Supplemental Environmental Assessment
Submitted by:
U.S. Marine Corps

P-614 Special Operations Training Group (SOTG) Battle Course
Marine Corps Base Camp Pendleton, California

January 2011

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1.0 Purpose and Need

1.1 Purpose

The purpose of this Supplemental Environmental Assessment (SEA) to the Final Environmental Assessment (FEA) for P-614 Special Operations Training Group (SOTG) Battle Course, 41 Area at Marine Corps Base Camp Pendleton, California is to correct placement of one California gnatcatcher (CAGN) point in the FEA and adress modifications to project design post-FEA. This SEA evaluates the environmental impact of these corrections and modifications to the FEA, both of which increase impacts to occupied habitat of the threatened CAGN. Thus the corrections and modifications are subject to the National Environmental Policy Act (NEPA) review. The FEA, for which the Commanding Officer (CO) of Marine Corps Base Camp Pendleton signed a Finding Of No Significant Impact (FONSI) on September 22, 2009, is located in Appendix D.

1.2 Need

A SEA is required to evaluate environmental impacts associated with the correction of and modifications to the original FEA.

1.3 Decisions That Need To Be Made

The CO of Camp Pendleton must decide whether to proceed with the project in light of the proposed changes and new information.

1.4 Background

The FEA for P-614 SOTG Battle Course (Appendix D) proposes to construct a new tactical automated range/urban sniper range and related facilities northwest of Range 130. A FONSI was signed on September 22, 2009 and a design-build construction contract was awarded shortly thereafter. As a result, the construction contractor reviewed the project and determined that modifications were necessary to the original design. Those modifications would result in an additional 1.1 acres of impacts to occupied CAGN habitat (Figure 3 and 6, Appendix A). In addition, through the course of reviewing the modifications, it was determined that the location of one of the original CAGN points was located within the action footprint of the selected alternative rather than slightly outside, as depicted in the FEA (Figure 2, Appendix A). Further review determined that the corrected CAGN location would increase impacts to occupied CAGN habitat by 3.1 acres. The revised total permanent impacts to occupied CAGN habitat is 13.8 acres.

2.0 Affected Environment - Proposed Changes

The range has been redesigned to meet engineering requirements. The redesign included a correction to the quantity of grading. The FEA was based upon an estimated 700,000 cubic yards of excavation (cut and fill). This turned out to be a sizable underestimate. A more accurate estimate is 1,300,000 cubic yards of cut and fill. This is in spite of the fact that the redesign uses a smaller overall footprint. The redesign moves the finished grade approximately 20 feet. This change in elevation of the finished grade of the range changed the slopes in the cut area and the toe of the slope in the fill area to be outside the approved FEA proposed action footprint in some places, resulting in increased impacts to occupied CAGN habitat (Figure 6, Appendix A). The redesign also reduced impacts to non-wetland waters of the U.S. to 0.66 acres (down from 0.96 acres in the original design). Impacts to non-wetland waters required a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (ACOE). The permit was received on December 3, 2010 (Appendix C) and requires mitigation at a 2:1 ratio. This mitigation would occur at the Santa Margarita River restoration site.

A temporary water service line has also been added for use during construction, which includes a pipeline and associated pumps, reservoirs, and water towers. The waterline would run along the east side of Aliso Creek Road and would extend from the project site to an existing line at a nearby helicopter landing pad (Figures 1 and 4, Appendix A). The waterline would primarily be above ground with the exception of two road crossings where it would run underground. This waterline would supply water for the earthwork operations that would require approximately 150,000 to 300,000 gallons of water per day.

Due to the change in elevation from the connection to the construction site, a booster pump would have to be installed. The booster pump would be a diesel driven pump. Drip pans would be placed under the booster pump to contain any oil or fuel spills. Operation of the pump would be supervised during hours of operation, most likely during nighttime hours. After construction is completed, the pump and all piping would be removed and any area disturbed from construction operations would be repaired and re-vegetated (using a plan approved by Marine Corps Base, Environmental Security Land Management Branch).

Within the original footprint a temporary lined reservoir would be built to hold approximately 1,000,000 gallons of water. This reservoir would be built in the alignment of the existing drainage where the new drop structures and desilting basins would be built. After the earthwork operations are completed and water consumption falls, temporary water towers would be erected at the construction site, within the original footprint to provide water storage. The reservoir would be completely removed and the new drop structures and desilting basin would then be built.

2.1 Physical Characteristics

The physical characteristics of the project area are the same as described in Chapter 3.1 of the approved FEA.

2.2 Biological Environment

2.2.1 Habitat/Vegetation

The habitat/vegetation existing within the project area is the same as those described in Chapter 3.1. All previous requirements under the Biological Opinion are required.

2.2.2 Threatened and Endangered

Known threatened or endangered species that could be found in or near the project area are the same as those described in Chapter 3.1 of the approved FEA. All previous requirements under the Biological Opinion are required.

2.3 Land Use

Current land use within the project area is the same as described in Chapter 3 of the approved FEA.

2.4 Cultural Resources

Previously, no known historic properties were found within the original footprint as described in Chapter 3.2 of the FEA. The change in footprint and addition of the temporary waterline has been previously surveyed as part of the Basewide Utilities Infrastructure EIS. The results of that survey identified two archaeological sites. One site was considered to be ineligible for the National Register of Historic Places and the other was eligible for the National Register of Historic Places, but assumed to be destroyed. (Appendix B). All excavation near the two sites would be monitored by a qualified archaeologist and a Native American monitor (approved by Marine Corps Base,

Environmental Security Cultural Resources Branch). A monitoring and discovery plan would be developed (reviewed and approved by Cultural Resources Branch), and a report detailing the results would be provided to the Cultural Resources Branch at the conclusion of excavations.

3.0 Environmental Consequences - Proposed Changes

3.1 Habitat Impact

The revised location of the CAGN point places the point within the original footprint, resulting in a 3.1 acre increase in impacts to CAGN occupied habitat. Additionally, the proposed modification to the project footprint results in a 1.1 acre increase to CAGN occupied habitat. The corrections and modifications would result in a 4.2 acre increase to occupied CAGN habitat, which would be mitigated at a 2:1 ratio. This would increase the overall anticipated impacts to 13.8 acres (vice 9.6 acres as addressed in the FEA) of CSS occurring within 500-ft of known CAGN locations. Compensating for these impacts to CSS at a ratio of 2:1, results in impacts to vegetation communities being less than significant. United States Army Corps of Engineers (ACOE) jurisdictional impacts are reduced due to the proposed modifications. An Individual Permit from the ACOE was issued on December 3, 2010, and can be found in Appendix C.

3.2 Biological Impact

The additional impacts associated with the SEA would not result in any significant indirect impacts to CAGN.

3.3 Listed Species

The FEA and corrections/modifications noted in the SEA are not likely to adversely affect any federally listed species on Marine Corps Base Camp Pendleton.
The USFWS Section 7 Consultation letter can be found in Appendix A.

3.4 Cultural Impacts

No adverse effect on cultural resources would be anticipated from carrying out the proposed changes. The letter to the State Historic Preservation Officer can be found in Appendix B.

3.5 Environmental Justice

Executive Order 1289, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Federal Register 7629 (1994), directs federal agencies to incorporate environmental justice in their decision making process. Federal agencies are directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies, and activities on minority or low-income populations. No environmental justice issues exist for the proposed changes. No minority or low-income populations would be displaced or negatively affected in any way by the proposed action.

3.6 Cumulative Impacts

The cumulative impacts of the proposed changes would be the same as those described in the approved FEA.

4.0 List of Preparers

Kristin Thomas, NEPA Planner

B.A., Environmental Studies
Years of Experience: 15

5.0 Consultation and Coordination with the Public and Others

Once CPEN finalizes the SEA, a news release would be prepared. The SEA and all Appendices would also be posted on the CPEN website.

6.0 References Cited

- *Final Environmental Assessment, P-614 Special Operations Training Group (SOTG),* U.S. Marine Corps, November 2009
- *Finding of No Significant Impact, U.S. Marine Corps, Camp Pendleton,* September 22, 2009
- *Section 7 Consultation for P-614 Special Operations Training Group Battle Course, Marine Corps Base Camp Pendleton, San Diego County, California*
- *Section 106 Consultation for P-614 Special Operations Training Group Battle Course, Marine Corps Base Camp Pendleton, San Diego County, California*
- *US Army Corps of Engineers, Individual Permit,* December 3, 2010

Appendix A – USFWS Communications

UNITED STATES MARINE CORPS
MARINE CORPS BASE
BOX 555008
CAMP PENDLETON, CALIFORNIA 92055-5008

IN REPLY REFER TO:
5090
ENVSEC
January 12, 2011

U.S. Fish and Wildlife Service
Ecological Services
6010 Hidden Valley Road
Carlsbad, CA 92011

Attention: Mr. Jonathan Snyder

SUBJECT: AMEND FORMAL CONSULTATION FOR P-614

Marine Corps Base Camp Pendleton (Base) requests an amendment to formal consultation with the U.S. Fish and Wildlife Service (USFWS) to modify the project description for P-614, the Special Operations Training Group Battle Course. Your office issued a Biological Opinion (FWS-MCBCP-09B0339-09F0970) for this project on November 19, 2009. This amendment addresses an error in the original Biological Assessment (BA) as well as proposed changes to the project description. The project description changes include changes to the range proper, changes to permanent construction impacts and the addition of a temporary waterline with associated booster pumps, water reservoir, and water towers (Figure 1).

During preparation of this request the Base discovered the coastal California gnatcatcher (*Polioptila californica californica,* CAGN) location depicted in the original BA in the northern portion of the project did not correspond to the data in our permanent database. The BA depicted the location point roughly 50 meters south of what we believe to be the correct location and we have been unable to determine how this error occurred. Correct plotting of the CAGN location increases the impacts to CAGN-occupied coastal sage scrub habitat for the original project description by 3.1 acres from 9.6 to 12.7 acres (Figure 2).

With the exception of the temporary waterline and booster pumps, all of the proposed changes will remain within the action area described in the original BA (Figure 3). Additionally, the temporary waterline overlaps with the project footprint of sub-

project R-130 UII within the Basewide Utilities Infrastructure consultation (FWS-MCBCP-10B0201-10F0410).

The original conceptual design called for 1:1 cut slopes with no terraces. The current design contains six foot wide terraces every 30 vertical feet for slope stability, erosion control and re-vegetation. The slope behind the known distance targets has been similarly changed.

The revised design indicates excavation will increase from approximately 700,000 cubic yards to 1,300,000 cubic yards. This increase in excavation changes the final elevation by as much as 20 feet. These elevation changes resulted in the toe of fill slopes exceeding the project footprint described in the original consultation. The revised footprint within the original action area (i.e. primary range construction) represents a net decrease of 11.6 acres of impact (Figure 3), virtually all of which had been mapped as coastal sage scrub in the original BA.

As this project involves extensive earthwork, a large volume of water will be required during construction for dust control, moisture conditioning and irrigation. The Base believes it is better to pipe the water than truck it to the site. The temporary water line will connect to an existing 12-inch waterline at the AV-8 Pad #2 (Figures 1 and 4) along Aliso Creek approximately three miles south of the construction site. Initial connection will require excavating an area approximately 4 feet by 15 feet. The excavation will occur within the fenced boundary of the AV-8 pad. The area of impact is a mix of native and annual grasses, ruderal and disturbed habitats. Installation is expected to take 10-15 working days. Once aboveground, the pipe will run on the shoulder of Aliso Creek Road to the construction site. Two buried road crossings will be required (Figure 5).

The elevation rise between the connection and the construction site requires two above-ground, diesel-driven booster pumps to be installed along the route (Figures 4 and 5). Drip pans will be placed under the booster pumps to contain any oil or fuel spills. The pumps will operate for 12 hours per day, 5 days a week for 7-11 months. Water use (and pump operation) will be highest during initial earth work. As grading operations taper off, water demand (and associated pumping) will decrease. Pumping could occur any time of day but is expected to run primarily at night. Pumping operations will be supervised by a

trained construction company employee. The dBA of the diesel driven pump is approximately 80 (dBA) at 23 feet.

The temporary water line will terminate at the construction site within the original project footprint. A temporary, lined reservoir will be built to hold approximately one million gallons of water (Figure 5). This reservoir will be sited where the permanent desilting basins will eventually be placed. After the earthwork operations are completed and water consumption falls, the reservoir will be replaced with temporary water towers at the construction site for water storage.

Following construction, the pumps and all piping will be removed and any area damaged from construction operations will be repaired and re-vegetated. A blind flange or fire hydrant will be installed at the original connection at the AV-8 pad. The reservoir will be completely removed.

The proposed design changes will increase the permanent loss of occupied California gnatcatcher habitat by 1.1 acres (Figure 6). Taking into account both the design change and error correction, the total permanent impacts to CAGN-occupied coastal sage scrub will be 13.8 acres. The Base will offset this impact with 27.6 acres of coastal sage scrub restoration in a manner consistent with the original Biological Opinion.

This project amendment is not likely to adversely affect least Bell's vireo (*Vireo bellii pusillus* LBV) and the southwestern willow flycatcher (*Empidonax trailli extimus*). Base biologists worked with the project proponents to site the booster pumps as far as possible away from known LBV and SWFL locations. The closest known LBV was located 95 meters to the south of the southern booster pump. The closest known willow flycatcher was located 125 meters to the southwest of the southern booster pump (Figure 4). Willow flycatchers do not nest in Aliso Creek and identification during surveys is only to the species level. Any willow flycatchers in the vicinity of this project are considered migrant or transients. Furthermore, no riparian habitat will be disturbed. The project changes will have no affect on any other federally listed species aboard the Base.

All of the Conservation Measures and Terms and Conditions identified in the original Biological Opinion will be applied to

5090
ENVSEC
January 12, 2011

the amended project. The qualified biologist will ensure the booster pumps are properly sited and the temporary waterline avoids riparian habitat. The Base intends for this letter to satisfy the requirements of the Conservation Measure identifying the final project footprint impacts to CAGN.

Thank you for your attention to this matter. If you have any questions concerning this project please contact me at (760)763-8536 or Ms. Sherri Sullivan at (760) 725-9729 for further information.

Sincerely,

W. H. BERRY
Resource Management Division Head
Assistant Chief of Staff,
Environmental Security
By direction of the Commanding Officer

Enclosures: Figures 1-6

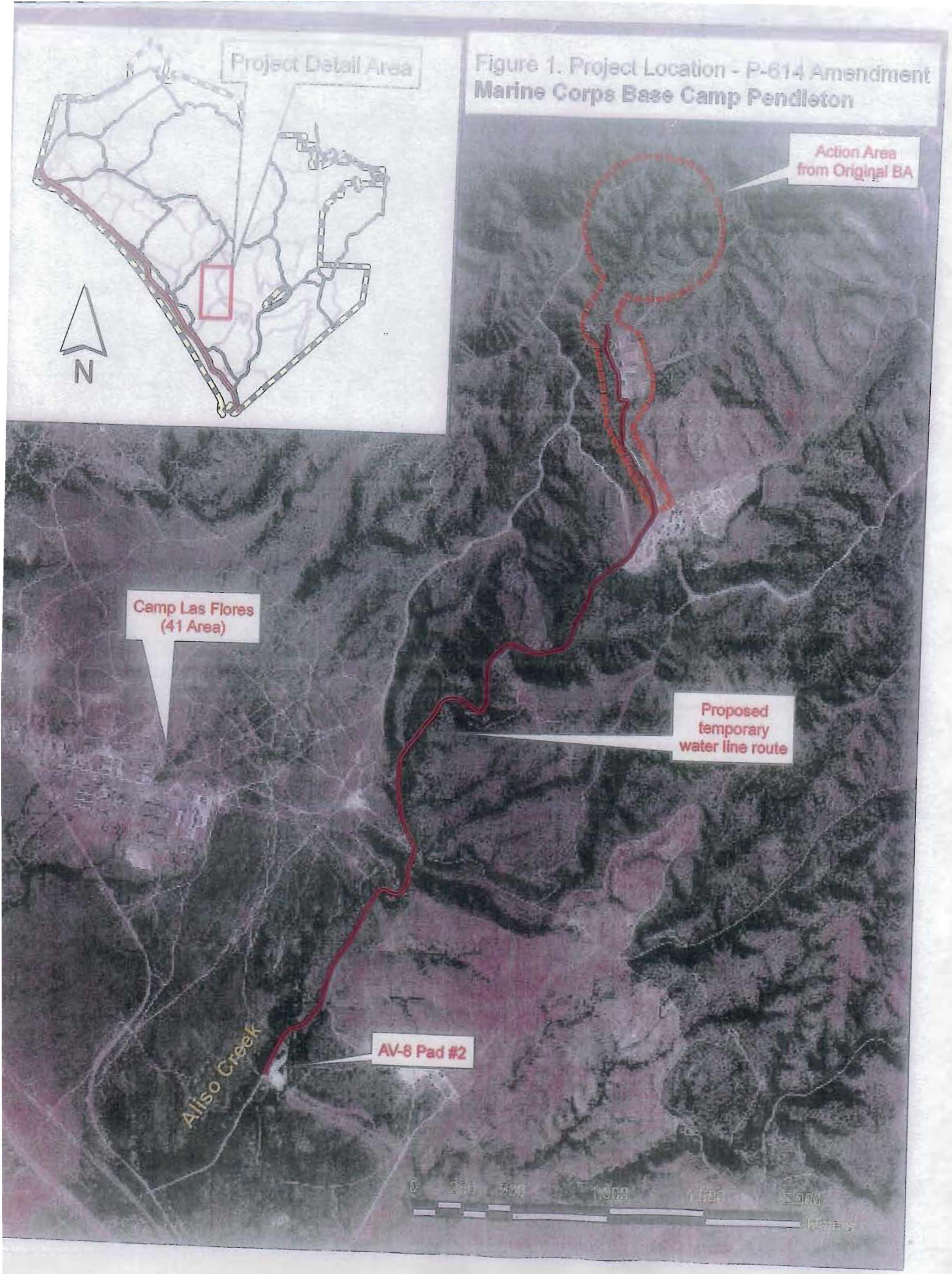


Figure 1. Project Location - P-614 Amendment
Marine Corps Base Camp Pendleton

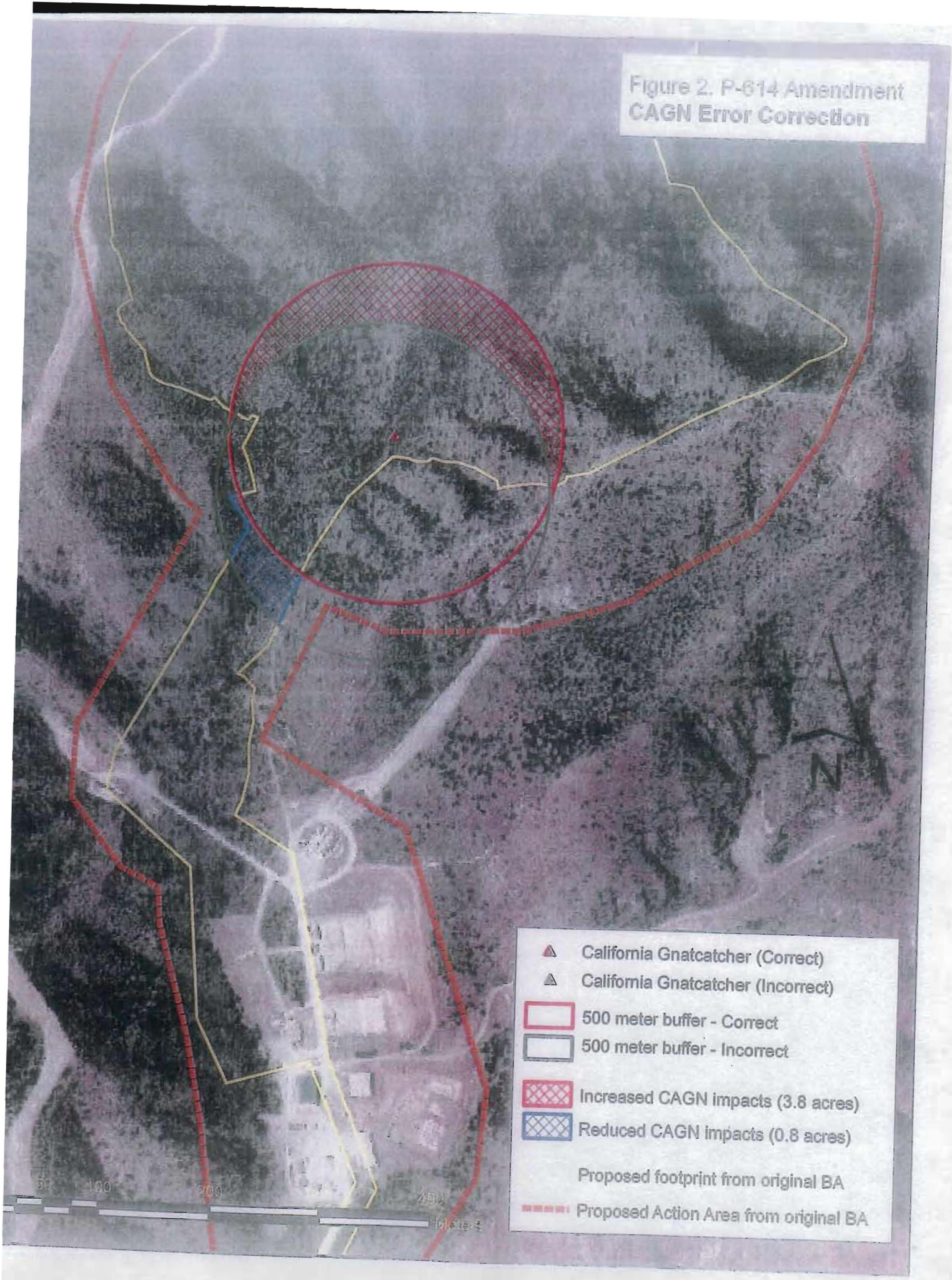


Figure 2. P-614 Amendment
CAGN Error Correction
California Gnatcatcher (Correct)
California Gnatcatcher (Incorrect)
500 meter buffer - Correct
500 meter buffer - Incorrect
Increased CAGN impacts (3.8 acres)
Reduced CAGN impacts (0.8 acres)
Proposed footprint from original BA
Proposed Action Area from original BA
N
100
200

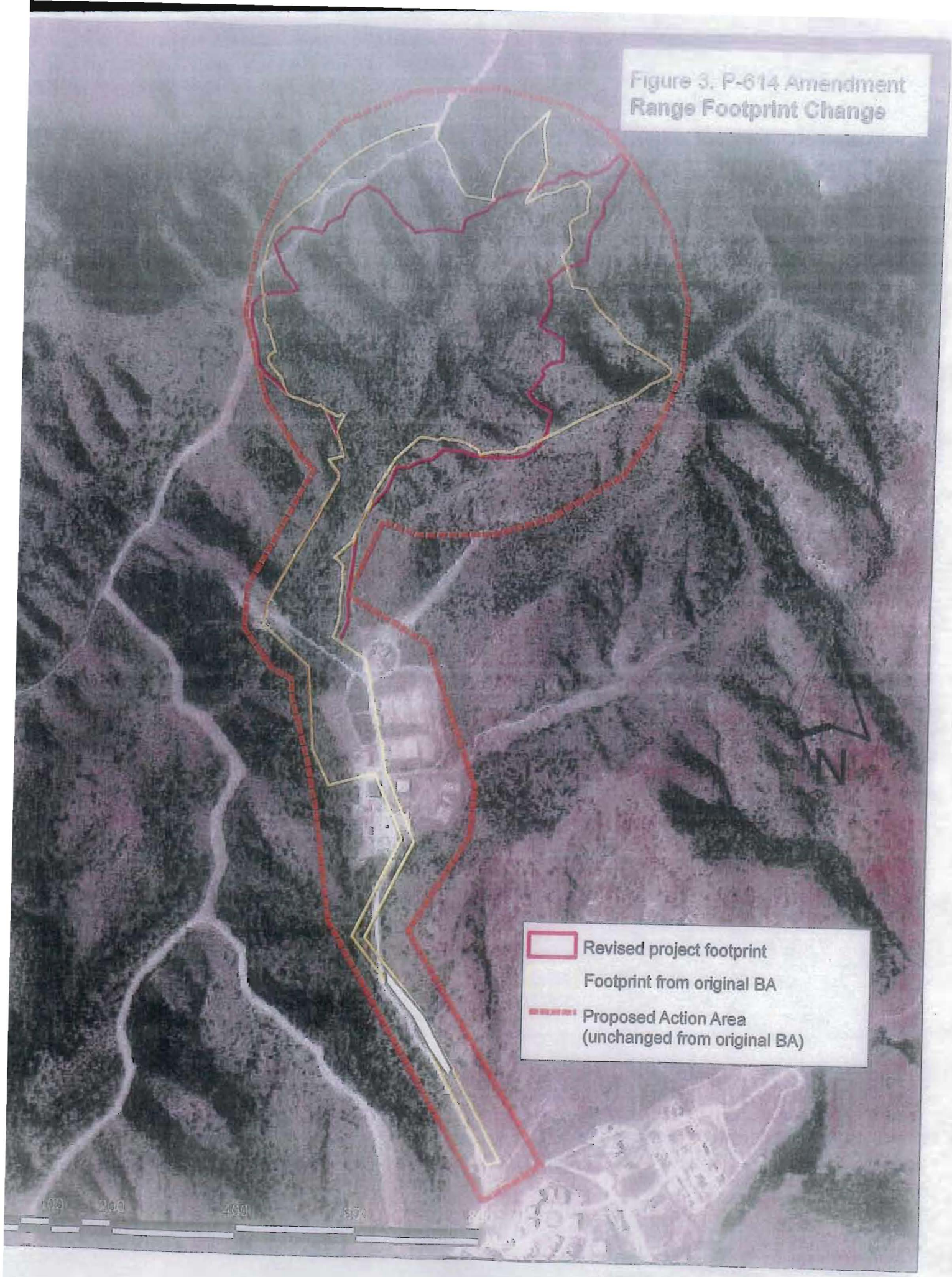


Figure 3. P-614 Amendment
Range Footprint Change
N
Revised project footprint
Footprint from original BA
Proposed Action Area
(unchanged from original BA)

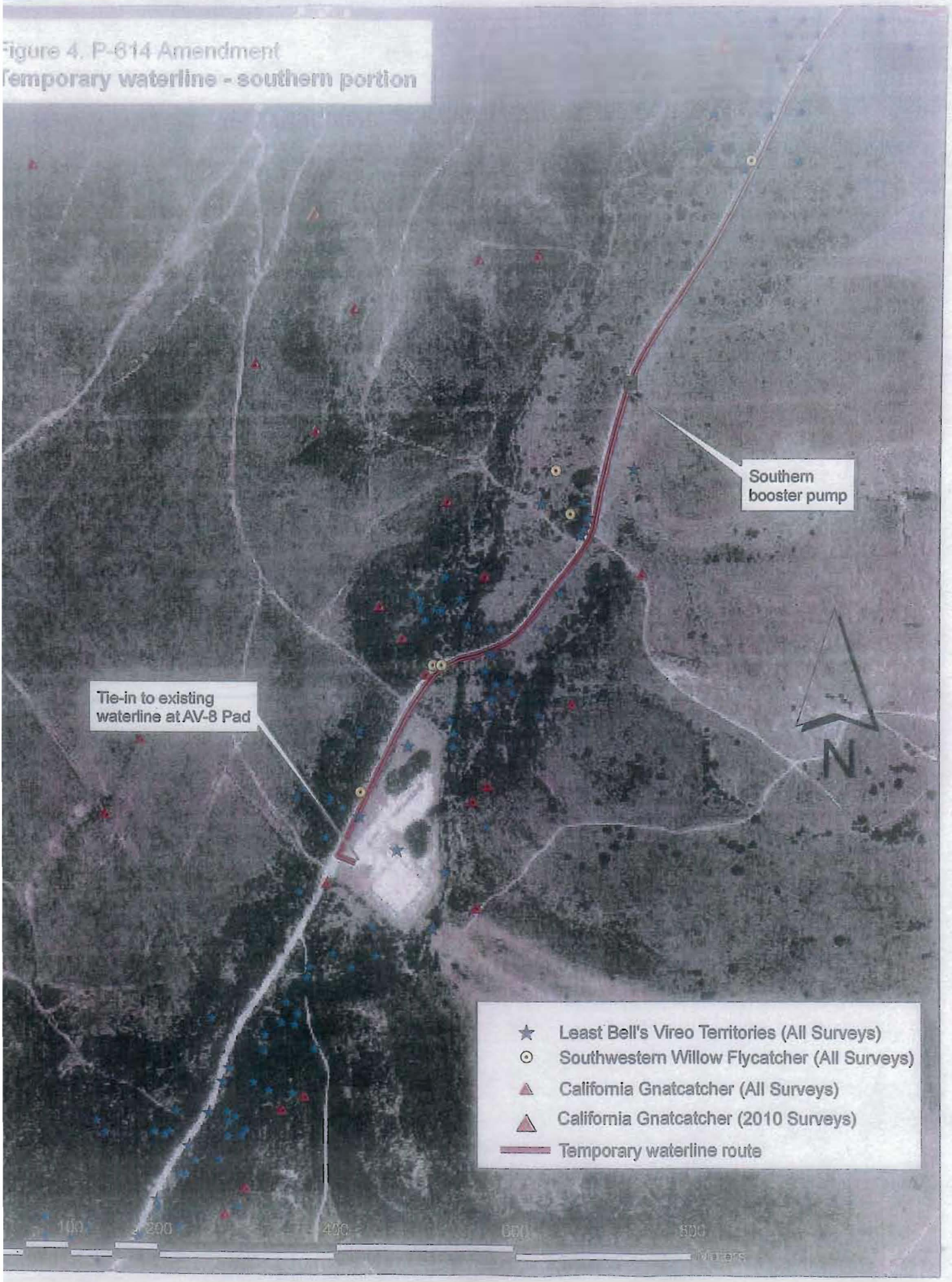


Figure 4. P-614 Amendment
Temporary waterline - southern portion
Southern booster pump
Tie-in to existing waterline at AV-8 Pad
N
Least Bell's Vireo Territories (All Surveys)
Southwestern Willow Flycatcher (All Surveys)
California Gnatcatcher (All Surveys)
California Gnatcatcher (2010 Surveys)
Temporary waterline route
100
200
400
600
800
Meters

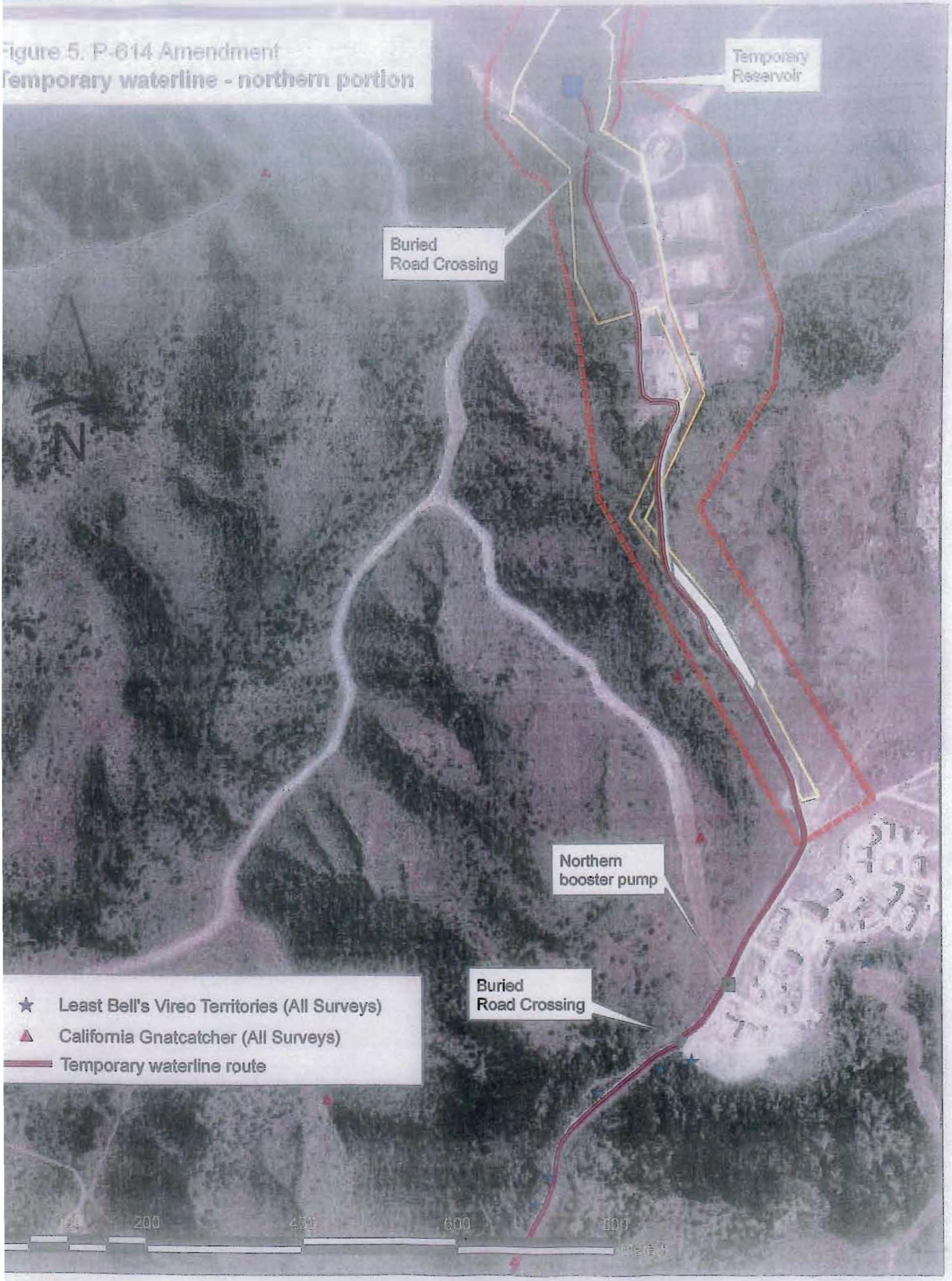


Figure 5. P-614 Amendment
Temporary waterline - northern portion
Temporary Reservoir
Buried Road Crossing
N
Northern booster pump
Buried Road Crossing
Least Bell's Vireo Territories (All Surveys)
California Gnatcatcher (All Surveys)
Temporary waterline route
200
400
600
800

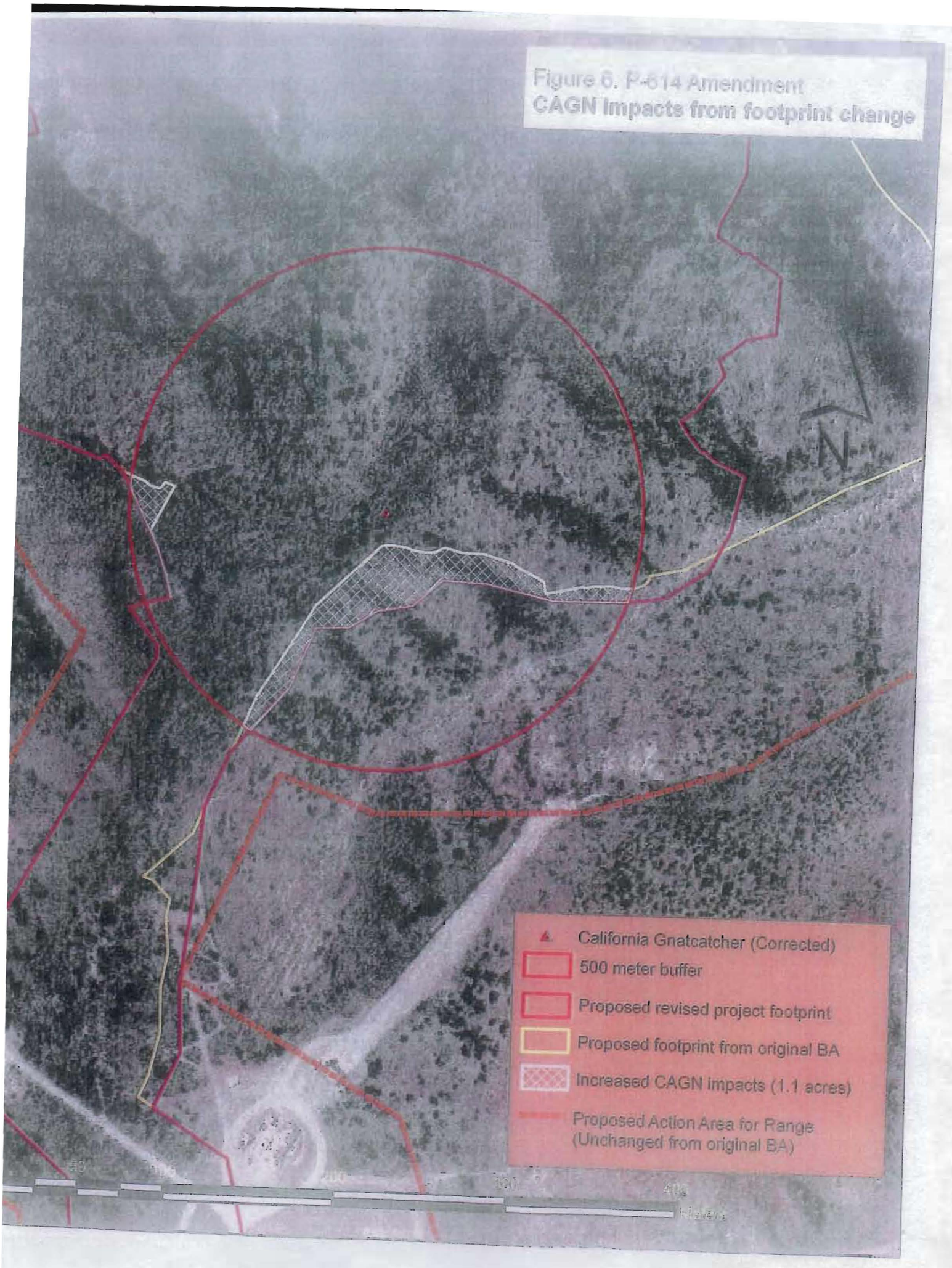


Figure 6. P-614 Amendment
CAGN Impacts from footprint change
N
California Gnatcatcher (Corrected)
500 meter buffer
Proposed revised project footprint
Proposed footprint from original BA
Increased CAGN impacts (1.1 acres)
Proposed Action Area for Range
(Unchanged from original BA)
200
300
400

Appendix B – SHPO Communications

Copy to:
Danielle Page

UNITED STATES MARINE CORPS
MARINE CORPS BASE
BOX 55508
CAMP PENDLETON, CALIFORNIA 92055-5008

IN REPLY REFER TO:
5090.19B
ENVSEC/523
January 14, 2011

Mr. Wayne Donaldson, FAIA
State Historic Preservation Officer
Department of Parks and Recreation
1416 9th Street, Rm. 1442
Sacramento, CA 94296-0001

Dear Mr. Donaldson:

SUBJECT: SPECIAL OPERATIONS TRAINING GROUP BATTLE COURSE, 41 AREA AMENDED (060098A)

Marine Corps Base (MCB) Camp Pendleton has changed the scope of the previous proposed Special Operations Training Group (SOTG) Battle Course (SHPO File No. USMC090318A), submitted March 10, 2009, to construct a tactical automated reaction range (Battle Course) within the Oscar Two training Area. Changes to the undertaking include the addition of a three-mile above ground water pipeline along Aliso Canyon Road, construction of a temporary reservoir and permanent silt basin, and terracing of the existing slope. The proposed water pipeline will expand the APE project three miles south of the Battle Course along Aliso Canyon Road (Enclosure (1)). Construction of the Battle Course requires the use of water supplied by the Government for dust control, moisture conditioning, and irrigation during construction.

Undertaking and Area of Potential Effects

The undertaking, pursuant to 36 CFR §800.16(y), is in the western area of MCB Camp Pendleton in the Oscar Two Training Area, three miles northeast of the intersection of the Range 130 access road and Stuart Mesa Road (Enclosure (1)). The area of potential effects (APE) of the SOTG Battle Course encompasses 148 acres with a smaller area identified as the Proposed Action Footprint (PAF). Grading and construction activities will occur within the smaller footprint. The PAF has expanded but does not exceed the boundaries of the original APE. Activities within the new PAF include grading and excavation of 1,300,000 cubic yards of soil and terracing of the existing slope. Terracing includes six foot terraces every thirty vertical feet for erosion control and re-vegetation efforts.

HAS BEEN SENT

[redacted]

MCB Camp Pendleton is also proposing to construct an above-ground pipeline to provide water for dust control, moisture conditioning, and irrigation during construction. While the SOTG Battle Course APE remains the same, linear expansion of the APE will follow Aliso Canyon Road three miles south from the SOTG Battle Course to the connection point at Landing Zone (LZ) 2 (Enclosure (2)). Two sections of pipe will be placed underground at road crossings (Enclosure (3)). Two diesel booster pumps will be placed along the route to pump water up the slope to the construction site. An additional pump will be placed at the northeastern connection point, within the Battle Course PAF, to pump water into a temporary reservoir. After construction of the Battle Course is complete, the pipeline, booster pumps, and reservoir will be removed. A permanent desilting basin and fire hydrant connection point will be constructed within the original APE.

Identification of Historic Properties Present

The original APE for the proposed Battle Course was previously surveyed by ASM Affiliates (Becker and Iverson 2009). No historic properties were found within the proposed project's APE. The archaeological survey report (*Archaeological Survey of the SOTG Battle Course, 41 Area, MCB Camp Pendleton, San Diego County, California)* was submitted to your office on March 10, 2009.

The additional pipeline APE has also been previously surveyed. The survey was conducted by AECOM (York 2010) as part of the archaeological survey completed for the Basewide Improvements Infrastructure (Enclosure (4)). The APE for Range 130 Utility Infrastructure Improvements (R-130UII) included the construction of sewer facilities and water distribution systems along Aliso Canyon. The proposed water systems for R130UII stretch from Stuart Mesa Road and follow Aliso Canyon road north 3.4 miles (5.6 km). Identification efforts for cultural resources within Aliso Canyon include surveys by Bull (1975), Reddy (1998b) survey, and Reddy and Pallette (2000). The results of these surveys identified two archaeological sites, CA-SDI-14496 and CA-SDI-14497, within the expanded APE. Reddy (1999) evaluated sites CA-SDI-14496 and CA-SDI-14497 for eligibility to the National Register of Historic Places. Site forms are included as enclosure (5).

Summary of Identification Efforts

CA-SDI-14496

Reddy (1997a) recorded site CA-SDI-14496 as a shell scatter with a large quantity of *Donax*. The site location is situated in a drainage with banks approximately two meters high. Portions of the site were obscured by vegetation but cobbles were recorded in the western bank. Evaluation of the site was completed by ASM Affiliates (Reddy 1999; Enclosure (6)). Evaluation included 30 shovel test pits and a single 1 x 0.5 m unit. Reddy recovered *Donax*, a single metavolcanic flake, and vertebrate bones. The material was intermixed with modern refuse. Due to the lack of intact deposits and low density of cultural material found at the site, the testing program "exhausted [the sites] research potential" (Reddy 1999). York (2010) expanded the northern boundaries of the site noting a wider distribution of shell and possible milling slick. However, the site was determined to be ineligible for the National Register of Historic Places (SHPO File No. USMC100209B).

CA-SDI-14497

Reddy (1997a) recorded site CA-SDI-14497 as a shell scatter along a creek in Los Aliso Canyon. The site is in an open floodplain valley about approximately 250 m up the creek. Reddy (1999) tested the site for eligibility for the National Register of Historic Places. Testing and evaluation consisted of seven shovel test pits and a single 1 x 0.5 m unit. ASM Affiliates recovered one core, shell (*Donax, Argopecten, Ostra, Chione, and Tivela)*, and vertebrate remains. Intact deposits were found up to 170 cm below surface. Two samples of shell were sent for radiocarbon dating yielding dates of 890 +/- 60 B.P. and 1000 +/- 60 B.P. Reddy determined the site is "most likely a locale of intensive shellfish processing" (1999). York (2010) attempted to relocate the site during the testing and evaluation of archaeological sites associated with R130UII. However, York failed to relocate this site citing erosion damage from "recent flooding" (2010). York stated that "although no materials were observed during the present survey, it

is possible that some remnant buried deposits are still present here…such deposits would likely be eligible for the NRHP" (2010). CA-SDI-14997 was determined eligible for the National Register of Historic Places under Criterion D (SHPO File No. USMC100209B). However, the site was assumed to be destroyed during the most recent study.

Finding of Effects

Pursuant to 36 CFR 800.4(b) (1), MCB Camp Pendleton has made a reasonable and good faith effort to carry out appropriate identification efforts for historic properties in the vicinity of the proposed project. CA-SDI-14496 is within the APE of the proposed undertaking but has been determined ineligible for the National Register of Historic Places. CA-SDI-14497 is approximately 20 meters to the east of the APE and Aliso Canyon Road, and is sufficiently removed from the project APE to indicate construction activities do not have the potential to cause effect. Furthermore, CA-SDI-14497 was not relocated in the most recent survey of the area. York (2010) indicated the site was destroyed through flooding and erosion.

MCB Camp Pendleton has applied the criteria for adverse effect (36 CFR 800.5(a)(1)) and found, subject to 36 CFR Part 800.5(b), that there will be "No Adverse Effects" for the proposed SOTG Battle Course Range and Temporary Water Line, with the following conditions: (1) All excavation near CA-SDI-14496 and CA-SDI-14497 will be monitored by a qualified archaeologist and a Native American monitor (approved by Cultural Resources Branch), both of which will be funded by the proponent; (2) A monitoring and discovery plan must be developed (reviewed and approved by Cultural Resources Branch) outlining specific procedures to be followed in the event of an archaeological discovery during excavations; and (3) A report detailing the monitoring results will be provided to Cultural Resources Branch at the conclusion of excavations.

Consultation with Tribes and Other Parties

In addition to contacting your office, MCB Camp Pendleton, pursuant to 36 CFR 800.4, is consulting with federally and non-

federally recognized Luiseño tribal governments (Pauma Band of Mission Indians, Pechanga Band of Luiseno Indians, Rincon Band of Luiseno Indians, La Jolla Band of Mission Indians, Soboba Band of Mission Indians, San Luis Rey Band of Mission Indians) and non-federally recognized Juaneño tribal governments (Juaneño Band of Mission Indians) as part of the Base's established consultation process. MCB Camp Pendleton has notified the public through contacts with the San Diego County Archaeological Society.

Request for Concurrence

Based on the results of the identification efforts, MCB Camp Pendleton has found that subject to 36 CFR 800.5(b)(3) and imposed conditions, there will be no historic properties adversely affected by the proposed undertaking. MCB Camp Pendleton requests your agreement with a **"No Adverse Effect"** finding for this undertaking on Camp Pendleton. A References Cited has been included as enclosure (7)).

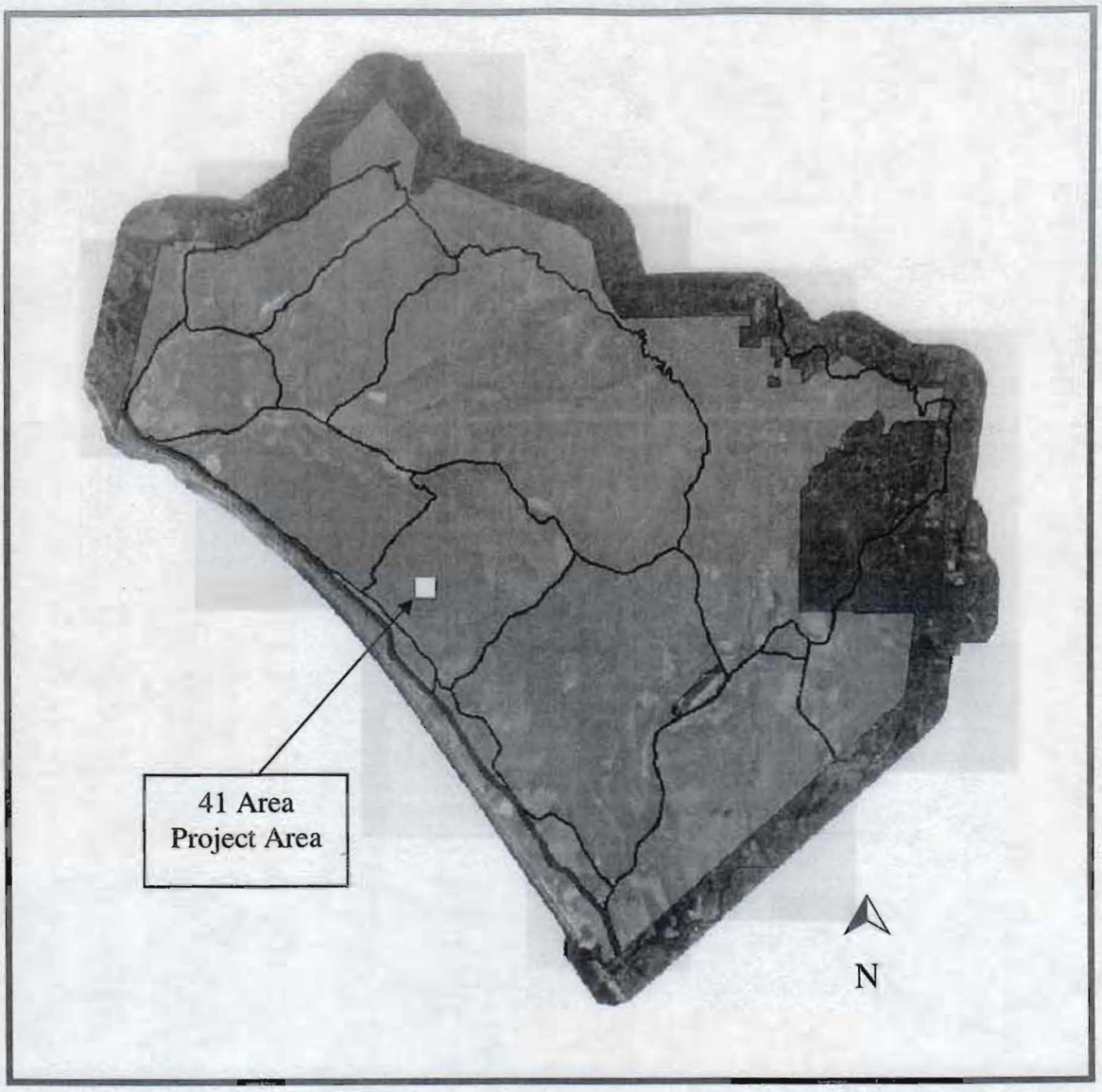
If you have any questions, please contact the undersigned at (760) 725-9738, or by email, danielle.page@usmc.mil .

Sincerely,

D. M. Page

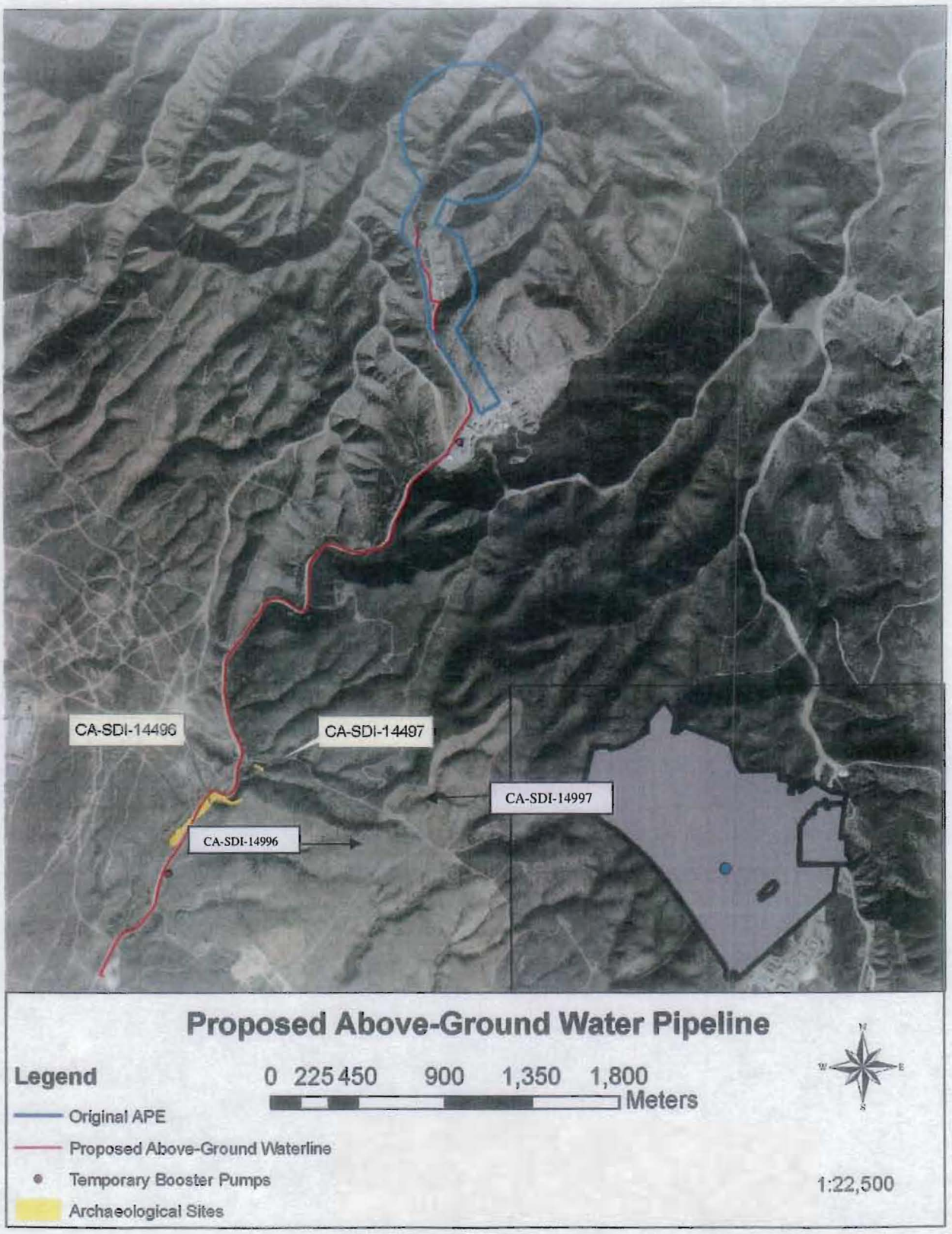
D. M. PAGE
Head, Cultural Resources Branch
by direction
of the Commanding Officer

Enclosures:
1. Project Location Map
2. Area of Potential Effects
3. Maps of Undergroun Water Pipeline Segments
4. Report Excerpt, York 2010
5. DPR 523 Archaeological Site Forms
6. Report Excerpt, Reddy 1999
7. References Cited



Map 1. Project location map for the P614 Construct Temporary Water Line (060098A), MCB Camp Pendleton.

Enclosure 1



Map 2. Area of Potential Effects

Enclosure 2

Map 3. Northeastern Underground Water Pipeline Segment

Map 4. Southwestern Underground Water Pipeline Segment

Enclosure 3

Enclosure 4
Report Excerpt from Reddy 1999

Enclosure 5
Report Excerpt from York 2010

Enclosure 6
DPR 523 Archaeological Site Forms

REFERENCES CITED:

Bull, Charles
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Appendix C – ACOE Permit

DEPARTMENT OF THE ARMY
Los Angeles District, Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

December 3, 2010

REPLY TO
ATTENTION OF
Office of the Chief
Regulatory Division

Bill Berry
Assistant Chief of Staff, Environmental Security Resource Management Division
Marine Corps Base, Building 22165
Box 555008
Camp Pendleton, California 92055-5008

Dear Mr. Berry:

Enclosed you will find a signed copy of your Department of the Army Permit (File No. SPL-2010-00319-JPL). Please retain this copy for your files.

Thank you for participating in our regulatory program. If you have any questions, please contact Jason Lambert of my staff at 213-452-3361 or via e-mail at Jason.P.Lambert@usace.army.mil.

Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at: http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

Corice Farrar

Corice J. Farrar
Acting Chief, Orange and Riverside Section
South Coast Branch
Regulatory Division

Enclosure(s)

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY PERMIT

Permittee: William H. Berry, Marine Corps Base Camp Pendleton

Permit Number: SPL-2010-00319-JPL

Issuing Office: Los Angeles District

Note: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To permanently discharge fill onto 0.66 acre of waters of the U.S., in association with the P-614 Special Operations Training Group (SOTG) Battle Course Area, Marine Corps Base Camp Pendleton Project as shown on the attached drawings.

Specifically, you are authorized to conduct the following activities affecting waters of the U.S.:

1. Conduct mass grading within a canyon, permanently impacting two main drainages which include 0.66 acre of jurisdictional waters of the U.S. as a part of the proposed project;
2. Install a storm drain culvert system to convey flows where the two main tributaries would be impacted;
3. Install two debris basins would be constructed at the upstream ends of the impact sites on the two main tributaries;
4. Construct six outfalls, each with riprap energy dissipaters;
5. Construct earthen swales to intercept and convey sheet flow to the nearest catch basin; and
6. Construct brow ditches at the top and toe of all slopes.

Project Location: The 148-acre proposed site for the P-614 SOTG Battle Course Area, Marine Corps Base Camp Pendleton Project is entirely within the boundaries of Marine Corps Base (MCB) Camp Pendleton, which is located in northern San Diego County, California. The

proposed project site is located in the Oscar Two training area, just north of Aliso Canyon Road and approximately 3 mi east of the intersection of Stuart Mesa Road and Las Pulgas Road.

Permit Conditions:

General Conditions:

1. The time limit for completing the authorized activity ends on **November 1, 2013**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification from this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

1. The Permittee shall mitigate for permanent impacts to 0.66 acre of waters of the U. S., through re-establishment of 1.32 acres of waters of the U.S. as described in the final, approved mitigation plan: "P-614 Special Operations Training Group (SOTG) Battle Course, 41 Area at Marine Corps Base Camp Pendleton, California, Habitat Mitigation Plan (HMP)" (dated October 2010, and prepared by Marine Corps Base Camp Pendleton

AC/S Environmental Security). The Permittee shall complete site preparation and planting and initiate monitoring as described in the final, approved mitigation plan within 120 days of discharging any fill material in waters of the U.S. According to the final, approved mitigation plan, responsible parties would be as follows: a) Implementation: Marine Corps Base Camp Pendleton; b) Performance: Marine Corps Base Camp Pendleton; c) Long-term management: Marine Corps Base Camp Pendleton. The Permittee retains ultimate legal responsibility for meeting the requirements of the final, approved mitigation plan. Detailed mitigation objectives, performance standards, and monitoring requirements are described in the above final, approved mitigation plan.

2. Prior to initiating construction in waters of the U.S., the Permittee shall submit to the Corps Regulatory Division a complete set of final detailed grading/construction plans showing all work and structures in waters of the U.S. All plans shall be in compliance with the Final Map and Drawing Standards for the Los Angeles District Regulatory Division dated September 21, 2009 (http://www.spl.usace.army.mil/regulatory/pn/SPL-RG_map-drawing-standard_final_w-fig.pdf). All plan sheets shall be signed, dated, and submitted on paper no larger than 11x 17 inches. No work in waters of the U.S. is authorized until the Permittee receives, in writing (by letter or e-mail), Corps Regulatory Division approval of the final detailed grading/construction plans. The Permittee shall ensure that the project is built in accordance with the Corps-approved plans.

3. Within 45 calendar days of completion of authorized work in waters of the U.S., the Permittee shall submit to the Corps Regulatory Division a post-project implementation memo indicating the date authorized impacts to waters of the U.S. ceased.

4. Within 45 calendar days of complete installation of all mitigation, the Permittee shall submit to the Corps Regulatory Division two copies of a memo indicating the following:
   a. Date(s) all mitigation was installed and monitoring was initiated;

   b. Schedule for future mitigation monitoring, implementation and reporting pursuant to final, Corps-approved HMMP;

   c. Summary of compliance status with each special condition of this permit (including any noncompliance previously occurred or currently occurring and corrective actions taken to achieve compliance);

   d. Color photographs taken at the project site before and after construction for those aspects directly associated with impacts to waters of the U.S.; and

   e. One copy of "as built" drawings for the entire project, including all mitigation sites (all sheets must be signed, dated, to-scale, and no larger than 11 x 17 inches).

5. This Corps permit does not authorize you to take any threatened or endangered species, in particular the coastal California gnatcatcher or adversely modify its designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA).

6. Pursuant to 36 C.F.R. section 800.13, in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Archeology Staff within 24 hours (Steve Dibble at 213-452-3849 or John Killeen at 213-452-3861). The Permittee shall immediately suspend all work in any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. section 800.13.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

   ( ) Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403).

   (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

   ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

   a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

   d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. You fail to comply with the terms and conditions of this permit.

   b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

   c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

   Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

William H. Berry

PERMITTEE

11/15/10

DATE

William H. Berry
Consultation Div. Head / USMC

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Corice Farrar

Corice J. Farrar
Acting Chief, Orange and Riverside Counties Section
South Coast Branch
Regulatory Division

3 Dec 2010

DATE

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

TRANSFEREE

DATE

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

NOTIFICATION OF COMMENCEMENT OF WORK FOR DEPARTMENT OF THE ARMY PERMIT

Permit Number: SPL-2010-00319-JPL
Name of Permittee: William H. Berry, Marine Corps Base Camp Pendleton
Date of Issuance: December 3, 2010

Date work in waters of the U.S. will commence: _____
Estimated construction period (in weeks): _____
Name & phone of contractor (if any): _____

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that I, and the contractor (if applicable), have read and agree to comply with the terms and conditions of the above referenced permit.

_____ _____
Signature of Permittee Date

At least ten (10) days prior to the commencement of the activity authorized by this permit, sign this certification and return it using any ONE of the following three (3) methods:

(1) E-MAIL a statement including all the above information to:
Jason.P.Lambert@usace.army.mil
OR
(2) FAX this certification, after signing, to: 213-452-4196
OR
(3) MAIL to the following address:

U.S. Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2010-00319
P.O. Box 532711
Los Angeles, California 90053-2325

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

NOTIFICATION OF COMPLETION OF WORK AND CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

Permit Number: SPL-2010-00319
Name of Permittee: William H. Berry, Marine Corps Base Camp Pendleton
Date of Issuance: December 3, 2010

Date work in waters of the U.S. completed: _____
Construction period (in weeks): _____
Name & phone of contractor (if any): _____

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of said permit.

_____ _____
Signature of Permittee Date

Upon completion of the activity authorized by this permit, sign this certification and return it using any ONE of the following three (3) methods:

(1) E-MAIL a statement including all the above information to:
Jason.P.Lambert@usace.army.mil
OR
(2) FAX this certification, after signing, to: 213-452-4196
OR
(3) MAIL to the following address:

U.S. Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2010-00319
P.O. Box 532711
Los Angeles, California 90053-2325

Appendix D– Final Environmental Assessment P-614 Special Operations Training Group (SOTG) Battle Course, 41 Area at Marine Corps Base Camp Pendleton, California