

FORT ORD REUSE AUTHORITY

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May 11, 2000

Mr. Brian Hunter
Regional Manager, Central Coast Region
California Department of Fish and Game
P.O. Box 47
Yountville, CA 94599

**RE: Request for CESA §2081 Permit for Seaside Bird's Beak
Highway 218/North-South Road Improvements Project
Fort Ord, California**

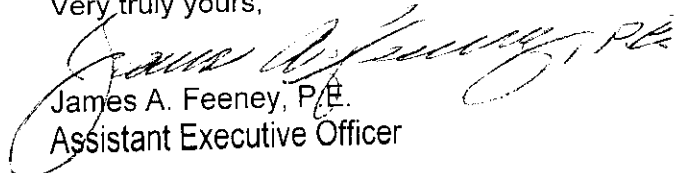
Dear Mr. Hunter:

Enclosed please find a completed application, including a mitigation plan for a permit for the incidental take of seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*) that may result from infrastructure improvements at Fort Ord, California. The Fort Ord Reuse Authority (FORA), as a lead agency for the project, is applying for this permit pursuant to the Final Adopted Regulations issued by the Department of Fish and Game on December 30, 1998 for implementing Section 2080 and Section 2081 of the Fish and Game Code.

FORA has had extensive discussions with your staff on this project for well over a year. The attached application and associated documents have been prepared as a result of those discussions in direct response to Department staff recommendations.

This infrastructure improvement project remains a critical component of the initial stages of base reuse. Accordingly, we will appreciate your prompt processing of our application so that we can proceed with construction in the near future.

Very truly yours,


James A. Feeney, P.E.
Assistant Executive Officer

Enclosures

cc: Ms. Terry Palmisano, Senior Wildlife Biologist Supervisor, CA Dept. of Fish and Game
Ms. Deborah Hillyard, Plant Ecologist, CA Dept. of Fish and Game
Mr. Michael A. Houlemard, Jr., Executive Officer, FORA
Mr. James Arnold, Senior Project Manager, FORA
Mr. Chuck Fagen, Project Manager, FORA

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Sample Cover Letter
To Be Submitted with Application Package

April 2000

Mr. Brian Hunter
Regional Manager, Central Coast Region
California Department of Fish and Game
PO Box 47
Yountville, CA 94599

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James A Feeney, P.E.
Assistant Executive Officer

Encls.

cc. Terry Palmisano *fish game*
Deborah Hillyard

**APPLICATION
§2081 INCIDENTAL TAKE PERMIT
HIGHWAY 218/NORTH-SOUTH ROAD IMPROVEMENTS PROJECT**

Applicant

The Fort Ord Reuse Authority
Attn: Mr. James A. Feeney, P.E., Assistant Executive Officer
100 12th Street, Bldg 2880
Marina, California 93933
Telephone (831) 883-3672

Species to be Covered

Seaside Bird's Beak—*Cordylanthus rigidus* ssp. *littoralis*

Seaside bird's beak is a state-listed endangered species under the California Endangered Species Act (CESA). The species is not the subject of the rules and guidelines pursuant to Section 2112 and Section 2114 of the Fish and Game Code.

Project Location

General Moore Drive (formerly North South Road) near the intersection of State Highway 218, in the former Fort Ord Military Installation in Monterey County

Project Description

The project entails reconstruction of approximately 1,500 linear feet of North-South Road between State Highway 218 and South Boundary Road, located on former Fort Ord in Monterey County. Alterations include the following: widening the existing Army roadway to conform with current public street specifications and accommodate projected increases in vehicular traffic; appropriate grading; drainage improvements; utility alterations; landscaping, and; the the construction of bicycle lanes, sidewalks, signage and striping. The project includes installation of a signal at Highway 218/North-South Road, and associated roadway modifications and turn lanes. North-South Road is currently located on Army-owned land that is scheduled for transfer to the Fort Ord Reuse Authority (FORA) using an economic development conveyance.

Take of the Covered Species

The project will result in the loss of approximately 0.16 acre of actual or potential habitat for seaside bird's beak from improvements to General Moore Drive (formerly North South Road) on the former Fort Ord military reservation.

Extent of Impact of Take

The project will affect actual or potential seaside bird's beak habitat at three specific locations. These locations include an approximately 440-foot-long by 15-foot-wide area along the west side of Admiral Moore Drive bounded by the existing road and the limits of construction (Site 1), an approximately 220-foot-long area of cracked asphalt pavement along the easterly edge of Admiral Moore Drive where individuals of seaside bird's beak have been observed growing in the past (Site 2) and an approximately 300 square foot area at the north-easterly curve of the intersection between Admiral Moore Drive and South Boundary Road. Impacts to actual or potential seaside bird's beak habitat at these three sites total approximately 7,120 square feet (0.16 acre).

Analysis of Jeopardy to the Continued Existence of the Species

A. Known Population Trends

Seaside bird's beak occurs in sandy soils below 700 ft. elevation near the coast between Carmel and Elkhorn Slough in northern Monterey County and is also local near Lompoc, at Burton Mesa and Vandenburg Air Force base in Santa Barbara County. In 1994, several previously unknown populations of seaside bird's beak were identified at Fort Ord, Monterey County. The Fort Ord Habitat Management Plan (HMP) estimates that Fort Ord supports approximately 1,127 acres of high, medium and low density occupied seaside bird's beak habitat which represents between 30 and 50 percent of the total distribution of seaside bird's beak. Seaside bird's beak typically occurs in sandy soils of stabilized dunes in a variety of habitats including coastal dunes, coastal scrub, coast live oak woodland, maritime chaparral, and Monterey pine forest (Chuang and Heckard 1986, Hickman 1993, Skinner and Pavlik 1994). The plant is a late germinating annual that requires warm soils to germinate. Seedling vigor appears weak and the species does not compete well and does not grow in areas occupied with dense annual grasses and weeds.

B. Known Threats

Urban development has resulted in the loss of Monterey County populations of seaside bird's beak. Populations in Santa Barbara County are threatened by urban development, energy projects, off-road vehicles and military operations.

C. Reasonably Foreseeable Impacts to the Species

The Fort Ord HMP accommodated a limited level of loss to seaside bird's beak by establishing large areas of habitat reserve in perpetuity, including approximately 1,058 acres of occupied seaside bird's beak habitat. However, urban development will continue to pose threats to scattered localized populations in areas off the former base. Some protection in these areas will be afforded by the fact that the plant is a state-listed species requiring take authorization. Since Fort Ord represents up to 50 percent of the range of the species, and

since most of the acreage occupied by seaside bird's beak on the former base will be set aside as permanent habitat reserve, further decline in the species may be arrested.

Measures to Minimize and Fully Mitigate Take

A mitigation plan intended to minimize and fully mitigate the loss of approximately 0.16 acre of actual or potential seaside bird's beak habitat is provided as an attachment to this application.

Monitoring Plan

A monitoring plan is included with the mitigation plan provided as an attachment to this application.

Funding

Total costs for implementation of the mitigation program described in the attached mitigation plan, including maintenance and monitoring over a five year term are estimated to be \$21,020.

FORA will provide surety (e.g. a bond) for the estimated costs of implementation, maintenance and monitoring in a form acceptable to the Department of Fish and Game at least two weeks prior to completion of the road improvement project. Each of the activities of the mitigation program will be covered by this surety until such time as the activities are completed. If FORA does not meet its obligations in a timely manner, the Department of Fish and Game will have the authority to use the surety to complete the mitigation program.

I certify that the information submitted in this application is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to suspension or revocation of this permit and to civil and criminal penalties under the laws of the State of California

Signed:

By _____
Fort Ord Reuse Authority
Marina, California

Date _____

Seaside Bird's Beak Mitigation Plan

Prepared for:
California Department of Fish and Game

In Support of:
§2081 Permit Application

for:
Highway 218/North-South Road Improvements Project

Submitted by:
Fort Ord Reuse Authority
100 12th Street, Bldg 2880
Marina, California 93933

April 2000

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**Seaside Bird's Beak Mitigation Plan
Highway 218/North-South Road Improvements Project**

I. INTRODUCTION

This mitigation plan has been prepared to compensate for losses to approximately 0.16 acre of actual or potential habitat for seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*) that will result from improvements to General Moore Drive (formerly North South Road) on the former Fort Ord military reservation. The Fort Ord Reuse Authority (FORA) has undertaken the roadway improvement project to provide access to the former base from the southwest in conformance with the approved Fort Ord Reuse Plan.

A. Summary of Development Project

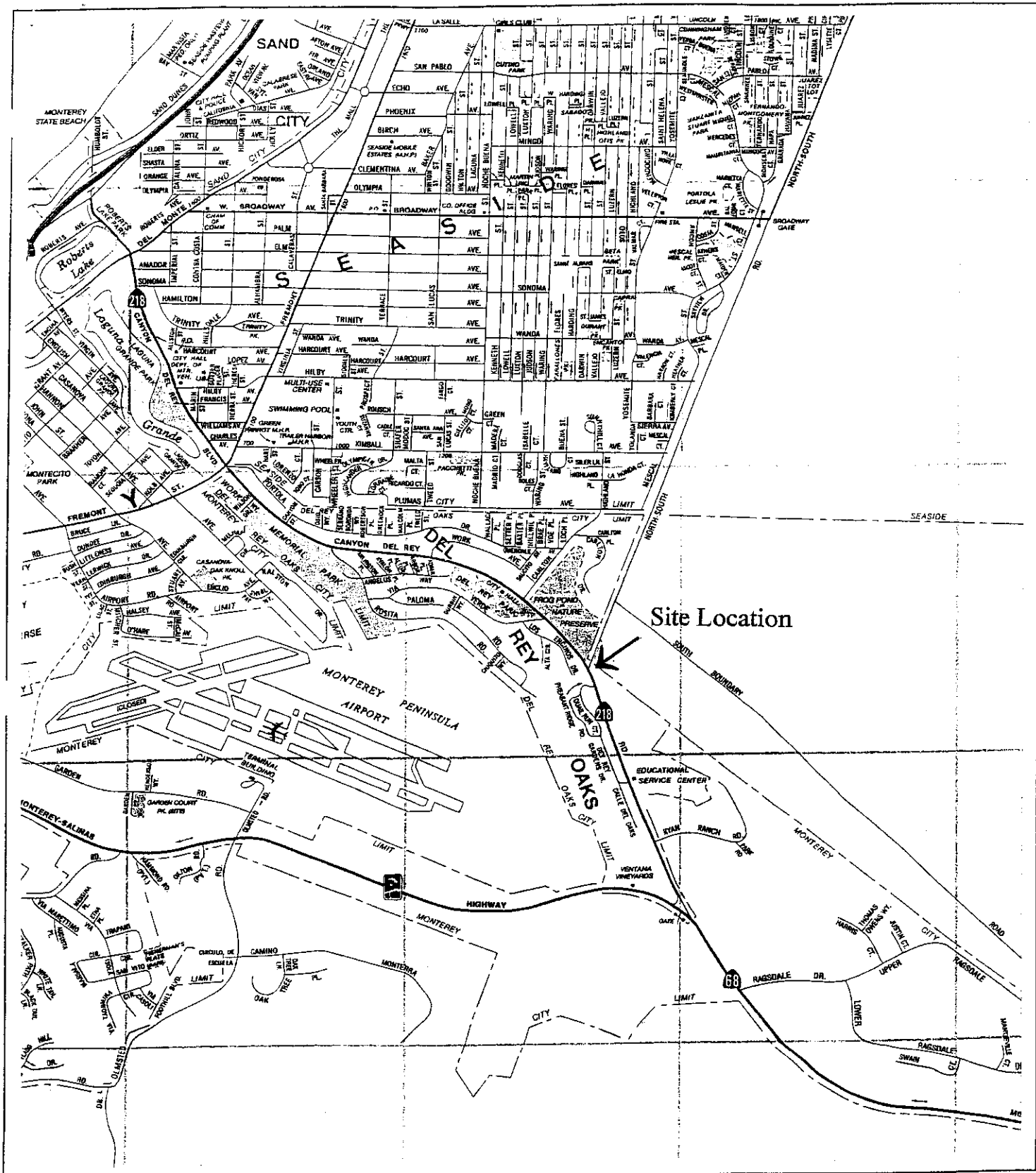
The North-South Road/Highway 218 Improvements Project is located at the southwestern corner of the former Fort Ord Military Reservation directly adjacent to (and northerly of) Highway 218 near the City of Del Rey Oaks (Figures 1 & 2). The project is located on Army property, planned for transfer to Monterey County, with the exception of the Highway 218 component and a small portion planned for transfer to the Monterey Peninsula Regional Park District.

The project involves road widening and associated improvements along an approximately 1,500-linear-foot segment of General Moore Drive and an adjoining section of South Boundary Road; enlargement of the existing culverted crossing of Canyon Del Rey Creek; and repaving of an adjacent, flanking stretch of Highway 218 (Figures 3a & b). Reconstruction of the road consists of the following elements: reconstruction and widening of the project portion of General Moore Drive; construction of bicycle lanes and a sidewalk; grading; improvement of drainage facilities; utility alterations; signage; striping; and minimal landscaping. The project also includes the installation of a traffic signal at the intersection of Highway 218 at General Moore Drive, and associated roadway modifications at this intersection. Completion of the project will allow the southwestern access on the former base to be opened to through traffic.

The party responsible for the mitigation will be:

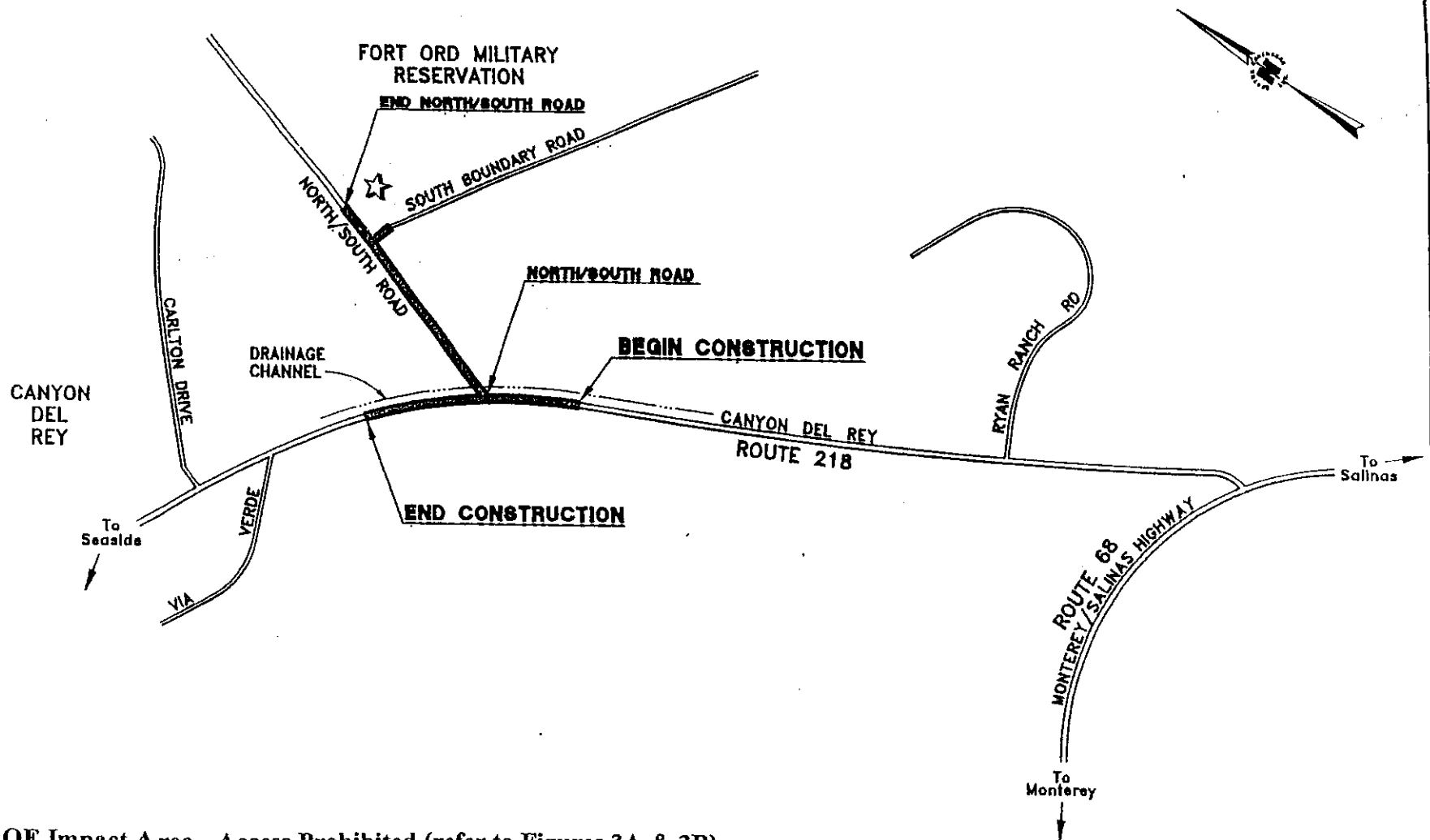
Mr. James A. Feeney, P.E.
Assistant Executive Officer
The Fort Ord Reuse Authority
100 12th Street, Bldg 2880
Marina, California 93933
Telephone (831) 883-3672

April 20, 2000



FIGURE

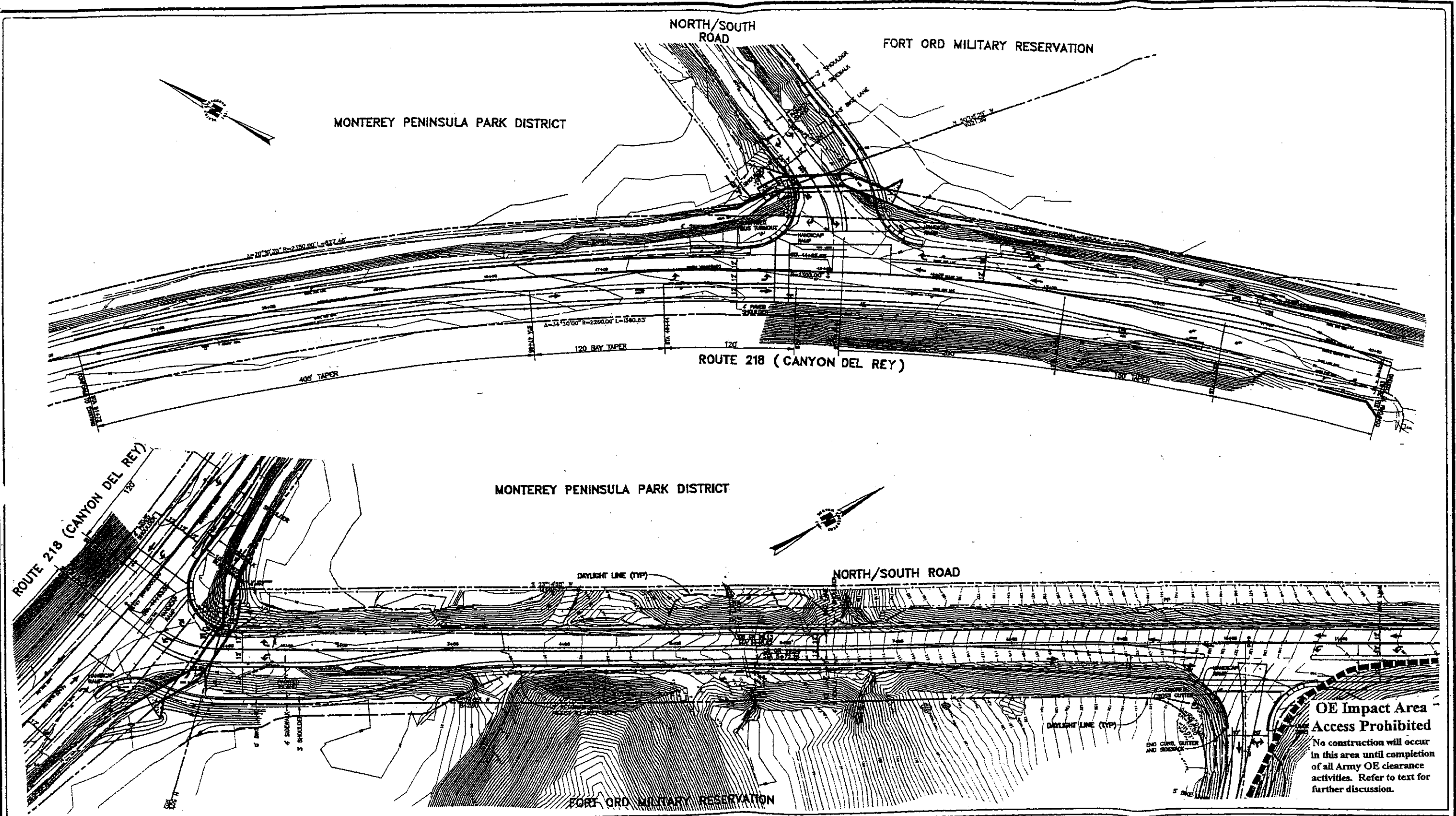
Site Location
 Highway 218/North South Road Project
 Monterey County, California



☆ OE Impact Area - Access Prohibited (refer to Figures 3A & 3B)
Refer to text for further discussion.

Development Site

Figure
2



Development Project Plans

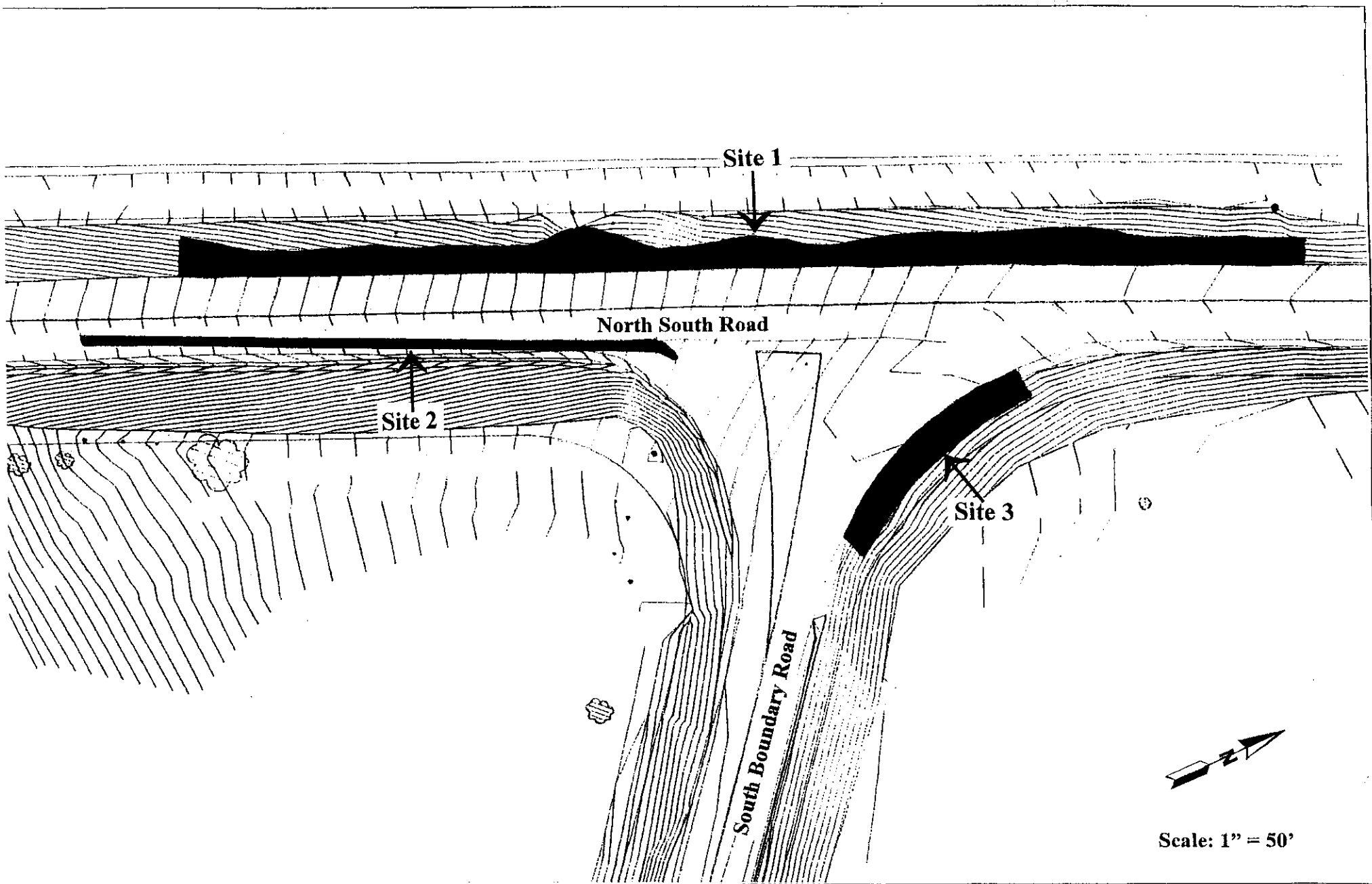
Figure
3A

B. Summary of Occurrence of State-Listed and Other Sensitive Species at the Project Site

The biological resources in the project area have been well characterized in previous environmental documents, including the *Flora and Fauna Baseline Study of Fort Ord, California* (Jones & Stokes Associates, Inc. and U.S. Army Corps of Engineers, December 1992); *Final Environmental Impact Statement, Fort Ord Disposal and Reuse* (U.S. Army Corps of Engineers, June 1993); *Fort Ord Reuse Plan Draft Environmental Impact Report* (EDAW, Inc. and EMC Planning Group, Inc., May 1996); and the *Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California* (HMP) (U.S. Army Corps of Engineers, April 1997). In addition, Zander Associates conducted a site reconnaissance to evaluate the site-specific biological resources of the development site in September 1997 with follow up visits in 1998 and 1999.

The sensitive species in the project area have been well described in previous documents (cited above). One federally-listed threatened plant species, Monterey spineflower (*Chorizanthe pungens* var. *pungens*) and one state-listed endangered plant species, seaside bird's beak (*Cordylanthus rigidus* ssp. *litoralis*), were previously reported from the area by Jones and Stokes Associates (1992). Individuals of seaside bird's beak were observed growing alongside and through cracks in the roadway by Zander Associates during the September 1997 and subsequent surveys. Monterey spineflower was not observed during these surveys. Other special-status plant species identified on or in the vicinity of the site include Toro manzanita (*Arctostaphylos montereyensis*), sandmat manzanita (*A. pumila*), Eastwood's ericameria (*Ericameria fasciculata*), and Monterey ceanothus (*Ceanothus cuneatus* var. *rigidus*).

The project will result in removal of some previously documented Monterey spineflower habitat and approximately 0.68 acre of central coast maritime chaparral within the road rights of way. Impacts to Monterey spineflower and maritime chaparral in developable areas of former Fort Ord were anticipated and accommodated by the Fort Ord HMP. In response to a request from the Army, the U.S. Fish and Wildlife Service concurred that the project's effects on Monterey spineflower did not require additional mitigation beyond the HMP. However, under separate arrangement with the California Native Plant Society, FORA has agreed to preserve additional maritime chaparral habitat adjacent to the development site to compensate for loss to this resource. The project will also affect actual or potential seaside bird's beak habitat at three specific locations (Figure 4). These locations include an approximately 440-foot-long by 15-foot-wide area along the west side of Admiral Moore Drive bounded by the existing road and the limits of construction (Site 1), an approximately 220-foot-long area of cracked asphalt pavement along the easterly edge of Admiral Moore Drive where individuals of seaside bird's beak have been observed growing in the past (Site 2) and an approximately 300 square foot area at the north-easterly curve of the intersection between Admiral Moore Drive and South Boundary Road. Impacts to actual or potential seaside bird's beak habitat at



Locations of Effect on Seaside Bird's Beak

FIGURE

these three sites total approximately 7,120 square feet (0.16 acre). While the Fort Ord HMP also accommodated this loss to seaside bird's beak, the plant is a state-listed endangered species and the Department of Fish and Game requires an incidental take permit for projects that could affect state-listed species.

C. Summary of Mitigation to be Implemented by this Plan

The overall goal of the mitigation program is to achieve no net loss of area occupied by seaside bird's beak by establishing new seaside bird's beak colonies on a disturbed area of a former range site (Range 42) on land to be transferred to the Bureau of Land Management. The mitigation program will also provide a basis for evaluating various methods of introducing bird's beak into a previously disturbed restoration area. Long-term management and protection of the area will be provided by BLM as part of its ongoing responsibilities for the Natural Resource Management Area (NRMA).

D. Status of Environmental Review Process

An Environmental Assessment/Initial Study was prepared for the project and a Finding of No Significant Impact/Negative Declaration, based on that environmental document was signed by FORA and the Army in October 1998. The EA/IS and FONSI/Neg Dec were certified by the FORA Board on January 8, 1999. A Notice of Determination of Negative Declaration was filed with Monterey County on April 30, 1999.

The CEQA Lead Agency for the project is:

The Fort Ord Reuse Authority
Attn: Mr. James A. Feeney, P.E., Assistant Executive Officer
100 12th Street, Bldg 2880
Marina, California 93933
Telephone (831) 883-3672

E. Definitions

Adaptive management – Habitat management that is adaptable in response to monitoring results and changing conditions in the field for the long-term benefit and success of the mitigation program.

Development project – A land use that is subject to CEQA review and that may have an adverse effect on the subject species.

Development site – Specific location of the development project.

Long-term – Indefinite, perpetual duration beyond the term of the Mitigation Program.

Mitigation Plan – A written description of the mitigation program following Department of Fish and Game guidelines that is attached to the §2081 Permit.

Mitigation program – A program of activities for the establishment of new colonies of the subject species in areas designated for habitat restoration.

Mitigation site – Specific location of the mitigation program.

Natural Resource Management Area – An approximately 15,000 acre area on former Fort Ord that has been (in part) or will be transferred to the Bureau of Land Management for the purpose of habitat preservation, restoration and management.

Performance Criteria – Standards by which the success of the mitigation program will be determined.

Perpetuity – See long-term

Term of Mitigation Program – The period between the commencement and termination dates of the implementation, maintenance and monitoring of the mitigation program.

Surety – A financial guarantee that the funds necessary to implement the mitigation program are set aside.

II. SPECIES CHARACTERISTICS

A. Seaside Bird's Beak—*Cordylanthus rigidus* ssp. *littoralis*

1. Species Description

Seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*) is a medium sized annual herb in the figwort family (Scrophulariaceae). There are 15 species of *Cordylanthus* and 20 subspecies found within California. *Cordylanthus rigidus* ssp. *littoralis* is a subspecies of *Cordylanthus rigidus* described by vegetation that is yellow-green in color, puberulent to soft hairy throughout, and widely branching. Leaves are more or less linear (sometimes inrolled), primarily alternate with lower leaves being opposite. The inflorescence is composed of 5 - 8 inconspicuous white flowers. The calyx is not tubular, but is 1-cleft nearly to base. Corolla is 2 lipped with 2 dull purplish lines. The upper corolla lip is fused forming a beak or hood enclosing stamens and the lower corolla lip is generally similar to the upper. It blooms from May to September.

2. Geographic Range

Seaside bird's beak occurs below 700 ft. elevation near the coast around the southern end of Monterey Bay and is also local near Lompoc in Santa Barbara County. In 1994, several

previously unknown populations of Seaside bird's beak were identified at Fort Ord, Monterey County. Biologists estimate that Fort Ord supports between 30 and 50 percent of the distribution of Seaside bird's beak (CDFG 1996).

3. Ecological Requirements

Little has been documented of the ecological requirements of seaside bird's beak, but based on observation of known populations the following general ecological characteristics may apply. Seaside bird's beak is a late germinating annual that requires warm soils to germinate. Seedling vigor appears weak and the species does not compete well and does not grow in areas occupied with dense annual grasses and weeds. Plants typically occur in sandy soils in a variety of habitats including coastal dunes, coastal scrub, coast live oak woodland, maritime chaparral, and Monterey pine forest (Chuang and Heckard 1986, Hickman 1993, Skinner and Pavlik 1994). This species appears to require pollination from insects and during flowering period, bumblebees are the most prevalent of a host of insects found on the plants (Kephart 1999). As with species of *Castilleja* and *Oenothera*, ants may play a role in seed dispersal for Seaside bird's beak. Seed production is high but little is known about seed viability (Kephart, pers. comm. 1999). Once flowering and seed production has ended, the plants die back and are mostly decomposed by mid winter.

III. MITIGATION DESIGN

A. Goals and Approach

The overall goal is to achieve no net loss in habitat area occupied by seaside bird's beak on former Fort Ord as a result of the subject development project. An additional goal of the mitigation program is to provide a basis for evaluating various methods of introducing bird's beak into a previously disturbed area identified for restoration.

The specific, long-term goal of the mitigation program is to establish new seaside bird's beak colonies on a disturbed area of a former range site (Range 42) on land to be transferred to the Bureau of Land Management. The mitigation program will also test various methods of soil treatment in a disturbed area to determine the most appropriate method for establishment of bird's beak and associated native plant species. Seed will be collected from nearby areas scheduled for development (e.g. Polygon E21b.3) and introduced into three 100-foot square test plots divided into four sectors. Soil treatment will be different in each sector of the plot prior to seed introduction. Seed germination, plant growth, establishment and reproduction will be monitored over a five year period to determine the success of plant establishment and the most appropriate method for soil treatment. Long-term management and protection of the area will be provided by BLM as part of its ongoing responsibilities for the Natural Resource Management Area (NRMA).

B. Implementation Techniques and Procedures

1. Site Selection

The mitigation site was chosen because it is a former range area (Range 42) on Fort Ord planned for eventual transfer to BLM for habitat restoration and management as part of the NRMA. The asphalt hardstand on the range has been removed under separate arrangement between FORA, BLM, the Army and Caltrans. The areas surrounding the range support viable central maritime chaparral habitat on sandy substrates (Arnold-Saint Ynez Complex) similar to those known to support seaside bird's beak. Former range areas within the future NRMA provide the greatest opportunities for habitat restoration because they are substantially disturbed areas typically surrounded by relatively high quality habitat. Alternative range areas were considered (Ranges 38 & 39) but rejected in favor of Range 42 because of its more suitable conditions (e.g. slope, aspect, substrates, surrounding vegetation and habitat characteristics).

2. Location of Mitigation Site

Range 42 is located just south of Eucalyptus Road on southerly-trending slopes ranging in elevation from approximately 518 feet (MSL) at the crest of a small knoll to about 400 feet and lower at the bottom of the range area (Figures 5a & b). The site is underlain by sandy soils of the Arnold-Saint Ynez Complex. Central maritime chaparral dominated by lower growing woody perennial species such as sandmat manzanita and Monterey ceanothus characterize the surrounding vegetation. The mitigation site consists of an approximately 5-acre former staging area for firing range activities that was paved in asphalt prior to hardstand removal in 1999. Hardstand removal provides an ideal opportunity to attempt to restore the area with pioneer species (such as seaside bird's beak) and to test and monitor methods for plant reestablishment.

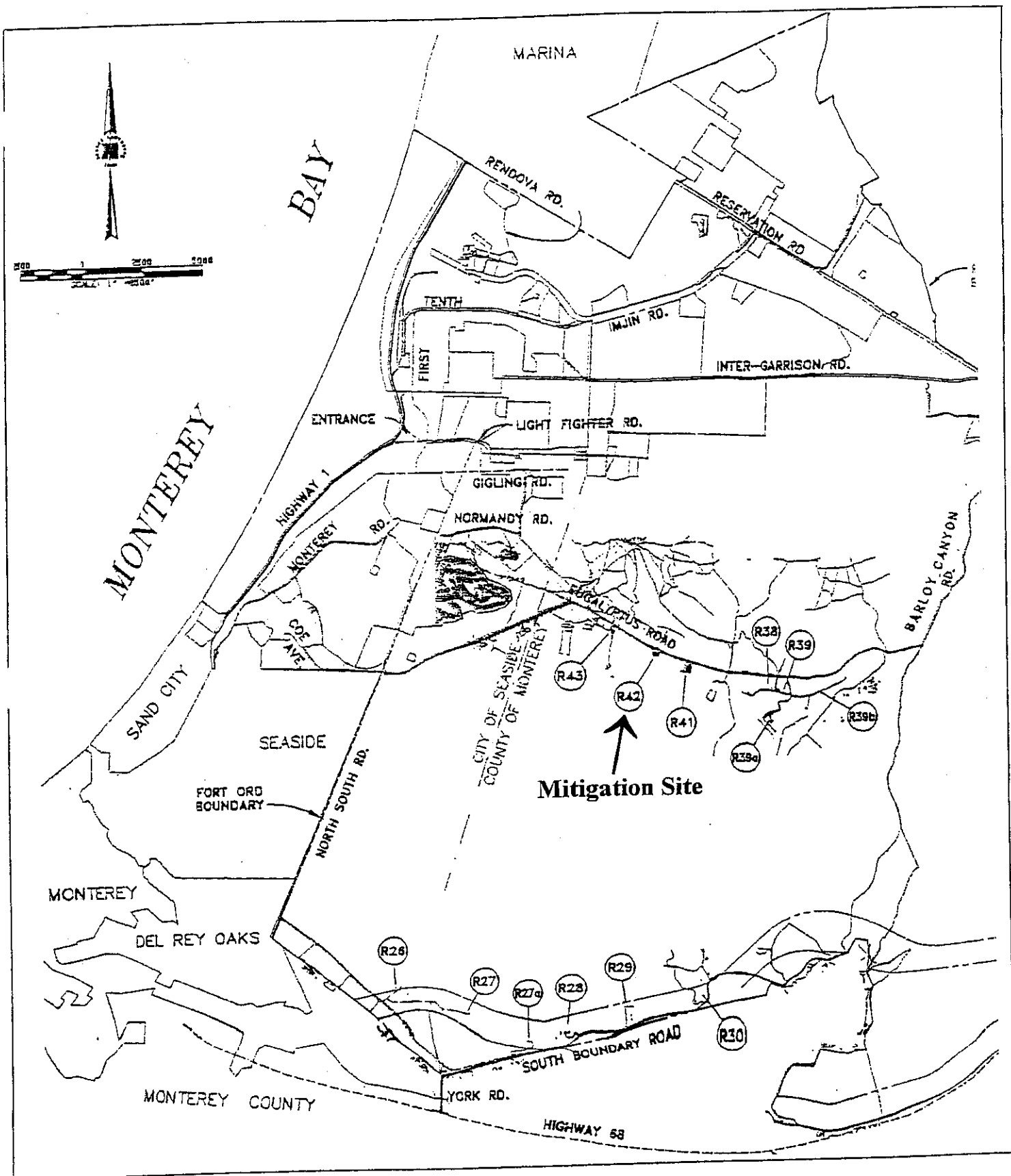
3. Materials

a. Soils

No imported soils, except possibly small amounts collected from donor sites at the time of seed collection for mycorrhizal inoculation will be used on the mitigation site.

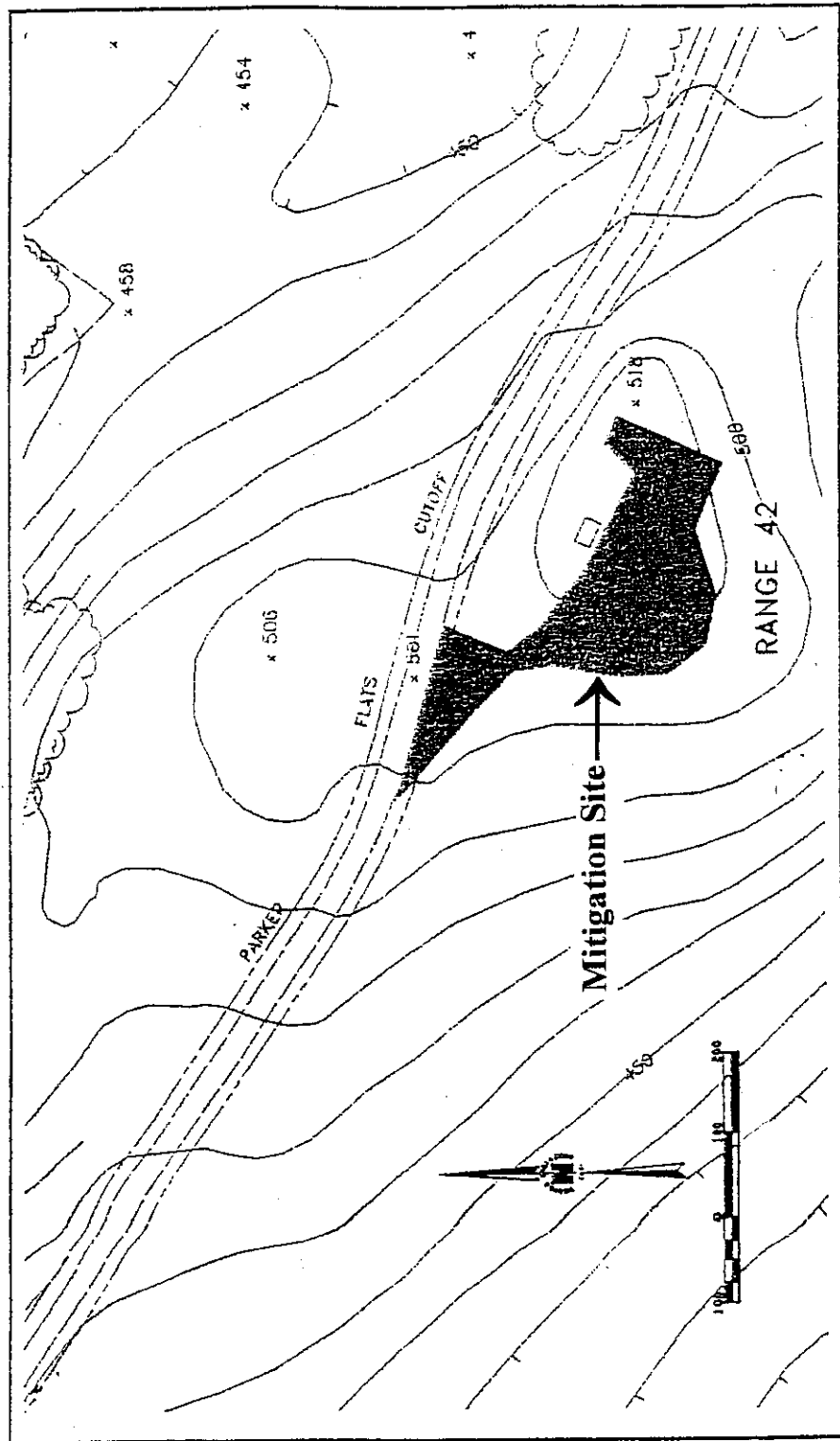
b. Plants

Seed will be collected from adjacent locations known to support seaside bird's beak that are planned for development in accordance with the Fort Ord Reuse Plan (e.g. Polygon E21b.3). Seed will be collected in the summer and fall of 2000 from plants within the areas planned for development.



Mitigation Site Location

Figure
5a



Mitigation Site Location

FIGURE 5b

4. Site Preparation

Areas where hardstand removal has taken place remain compacted to a depth of approximately nine inches. Below this compacted level is a soft, friable sand. Four different soil treatments in three separate plots will occur in these areas (Figure 6). Treatment 1 will be a control in which no disturbance to the compacted surface will occur. Treatment 2 will remove the top nine inches of compacted material for disposal offsite, exposing the friable sands below as a planting medium. Treatment 3 will break the top nine inches of hardpan into particles less than three inches in diameter and blend them with the friable sands below. A flat finish grade of this mixed planting medium will result. Treatment 4 will be the same break up and blending of layers as the previous treatment, but the finish grade will be left with a random rolling/holed finish to provide microtopographic relief.

5. Seeding Regime

Direct seeding will occur in the early spring of 2001. Seed will be applied at densities determined by the abundance of collected material, results of other seed trials using seaside bird's beak and suitability of the plots and treatment areas to accept various amounts of seed (e.g. control areas may not accept as much seed as friable sands.).

6. Maintenance

Maintenance will involve carefully hand-weeding the seeded areas. Maintenance weeding will occur quarterly, or as otherwise determined necessary for an initial two year period. Monitoring of the weed eradication program will determine the need for extending this period. Depending on the results of direct seeding on untreated, compacted substrates, maintenance may also involve breaking the surface of the compacted areas (see remedial measures below).

C. Implementation Schedule

Site preparation and seed collection will begin in the summer of 2000. By late fall, all plots will be established and all seed will be stored ready for application by January, February or March 2001 (depending on weather conditions). Prior to seeding, all plots will be checked and re-scarified as necessary to maintain desired seedbed soil conditions. Site maintenance activities will occur annually during February, March and April and also in September and October.

BIRD'S BEAK MITIGATION PROGRAM

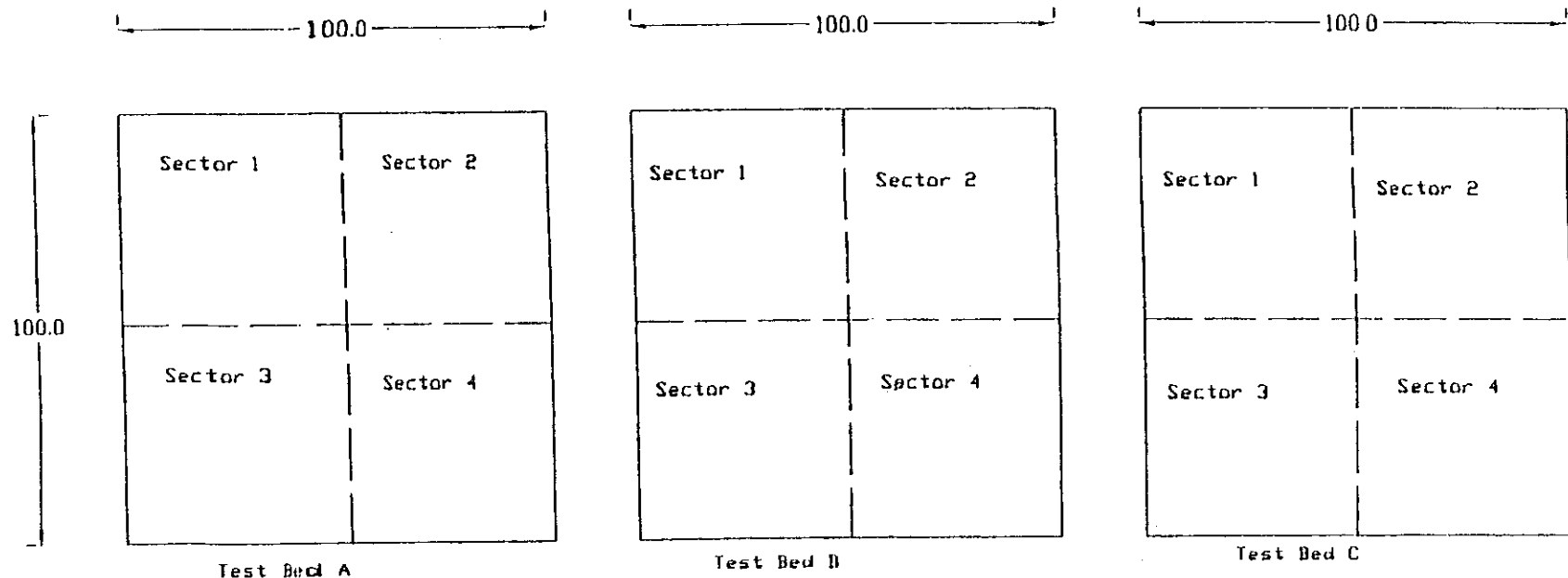
1. Areas A, B and C will be three identical test beds.
2. Each bed will be broken up into 4 sectors. Each sector will be seeded with the same weight of seed.

Sector 1: Control Sector: No treatment

Sector 2: Top 9 inches of hardpan removed from site and disposed of in an approved manner

Sector 3: Top 9 inches of hardpan broken up into sizes smaller than 3 inches, blended in with 9 inches of soil below, with a flat finish grade.

Sector 4: Same as sector 3 but will have a random rolling/holed finish. Rolls/holes shall not exceed 2 feet.



Sample Plot Layout

FIGURE

6

IV. MONITORING PLAN

A. Goals

The goals of the monitoring plan are to determine the success of direct seeding of seaside bird's beak onto different soil treatment plots and to assess the growth, survival, establishment and reproduction of viable colonies of seaside bird's beak on the restoration site.

B. Performance Criteria

Three specific parameters of the seeded plots will be monitored over the term of the monitoring program: soil compaction; non-native species invasion; bird's beak establishment. These parameters and the criteria for determining success under each of them are presented in Table 1.

Table 1 – Performance Criteria

Parameter	Monitoring Method	Frequency	Performance Criteria	Remedial Measures
Soil Compaction	Visually inspect condition of soil	Quarterly in the first 2 years; biannually in subsequent 3 years	Soil surface supports introduced native plant species	Rework soil; reintroduce seed and/or seedlings
Non-native Species Establishment	Percent cover estimates	Quarterly in the first 2 years; biannually in subsequent 3 years	No greater than 15% cover of non-native plants after 3 years	Increase weed control; extend mitigation term until <15% cover criterion achieved
Bird's Beak Establishment	Percent cover estimates	Quarterly in the first 2 years; biannually in subsequent 3 years	Minimum of 25% cover of seaside bird's beak after 3 years	Reintroduce seed; introduce seedlings; rework soil; extend mitigation term until 25% cover criterion achieved

C. Field Sampling Techniques and Procedures

Area occupied by seedlings and established plants and numbers of seedlings/plants per area will be estimated and mapped within each plot. The area and extent of non-native plants within each plot will also be visually estimated. The condition of the soil substrates in each plot (e.g. compacted, eroded, smooth surface vs. uneven surface) will also be evaluated and mapped in relation to the occurrence of bird's beak.

D. Analysis of Results

Area occupied and numbers present will be compared with original soil treatment regimes, non-native species abundance and current soil conditions. A map will be produced indicating relative densities of bird's beak in relation to soil treatment plots. If bird's beak is establishing unevenly or declining over time in relation to soil compaction, remedial measures may be necessary (see below).

E. Remedial Actions

Remedial measures will be initiated if success criteria are not met and will include the following:

- Increased weed control,
- Extended term of active mitigation program
- Further modification of soil substrates
- Repeat seed collection and propagation

F. Monitoring and Reporting Schedule

Monitoring will occur quarterly (March, June, September, December) in the first two years and biannually (June, September) thereafter as conditions warrant. An annual report will be submitted to the Department of Fish and Game by January 31st of each year beginning in 2001 with a final report submitted in 2006, assuming all success criteria have been met.

V. REPORTING RESULTS

Annual reports submitted to the Department of Fish and Game will include: 1) observational and analytical data; 2) photo documentation; 3) an evaluation of the success of the mitigation program based on comparison with the performance criteria; 4) recommendations for remedial measures and/or adaptive management.

VI. MAINTENANCE AND PROTECTION

A. Maintenance Measures

Maintenance will involve carefully hand-weeding the seeded areas. Maintenance weeding will occur monthly, or as otherwise determined necessary for a five year period. Depending on the results of direct seeding on untreated, compacted substrates, maintenance may also involve breaking the surface of the compacted areas. FORA will be the responsible party, either directly or under a maintenance agreement with BLM (or other suitable land manager) for maintenance of the mitigation site during the term of the mitigation program. Long-term maintenance will involve complete restoration of the area as a maritime chaparral habitat with the seaside bird's beak plots incorporated into the habitat. BLM will be the responsible party for long-term maintenance (assuming land transfer from the Army to BLM). The area is intended to be managed for habitat in perpetuity as part of the NRMA.

B. Protection Measures

Both short-term and long-term protection measures are established because the land is currently held by the federal government (Army/Department of Defense) and is planned for transfer to another branch of the federal government (BLM/Department of the Interior). Access restrictions now apply to the mitigation area and will continue to be enforced under BLM's tenure.

VII. FUNDING/SECURITY

FORA estimates total costs for implementation of this mitigation program, maintenance and monitoring over the five year term as follows:

Equipment	Time	Cost/hr		Cost
		Equip	Labor	
D4 Dozer	12hrs	\$160.37	\$40.46	\$2,410
CAT418Backhoe	16	24.19	40.46	1,034
Supervisor w/pickup	8	8.08	43.32	<u>411</u>
				\$3,855
		Labor Surcharge @ 15%		222
		Markup on Labor @ 33%		488
		Markup on Equip @ 15%		355
		Total Site Construction		\$4,920
Consulting Biologist	40 hrs @ \$90/hr			<u>\$3,600</u>
Total Implementation Costs				\$8,520
Maintenance and Monitoring	\$2,500/yr @ 5yrs			\$12,500
Total Costs				\$21,020

FORA will provide surety (e.g. a bond) for the estimated costs of implementation, maintenance and monitoring in a form acceptable to the Department of Fish and Game at least two weeks prior to completion of the road improvement project. Each of the activities of the mitigation program will be covered by this surety until such time as the activities are completed. If FORA does not meet its obligations in a timely manner, the Department of Fish and Game will have the authority to use the surety to complete the mitigation program.



California Department of Fish and Game
P.O. Box 47, Yountville, CA 94599
California Endangered Species Act
Incidental Take Permit No. 2081-x-x-x
Fort Ord Reuse Authority
North-South Road/Highway 218 Improvements

Authority: This California Endangered Species Act ("CESA") Incidental Take Permit ("permit") is issued by the Department of Fish and Game ("Department") pursuant to Fish and Game Code section 2081(b) and section 2081(c), and California Code of Regulations, title 14, subdivision 3, chapter 6, article 1, commencing with section 783. CESA prohibits the take¹ of any species of wildlife that is included in the list of endangered species, the list of threatened species, or the list of candidate species². However, the Department may authorize, by permit, the take of such species if the conditions set forth in section 2081(b) and section 2081(c) are met.

Permittee: Fort Ord Reuse Authority

Name and title of principal officer: Michael A. Houlemard

Mailing address: 100 12th Street, Bldg 2880, Marina, CA 93933

Agent for service of process: James A. Feeney

¹Pursuant to Fish and Game Code section 86, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill."

²"Candidate species" are species of wildlife that have not yet been placed on the list of endangered species or the list threatened species, but which are under formal consideration for listing pursuant to Fish and Game Code section 2074.2.

Project location: North-South Road near the intersection of State Highway 218, in the former Fort Ord Military Installation in Monterey County

Project description: The project entails reconstruction of approximately 1,500 linear feet of North-South Road between State Highway 218 and South Boundary Road, located on former Fort Ord in Monterey County. Alterations include the following: widening the existing Army roadway to conform with current public street specifications and accommodate projected increases in vehicular traffic; appropriate grading; drainage improvements; utility alterations; landscaping, and; the the construction of bicycle lanes, sidewalks, signage and striping. The project includes installation of a signal at Highway 218/North-South Road, and associated roadway modifications and turn lanes. North-South Road is currently located on Army-owned land that is scheduled for transfer to the Fort Ord Reuse Authority (FORA) using an economic development conveyance.

Covered species:

This permit covers the following species:

Name	Status ³
Seaside bird's-beak (<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>)	endangered

These species and only these species are hereinafter referred to as "Covered Species."

Effective date and expiration date of permit:

This permit shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by applicant (see below) and returned to the Department. Unless renewed by the Department, authorization of incidental take shall expire on October 6, 2000; measures required to fully mitigate the impacts of the project shall be implemented until success criteria have been met.

³Refers to status under CESA. Under CESA, a species may be on the list of endangered species, the list of threatened species, or the list of candidate species. All other species are "unlisted."

Incidental take authorization:

The Department authorizes the permittee, its employees, contractors and agents to take Covered Species incidentally in carrying out the project, subject to the limitations described in this section and the conditions of approval identified below. This permit does not authorize any intentional take of Covered Species, take of Covered Species from activities outside the scope of the project as described above, or take of Covered Species resulting from a permit violation.

Conditions of Approval:

The Department's issuance of this permit and Permittee's authorization to take the Covered Species is subject to Permittee's compliance with and implementation of the following conditions of approval:

1. Permittee shall comply with all applicable state, federal and local laws in existence on the effective date of this permit or adopted thereafter.
2. Permittee shall fully implement and adhere to the conditions in Attachment 1, Seaside Bird's Beak Mitigation Plan. Permittee agrees to execute a Memorandum of Agreement ("MOA") with the Bureau of Land Management ("BLM") within 90 days of date of issuance of this permit.
3. This permit may be amended without the concurrence of the permittee if the Department determines that continued implementation of the project under existing permit conditions would jeopardize the continued existence of a Covered Species or that changed biological conditions necessitate a permit amendment to ensure that impacts to the Covered Species are minimized and fully mitigated.
4. The Department may issue permittee a written stop work order to suspend any activity covered by this permit for an initial period of up to 25 days to prevent a violation of this permit or the illegal take of an endangered, threatened or candidate species. Permittee shall comply with the stop work order immediately upon receipt thereof. The Department may extend a stop work order under this provision for a period not to exceed 25 additional days, upon written notice to the permittee. The Department shall commence the formal suspension process pursuant to California Code of Regulations, title 14, section 783.7 within five working days of

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[permittee]
[project]

issuing a stop work order.

Notices:

Written notices, reports and other communications relating to this permit shall be delivered to the Department by first class mail at the following addresses, or at addresses the Department may subsequently provide the Permittee:

Original to: Regional Manager
Central Coast Region
P.O. Box 47
Yountville, CA 94599

Copy to: General Counsel
Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Compliance with the California Environmental Quality Act:

The Department's issuance of a permit is a "project" subject to the California Environmental Quality Act, Public Resources Code, section 21000, et seq. ("CEQA"). An Environmental Assessment/Initial Study was prepared for the project and a Finding of No Significant Impact/Negative Declaration, based on that environmental document was signed by FORA and the Army in October 1998. The EA/IS and FONSI/NegDec were certified by the FORA Board on January 8, 1999. A Notice of Determination of Negative Declaration was filed with Monterey County on April 30, 1999. The mitigation measures required as part of the Negative Declaration which are intended to fully mitigate impacts to seaside bird's-beak include implementation of the Fort Ord Habitat Management Plan and consultation with the Department on additional measures. FORA consulted with the Department and in August 1999, the Department reviewed and granted conceptual approval to a proposal from FORA to restore a degraded range area as an additional measure. Implementation of the program to establish new seaside bird's beak colonies in a disturbed area of a former range site (Range 42), and monitoring and reporting on the efficacy of the required program are additional measures intended to fully mitigate impacts to seaside bird's-beak.

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[permittee]
[project]

The Department is acting as a "Responsible Agency" under CEQA in issuing this permit. Section 15096(a) of the CEQA Guidelines states that "A responsible agency complies with CEQA by considering the EIR or negative declaration prepared by the lead agency and by reaching its own conclusions on whether or how to approve the project involved." Section 15096(g)(1) of the CEQA Guidelines further states that "A responsible agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve." In issuing the permit, therefore, CEQA required the Department to review the lead agency's document for the Project and to ensure that the direct and indirect environmental effects approved or authorized in the permit for the Project will be adequately mitigated or avoided. As stated in the CESA findings, below, the Department has determined that all impacts of taking Covered Species from Project activities are minimized and fully mitigated under the conditions of approval of this permit.

CESA Findings:

Section 2081 of CESA states, in pertinent part:

...

(b) The Department may authorize, by permit, the take of endangered species, threatened species, and candidate species if all of the following conditions are met:

(1) The take is incidental to an otherwise lawful activity.

(2) The impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.

(3) The permit is consistent with any regulations adopted pursuant to Sections 2112 and 2114.

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[permittee]
[project]

(4) The applicant shall ensure adequate funding to implement the measures required by paragraph (2), and for monitoring compliance with, and effectiveness of, those measures.

(c) No permit may be issued pursuant to subdivision (b) if issuance of the permit would jeopardize the continued existence of the species. The department shall make this determination based on the best scientific and other information that is reasonably available, and shall include consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities.

These CESA provisions constitute the criteria for the issuance of a permit. The Department finds that these criteria are met for the issuance of a permit to Permittee as follows:

1. The take of Covered Species as defined in the permit will be incidental to otherwise lawful Project activities.
2. The impacts of take of Covered Species will be minimized and fully mitigated through implementation of measures that are required as permit conditions of approval.
3. The minimization and mitigation measures required in the permit are roughly proportional in extent to the Project's impact of taking Covered Species.
4. The required minimization and mitigation measures will maintain the Permittee's Project objectives to the greatest possible extent.
5. All required measures are capable of successful implementation.
6. This permit is consistent with any regulations adopted pursuant to sections 2112 and 2114 of the Fish and Game Code.
7. The Permittee has ensured adequate funding to implement the required minimization and mitigation measures, and for monitoring

compliance with, and the effectiveness of, those measures.

8. Issuance of this permit will not jeopardize the continued existence of any Covered Species. The Department's finding is based on the best information that is reasonably available, and includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (a) known population trends; (b) known threats to the species; and (c) reasonably foreseeable impacts on the species from other related projects and activities. The Department's finding is further based on the Department's express authority to revise the terms of the permit as necessary to avoid jeopardy.

Attachments:

ATTACHMENT 1 Seaside Bird's Beak Mitigation Plan, Highway
218/North-South Road Improvements Project (April
14, 2000) including monitoring and reporting
requirements

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME
on _____, 2000.

[name], Regional Manager
Central Coast Region

ACKNOWLEDGMENT

The undersigned applicant acknowledges receipt of this permit and, by signing, accepts and agrees to comply with all terms and conditions of the permit.

By: _____ Date: _____

Name: _____

Title: _____

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[permittee]
[project]

**CALIFORNIA DEPARTMENT OF FISH AND GAME
CALIFORNIA INCIDENTAL TAKE PERMIT**

NO. 2081-x-x-x

**Fort Ord Reuse Authority, North-South Road/Highway 218 Improvements
CEQA FINDINGS**

INTRODUCTION:

The California Environmental Quality Act ("CEQA"; Public Resources Code §21000, *et seq.*), and the State CEQA Guidelines ("Guidelines"; 14 Cal.Code Regs. 15000, *et seq.*) require that prior to reaching a decision on a project, a responsible agency must consider the environmental effects of the project as shown in the document prepared by the lead agency.

As the lead agency for the North-South Road/Highway 218 improvement activities, the Fort Ord Reuse Authority ("FORA") adopted a Negative Declaration on January 8, 1999. The Negative Declaration identified impacts to the seaside bird's-beak, and required that FORA implement the Fort Ord Habitat Management Plan. In addition, the Negative Declaration required that FORA consult with the California Department of Fish and Game ("CDFG") to develop additional measures to minimize and fully mitigate impacts to the species. In consultation with CDFG, the Bureau of Land Management ("BLM") and the Army, FORA agreed to establish new seaside bird's beak colonies in a disturbed area of a former range site (Range 42) and monitor and report on the efficacy of the restoration/establishment program as additional measures.

CDFG is issuing a California incidental take permit ("Permit") to the project applicant, FORA for the North-South Road/Highway 218 Improvements project. The applicant proposes reconstruction of approximately 1,500 linear feet of North-South Road between State Highway 218 and South Boundary Road, located on former Fort Ord in Monterey County. Alterations include the following: widening the existing Army roadway to conform with current public street specifications and accommodate projected increases in vehicular traffic; appropriate grading; drainage improvements; utility alterations; landscaping, and; the the construction of bicycle lanes, sidewalks, signage and striping. The project includes installation of a signal at Highway 218/North-South Road, and associated roadway modifications and turn lanes. North-South Road is currently located on Army-owned land that is scheduled for transfer to the Fort Ord Reuse Authority (FORA) using an economic development conveyance.

CDFG is a responsible agency under CEQA for the purpose of approving the Permit necessitated by the lead agency's approval of the project. As a CEQA responsible agency, CDFG is required by Guidelines §15096 to review the environment document certified by the lead agency approving the project and to make certain findings concerning the project's potential to cause significant adverse environmental effects. However, when considering alternatives and mitigation measures approved by the lead agency, a responsible agency is more limited than the lead agency. CDFG has responsibility for mitigating, minimizing or avoiding only the direct or indirect environmental effects on species protected by the California Endangered Species Act.

FINDINGS:

CDFG has considered the negative declaration adopted by the lead agency.

CDFG finds that the mitigation measures that have been incorporated as conditions of approval of the Permit will: 1) minimize and fully mitigate take of the State-listed species, and meet other standards established in section 2081 of the Fish and Game Code for issuance of incidental take permits, and 2) avoid any significant adverse effects on those species. The following measures and others set forth in the Permit will fully mitigate impacts to those species and avoid significant effects on the species:

- establishment of new seaside bird's beak colonies on a disturbed area of a former range site (Range 42) on land to be transferred to the Bureau of Land Management. The mitigation program will also provide a basis for evaluating various methods of introducing bird's beak into a previously disturbed restoration area. Long-term management and protection of the area will be provided by BLM as part of its ongoing responsibilities for the Natural Resource Management Area (NRMA).
- monitoring program that provides for quarterly monitoring (March, June, September, December) in the first two years and biannual monitoring (June, September) thereafter as conditions warrant. An annual report will be submitted to the Department of Fish and Game by January 31st of each year beginning in 2001 with a final report submitted in 2006, assuming all success criteria have been met. Annual reports submitted to the Department of Fish and Game will include: 1) observational and analytical data; 2) photo documentation; 3) an evaluation of the success of the mitigation program based on comparison with the performance criteria; 4) recommendations for remedial measures and/or adaptive management.
- surety (e.g. a bond) in the amount of \$21,020 for the estimated costs of implementation, maintenance and monitoring in a form acceptable to the Department of Fish and Game at least two weeks prior to completion of the road improvement project. Each of the activities of the mitigation program will be covered by this surety until such time as the activities are completed. If FORA does not meet its obligations in a timely manner, the Department of Fish and Game will have the authority to use the surety to complete the mitigation program.

CDFG has independently concluded that the Permit should be issued under the terms and conditions specified therein.

CDFG finds that the Mitigation Monitoring and Reporting Program at Attachment 1 of the Permit will ensure compliance with mitigation measures by requiring the applicant to monitor and report progress in implementing those measures for review by CDFG staff.

CEQA Findings, Page 3

The Mitigation Monitoring and Reporting Program is adopted.

The Project is approved.

DATE: _____, 1999 By: _____
(*regional manager*)
DEPARTMENT OF FISH AND GAME

APR 21

Transmittal/Memorandum

To: Jim Feeney, Birch Ohlinger, Steve Endsley

By Overnight Mail

From: Mike Zander

Subject: Fish and Game Permit Application Materials—North South Road

Date: April 20, 2000

Enclosed please find the following documents relative to the permit application for incidental take of seaside bird's beak as a result of the North-South Road improvements:

- A sample cover letter for the permit application (to be modified as you wish and typed on FORA letterhead for submittal with the permit)
- A completed application (for your signature)
- A Mitigation Plan (for attachment to the permit application)
- A Draft Fish and Game Permit for the Project (to be finalized and issued by DFG)
- A Draft Findings Document (to be finalized and issued by DFG)

There are some unresolved issues with this application package. They are:

- The mitigation program is not as thorough and habitat-oriented as Deb Hillyard will want. We can either spend more time developing it or send it in as is and take our chances. We should discuss this.
- The land for the mitigation site is still in Army hands and will continue to be for some time. We will probably need to involve the Army and formalize an arrangement with them to pull this off.
- A formal arrangement with BLM will probably also have to be made
- The costs for the mitigation program are based on some guestimates and may not be enough to satisfy DFG, especially considering the habitat orientation Deb Hillyard will want.

I've included a Draft Permit and CEQA Findings for your review. Terry Palmisano sent me the templates for these and I filled them out to expedite processing. **Do Not** submit them with the application, but we may want to send them back to Terry separately with a note that she (or Deb) can have them electronically if she so desires.

Call me when you've had a chance to digest this.