

FORT ORD REUSE AUTHORITY



UXO Support Work Plan Eucalyptus Road Phase II

Former Fort Ord
Monterey County, California

August 16, 2010

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1. Introduction

The former Fort Ord is located adjacent to Monterey Bay in northwestern Monterey County, California (Figure 1). Since 1917, portions of the former Fort Ord were used by the United States Department of the Army (Army) for maneuvers, target ranges, and other purposes. Military munitions were fired into, fired upon, or used on the facility. As a result, a wide variety of conventional munitions and explosives of concern (MEC), consisting of unexploded ordnance (UXO) and discarded military munitions (DMM) items, and munitions debris (MD) have been encountered at the former Fort Ord.

This UXO Support Work Plan has been prepared in support of the proposed Eucalyptus Road Phase II work to be conducted by the Fort Ord Reuse Authority (FORA) and its subcontractors. Eucalyptus Road Phase II includes the area for the proposed alignment of Eucalyptus Road, plus a 50-foot-wide work area on both sides of the new alignment of Eucalyptus Road for a total approximate width of 200 to 300 feet, hereafter referred to as “the proposed roadway extension” (Figure 1). This UXO Support Work Plan was prepared by ARCADIS and Weston Solutions, Inc. (WESTON; “the ARCADIS Team”) on behalf of FORA.

The proposed roadway extension lies within the boundaries of the Seaside Munitions Response Area (MRA) and the Phase II portion of the Parker Flats MRA (Figure 2), which were transferred to FORA under the Finding of Suitability for Early Transfer (FOSET), Former Fort Ord, Environmental Services Cooperative Agreement (ESCA) Parcels and Non-ESCA Parcels (Operable Unit Carbon Tetrachloride Plume; FOSET 5; Army 2007). A portion of the proposed roadway extension lies within property that is still owned by the Army (Figure 2). Previous sampling, investigation, and removal actions have been conducted over the majority of the proposed roadway extension, and the results were presented in After-Action Reports and Technical Information Papers prepared by the Army or the Environmental Services Cooperative Agreement Remediation Program (ESCA RP) Team. One portion of the proposed roadway extension is located within the Parker Flats Phase II MRA, which is currently being investigated by the ESCA RP Team on behalf of FORA as part of the Group 1 Remedial Investigation/Feasibility Study (RI/FS) Work Plan (“the Group 1 RI/FS Work Plan”; ESCA RP Team 2008).

The purpose of this UXO Support Work Plan is to identify the proposed roadway extension activities that will require UXO support. FORA is in the process of engaging a construction firm to perform the roadway extension work. The project generally

consists of site grading, underground utilities installation, paving, fence removal and installation, soil management (includes possible importation of soils), and paving.

1.1 Site Description

Eucalyptus Road is a paved road that runs through the approximate center of the former Fort Ord. Eucalyptus Road intersects with General Jim Moore Boulevard and runs northeast along the perimeter of the Seaside MRA and through the Parker Flats MRA (Figures 1 and 2). Eucalyptus Road then turns sharply at the intersection with Parker Flats Cutoff Road and continues southeast along the northern perimeter of the former Impact Area (Figure 2). In 2009, FORA began construction activities related to the realignment of General Jim Moore Boulevard and Eucalyptus Road. As part of these activities, the pavement from the southern portion of Eucalyptus Road (at the intersection with General Jim Moore Boulevard) to an area approximately 4,360 linear feet (LF) to the northeast (referred to as station 53+00) was removed and the area re-graded in preparation for the new Eucalyptus roadway alignment. The proposed roadway extension work area extends from station 53+00 a distance of approximately 3,200 LF to Station 85+00, approximately 300 LF before the intersection of Eucalyptus Road and Parker Flats Cutoff Road. The proposed roadway extension includes the Eucalyptus Road alignment limits of grading plus an additional 50-foot-wide work area on either side of the road (Figure 2).

The proposed roadway extension lies within the boundaries of the Seaside MRA and the Phase II portion of the Parker Flats MRA (Figure 2), which were transferred to FORA as under the FOSET 5 (Army 2007). A portion of the proposed roadway extension lies within property that is still owned by the Army (Figure 2). Portions of the following Munitions Response Sites (MRSs) are located within the boundaries of the proposed roadway extension (Figure 2):

- MRS-15MOCO.02 located in the Parker Flats Phase II MRA;
- MRS-44PBC and MRS-44EDC located in the Parker Flats Phase II MRA;
- MRS-15SEA.04 located in the Seaside MRA; and
- MRS-24A located on Army property.

1.2 Overview of Activities Requiring UXO Support

The need for UXO support was evaluated and the following activities will be supported:

- Site surveys and construction surveys
- Removal and placement of ground asphalt
- Roadway site preparation and construction including: grading, subsurface utility trenching and installation
- Monitoring and reporting of soil management activities including importation and excavation from the Residential Quality Assurance (RQA) pilot study area (MRS15-SEA.4)
- Relocating the existing right-of-way/boundary fence on the south side of Eucalyptus Road per Army specifications

2. UXO Support Procedures

UXO support will be provided by WESTON in accordance with the Group 1 RI/FS Work Plan as follows:

- Prior to ground-disturbing activities, Military Munitions Recognition Training will be provided to the construction employees.
- During site surveys and construction surveys, a qualified WESTON UXO Technician will accompany the survey crews.
- During grading, excavation, asphalt removal and placement activities, and soil excavation and importation activities, and the installation and removal of fencing, qualified WESTON UXO Technicians will be at the work location to observe the operations and monitor for MEC that may be uncovered by the work. Munitions debris found will be stockpiled, secured, and disposed of in accordance with the Group 1 RI/FS Work Plan.
- Following asphalt removal, a geophysical investigation will be conducted over the newly exposed area to confirm that the road was not impacted by projectiles.

- If MEC or MEC-like items are observed at the work site during construction operations, FORA shall stop work and notify the ESCA RP Team, per the ESCA RP Team's Site Security Incidental Finds Standard Operating Procedure (Appendix A) that has been adopted for this scope of work.
- After WESTON's response, the ESCA RP Team will assess the probability of encountering additional MEC based on Department of Defense Explosive Safety Board guidance.
- Construction restarts when authorized by WESTON personnel in coordination with the United States Environmental Protection Agency and the Department of Toxic Substances Control (DTSC).

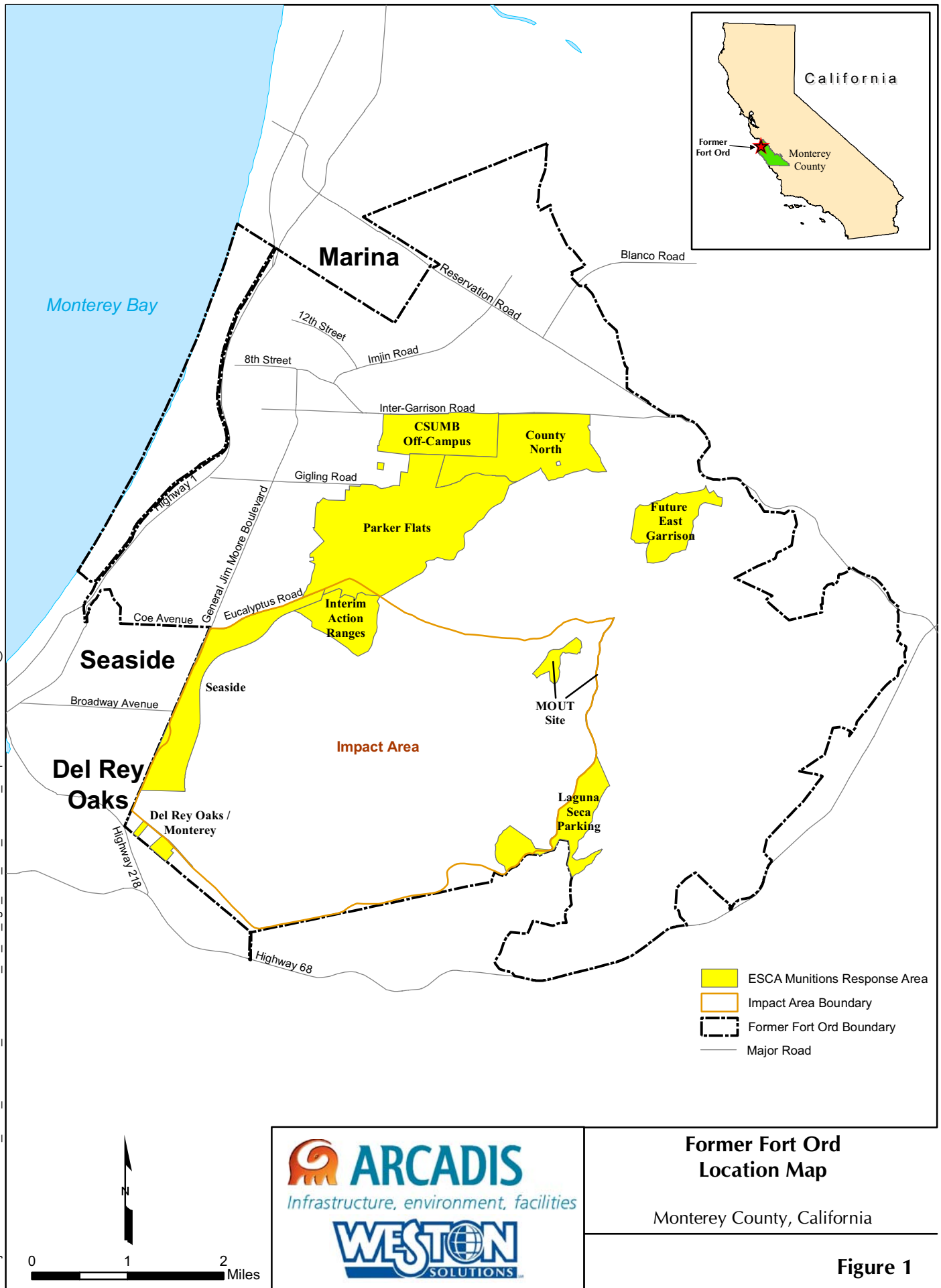
The field activities and significant findings will be reported to the EPA and DTSC consistent with the Group 1 RI/FS Work Plan. The results of these activities will also be documented for consideration during the development of the Group 1 RI/FS.

3. References

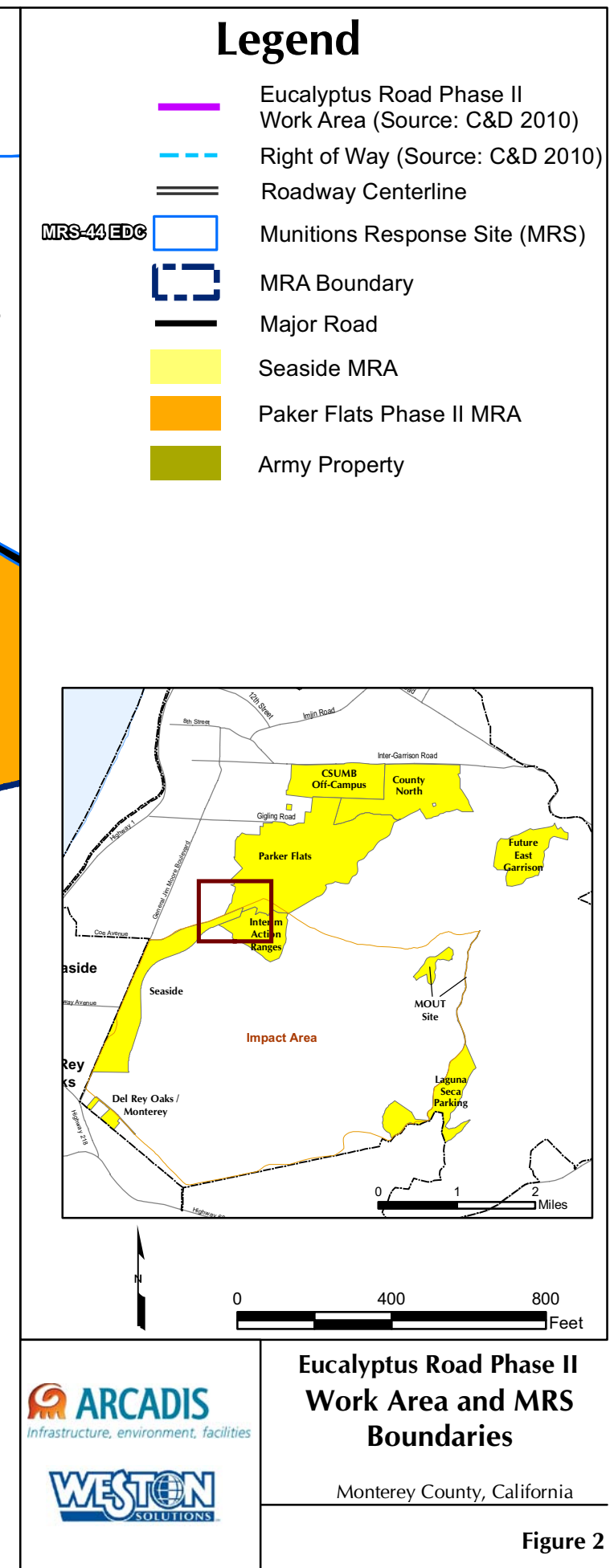
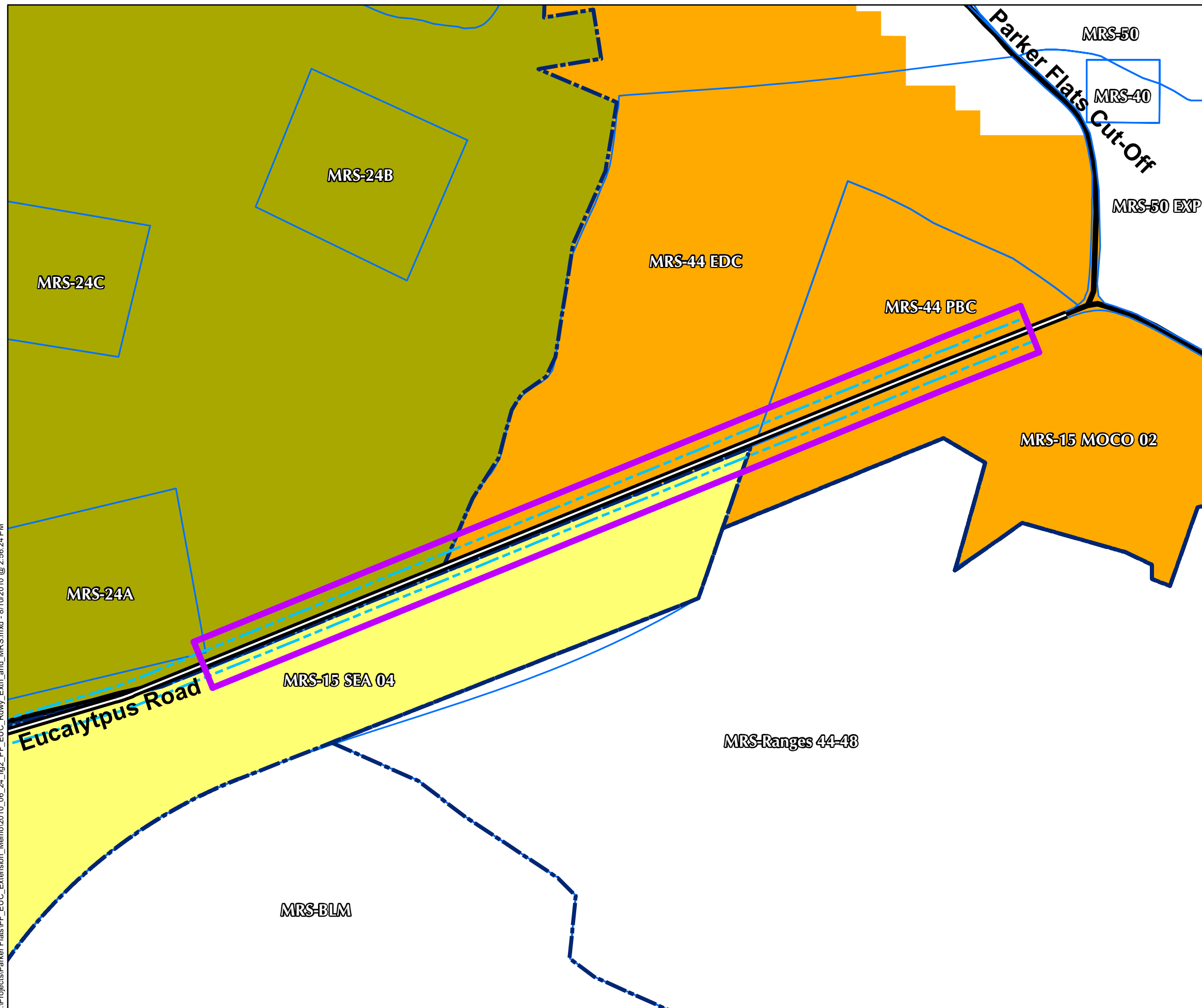
Environmental Services Cooperative Agreement Remediation Program Team (ESCA RP Team). 2008. Final Group 1 Remedial Investigation/Feasibility Study Work Plan, Seaside Munitions Response Area and Parker Flats Munitions Response Area Phase II, Former Fort Ord, Monterey County, California. December 17. (Fort Ord Administrative Record No. ESCA-0124)

United States Department of the Army (Army). 2007. Finding of Suitability for Early Transfer (FOSET), Former Fort Ord, Environmental Services Cooperative Agreement (ESCA) Parcels and Non-ESCA Parcels (Operable Unit Carbon Tetrachloride Plume) (FOSET 5). November 15. (Fort Ord Administrative Record No. FOSET-004J)

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Appendix A

Site Security Incidental Finds
Standard Operating Procedure

STANDARD OPERATING PROCEDURE FOR DISCOVERY OF INCIDENTAL ITEMS

1.0 PURPOSE

The purpose of this Standard Operating Procedure (SOP) is to provide the step by step procedures and safety and health requirements applicable in the event suspected ordnance items are discovered outside of a remedial activity on Fort Ord Reuse Authority's (FORA's) property covered under the Environmental Service Cooperative Agreement (ESCA) or by the FORA ESCA Remediation Program (RP) Team, which consists of LFR Inc., Weston Solutions, Inc., Westcliffe Engineers, Inc., and their subcontractors.

Prompt reporting on incidental items is necessary to ensure that the item(s) is secured prior to disposal and is reported in the Military Munitions Response Program (MMRP) database.

A Chemical Warfare Material (CWM) Risk Assessment has been completed for Fort Ord. The results indicated that the probability of encountering CWM munitions is "unlikely" while the probability of encountering CWM Chemical Identification Sets (CAIS) is "seldom."

2.0 SCOPE

This SOP applies to all ESCA RP Team personnel.

3.0 REFERENCES

Fort Ord Reuse Authority (FORA). 2009. Fort Ord Reuse Authority Site Security Plan, Former Fort Ord, Monterey County, California. [date pending]

United States Department of the Army Fort Ord Base Realignment and Closure Office (Army). 2005. Munitions Response Site (MRS) Security Program (formerly Ordnance and Explosives [OE] Site Security 2002 Program Summary), Former Fort Ord, California. May 11. Revised June 2009.

4.0 RESPONSIBILITIES

4.1 Remediation Project Manager (RPM)

The RPM is responsible for ensuring availability of resources required to safely implement this SOP.

4.2 Senior Unexploded Ordnance Supervisor (SUXOS)

The SUXOS is responsible for incorporating this SOP in plans, procedures, and training and ensuring that all personnel conducting munitions and explosives of concern (MEC) operations are familiar with and comply with this SOP. The SUXOS is responsible for determining response actions associated with the discovery of incidental items.

4.3 UXO Safety Officer (UXOSO)

The UXOSO ensures that all operations pertaining to MEC clearance are being conducted in a safe manner and in accordance with the Programmatic Work Plan, Site-Specific Work Plan, and this SOP. The UXOSO conducts safety audits of the operations and ensures that all personnel are properly trained and utilizing the appropriate personal protective equipment (PPE). The UXOSO is responsible for ensuring responses to reports of incidental items are conducted in a safe manner that is protective of the ESCA RP Team staff and the public.

4.4 UXO Team Leader

The UXO Team Leader is responsible for supervision of the team conducting the clearance operation. The UXO Team Leader is required to conduct training of personnel involved in MEC operations to ensure that every member of the MEC team thoroughly understands this SOP. The UXO Team leader is responsible for responding to and securing reported incidental items.

4.5 ESCA RP Team Personnel

ESCA RP Team personnel are responsible for reporting suspect incidental items they discover promptly to the SUXOS. If feasible the location of the item and a photograph of the item should be recorded. If possible the area should be secured until a response action is initiated by the SUXOS.

5.0 OPERATIONS

5.1 General

The ESCA RP Team has been identified by FORA as the responding party for reported incidental finds during normal business hours while active remedial activities are underway. Each RP Team member is responsible for reporting suspect incidental items they discover either on or off ESCA property promptly to the SUXOS and the following activities should be undertaken:

- Notify SUXOS and UXOSO immediately. If feasible the reporting personnel should record the location of the item and take a photograph of the item. If possible the area should be secured until a response action is initiated by the SUXOS.

- The SUXOS and UXOSO will ensure the area is made safe and evacuate nonessential personnel.
- The incidental item will be positively identified.
- If the item is determined to be MEC the SUXOS will notify the Weston Project Manager (PM) and LFR PM.
- The item will be photographed and the global positioning system (GPS) location will be recorded.
- If the item is shown to be outside the ESCA boundary the SUXOS/UXOSO will inform the United States Army Corps of Engineers (USACE) Explosives Safety representative and Fort Ord Base Realignment and Closure Office (BRAC) MRS Security Management Office, or if unavailable, the Army's 60th Explosive Ordnance Disposal (EOD) Unit to initiate a response action.
- If the item is shown to be within the ESCA boundary the SUXOS/UXOSO will provide a notice to the USACE Explosives Safety representative.
- If the item is safe to move, it may be transported to the consolidation point pending disposal by the ESCA RP Team.
- If unsafe to move, use discrete marking 1 meter north of the item pending and initiate blow-in-place procedures as described in the work plan.
- Complete and submit an incidental item form within 24 hours as described in the Site Security Implementation Plan.

6.0 SAFETY

6.1 General

At no time will suspected incidental items be moved until the SUXOS/UXOSO makes an identification. A Livens Projector, a 4.2-inch mortar, or a 4-inch Stokes mortar measuring 19.56 inches in length (fuzed or unfuzed) will not be moved prior to disposition determination by the EOD's Technical Escort Unit.

6.2 PPE

Standard PPE for field MEC operations will be utilized in accordance with the work plan.