

Appendix C

MRS-16 Technical Letter for Preparatory Action

MRS-16

Technical Letter For Preparatory Action

1.0 Introduction

This technical letter describes the procedures that will be performed by Shaw Environmental and its subcontractors in and around Munitions Response Site (MRS)-16 (formerly Site OE-16) at the former Fort Ord ([Figure 1-1](#)) prior to conducting a prescribed burn (currently scheduled for summer 2006).

The prescribed burn is part of the remedy for this site under the Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, California, September, 2002. The selected interim remedy for MRS-16 includes prescribed burning for vegetation clearance, surface and subsurface removal of munitions and explosives of concern (MEC), and detonation of MEC using engineering controls

1.1 Purpose

These preparatory actions are required to (1) allow access to the site in case of emergency, (2) ensure compliance with biological monitoring requirements for habitat areas at the former Fort Ord, and (3) create a 150-ft wide primary containment line for the prescribed burn. These preparatory actions are necessary to provide for worker safety and to facilitate a successful burn, and must be completed prior to conducting the prescribed burning at MRS-16. The prescribed burn of MRS-16 is currently scheduled for summer, 2006. The nature of these preparatory actions necessitate that the actions take place as soon as possible in order to be able to conduct the prescribed burn at the earliest opportunity after the approval of the MRS-16 MEC Removal Work Plan. The Work Plan is currently in development and will outline the procedures for conducting the prescribed burning and MEC removal at MRS-16.

1.2 Scope

This preparatory action entails removing railroad ties and debris from the prescribed burn area; possibly repairing an access road through the site; conducting baseline biological monitoring within and adjacent to the prescribed burn primary containment line; clearing vegetation within the primary containment line around the entire site; and supporting the Presidio of Monterey Fire Department (POMFD) blacklining of the primary containment line to assist in containing the prescribed burn within the site.

2.0 Site Description

Fort Ord is a former military installation that comprises approximately 46 square miles in northwestern Monterey County, California, and is located approximately 120 miles south of San Francisco. Monterey Bay forms the western boundary of the former Fort Ord, and the Santa

Lucia Range bounds the former Fort Ord to the south. The cities of Marina and Seaside, and the Salinas Valley are northwest, southwest, and east of the former Fort Ord, respectively. MRS-16 is located immediately north of the former Fort Ord Impact Area between Eucalyptus and Parker Flats roads and bounded by Watkins Gate Road to the east (Figure 1-2).

3.0 Preparatory Actions Required

This section describes the types of preparatory actions required at MRS-16.

3.1 Removal of Railroad Ties and Debris

Readily accessible railroad ties and debris on the ground surface remaining from when the area was an active training site will be removed prior to the prescribed burn (Pictures 1 and 2). Unexploded Ordnance (UXO) escorts will be on-site to ensure the safety of personnel removing the railroad ties and other debris. These items are to be removed in order to reduce smoke emissions during the prescribed burn. The railroad ties and debris will be inspected and transported offsite to a licensed landfill. Surface MEC and MEC-like items in accessible areas have been removed previously from MRS-16.

3.2 Access Road Repair

An access road that runs through the center of MRS-16 will be repaired if determined to be necessary by the Fort Ord BRAC Office and the POMFD. The access road is highlighted on Figure 1-2. This road is currently deeply rutted and impassable by most vehicles (Pictures 3 and 4). Use of this access road could be needed in the event of an emergency. A UXO escort will provide construction support during the repair work if the work is determined to be necessary. MEC clearance to depth will be conducted as part of the MR work following the prescribed burn. Closure of roads currently open to government vehicles and foot and bicycle traffic may be required depending on the extent of repair work, if any.

3.3 Containment Line Baseline Biological Monitoring

Baseline biological monitoring will be conducted within, and adjacent to, the MRS-16 primary containment line. A UXO escort will be provided to biological monitoring personnel. The baseline survey will be conducted to document the location and concentration of central maritime chaparral species and grasses within, and adjacent to with respect to grasses, the MRS-16 primary containment line prior to vegetation cutting/blacklining. Central maritime chaparral surveys are characterized in terms of flora species composition and dominance and the location and extent of Installation-Wide Multispecies Habitat Management Plan species found within the fuel break. The baseline survey will be conducted using the following procedures:

Maritime Chaparral: Permanent vegetation monitoring transects will be installed in accordance with the Protocol for Conducting Vegetation Sampling at Fort Ord in Compliance with the Installation-Wide Multispecies Habitat Management Plan. The endpoints of each transect will be recorded using GPS. For the baseline survey, temporary, non-metallic markers will be positioned at the endpoints. The line-intercept method will be used to measure percent

cover of chaparral species. Randomly selected 50 meter transects will be installed until there is a less than 10 percent change in percent cover of the HMP chaparral species. Herbaceous cover will be visually estimated or determined using a 1/4 meter quadrat. Pictures of the area will be taken using photo points established using GPS, and the direction of the photo will be recorded. Photos will be used for future comparisons to the baseline conditions.

Grasses: To evaluate possible increases of invasive species, including grasses, within and adjacent to the primary containment line, existing populations of weeds, including grasses, will be mapped using GPS prior to vegetation cutting/blacklining. A density classification of high, medium, or low will be assigned to areas of invasive species for use in comparing future vegetation recovery as required by the HMP. The mapping and density classification should take place both within the primary containment line, and in areas within the burn polygon adjacent to the primary containment line. Pictures of the area will be taken using photo points established using GPS, and the direction of the photo will be recorded. Photos will be used for future comparisons to the baseline conditions as well as determining the density of the grasses within and adjacent to different areas of the primary containment line.

3.4 Containment Line Vegetation Cutting and Blacklining

Primary containment line vegetation cutting will be conducted at MRS-16 with an approximate area of 28 acres ([Figure 1-2](#)). The containment line on the western side of the burn area (approximately 6 acres) is outside of the MRS-16 site boundary. In addition to the primary containment line, secondary and tertiary containment lines have been established for the prescribed burn ([Figure 1-3](#)). The secondary and tertiary containment lines have been maintained regularly and do not require additional vegetation clearance at this time.

The purpose of the work is to create a primary containment line with a width of 150 feet around the entire prescribed burn area within MRS-16. This area has been surveyed by the U.S. Army Corps of Engineers Ordnance and Explosives Safety Specialist, and was determined to be appropriate to cut with safety measures outlined below. The primary containment line is outside of the range boundaries within MRS-16. Vegetation within the primary containment line is currently very thick ([Pictures 5 and 6](#)), and must be removed to be an effective containment boundary. In areas with heavy vegetation that obscures visual inspection of the ground surface, a first cut will be made to a height between 18 and 24 inches above the ground. After visual inspection for MEC, a second cut will be made to a height of no more than 6 inches above ground. In areas with medium to light vegetation where the ground surface can be readily observed before cutting, the vegetation will be cut in one stage to a height of no more than 6 inches above ground. The UXO team will provide construction support during vegetation clearance in heavily vegetated areas by first conducting a visual survey of the area to be cut to the extent possible and then moving outside of the Minimum Separation Distance (MSD) prior to equipment startup. The MSD has been established at 809 feet. If during vegetation clearance MEC or an unknown item is encountered, the vegetation clearance will stop and the UXO technician will return to investigate the item. In areas with medium to light vegetation that does not obscure the ground surface, a magnetometer will be used in conjunction with a visual survey of the ground surface for MEC. Subsurface investigation and removal of MEC within the primary containment line will occur after the prescribed burn is conducted. The six foot chain link fence surrounding MRS-16 will be cut to allow access to areas where vegetation clearance is

needed. The fence will be repaired at the end of each work day prior to crews leaving the site. Closure of roads currently open to government vehicles and foot and bicycle traffic will be required for vegetation clearance within the primary containment line.

After completion of the primary containment line vegetation clearance, the POMFD will conduct blacklining operations in selected areas to reinforce the primary containment line ([Picture 7](#)). Blacklining entails surgical burning of areas within the primary containment line to remove additional vegetative fuel.

4.0 Environmental Protection

Disturbances to the vegetation and soil will be minimized, without unreasonably disrupting the preparatory actions. This includes restricting vehicle access to existing roads as much as possible while railroad ties and tar gets are hauled off site, and remaining within the existing footprint of the access road to be repaired, if required.

5.0 Reporting

The results of these preparatory actions will be documented in the MRS-16 After-Action Report. This section of the report will detail the completion of the actions and any actions that were not required or not completed due to unforeseen circumstances.

6.0 Schedule

Preparatory Action	Schedule	Previous Action(s) Required	Potential or Mandatory
Railroad Ties and Debris Removal	Prior to Prescribed Burn	None	Mandatory
Access Road Repair	Prior to Prescribed Burn	None	Potential
Biological Monitoring	Late March-Early April 2006	None	Mandatory
Primary Containment Line Vegetation Clearance	Early April-Late April 2006	Biological Monitoring	Mandatory
Blacklining	Late April-Prior to Prescribed Burn	Biological Monitoring Primary Containment Line Vegetation Clearance	Mandatory

7.0 *References*

- 1) Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, California, September, 2002.
- 2) Superfund Post-Decision Proposed Plan, Interim Action Record of Decision, for Munitions Response Site 16, January 2006.

8.0 *Pictures of Preparatory Actions Required*



Picture 1: General Debris



Picture 2: Railroad Ties



Picture 3: Rutted Section of Access Road



Picture 4: Rutted Section of Access Road



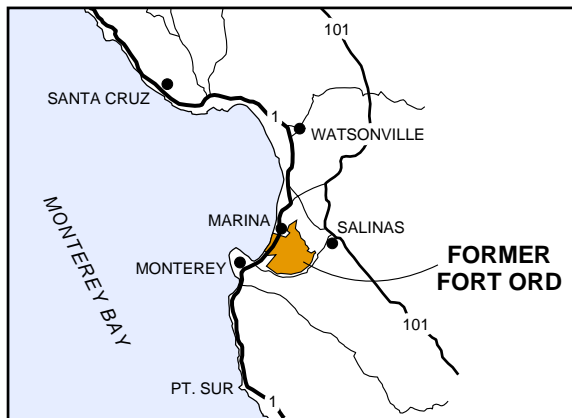
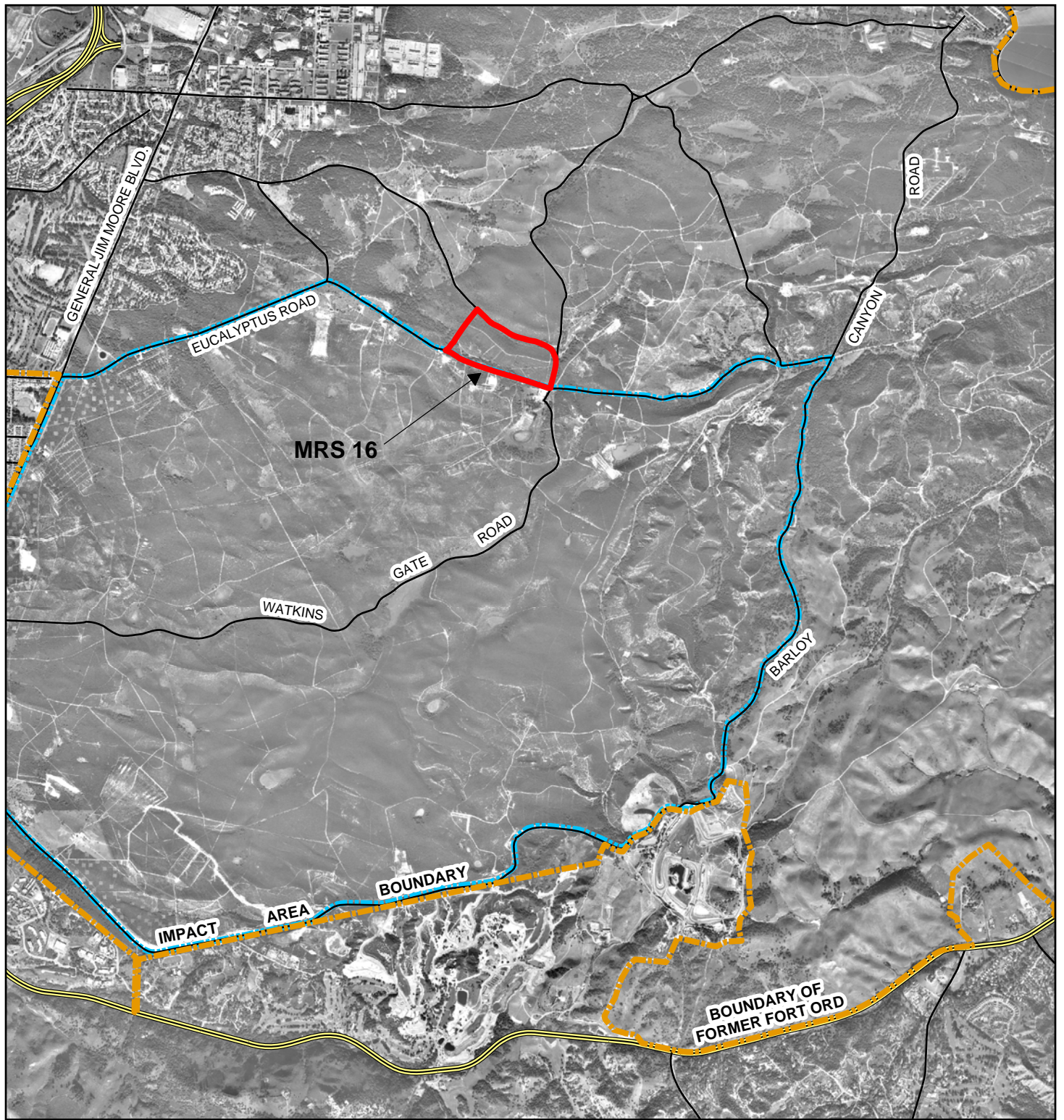
Picture 5: Heavy Vegetation within Primary Containment Line



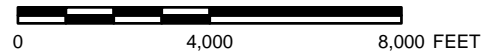
Picture 6: Heavy Vegetation within Primary Containment Line



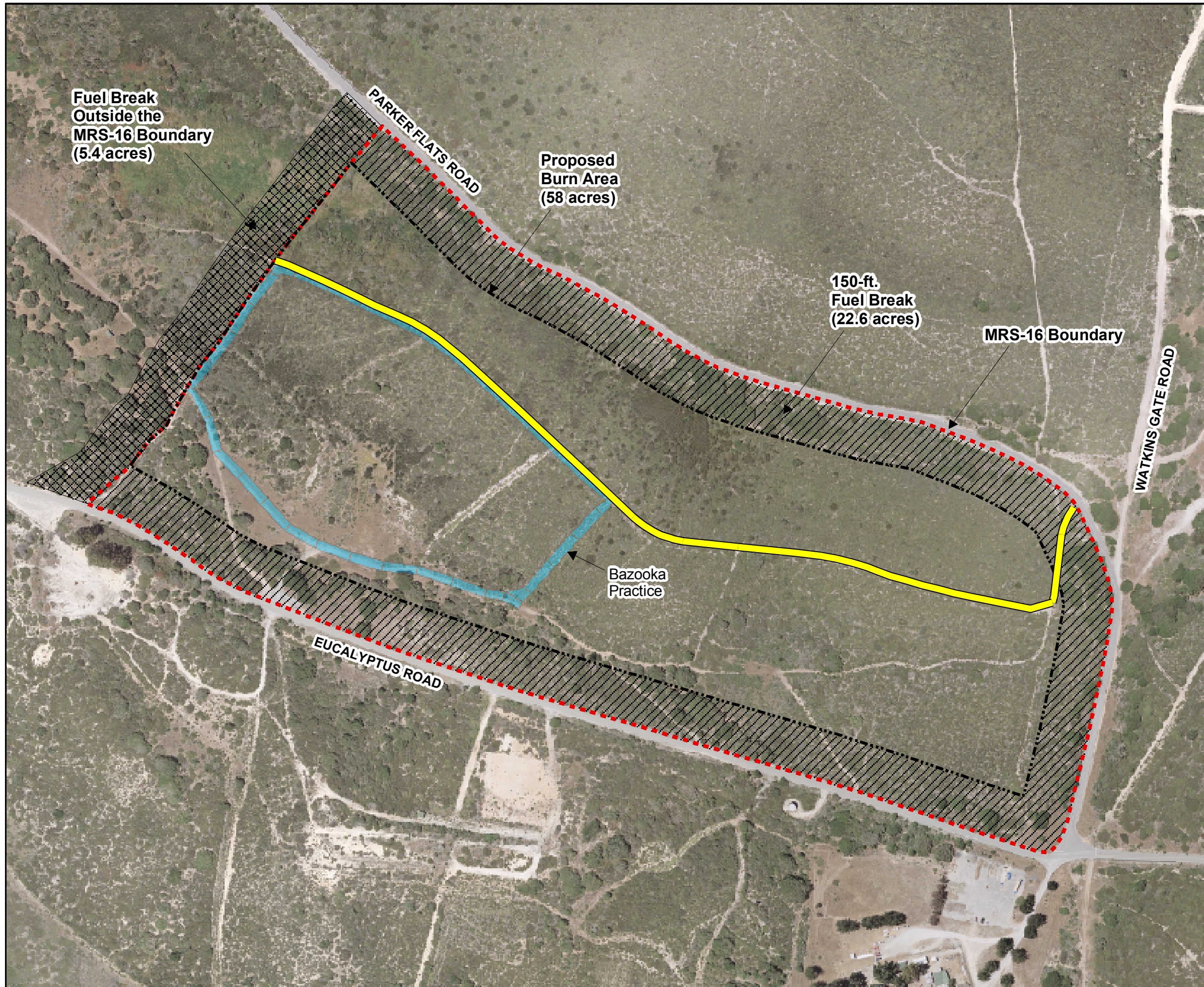
Picture 7: Blacklining Operations



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REVISION	DATE	DESCRIPTION	CHKD	APPR
		Department of the Army Sacramento District, Corps of Engineers Sacramento, California		
DESIGNED:	FIGURE 1-1 LOCATION MAP MRS 16 FORMER FORT ORD, CALIFORNIA			
DRAWN:				
CHECKED:				
SUBMITTED:	DATE	SCALE:	SPEC. No.	
		SHEET	FILE No. MRS16_location.mxd	



Fuel Break
Outside the
MRS-16 Boundary
(5.4 acres)

PARKER FLATS ROAD

Proposed
Burn Area
(58 acres)

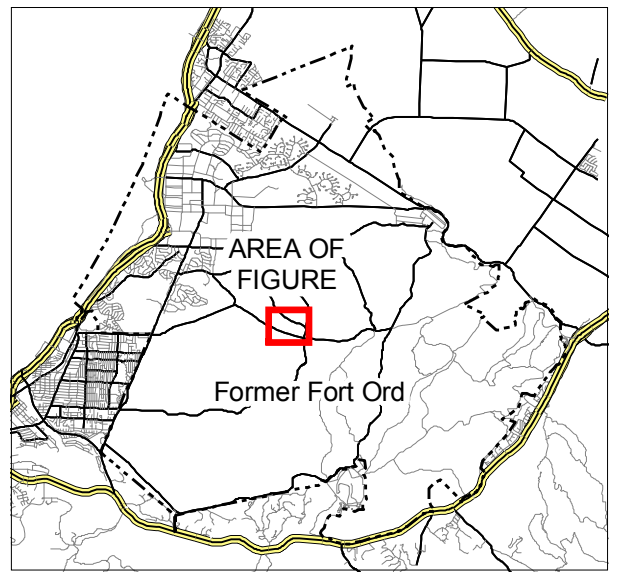
150-ft.
Fuel Break
(22.6 acres)

MRS-16 Boundary

WATKINS GATE ROAD

Bazooka
Practice






EUCALYPTUS ROAD

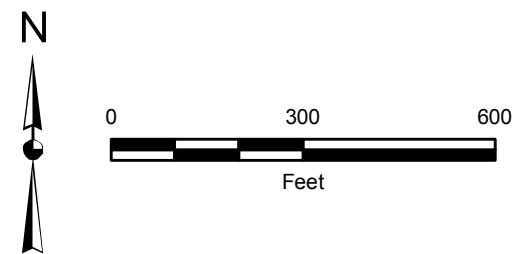


AREA OF
FIGURE


Former Fort Ord

LEGEND

-  MRS 16 Boundary
-  Proposed Burn Area
-  Fuel Break Area
-  Fuel Break Outside the MRS-16 Boundary
-  Road to be repaired at direction of BRAC/POMFD



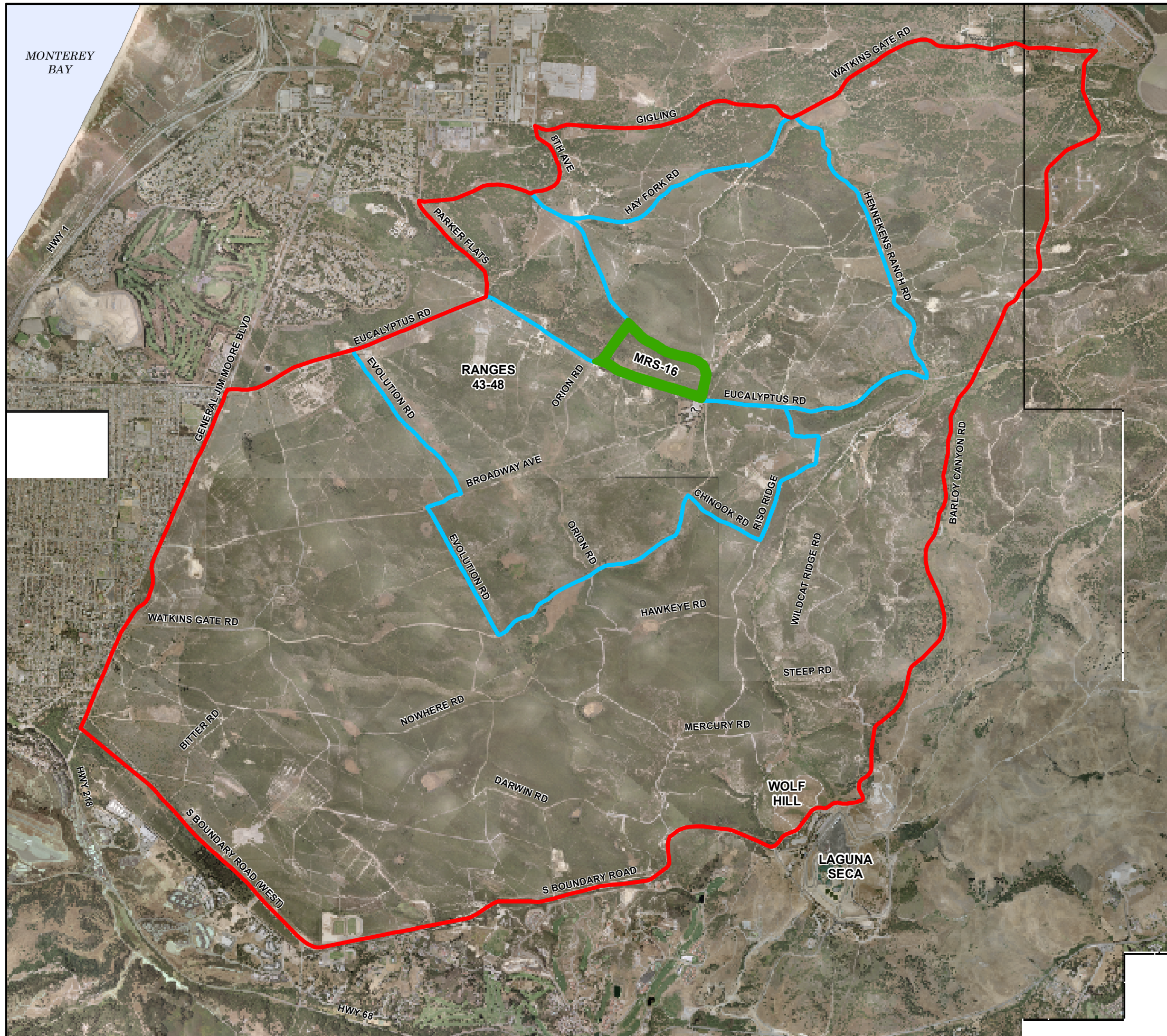
REVISION	DATE	DESCRIPTION	CHKD	APPR

 Shaw Environmental, Inc.
 Department of the Army
Sacramento District, Corps of Engineers
Sacramento, California

DESIGNED: J. MOSER
 DRAWN: K. BLACK
 CHECKED: P. KELSALL

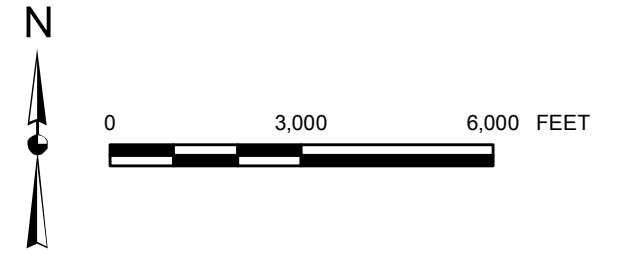
FIGURE 1-2
SITE PLAN
MRS 16
FORMER FORT ORD, CALIFORNIA

SUBMITTED:	DATE:	SCALE:	SHEET:	FILE No.	SPEC. No.
				MRS16_road_repair.mxd	



LEGEND

- Primary Containment
- Secondary Containment
- Tertiary Containment



REVISION	DATE	DESCRIPTION	CHKD	APPR
Shaw Environmental, Inc.		Department of the Army Sacramento District, Corps of Engineers Sacramento, California		
DESIGNED: J. MOSER		FIGURE 1-3 CONTAINMENT AREAS MRS 16		
DRAWN: K. BLACK		FORMER FORT ORD, CALIFORNIA		
CHECKED: P. KELSALL		SCALE: _____ SPEC. No. _____		
SUBMITTED: _____ DATE _____		SHEET _____ FILE No. MRS16_containment.mxd		