWS to sound levels above 60 dBA  $L_{eq}$  or background, whichever is higher, will be completed between September 16 and June 15.

#### Least Bell's Vireo

- BIO-30. Least Bell's vireo habitat in riparian areas will be avoided by one of the following methods: constructing in the pavement; boring beneath the drainage and riparian area; or use of a bridge hang over the riparian area.
- BIO-31. Any construction or installation work performed within 305 meters (1,000 feet) of potential habitat for least Bell's vireo during the period of March 15 to June 15 of any given year will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. Noise, dust, nighttime lighting, and human presence will be limited as follows:
- From March 1 to June 1, no operations will be conducted within 305 meters (1,000 feet) of potential habitat after dark.
  - Noise levels will be controlled with residential or better level mufflers or engine enclosures for trenching and other mobile equipment. Boring machine noise will be restricted by use of residential or better mufflers or engine enclosures or portable sound walls. Noise reduction methods may be used in conjunction with one another, or other noise reduction methods may be used to reduce noise impacts. Noise levels as measured at the edge of potential habitat will always be below 90 dBA, or ambient, whichever is higher, with a goal of reducing noise to below 60 dBA whenever and wherever possible.



- There will be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response.
- Dust will be strictly controlled by watering within 305 meters (1,000 feet) of potential habitat.

Construction or installation work performed within 305 meters (1,000 feet) of potential habitat for least Bell's vireo during the period of March 15 to June 15 will be monitored daily by a qualified biologist or as coordinated with existing Camp Pendleton monitoring, where applicable. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, Corps, and USFWS.

- BIO-32. No night lighting will be used within 1,000 feet of potential habitat during the breeding season.
- BIO-33. Any work that would subject potential habitat for least Bell's vireo in critical areas as directed by the USFWS to sound levels above 60 dBA  $L_{eq}$  or background, whichever is higher, will be completed between September 16 and June 15.
- BIO-34. Construction within 305 meters (1,000 feet) of potential vireo habitat at Las Flores Creek in Camp Pendleton will be prioritized to be completed first provided construction can begin by March 15. If construction start is delayed past April 15, then construction will not occur until September 16 unless noise levels can be controlled at or below 60 dBA at the edge of potential habitat.

#### California Gnatcatcher

- BIO-35. Coastal sage scrub areas will be avoided by constructing in the pavement or 1 to 3 feet off the edge of pavement in the disturbed shoulder, boring the fiber optic conduit and cable beneath coastal sage scrub plant communities, or hanging the conduit from a bridge.
- BIO-36. Any construction or installation work performed within 1,000 feet of potential habitat for California coastal gnatcatcher during the period of February 15 to June 1 of any given year will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. No night lighting will be used within 1,000 feet of potential habitat during the breeding season. Noise, dust, nighttime lighting, and human presence will be limited as follows:
- From February 15 to June 1, no operations will be conducted within 305 meters (1,000 feet) of potential habitat after dark.
  - Noise levels will be controlled with residential or better level mufflers or engine enclosures for trenching and other mobile equipment. Boring machine noise will be restricted by use of residential or better mufflers or engine enclosures or portable sound walls. Noise reduction methods may be used in conjunction with one another, or other noise reduction methods may be used to reduce noise impacts. Noise levels as measured at the edge of potential habitat will always be below 90 dBA, or ambient, whichever is higher, with a goal of reducing noise to below 60 dBA whenever and wherever possible.

- There will be no construction-related pedestrian access to any riparian habitat during breeding season except in case of emergency frac-out response.
- Dust will be strictly controlled by watering within 305 meters (1,000 feet) of potential habitat.

Construction or installation work performed within 1,000 feet of potential habitat for California coastal gnatcatcher during the period of February 15 to June 1 will be monitored daily by a qualified biologist or as coordinated with existing Camp Pendleton monitoring, where applicable. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, Corps, and USFWS.

- BIO-37. No night lighting will be used within 1,000 feet of potential habitat during the breeding season.
- BIO-38. Any work that would subject potential habitat for gnatcatcher in critical areas as directed by the USFWS to sound levels above 60 dBA  $L_{eq}$  or background, whichever is higher, will be completed between September 1 and June 1.

#### **Burrowing owl**

- BIO-39. Preconstruction surveys during the breeding season (February 1 to August 31) will be conducted by biologists who will visually check all potential habitats within 250 feet of both sides of the proposed fiber optic cable construction corridor. If active burrowing owl nests are found, biologists will establish a 250-foot buffer zone around the active burrow. No installation activities will be permitted within the specified buffer zone until after the breeding season or until it is determined that young have fledged.
- BIO-40. Preconstruction surveys during the wintering season (September 1 to January 31) will be conducted by visually checking all potential habitat in areas where there will be some ground disturbance including vehicle access or trenching. Qualified wildlife biologists will conduct preconstruction surveys for burrowing owls within 2 weeks of construction activities.
- BIO-41. The CDFG guidelines require that one-way doors be installed at least 48 hours before construction at all active burrows that exist within the construction area so that the burrows are not occupied during construction activities. The one-way doors will be installed at that time to ensure that the owls can get out of the burrows but cannot get back in. The CDFG guidelines also require the installation of two artificial burrows for each occupied burrow that is removed. Artificial burrows will be constructed prior to installation of one-way doors.
- BIO-42. If any active burrows are damaged by construction activities, compensation will be paid at the equivalency rate of 6.5 acres of foraging habitat for burrowing owls for each active burrow damaged.

#### **Le Conte and Crissal Thrasher**

- BIO-5. Native trees in the construction corridor over 5 inches DBH (or 4.5 feet (1.2 meters) above ground) will be staked and flagged around the dripline. Trees with trunks outside the corridor, but with parts of their canopies within the construction corridor, and

multiple-stem shrubs with 5 or more stems 1 inch or more DBH, are included. Staking and flagging will be conducted prior to ground disturbing activities.

BIO-6. All flagged trees and shrubs will be avoided wherever feasible during construction. Avoidance may be accomplished by rerouting the conduits outside the dripline of the plants or directionally drilling beneath them at least 10 feet. Where the entire plant cannot be avoided, the plant may be pruned of up to one-third its live crown ratio, keeping pruning cuts outside of branch collars. Where pruning will not suffice to allow equipment to pass, the tree or shrub will be cut off at ground level. The roots will be left in place to encourage resprouting.

BIO -24. To compensate for the long-term but temporary loss of creosote bush scrub habitat in the construction corridor, AT&T will purchase land or land credits for a total of 148 acres. To the extent available on the market, the land will contain habitat for fairyduster (*Calliandra eriophylla*). This total acquisition will also compensate for temporary loss of habitat for desert tortoise, Crissal and LeConte's Thrasher, and flat-tailed horned lizard. Desert tortoise habitat compensation accounts for 108 acres (see measure BIO-48); therefore an additional compensation must be purchased for 40 acres.

#### Cliff Swallow

BIO-43. If activities to attach fiber optic cable to bridges occur when swallows are not breeding (September 1 through February 28), activities can proceed with no further mitigation.

BIO-44. If proposed bridge attachments are planned to occur during the swallows' breeding season, the prior year's nests will be removed before March 1 to discourage nesting, and the bridge area will be hosed at least weekly to remove new mud and prevent swallows from completing their nests until the bridge attachment is complete or until swallows desist nesting attempts.

BIO-45. If a swallow successfully completes a nest, attachment to the bridge will stop and will not resume before September 1 unless a qualified biologist determines that the young have fledged.

#### Peninsular Bighorn Sheep

BIO-46. A trained biological monitor will be on-site for activities conducted along I-8 within the boundaries of proposed critical habitat for the peninsular bighorn sheep.

BIO-47. The monitor will perform pre-construction surveys of the alignment in areas adjoining potential or known bighorn sheep habitat.

BIO-48. Peninsular bighorn sheep sightings will be reported to the USFWS within 24 hours.

BIO-49. If a bighorn sheep is noted within 92 meters (300 feet) of ongoing cable installation, then all operations will cease until the individual/group has moved 92 meters (300 feet) beyond the construction corridor.

#### Desert Tortoise

BIO-50. A biological monitor will be present during construction in all areas of potential desert tortoise habitat.

- BIO-51. Should a tortoise wander onto the project site during construction, adjacent activities will be halted until the tortoise has been moved off the project site out of harm's way.
- BIO-52. If a tortoise is located on the project site and is not moving, construction will be halted until an authorized biologist is able to move it out of harm's way.
- BIO-53. The USFWS will approve and authorize biologists responsible for moving tortoises out of harm's way.
- BIO-54. The project proponent will submit the names of all proposed, authorized biologist(s) to BLM for review and approval at least 30 days prior to initiation of any desert tortoise clearance surveys. Project activities will not begin until an authorized biologist(s) has been approved.
- BIO-55. A clearance survey for the desert tortoise will be conducted within 48 hours prior to ground disturbance.
- BIO-56. When burrows are found, they will be checked for desert tortoises. When tortoises are found, such burrows will be flagged.
- BIO-57. All unoccupied burrows will also be flagged, but in a different manner than the occupied burrows. Burrows outside of the limits of construction will be flagged so that the biological monitor will be able to more easily locate them during construction.
- BIO-58. All desert tortoise burrows and pallets will be flagged for avoidance. All desert tortoise burrows or pallets in the construction zone that cannot be avoided will be excavated by a qualified biologist or blocked. All desert tortoise handling and burrow excavation will be in accordance with handling procedures developed by the USFWS and conducted by qualified desert tortoise biologists.
- BIO-59. Desert tortoises that are found aboveground and need to be moved from harm's way will be placed in the shade of a shrub. All desert tortoises removed from burrows will be placed in an unoccupied burrow of approximately the same size as the one from which it was removed.
- BIO-60. If an existing burrow is unavailable, the authorized biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows to ensure their safety. The authorized biologist will be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.
- BIO-61. All persons authorized by the USFWS to handle desert tortoise will follow the guidelines established in the *Guidelines for Handling Desert Tortoises During Construction Projects* (Desert Tortoise Council 1994, revised 1999).
- BIO-62. Op Amp locations will be fenced with chain link. Within desert tortoise habitat, the lower 46 centimeters (18 inches) of the fence will be "tortoise-proof" (i.e., the mesh will be 1.3 centimeters [0.5 inches] or less to prevent tortoise access to the Op Amp facility).
- BIO-63. All fiber-optic line marker signs within desert tortoise habitat will be fitted with "bird-be-gone" or similar bird repellent devices.

- BIO-64. Existing routes of travel will be used whenever possible. To the extent possible, previously disturbed areas within the project sites will be used for temporary storage areas; laydown sites, and any other surface-disturbing activities. Any routes of travel that require construction or modification will have a qualified biologist(s) survey the area for tortoises prior to modification or construction of route.
- BIO-65. Trench segments or other excavations will be fenced with temporary tortoise-proof fencing, covered at the close of each working day, or provided with tortoise escape ramps. All excavations will be inspected for tortoises prior to filling.
- BIO-66. Anytime a vehicle is parked, the ground around and under the vehicle will be inspected for desert tortoises before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If this does not occur within 15 minutes, an authorized biologist will remove and relocate the tortoise. Within desert tortoise habitat, any construction pipe, culverts, or similar structures with a diameter of 8 to 30 centimeters (3 to 12 inches) that are stored on the construction site for one or more nights will be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site.
- BIO-67. All construction related activities in desert tortoise habitat will be conducted from dawn until dusk.
- BIO-68. A speed limit of 32 kilometers/hour (20 mph) will be maintained while on the construction site, dirt or unposted access roads, and storage areas.
- BIO-69. Impacts to desert tortoise habitat will be offset through either an acceptable land acquisition or an assessed financial contribution. To offset the temporary impact of construction on, and the 2-acre loss of, desert tortoise habitat, AT&T will acquire 193 acres of desert tortoise habitat in designated critical habitat of the Chuckwalla unit. This acreage is based on the loss of 2 acres and the temporary impact of construction on 77 acres of category III habitat compensated at a 1:1 ratio; temporary impact of construction on 6 acres of category II desert tortoise habitat compensated at a 3:1 ratio; and temporary impact of construction of 24 acres of category I habitat compensated at a 4:1 ratio. Overall, the parcel (reviewed and mutually approved by the USFWS, BLM, and CDFG) must be comparable or superior in quality to the tortoise habitat that will be disturbed by the proposed project. Correspondingly, AT&T could provide enough funds directly to the BLM or CDFG to procure lands in designated critical habitat of the Chuckwalla unit. In both cases, the compensation must be secured (with any property either deeded to BLM or CDFG) prior to the onset of any project-related construction activities. Additionally, a sum of \$38,695 (i.e., \$200/acre management rate and \$95 enhancement fee) will be given to the CDFG to manage acquired lands. The property shall be protected in perpetuity for the benefit of the desert tortoise.
- BIO-24. To compensate for the long-term but temporary loss of creosote bush scrub habitat in the construction corridor, AT&T will purchase land or land credits for a total of 148 acres. To the extent available on the market, the land will contain habitat for fairyduster (*Calliandra eriophylla*). This total acquisition will also compensate for temporary loss of habitat for desert tortoise, Crissal and LeConte's Thrasher, and flat-tailed horned lizard. Desert tortoise habitat compensation accounts for 108 acres (see measure BIO-48); therefore an additional compensation must be purchased for 40 acres.

**Flat-Tailed Horned Lizard (FTHL) and Colorado Desert Fringe-Toed Lizard (CFTL)**

- BIO-70. Qualified biologists will conduct preconstruction surveys to identify all potential habitat along the construction area. Within 7 days before construction begins, biologists will identify habitat areas subject to direct construction-related ground disturbance.
- BIO-71. Following preconstruction searches for potential FTHL/CFTL habitat, and 7 days before construction, biologists will establish exclusion zones in the project construction corridor near potential habitat. Exclusion zones are 50 feet from the work area.
- BIO-72. Biologists will conduct a final clearance survey 1 to 2 days prior to construction activities, excavate potential burrows, and relocate the lizard to nearby suitable habitat in the exclusion zones. The management strategy guidelines for relocation of flat-tailed horned lizards described in Working Group of Flat-Tailed Horned Lizard Interagency Committee (Foreman 1997) shall be utilized.
- BIO-73. Construction areas will be periodically examined (at least hourly when surface temperatures exceed 30 degrees Celsius) for the presence of FTHL/CFTL. In addition, all trenches, holes, or deep excavations will be examined for the presence of flat-tailed horned lizards prior to filling. If lizards are found they will be relocated to nearby suitable habitat.
- BIO-74. A field contact representative will have the authority to ensure compliance with protective measures for FTHL/CFTL, and will initiate a worker education program.
- BIO-75. A biological monitor shall be present in each area of active construction within FTHL/CFTL habitat throughout the work day from initial clearing through habitat restoration. The biological monitor shall have sufficient education and field experience or training with the FTHL/CFTL to understand its biology and behavior. The monitors shall ensure that all activities are in compliance with the FTHL Rangewide Management Strategy. The biological monitor shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
- Examine construction area periodically (at least hourly when surface temperatures exceed thirty degrees Celsius) for the presence of FTHL/CFTL. In addition, all hazardous sites (open pipes, trenches, holes, or deep excavations) shall be inspected for the presence of FTHL/CFTL prior to backfilling.
  - Work with the construction supervisor to take steps, as necessary, to avoid disturbance to FTHL/CFTL and their habitat. If avoiding disturbance is not possible or if FTHL/CFTL is found trapped in an excavation, the affected lizard will be captured by hand and relocated.
  - Relocated FTHL/CFTL shall be placed in the shade of a large shrub a short distance from the construction ROW and in the direction of undisturbed habitat. If the surface temperature in the sun is less than 30 degrees Celsius, or greater than 50 degrees Celsius, the biological monitor authorized to handle the FTHL/CFTL will hold the lizard for later release.
  - Initially captured FTHL/CFTL shall be held in a cloth bag, cooler, or other appropriate clean dry container from which the lizard cannot escape. Lizards shall be held at temperatures between 25 and 35 degrees Celsius and shall not be exposed

to direct sunlight. Release shall occur as soon as possible after capture and during daylight hours when surface temperatures range from 32 to 40 degrees.

- BIO-24. To compensate for the long-term but temporary loss of creosote bush scrub habitat in the construction corridor, AT&T will purchase land or land credits for a total of 148 acres. To the extent available on the market, the land will contain habitat for fairyduster (*Calliandra eriophylla*). This total acquisition will also compensate for temporary loss of habitat for desert tortoise, Crissal and LeConte's Thrasher, and flat-tailed horned lizard. Desert tortoise habitat compensation accounts for 108 acres (see measure BIO-48); therefore an additional compensation must be purchased for 40 acres.

### Arroyo Southwestern Toad

The following avoidance and minimization measures will be employed when construction takes place within arroyo toad habitat. For the purposes of this document, arroyo toad habitat is defined as areas within one kilometer [0.6 miles] of Miller Creek, La Posta Creek, Kitchen Creek, Cottonwood Creek, Pine Valley Creek, Samagatuma Creek, Sweetwater River, Viejas Creek, San Mateo Creek, Santa Margarita River, San Juan Creek, Trabuco Creek, San Onofre Creek. These conservation measures are derived from the Recovery Plan for the Arroyo Southwestern Toad (USFWS 1999):

- BIO-76. Daily pre-construction sweeps of the construction area will be conducted.
- BIO-77. A "drift fence" of silt fence material will be installed wherever construction is taking place within suitable arroyo toad habitat. The fence will be in place far enough ahead of the construction to effectively exclude toads from the work space for a period of 24 hours prior to construction. The fence may be removed progressively behind equipment as the line is buried and the trench re-graded. This fence will exclude foraging arroyo toads from the work area and will be cleared before construction begins every morning by a biological monitor. This process will proceed every hour if there is any measurable precipitation. Toads found on the inside of the enclosure will be placed outside the enclosure on the stream side. Toads found on the outside of the enclosure will be placed out of harm's way and in such a manner as to facilitate the toads' presumed trajectory.
- BIO-78. The USFWS will approve in writing those monitors who will be permitted to handle arroyo toads. AT&T will submit to BLM, which will forward to the USFWS a list of monitors with their credentials regarding their experience in identification and handling of herptofauna. The applicant is encouraged to provide to the USFWS the training schedule and curriculum that is proposed for training said monitors. The USFWS will respond with a list of the approved monitors.
- BIO-79. There will be continuous biological monitoring of all construction within arroyo toad habitat.
- BIO-80. There will be no construction within one kilometer (0.6 miles) of arroyo toad habitat after dark.
- BIO-81. No night lighting will be used within 1,000 feet of potential habitat during the breeding season.
- BIO-82. During periods of precipitation within one kilometer (0.6 miles) of arroyo toad habitat, vehicle speeds will be 32 kilometers/hour (20 mph) or below within the work zone.

- BIO-83. The project construction will avoid stream channels entirely.
- BIO-84. Construction personnel and the biological monitors will be trained by a qualified herpetologist on the identification and avoidance of the arroyo toad.
- BIO-85. Directional drilling at Pine Creek, Cottonwood Creek, and Kitchen Creek will take place outside arroyo toad breeding season, typically January through July.

#### **Couch's Spadefoot Toad**

- BIO-86. Couch's Spadefoot Toad habitat is limited to the north side of Highway 78 from Glamis to Milpitas Wash. All construction activity is therefore limited to the south side from Glamis to Milpitas Wash of Highway 78 to avoid impacts to this species.

#### **CULTURAL RESOURCES**

- C-1. Procedures for reducing impacts on significant cultural resources will be determined in consultation with the BLM, Advisory Council on Historic Preservation, and state agencies pursuant to Section 106 of the NHPA and implementing regulations (36 CFR 800). Avoidance is the primary method of reducing impacts on cultural resources.
- C-2. A specific Cultural Resources Monitoring and Mitigation Plan will be prepared that identifies which portion of the general measures C-5 and C-6 will be applied at each site to minimize potential impacts on sensitive cultural resources.
- C-3. AT&T will provide on-site monitoring of construction activities supervised by a qualified archaeologist at all eligible sites on the National Register of Historic Places (NRHP). Through consultation, additional sites may be added for monitoring.
- C-4. When disturbance of NRHP eligible sites is unavoidable, impacts will be mitigated according to a site-specific treatment plan that will be formulated in consultation with the proponent, BLM, SHPO, and State lands agency representatives. Mitigation measures include monitoring of construction activities, additional surface documentation, collection, and partial or complete excavation.
- C-5. Indirect impacts will be controlled by educating employees about the significance of cultural resources and implementing a strict management policy restricting the casual collection of artifacts from the project area.
- C-6. In addition to the 100 percent Class III survey already completed for the entire project, consideration of cultural resources during project implementation includes intensive surveys to inventory and evaluate cultural resources for any new area proposed for temporary use. Areas that are determined to contain significant or potentially significant cultural resources will not be used for temporary work areas.
- C-7. Prior to construction, known cultural resource sites to be avoided will be flagged and staked on the ground and marked on maps as sensitive resources. No further description will be provided to preserve confidentiality of the site. Ground disturbance activities will be prohibited within the flagged area.
- C-8. If previously undocumented sites or subsurface components of documented sites are discovered during construction, activities will be halted until a qualified archaeologist



reviews the resources and a construction method is developed according to the state-specific treatment plan approved by the SHPO.

- C-9. If human remains are encountered during construction, all work will immediately halt in the vicinity of the discovery and the county sheriff or coroner will be immediately notified. If the coroner determines that the remains are historic or prehistoric, construction in the immediate area of the burial will not continue until the nature of the burial and an appropriate course of action are determined in consultation with the landowner and the SHPO.

## GEOLOGY/SOILS

- GS-1. Temporary water bars or baffles will be used to direct water runoff away from the construction ROW into energy-dissipating devices.
- GS-2. Temporary sediment barriers (such as sedimentation fences and certified weed-free straw bales) will be placed at the base of slopes adjacent to all road or waterbody crossings where vegetation has been disturbed, to prevent sediment migration off site. These barriers will remain in place until revegetation measures are judged successful.
- GS-3. Where trenching is necessary on steep slopes, erosion control measures (such as trench plugs, water bars, or baffles) will be placed in the trench.
- GS-4. Trench plugs will be used on slopes adjacent to water bodies and wetlands or in agricultural fields and residential areas, if needed.
- GS-5. Where sediment is transported onto a public road surface or other paved area by equipment or vehicles accessing the construction site, sediment will be removed immediately by mechanical means (sweeping, shoveling, or blading) only.
- GS-6. The conditions of the Storm Water Pollution Prevention Plan (SWPPP) will be imposed on all construction activities to limit sedimentation of surface waters. Draft SWPPPs for each of the State Regional Water Quality Control Board Regions crossed by this project (4, 7, 8, and 9) are included in Appendix D.
- GS-7. As weather conditions dictate, temporary sediment barriers (sand bags, silt fences or hay bales) will be strategically placed to prevent water flow off-site into waterways or storm drain inlets.
- GS-8. Dust and blowing sand caused by construction activity will be controlled through watering where needed.
- GS-9. Construct all structures to seismic standards in local building codes.
- GS-10. Once the fiber optic duct has been installed and the backfilled, the fiber optic alignment and working space will be recontoured to approximate original contours. Recontouring to natural lines and grade will be accomplished without disruption to adjacent undisturbed habitat. Mechanical roughening/resurfacing will be utilized to recontour the substrate and decompact the soil in native desert vegetation areas.

## HAZARDS/HAZARDOUS MATERIALS

- HAZ-1. Prepare and implement Spill Prevention, Containment, and Control Plan (SPCCP).
- HAZ-2. The contractor will be required to have a continuous cleanup program throughout construction, and restore land crossed to its preconstruction condition. Restoration also will include the removal of ruts deeper than 4 inches and the disposal of foreign objects (see restoration plan, Appendix J). Restoration will include recontouring and reseeding impacted areas with native vegetation similar to the original and removing trash. The contractor will be required to keep a clear work area. After completion of the project a final walk-through will be completed on BLM lands to ensure that no waste or material is left on site and that all ruts or terrain damage or vegetation disturbance has been repaired to the satisfaction of the BLM Authorized Officer.
- HAZ-3. No nonbiodegradable debris will be deposited in the ROW or temporary use areas.
- HAZ-4. The contractor will be required to transport one portable chemical toilet for each construction crew or group of crews of at least five persons during construction.
- HAZ-5. A Safety and Health Plan will be developed, and construction practices will be used that follow recommendations regarding fire hazards and accident prevention. The Safety and Health Plan will be consistent with 29 CFR 1910 (OSHA Occupational Safety and Health Standards) and 29 CFR 1926 (OSHA Safety and Health Regulations for Construction). It will conform to California Occupational Safety and Health Administration (CalOSHA) regulations. The Safety and Health Plan will identify the site physical hazards, site chemical hazards, and the physical hazards of the proposed operations. Unexploded ordnance (UXO) training will be included.
- HAZ-6. Construction contractors will follow fire management protocols as specified in their contracts. Contractors will be responsible for determining the fire activity level for the next day and complying with contract provisions for that predicted activity level, including equipment for each crew and the types of activities that will be restricted during high activity levels.
- HAZ-7. As part of construction, each contractor will designate a person to contact the BLM Fire Management Officer daily to determine the fire activity level for the next day's work. During construction scheduling, project engineers will coordinate the construction schedule to minimize fire season conflicts by coordinating with BLM Field Offices.
- HAZ-8. A fire prevention plan will be prepared and will include potential fire hazards, names or job titles of key fire prevention personnel, and housekeeping procedures. Training and maintenance procedures also will be identified. [8 CCR 3221 Fire Prevention Plan]

## HYDROLOGY/WATER QUALITY

- HY-1. Contained waters (flood control structures, irrigation canals and drainage ditches in culverts) may be crossed by trenching over or beneath the culverts where trenching can occur without risk of damage to the culvert and is approved by the culvert manager or owner. Otherwise such waters will be directionally drilled.

- HY-2. On Camp Pendleton, all water bodies will be directionally drilled with the exception of San Mateo Creek, San Onofre Creek, and the Santa Margarita River, which will be crossed using bridge hangs existing bridges.
- HY-3. Water to be used during the conduit installation phase includes water needed for directional drilling and for dust control. All water used will be obtained from private sources off-ROW, and no natural water sources will be tapped for construction use.
- HY-4. During construction, equipment will be refueled on the ROW by a fuel truck. Refueling will take place no closer than 100 feet from a wetland or riparian zone. Full spill containment kits will be stored at the nearest staging areas. The fuel truck will contain an emergency spill kit to capture any spillage. Contents of the Spill Kit are specified in the SPCC Plan (Appendix D, Attachment D-1).

#### NOISE

- NO-1. Emergency generators for Op Amp facilities will be enclosed in an insulating shelter that limits noise levels to 85 dBA at 5 feet from the shelter.
- NO-2. Construction of Op Amp facilities will be limited to Monday through Saturday from 6 am to 7 pm to limit noise impact to neighbors.
- NO-3. On-ROW construction will be limited by local permitting agencies, including counties and municipalities, according to the local ordinances. All on-ROW construction will conform to local noise ordinances.

#### RECREATION

- REC-1. In the vicinity of Algodones Dunes Recreation Area, construction activities will be limited from November 16 through June 14 to work only Tuesday through Thursday to avoid conflicts with off-highway vehicles (OHV) south of Highway 78.
- REC-2. No construction equipment will be staged over the weekend in the dunes area.

#### TRANSPORTATION/TRAFFIC

- TR-1. A traffic control plan conforming to California Department of Transportation (CalTrans) standards will be in place prior to beginning construction.
- TR-2. Appropriate traffic control measures will be instituted whenever required by the plan and will be in accordance with U.S. Department of Transportation standards for traffic control to protect worker and public safety.
- TR-3. All personnel will be safety-trained prior to beginning work on this project, including construction workers as well as supervisors and monitors.
- TR-4. At locations where access to nearby property is blocked, contractor shall be prepared at all times to accommodate emergency vehicle passage, including plating over excavations or providing detours.