

APPENDIX B

County North MRA Site Walk Investigation Results Memorandum

MEMORANDUM

Date: May 12, 2009

To: Judy Huang, P.E. – U.S. EPA, Remedial Project Manager
Roman Racca, P.G. – Cal EPA/DTSC, Project Manager Site Mitigation/Office of Military Facilities Division
Gail Youngblood – Department of the Army, BRAC Environmental Coordinator
Bill Collins – Department of the Army

CC: Stan Cook – FORA ESCA Program Manager

From: Kristie Reimer – ESCA RP Team Program Manager (LFR);
Linda Temple – ESCA RP Remediation Program Manager (WESTON);
Christopher Spill – ESCA RP Team Technical Project Manager (LFR)

Subject: **County North MRA Site Walk Investigation Results**

This memorandum has been prepared to briefly describe the results of the investigation activities that occurred in the County North Munitions Response Area (MRA) on the former Fort Ord. These investigation activities were conducted at the request of the U.S. Environmental Protection Agency (EPA) and the Department of Toxic Substances Control (DTSC) in support of a Track 1 Plug-In approach for the County North MRA, which will be documented in a U.S. Department of the Army (Army) Track-1 Plug In Approval Memorandum. The investigation consisted of the following activities:

- **Site walk** - conducted on April 8, 2009 by a representative of the EPA, two representatives of the DTSC, and two members of the Fort Ord Reuse Authority Environmental Services Cooperative Agreement Remediation Program Team (FORA ESCA RP Team). The Site walk identified 66 locations which required further subsurface investigation which was conducted at a later date. The results of the subsurface investigation are described in this memorandum. The results of the site walk were documented in the County North MRA - Investigation of Discrete Points Identified During April 8, 2009 Site Walk Memorandum dated April 15, 2009.
- **Surface investigation** – conducted on April 17, 2009 based upon a request sent by the DTSC in an email dated April 16, 2009. The DTSC requested in their email that an area identified on an aerial photograph as a potential defensive position be further investigated. The results of this investigation are discussed in more detail below.
- **Subsurface investigation** - conducted on April 28, 2009 of the 66 locations identified during the April 8, 2009 site walk. The results of this investigation are discussed in more detail below.

The surface investigation occurred on April 17, 2009, when the unexploded ordnance (UXO) Quality Control (QC) officer and the Senior UXO Safety Officer (SUXOS) from the FORA ESCA RP Team visited the County North MRA to locate the area identified by the DTSC in the aerial photograph. The area was identified as a defensive position located at the top of a hill consisting of a square trench with side spur trenches extending in different directions. The UXO QC officer and the SUXOS walked the trench system with a handheld Global Positioning System unit to track the path walked and Schoenstedt magnetometers to assess the subsurface conditions. The path walked by the UXO QC officer and the SUXOS is shown in blue on Figure 1. The Schoenstedt magnetometers indicated mostly

FORA ESCA Remediation Program Team



Fort Ord
Reuse Authority



surface anomalies in and around the trench system. The most commonly found items were small arms ammunition links and small pieces of cultural debris (trash). One larger item found in the center of the square trench was a piece of scrap metal sticking out of the soil. The trenches contained numerous reinforcing metal fence posts at the corners/command posts, which interfered with the operation of the Schoenstedt magnetometers in those areas. Overall the area was found to have a minimal amount of military-related debris. It was noted that there were numerous amounts of expended small arms casings in the area.

The subsurface investigation occurred on April 28, 2009, when one team of three UXO Technicians intrusively investigated the 66 point locations identified during the April 8, 2009 site walk. The flagged locations were investigated in accordance with the standard procedures and safety protocols established in the County North MRA - Investigation of Discrete Points Identified During April 8, 2009 Site Walk Memorandum dated April 15, 2009, the Final Group 1 Remedial Investigation/Feasibility Study (RI/FS) Work Plan dated December 18, 2008, and the requirements of the Natural Resource Impact Mitigation Checklist approved by the Army's biologist. The investigation was completed using hand tools and no vegetation removal was required as part of this activity. The items recovered during the intrusive investigation consisted of approximately 2 pounds of munitions debris (MD; consisting of a practice grenade, an illumination signal, and grenade safety levers), approximately 51 pounds of cultural debris (consisting of wire, metal cans, metals spikes, car parts, and other miscellaneous debris), and approximately 3 pounds of linked small arms ammunition (blanks). No munitions and explosives of concern (MEC) items were identified during the intrusive investigation. Table 1 summarizes the MD found during the intrusive investigation. The locations of the investigation points are show on Figure 1. The items recovered during the County North MRA investigation are shown in Photograph 1.

The types of items encountered during the FORA ESCA RP Team's investigation of the County North MRA are consistent with the items recovered during previous site investigations conducted by the Army. The items encountered provide further supporting evidence that the historical use of the MRA was for general training and maneuvers and a bivouac area. The training activities conducted at these sites would have involved the use of primarily practice and pyrotechnic items. Based upon the results of the FORA ESCA RP Team's site investigation and the previous investigations conducted by the Army in the County North MRA, the County North MRA meets the Army's definition of a Track 1, Category 3 site.

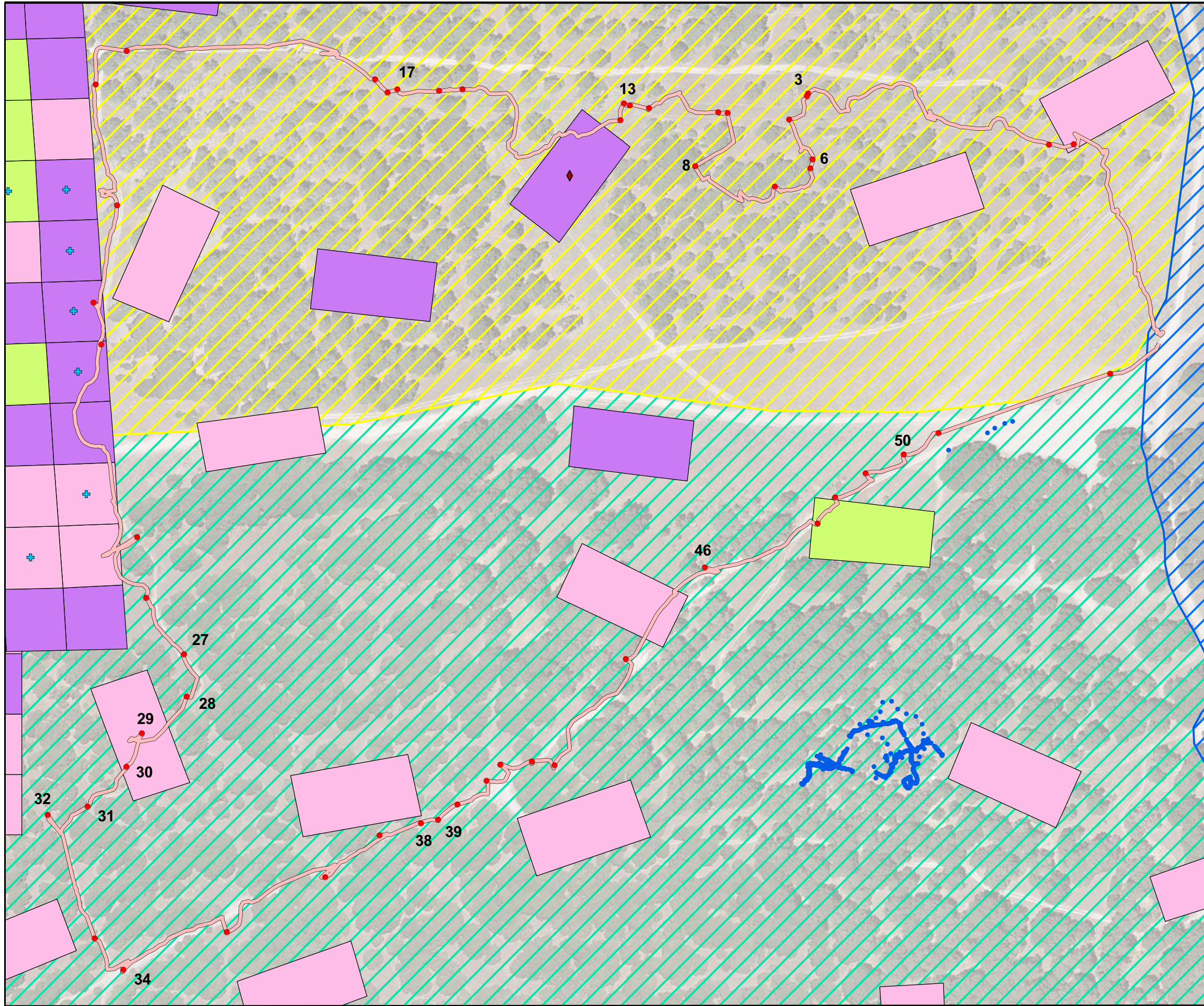
Table 1
 Munitions Debris and Small Arms Ammunition Links Recovered During County North
 MRA Investigation

| Point Number | Depth (Inches) | Item Found |
|--------------|----------------|---|
| 3 | 3 | SIGNAL, GROUND, ILLUMINATION, M125 SERIES |
| 6 | 4 | GRENADE, HAND, PRACTICE, MK2 |
| 8 | 0 | GRENADE SAFETY LEVER |
| 13 | 0 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 17 | 4 | AMMUNITION MAGAZINE 7.62 |
| 27 | 1 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 28 | 1 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 29 | 1 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 30 | 2 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 31 | 6 | SMALL ARMS AMMUNITION CAN |
| 31 | 2 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 32 | 0 | GRENADE SAFETY LEVER |
| 34 | 0 | GRENADE SAFETY LEVER |
| 34 | 0 | GRENADE SAFETY LEVER |
| 38 | 2 | SMALL ARMS AMMUNITION CAN LID |
| 39 | 2 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 46 | 2 | LINKED SMALL ARMS AMMUNITION (Blanks) |
| 50 | 7 | GRENADE SAFETY LEVER |

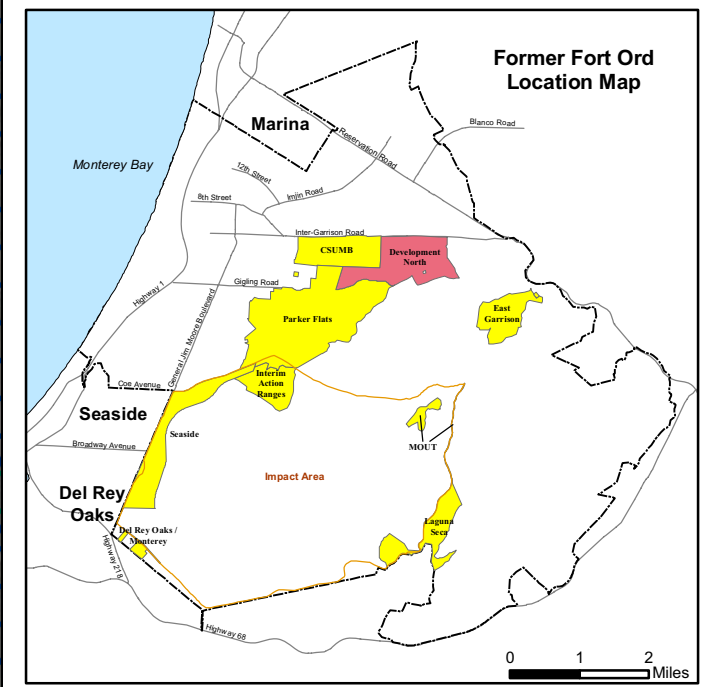
Photograph 1
 Munitions Debris, Cultural Debris, and Linked Small Arms Ammunition (Blanks) Recovered During County North
 MRA Investigation



T:\Projects\Development\North\2009_05_01_landuse_DTSCWalk_Habitat.mxd - 7/10/2009 @ 12:41:44 PM



- Legend**
- MEC Type (1994 + 1997)**
- ▲ DMM
 - ⊕ ISD
 - ◆ UXO
- Munitions Debris (MD) by Weight (total pounds per grid)**
- 0
 - < 10
 - 10 - 100
 - >100
- Dig Points
 - Walking Path 04/17/09
 - Walk About dated 04/8/09
 - ▭ Munitions Response Areas
 - Major Roads
- Future Land Use**
- ▨ Corridor - Wildlife concerns
 - ▨ Institutional / Commercial
 - ▨ Reserve



**County North MRA
Site Investigation**

FORA ESCA RP
Monterey County, California

Figure 1