

Track 0
Plug-In Approval Memorandum
Selected Parcels – Group D

Former Fort Ord, California

May 5, 2006

United States Department of the Army

Base Realignment and Closure (BRAC)
Former Fort Ord, California

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ACRONYM LIST

A

AAR	after action reports
ADL	Arthur D. Little, Inc.
AEHA	U.S. Army Environmental Hygiene Agency
AR	Army Regulation
Army	U.S. Army
ASR	Archive Search Report

B

BLM	Bureau of Land Management
BRA	Basewide Range Assessment
BRAC	Base Realignment and Closure

C

CAIS	Chemical Agent Identification Sets
Cal/EPA	California Environmental Protection Agency
CEHNC	U.S. Army Engineering and Support Center, Huntsville
CEHND	Army Corps of Engineers Huntsville Division
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CESPK	Corp of Engineers Sacramento District Office
CMS	CMS Environmental, Inc.

D

DA	Department of the Army
DDESB	Department of Defense Explosives Safety Board
D/Div	Division
DHS	Department of Health Services
DIV ARTY	Division Artillery
DMM	Discarded Military Munitions
DoD	Department of Defense
DRMO	Defense Reutilization and Marketing Office
DRO	Del Rey Oaks
DSS	Division Support Services
DTSC	Department of Toxic Substances Control

E

EG	East Garrison
EOD	Explosive Ordnance Disposal
ESD	Explanation of Significant Differences

F

FAAF	Fritzsche Army Air Field
FBTA	Field Battalion Training Area or Firing Battery Training Area
FFA	Federal Facilities Agreement
FO	Fort Ord

FS	Feasibility Study
<u>G</u>	
GPS	Global Positioning System
<u>H</u>	
HA	Historical Areas
Harding ESE	now MACTEC, formerly known as Harding Lawson Associates (HLA)
HFA	Human Factors Applications, Inc.
HLA	Harding Lawson Associates
HTW	Hazardous and Toxic Waste
HQS	Headquarters
<u>I</u>	
Inf	Infantry
IRP	Installation Restoration Program
IT	IT Corporation
ITT	Individual Tactical Training
<u>K</u>	
KO	Contracting Officer
<u>M</u>	
MACTEC	MACTEC Engineering and Consulting, Inc.
MC	Munitions Constituents
MD	Munitions Debris
MEC	Munitions and Explosives of Concern
MKI	Mark I
mm	millimeter
MMRP	Military Munitions Response Program
MOCO	Monterey County
MR	Munitions Response
MRA	Multi-Range Area
MRS	Munitions Response Site
mg/kg	milligrams per kilogram
<u>N</u>	
NCOA	Non-Commissioned Officers Academy
NTCRA	Non-Time Critical Removal Action
<u>O</u>	
OE	Ordnance and Explosives
OEW	Ordnance and Explosive Waste
OU	Operable Unit
<u>P</u>	
PA/SI	Preliminary Assessment/Site Inspection
Parsons	Parsons Infrastructure & Technology Group, Inc.
PDA	Personal Digital Assistants
PRG	Preliminary Remediation Goal

Q

QA/QC quality assurance/quality control

R

RAC Risk Assessment Code
RI Remedial Investigation
RIC Rifle Instruction Circle
RI/FS Remedial Investigation/Feasibility Study
ROD Record of Decision
RSOP Reconnaissance, Selection, and Occupation of Position

S

SAA Small Arms Ammunition
SAP Sampling and Analysis Plan
Shaw Shaw Environmental, Inc.
SOCs Semi-volatile organic compounds
SOP Standard Operating Procedure
SS/GS SiteStats/GridStats

T

TCRA Time Critical Removal Action

U

USA USA Environmental, Inc.
USACE U.S. Army Corps of Engineers
USAEDH U.S. Army Design Engineering and Support Center, Huntsville
USEO U.S. Engineering Office
USEPA United States Environmental Protection Agency
UXO Unexploded Ordnance

V

VOCs Volatile organic compounds

1.0 INTRODUCTION

The Munitions Response Remedial Investigation/Feasibility Study (MR RI/FS; formerly ordnance and explosives [OE] RI/FS) program for the former Fort Ord is being implemented to evaluate and address all areas within the base with regards to known and suspected areas containing munitions and explosives of concern (MEC) from past military training activities. The MR RI/FS program is being completed by grouping areas and sites within the former Fort Ord as a series of “tracks” numbered 0 through 3 that are based on MEC-related characteristics to expedite clean-up, reuse and/or transfer of Fort Ord property. The Track 0 portion of the MR RI/FS program addresses areas that contain no evidence of MEC and have never been suspected as having been used for military munitions-related activities of any kind. The Track 0 Record of Decision (ROD) addresses selected land parcels, and also provides a Plug-In process to address future land parcels that are considered eligible for inclusion into the Track 0 process.

This Approval Memorandum for selected parcels (Parcel Group D) provides the required documentation specified in the *Final Record of Decision, No Action Regarding Ordnance-Related Investigation* dated June 19, 2002 (Final Track 0 Record of Decision [ROD]) to allow additional eligible land parcels into the Track 0 Plug-In process subsequent to finalization of the Track 0 ROD. This memorandum addresses ten (10) parcels that have been divided into four (4) groups based on location, physical features, and proximity to areas of investigation on the former Fort Ord as summarized in Table 1 and shown on Plates 2, 4, 6 and 8. When written approval from the United States Environmental Protection Agency (USEPA), and the California Environmental Protection Agency’s Department of Toxic Substances Control (DTSC) is received, this memorandum will serve as the decision document stating that no action regarding munitions response is required for these 10 parcels. The following sections provide an overview of Fort Ord; the Track 0 process; and parcel group-specific documentation including history of the area, future use, adjacent areas (generally within 500 feet) that have had investigations, and rationale for inclusion of the parcel group into the Track 0 Plug-In process.

1.1 Fort Ord and MR RI/FS Background

The former Fort Ord is located in northern Monterey County approximately 80 miles south of San Francisco (Plate 1). The former Army base is made up of approximately 28,000 acres of land next to Monterey Bay and the cities of Seaside, Sand City, Monterey, and Del Rey Oaks to the south, and Marina to the north. The former Fort Ord is bounded to the east and north by the Salinas Valley. A Southern Pacific Railroad track and Highway 1 pass through the western portion of the former Fort Ord, separating the beach from the rest of the base. Laguna Seca Recreation Area and Toro Park border former Fort Ord to the south and southeast, respectively, as well as the small communities of Toro Park Estates and San Benancio.

The U.S. Government bought the present day East Garrison and nearby lands on the east side of Fort Ord in 1917 to use as a maneuver and training ground for field artillery and cavalry troops stationed at the Presidio of Monterey. No permanent improvements were made until the late 1930s, when administrative buildings, barracks, mess halls, tent pads, and a sewage treatment plant were constructed.

In 1940, additional agricultural property was purchased for the development of the Main Garrison. At the same time, the beachfront property was donated to the Army. The Main Garrison was constructed between 1940 and the 1960s, starting in the northwest corner of the base and expanding southward and eastward. During the 1940s and 1950s, a small airfield within the Main Garrison was present in what is now the South Parade Ground. In the early 1960s, Fritzsche Army Air Field (FAAF) was completed. The Main Garrison airfield was then decommissioned and its facilities were redeveloped as a motor pool and other facilities. Significant construction activities at the former Fort Ord have not occurred since that time.

Since it was established in 1917, Fort Ord served primarily as a training and staging facility for infantry troops. Fort Ord was a basic training center from 1947 to 1975; served as a base for 7th Infantry Division after 1975; and was selected for closure in 1991. Fort Ord was officially closed in September 1994 in

response to the 1991 Base Realignment and Closure Act (BRAC). No active Army division is stationed at Fort Ord; however, Army personnel operate the areas of Fort Ord still held by the Army (*Army, 2000a*). Much of the Installation has been or will be disposed to federal, state, local, and private entities through economic development conveyance, public benefit conveyance, negotiated sale, or other means.

Because various Army divisions used portions of Fort Ord for maneuvers, target ranges, and other training/staging activities, military munitions may be present at the former Fort Ord. In 1998, the Army agreed to evaluate military munitions at former Fort Ord in an MR RI/FS consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). A Federal Facility Agreement (FFA) was signed in 1990 by the Army, USEPA, and the DTSC (formerly the Department of Health Services or DHS). The FFA established schedules for performing remedial investigations and feasibility studies and requires that remedial actions be completed as expeditiously as possible. An agreement was signed between the Army, USEPA, and the DTSC to evaluate military munitions at the former Fort Ord subject to the provisions of the Fort Ord FFA in April 2000 (*Army, 2002*). In preparation for transfer and reuse of Former Fort Ord property, various military munitions-related investigative and removal/remedial activities have been performed since 1993. Potential chemical contamination at the Former Fort Ord was investigated under the Basewide Remedial Investigation/Feasibility Study (*HLA, 1995b*).

The MR RI/FS utilizes a “tracking” process, which categorizes areas with similar MEC-related characteristics to expedite clean-up, reuse and/or transfer of Fort Ord property. According to this “tracking process”, an area under investigation is assigned one of four tracks, Track 0 through Track 3, which are described as follows:

1. *Track 0*: Areas that contain no evidence of MEC and have never been suspected as having been used for military munitions-related activities of any kind. The Track 0 process addresses single or grouped areas of land at the former Fort Ord that have no history of munitions-related use and

for which No Action is necessary to protect human health and the environment. Details of the Track 0 program and areas addressed are provided in the Track 0 Record of Decision (ROD; *Army, 2002*), and the Track 0 Explanation of Significant Differences (ESD; *Army, 2005b*).

2. *Track 1*: Sites where military munitions were suspected to have been used, but based on the RI/FS for each site, it falls into one of the following three categories:

- Category 1: There is no evidence to indicate military munitions were used at the site (i.e., suspected training did not occur); or
- Category 2: The site was used for training, but the military munitions items used do not pose an explosive hazard (i.e., training did not involve explosive items); or
- Category 3: The site was used for training with military munitions, but military munitions items that potentially remain as a result of that training do not pose an unacceptable risk based on site-specific evaluations conducted in the Track 1 OE RI/FS. Field investigations identified evidence of past training involving military munitions, but training at these sites involved only the use of practice and/or pyrotechnic items that are not designed to cause injury. In the unlikely event that a live item of the type previously observed at the site is found, it is not expected that the item would function by casual contact (i.e., inadvertent and unintentional contact).

To be included in the Track 1 decision process, the results of the evaluation performed for a site must indicate a strong weight of evidence that the information from the Literature Review and field investigations supports No Further Action Related to MEC as determined by the project team. Because Track 1 sites do not pose an unacceptable risk to human health or the environment from previous military munitions-related activities, no further action related to MEC is necessary at these sites.

3. *Track 2*: Sites where MEC items were present, and MEC removal has been conducted.
4. *Track 3*: Areas where MEC items are known or suspected to be present, but MEC investigations have not yet been completed.

The Track 0 Plug-In process is described below.

1.2 Track 0 Plug-In Process

This section describes the Track 0 program and summarizes steps to address future areas eligible for Track 0 through the Plug-In process. Parcels being considered for the Track 0 Plug-In process are shown on Table 1. As part of the MR RI/FS effort, a literature review was performed for evaluation of military munitions at former Fort Ord. Based on this review and the results of area inspections, certain areas of former Fort Ord were identified to contain no evidence of military munitions or past use of military munitions. These areas were designated as potential Track 0 areas, which require no further action related to MEC to protect human health and the environment. Subsequent to a Technical Memorandum (*HLA, 2000b*), which stated the rationale for Track 0 designation of these areas, the proposed No Action plan for the Track 0 areas was presented for public review in a Proposed Plan (*Army, 2000a*). The No Action decisions and the rationale for selection of Track 0 areas were then presented in a No Action ROD titled “Final Record of Decision (ROD), No Action Regarding Ordnance-Related Investigation” (*Army, 2002*). The Final Track 0 No Action ROD was approved by USEPA and DTSC in the summer of 2002. The No Action ROD addresses documentation and management procedures for:

- Track 0 areas already determined as part of the prepared No Action ROD (i.e., *Track 0 ROD Process*).
- Other areas that may be identified in the future for No Action (Track 0 selection) (i.e., *Track 0 “Plug-In” Process*).

The purpose of the Track 0 “Plug-In” Process, as explained in the Track 0 ROD (*Army, 2002*), is to define the documentation required for areas of former Fort Ord identified as Track 0 after the No Action ROD was approved. The Track 0 “Plug-In” process requires that the decision of “no action regarding munitions response is required” for these future Track 0 areas be documented in Approval Memoranda. This Approval Memorandum describes the rationale for Track 0 designation for 10 parcels, and includes the following:

1. A description of the area;
2. A description of the historical use of the area;
3. A rationale for the designation of the area as Track 0;
4. A checklist summarizing the key elements of Track 0 documentation; and
5. A map of the area detailing the location and any pertinent available MEC-related information.

After preparation and submission to appropriate regulatory agencies, the Approval Memorandum is made available for public review for a 30-day period, and a public notice is posted in a local newspaper. After responses to public comments are incorporated and approval from USEPA and DTSC is received, a public notification of the final No Action decision for selected Track 0 areas is provided in a major local newspaper. The Approval Memorandum for a specific Track 0 area then serves as the final decision document stating that no action regarding munitions response is required for that area (*Army, 2002*).

1.2.1 Track 0 Explanation of Significant Differences (ESD)

The Track 0 ESD clarifies the types of areas that the Track 0 ROD intended to make eligible for consideration for No Action under the Track 0 “Plug-In” process. As stated in the Track 0 ROD, the Track 0 process (including the Plug-In process) addresses single or grouped areas at the former Fort Ord that have no history of munitions-related use and for which No Action is necessary to protect human health and the environment. Any area that meets these criteria, (areas that are similar to those already

approved in the Track 0 ROD) are eligible for Track 0 consideration under the Plug-In process. Three specific circumstances clarified in the ESD are discussed below.

Incidental Munitions

The term “no evidence of MEC” could be interpreted as meaning that any incidental MEC or munitions debris (MD) found in an area would disqualify the area from Track 0 Plug-in consideration without consideration of evidence of past military munitions training activities for the area. Because of Fort Ord’s history as a military base, the Army acknowledges the possibility that military munitions could be encountered anywhere at the former Fort Ord. Also because of Fort Ord’s history as a military base, there have been (and likely will be) discoveries of incidental MEC and MD that were not indicative of past military munitions training activities at that location. Examples of the discovery of incidental munitions include:

- Stolen munitions transported from established range areas
- Munitions items collected at amnesty points
- Military munitions and/or munitions debris on roadsides
- Military munitions and/or munitions debris used as souvenirs, door stop, paper weight, etc.
- Munitions debris of signal or pyrotechnic types used as part of a training activity in another area, but was transported by wind (in the case of parachute signals, for example), water (in depressions where runoff collects), or by other means.

The Track 0 ROD approved No Action regarding munitions response for a number of parcels at the former Fort Ord where incidental munitions items had been discovered, removed and reported. Similar areas of the former Fort Ord not suspected as having been used for military munitions-related activities of

any kind, but where incidental military munitions have been discovered, should be eligible for Track 0 consideration.

Special Case Track 0 Areas

The Track 0 ROD also approved No Action regarding munitions response for a Special Case Track 0 area. The Special Case Track 0 area included a former landfill where MD was found buried with refuse. No military munitions-related activities occurred in the area and the MD items and the refuse were entirely removed.

Although it was not specifically stated in the Track 0 ROD, the Track 0 ROD intended to make eligible similar areas for consideration for No Action under the Track 0 Plug-In process. The ESD provides that additional Special Case areas may be eligible for Track 0 consideration under the Plug-In process, where military munitions are found in a disposal area and the munitions items were fully excavated.

Non-Firing Areas

As described in Section 2.7.5 of the Track 0 ROD, areas where military training might have occurred, but additional research under the MR RI/FS program clearly indicates that no live fire was conducted, will be eligible for evaluation under the Track 0 Plug-In process.

In addition, although of limited significance, the ESD provides that for the purposes of the Military Munitions Response Program (MMRP) at the former Fort Ord, including the Track 0 process, the definition of MEC does not include small arms ammunition (.50 caliber and below). Therefore, the presence of small arms ammunition does not preclude a no action determination regarding military munitions response; nor does a no action determination indicate that small arms ammunition is not present. A Glossary of Munitions Response Program Terms is provided in Appendix A.

1.3 Group D Parcels Background

Each of the ten parcels evaluated in this Approval Memorandum lies within or is immediately adjacent to a Track 1 or Track 1 Plug-In Munitions Response Site (MRS) and only the parcel or portion of the parcel that is outside of the MRS boundary is evaluated in this memorandum. This Approval Memorandum summarizes the evaluation of the parcels, or portions of the parcels, adjacent to Track 1 and Track 1 Plug-In MRSs and outlines the rationale for recommending no action regarding a munitions response. For discussion purposes the parcels were grouped together based on proximity to one another (Group 1 through Group 4; Table 1). An evaluation of the adjacent Track 1 MRSs has been completed and is documented in the Track 1 OE RI/FS (*MACTEC, 2004*). The Track 1 MRSs adjacent to parcels evaluated in this Approval Memorandum include MRS-5 and MRS-59A. No further munitions response was recommended for MRS-5 and MRS-59A in the Track 1 OE RI/FS. The ROD selecting no further action regarding munitions response at MRS-5 and MRS-59A, as well as for 19 other MRSs (Track 1 ROD), was signed in April 2005 (*Army, 2005a*).

The Track 1 ROD also provides a Plug-In process to address future sites considered eligible for inclusion into the Track 1 process. There are currently six proposed Track 1 Plug-In MRSs or areas, that lie within or are immediately adjacent to parcels evaluated in this Approval Memorandum: MRS-2, MRS-27F, MRS-43A, MRS-45A, MRS-59B and Parcel E20c.1.1.1. MRS-2, MRS-27F, MRS-43A, MRS-45A, MRS-59B, and Parcel E20c.1.1.1 which are currently being evaluated as candidate Track 1 Plug-In Sites. The results of the evaluation will be documented in a Track 1 Plug-In Approval Memorandum which will be submitted for public and regulatory review. The Track 1 Plug-In Approval Memorandum provides the required documentation specified in the Track 1 ROD to include MRS-2, MRS-27F, MRS-43A, MRS-45A, MRS-59B, and Parcel E20c.1.1.1 in the Track 1 Plug-In process subsequent to finalization of the Track 1 ROD. The Track 1 Plug-In Approval Memorandum for these sites will serve as the decision document stating that no further action regarding munitions response is required for MRS-2, MRS-27F,

MRS-43A, MRS-45A, MRS-59B, and Parcel E20c.1.1.1 when written concurrence from the USEPA, and acknowledgement from the DTSC are received.

Other MRSs in the vicinity of Parcel Group D include MRS-27E, a potential future Track 1 candidate site, and the following Track 2 sites: MRS-15DRO.1, MRS-15DRO.2, MRS-15SEA.1, and MRS-15SEA.2. As described in Section 1.1, Track 2 includes sites where MEC items were present, and MEC removal has been conducted. Although the removal has been conducted at MRS-15DRO.1, MRS-15DRO.2, MRS-15SEA.1, and MRS-15SEA.2, these sites will undergo further evaluation through the MR RI/FS process.

2.0 GROUP 1 – PARCELS E2c.4.3, E2d.3.2, L5.9.2, and L20.17.2

2.1 Description

The Group 1 parcels are located in the eastern portion of the Main Garrison and situated between Eighth Street and Imjin Parkway (formerly Twelfth Street, Plates 2 and 3). The Main Garrison was the earliest and most heavily developed portion of the former Fort Ord. The area described in this section includes the portions of Parcels E2c.4.3, E2d.3.2, L5.9.2, and L20.17.2 that are adjacent to, but outside of the boundary of MRS-2 (Plate 2). MRS-2 was evaluated in the Track 1 OE RI/FS. Historical research and sampling conducted at this site found no evidence of past training involving military munitions.

However, there were reports that Chemical Agent Identification Sets (CAIS) may have been buried near Imjin Road. Reports of CAIS burial could not be verified and no evidence of their presence was found during military munitions sampling. The Track 1 OE RI/FS recommended that MRS-2 should be retained in the Track 1 process (*MACTEC, 2004*). MRS-2 will be considered as a candidate site for the Track 1 Plug-In process in accordance with criteria identified in the approved Track 1 ROD (*Army, 2005a*).

The portions of the parcels included in this evaluation include open space and roads and comprise approximately 15 acres. The Group 1 parcels lie adjacent to property that was previously evaluated under the Fort Ord MR RI/FS program and determined to be Track 0 (*Army, 2002, 2005d*).

2.2 History and Use

These Parcels lie on a tract of former agricultural land that was purchased from private landowners by the U.S. Government sometime after July 1, 1940 (*ADL, 1994*). Development within adjacent parcels began in the early 1940s with the construction of the Fort Ord Main Garrison to the west. Review of 1940s era documentation including historical maps and aerial photographs does not indicate any specific training sites within this parcel. The majority of the development around these parcels occurred in 1940 and 1941 and was mainly to the north, south, and west of the parcels. Adjacent development included the construction of a veterinary area, horse drawn field artillery stables, and a medical detachment to the

north, south, and west, respectively, of Parcel E2d.3.2, and a prisoner of war camp and the post stockade to the north of Parcel L5.9.2 (*Post Engineer, 1944 and USEO, 1946*). Building 3280 was constructed on the far west end of Parcel E2d.3.2 in 1944. The 1946 Fort Ord Master Plan shows a prisoner of war recreation area also present on the west end of Parcel E2d.3.2 (*USEO, 1946*). The exact use of Building 3280 is not known, but it may have supported the prisoner of war recreation area located adjacent to it. During interviews conducted as part of a Fort Ord archives search a military dependent at Fort Ord (1933 to 1947) identified this area (MRS-2) as chemical training area. The dependent remembered watching soldiers training in this area wearing protective masks. It was also noted that live agents were probably not used because the horses that were part of the training were not masked (*USAEDH, 1993*). The dependent also stated that this area was later used for land mine warfare training (*USAEDH, 1997*). None of the available Fort Ord training facilities maps indicate that this area was either a chemical training area or a land mine training area. These parcels lie within an area designated as “Well Area, No Artillery Firing Or Demolitions” as shown on the 1945 Fort Ord Training Facilities Map (*Army, 1945*).

A review of 1950s era aerial photos and training maps identified a Rifle Instruction Circle (RIC) within the eastern portion of Parcel L20.17.2, a survey training area to the north of the parcels and a Pole Orchard to the south of the parcels. Rifle instruction included the practice of setting up and aiming of weapons or dry-fire training (*USAEDH, 1993*). The Pole Orchard was a field communications training area. Recreational facilities established in the 1950s adjacent to the parcels included a baseball field and a driving range to the south in the area where the horse drawn field artillery stables were located. In 1957 the parcels were in an area assigned to the 1st Brigade. The mission of the 1st Brigade was to conduct combat support (*Army, 1968*). The Investigation of this area as part of the Fort Ord Basewide RI/FS identified locations to the south and southwest of the parcels (Pete’s Pond, Pete’s Pond Extension, and the Disposal Area) that were used to dispose of waste material including concrete debris, scrap metal, incinerated medical waste, munitions debris, and household refuse in the early 1950s. The remediation of these locations is discussed in Section 2.3.2.2.

A review of 1960s and 1970s era documentation did not identify any training areas within the parcels. Adjacent training areas including areas used for physical training and education in the handling of weapons included a land navigation area and individual tactical training area to the east, a pole orchard to the southwest, hand to hand combat area to the west, and physical training area (running track) to the south. By 1980 this area and vicinity were no longer used for training (*MACTEC, 2004*). In 2002, the intersection of Imjin Road and Twelfth Street was reconfigured and both road names were changed to Imjin Parkway. The reconfiguration included earth moving and grading within Parcel E2c.4.3. No MEC or munitions debris were found during these activities.

2.3 Area Investigations

2.3.1 Investigations Within Parcels E2c.4.3, E2d.3.2, L5.9.2, and L20.17.2

Based on an extensive literature search that included a review of range control records, Fort Ord training facilities maps, aerial photographs, historical film footage, and historical archives searches and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on the portions of Parcels E2d.3.2, E2c.4.3, and L5.9.2 that lie outside of MRS-2 (Plate 2); consequently, no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. Four sample grids evaluated as part of the investigation of adjacent MRS-2 were established outside of the MRS-2 boundary, and within Parcel L20.17.2 (*HFA, 1994*). A detailed discussion of the investigation of MRS-2 is provided in Section 2.3.2.1. The only training identified within Parcel L20.17.2 on Fort Ord training facilities maps was a Rifle Instruction Circle present in the 1950's and 1960's. As discussed in Section 2.2, rifle instruction included the practice of setting up and aiming of weapons or dry-fire training (*USAEDH, 1993*).

A site reconnaissance of Parcel L20.17.2 was conducted on April 10, 2006. The reconnaissance was conducted by a two-person team that included a U.S. Army Corps of Engineers (USACE) Unexploded

Ordnance (UXO) Safety Specialist accompanied by a global positioning system (GPS) operator. The reconnaissance focused primarily in the northern portion of Parcel L20.17.2 in the vicinity of the four MRS-2 sample grids established in the parcel. The USACE UXO Safety Specialist walked a portion of the parcel using a hand-held magnetometer to survey the path walked. The GPS operator recorded the path walked documenting the location of any items found (Plate 3). No evidence of military munitions was observed during the site reconnaissance.

In support of the future transfer of the Group 1 parcels, a site visit was conducted in February 2006. The site visit included walking portions of the parcels and documenting general site conditions. The site visit was conducted by the USACE's contractor responsible for documenting property condition prior to transfer. Those conducting the site visit underwent ordnance recognition and safety training. No evidence of military munitions was observed during the site visit.

2.3.2 Investigation of Adjacent Areas

These parcels lie within the central portion of the former Fort Ord Main Garrison (Plate 4). The parcels surrounding the Group 1 parcels are Track 0 parcels as described in the Track 0 ROD (*Army, 2002*) and the Track 0 Plug-In Approval Memorandums for the Group B and Group C parcels (*Army, 2005c and 2005d*). The adjacent parcels are identified for future development that will include retail and light industry. To date, no reports of the finding of military munitions on adjacent parcels have been reported to the Army. One MRS (MRS-2) is adjacent to all of the portions of the Group 1 parcels evaluated in this Approval Memorandum. MRS-2 underwent sampling for the presence of MEC in 1993 and no MEC was found. The western portion of MRS-2 (south of Eighth Street), and an area to the west, were identified as a former disposal areas (Plate 3). The adjacent disposal areas were investigated and remediated under the Fort Ord Basewide program (*HLA, 1995c*) as Installation Restoration Program (IRP) Sites 16 and 17 (Section 2.3.2.2). The investigation of adjacent IRP Site 25 was also performed under the Basewide program and also discussed in Section 2.3.2.2.

2.3.2.1 MRS-2

Fort Ord Munitions Response Program

MRS-2 is approximately 34 acres and is located in the eastern portion of the former Fort Ord Main Garrison and divided by Eighth Street (Plate 3). MRS-2 was identified as an MRS on the basis of interviews conducted as part of the Fort Ord Archives Search (*USAEDH, 1993*). The site includes an area designated as ‘Pete’s Pond’, a topographic depression that seasonally fills up with runoff from storm drain discharge.

Results of the Archive Search Report (ASR) indicated that MRS-2 was not an impact area. In 1994, Human Factors Applications, Inc. (HFA) conducted a MEC sampling investigation at the site. As part of the investigation, twenty 100- by 100-foot grids were sampled (all anomalies detected were excavated). The grids were placed primarily within the southern portion of the site, which included the area along Imjin Road where interview records indicate that CAIS may have been buried. Four of the grids were located outside of the site boundary within Parcel L20.17.2. The number of anomalies detected at the site was not specified in the HFA report. Two munitions debris items (an inert training hand grenade and a practice bomb) were found and removed during grid sampling. The training hand grenade that was found was a MK1A1, a training device that does not contain a fuze or explosive filler. No other information regarding the practice bomb was provided, but due to the proximity of these parcels to the Fort Ord Main Garrison, it seems unlikely that bombs containing energetic material would have been used in this area. It is not known in which grid(s) the two munitions debris items were found because the exact location of these items was not documented in the HFA report. Based on the suspected training activities that were reported to have occurred at MRS-2, the munitions debris items found during sampling do not appear to be associated with the suspect training activities. No historical documentation or interviews identified MRS-2 or the surrounding area as having been used for military training using training or practice hand grenades or practice bombs. Additionally, no other items related to practice bombs and training or practice hand grenades (e.g., other practice bombs, bomb or hand grenade fuzes, training or practice hand

grenades, or hand grenade safety levers) were found during the sampling at MRS-2 or during significant soil disturbance activities (associated with environmental investigations) and site walks that occurred within and adjacent to the subject area. Historical training maps and aerial photographs show a Rifle Instruction Circle within adjacent Parcel L20.17.2 in the 1950's and 1960's; by 1999, a parking lot and access road were constructed and another road were constructed for heavy equipment traffic accessing the Operable Unit (OU) 2 Landfills. No evidence has been found to indicate that MRS-2 or the adjacent parcels were used for hand grenade training or a practice bombing range. This area is accessed frequently by horseback riders and environmental investigation personnel. Other than the one inert training grenade and practice bomb (MD) found during sampling, no other items have been reported. Considering the location of the sample grids to the OU 2 Landfills and other disposal areas (i.e., IRP Sites 16 and 17), a more likely explanation for the presence of the training grenade and practice bomb is that they were discarded in the area in which they were recovered.

As described in detail in Section 2.3.2.2, 468 2.36-inch practice rockets containing inert filling and other munitions debris was found during the excavations conducted at IRP Sites 16 and 17. Because this munitions debris was buried in discrete piles or mixed with landfill debris, they are believed to be the result of disposal and are not related to munitions use at MRS-2. The portion of MRS-2 that has been excavated, backfilled and re-graded (Pete's Pond) is a Special Case Track 0 area (*Army, 2002 and 2005b*).

MRS-2 was categorized as a Track 1 site and was evaluated in the Track 1 OE RI/FS. Track 1 sites were suspected to have been used for military training with military munitions. Historical research and sampling conducted at this site found no evidence of past training involving military munitions. Reports of CAIS burial could not be verified and no evidence of their presence was found during military munitions sampling. The Track 1 OE RI/FS recommended that further research should be performed to verify the validity of the reports of CAIS burials in the site vicinity and that the site be retained in the Track 1 process (*MACTEC, 2004*). MRS-2 is currently being evaluated as a candidate Track 1 Plug-In site, the results of which will be documented in a Track 1 Plug-In Approval Memorandum. MEC

sampling results, results of subsurface investigations and removal programs conducted as part of the Basewide RI/FS and hazardous and toxic waste (HTW) cleanup programs, as well as earthmoving and grading performed during road construction activities, do not support the use of MRS-2 as a land mine or chemical training area. MRS-2 is considered a candidate site for the Track 1 Plug-In process in accordance with criteria identified in the approved Track 1 ROD (*Army, 2005a*).

Fort Ord Basewide Range Assessment

MRS-2 was investigated as part of a basewide range assessment (BRA) for small arms and multi-use ranges. The assessment of MRS-2 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-2. As part of this effort, the areas of investigation were identified as historical areas (HA). Under the BRA, MRS-2 was identified as HA-91. As part of the literature search a review of historical maps and aerial photographs was conducted. No evidence of chemical training, particularly the use of CAIS kits, was found during the MEC sampling. At the time the BRA investigation was conducted, the Track 1 evaluation for MRS-2 had not yet concluded. Because the Track 1 evaluation was not complete, the BRA recommended that HA-91 (MRS-2) be further evaluated in conjunction with the munitions response program (*MACTEC/Shaw, 2005*).

2.3.2.2 Installation Restoration Program (IRP Sites 16, 17 and 25)

IRP Sites 16 and 17 are located on the east side of the central portion of the Main Garrison south of Parcel E2d.3.2. IRP Site 16 (Pete's Pond) was suspected to have been a landfill and IRP Site 17 was a documented disposal area that reportedly contained medical waste. Extensive field work including site walks, soil boring investigations, geophysical surveys, trenching, and soil excavation have been conducted at IRP Sites 16 and 17. These sites were investigated for the presence of chemical contamination under the Basewide RI/FS program. Remediation at IRP Site 16 included the excavation and removal of debris and soil containing metals (antimony, arsenic, cadmium, copper, lead, mercury, and nickel), hydrocarbons, volatile organic compounds (VOCs), semi-volatile organic compounds (SOCs),

and dioxins associated with former disposal areas (Pete's Pond and Pete's Pond Extension). Remediation at IRP Site 17 also included the excavation and removal of debris and soils containing metals (antimony, arsenic, cadmium, copper, lead, mercury, and nickel), hydrocarbons, and dioxins released at a former disposal area. No evidence of CAIS kits were found during the investigation and remediation at IRP Sites 16 and 17. The Site 16 and 17 Remedial Action Confirmation Reports and Post-Remediation Health Risk Assessments were submitted to the regulatory agencies in April 1999 (*IT, 1999a*). Agency concurrence of no further remedial action related to chemical contamination was granted by the USEPA and DTSC for IRP Site 16 and 17. During the investigations conducted at IRP Sites 16 and 17, munitions debris was found in several instances mixed with other refuse. Four-hundred sixty-eight 2.36-inch practice rockets with inert filling (munitions debris) were found in disposal pits located in landfill areas. These landfill areas were fully excavated during this investigation. This area is considered a Special Case Track 0 area as described in the Track 0 ROD (*Army, 2002*) and in the ESD for the Track 0 ROD (*Army, 2005b*). The rationale for including this former disposal area as Track 0 special case area was that although military munitions were found, the items were buried in disposal pits and were not associated with munitions use in these areas. This area has been fully excavated, backfilled, and re-graded. Any munitions that might not have been located through excavation would most likely have been found during the re-grading process.

IRP Site 25 was the former location of the Fort Ord Defense Reutilization and Marketing Office (DRMO). IRP Site 25 was used to store decommissioned equipment including transformers containing polychlorinated biphenyls, drums, and scrap metal. This site was originally inspected by the U.S. Army Environmental Hygiene Agency (AEHA) in 1988 (Solid Waste Management Unit FTO-022). No military munitions were reported at FTO-022 in the AEHA report (*AEHA, 1988*). An investigation of IRP Site 25 that included a site walk and soil borings was performed as part of the Fort Ord Basewide Remedial Investigation. No evidence of military munitions was found during the investigation of IRP Site 25. Based on the results of the Basewide Remedial Investigation that included a human health and

ecological risk assessment, no further action related to chemical contamination is required at IRP Site 25 (*Army, 1997*).

2.3.2.3 USACE Site Walk of Adjacent Track 0 Parcels

To further support conclusions that certain undeveloped parcels were Track 0, the USEPA and the DTSC requested the Army conduct site walks in certain open areas to verify that no MEC or munitions debris were present on the ground surface. On March 6, 2000, a USACE UXO Safety Specialist performed a site walk over portions of Parcels S2.5.1.1 and S2.5.2.1, adjacent to Parcel L20.17.2. The site walk involved the UXO Safety Specialist walking in a meandering path in open areas visually searching the ground surface. No MEC or munitions debris was found during the site walk (*Army, 2000c*).

2.4 Rationale for Track 0 Designation of Parcels

MEC is not likely to be present on these parcels for the following reasons:

- A review of the military munitions program-related documentation for the former Fort Ord including, the ASR (*USAEDH, 1993, 1994 and 1997*), the Literature Review Report OE RI/FS (*HLA, 2000a*), the Track 1 OE RI/FS (*MACTEC, 2004*) and the Track 0 Technical Memorandum (*HLA, 2000b*) did not indicate that military munitions were used on the portions of Parcels E2c.4.3, E2d.3.2, L5.9.2, and L20.17.2 evaluated in this Approval Memorandum.
- No evidence of military munitions was found on Parcel L20.17.2 during a site reconnaissance conducted by a USACE UXO Safety Specialist.
- No evidence was found during the investigations conducted at adjacent IRP Sites 16, 17 and 25 to indicate that military munitions were used at these sites. Buried munitions debris found during the characterization and remediation activities conducted at IRP Sites 16 and 17 is the result of their disposal at these sites.

- MRS-2 was evaluated in the Track 1 OE RI/FS. Historical research and sampling conducted at this site found no evidence of past training involving military munitions.
- These parcels lie adjacent to property previously evaluated and determined to be Track 0. Adjacent parcels to the north, south, and east include parcels originally developed by the Army beginning in 1940. To date, there have been no reports of military munitions discoveries by the recipients of property surrounding these parcels.

2.5 Track 0 Checklist – Group 1

PARCELS

E2c.4.3, E2d.3.2, L5.9.2, and L20.17.2

DESCRIPTION

These parcels are located in the eastern portion of the Main Garrison and situated between Eighth Street and Imjin Parkway (formerly Twelfth Street) (Plates 2 and 3). The Main Garrison was the earliest and most heavily developed portion of the former Fort Ord. The area described in this section includes the portions of Parcels E2c.4.3, E2d.3.2, L5.9.2, and L20.17.2 that are adjacent to, but outside of the boundary of MRS-2 (Plate 2).

HISTORICAL USE

History suggests no use of military munitions. Prior to Army acquisition, this area was ranch land (David Jacks Corporation). These parcels were included within in a tract of land acquired by the Army after July 1, 1940. 1940: Construction of support facilities on the surrounding parcels including a veterinary area, horse-drawn field artillery stables, medical detachment buildings, and water supply wells. 1944: Construction of Building 3280 on Parcel E2d.3.2. Buildings present to the west are designated as a “Medical Detachment Area.” A prisoner of war camp and the post stockade are present to the north of Parcel L5.9.2. 1945: Parcel within area identified on maps as “Well Area, No Artillery Firing or Demolitions.” 1946: Prisoner of war recreation area is located on the west end of Parcel E2d.3.2.

1951: Aerial photographs show grading and earthmoving activities in the IRP Site 16 (Pete's Pond) and 17 area. Baseball field is present west of IRP Site 17 and to the southwest of Parcel E2d.3.2. Three rifle instruction circles are present to the south of the Group 1 parcels.

1954: Training map indicates rifle instruction circles and a confidence course to the south of the Group 1 parcels.

1956: These parcels are within an area designated as a survey training area. A rifle instruction circle is present within Parcel L20.17.2. New stockade is constructed approximately 150 feet north of Parcel L5.9.2.

1957 and 1958: Rifle instruction circle still present within Parcel L20.17.2. The parcels are within a larger area that is assigned to the 1st Brigade.

1961: Training map shows a land navigation area just southeast of Parcel L20.17.2.

1964 and 1965: A hand-to-hand combat area, a physical training area, obstacle course, and pole orchard are present south of the parcels. With the exception of the rifle instruction circle, no training facilities are noted within the Group 1 parcels.

1966: By 1966 Imjin Road and a maintenance shop have been constructed adjacent to the parcels. The maintenance shop is located approximately 300 feet southwest of Parcel L20.17.2. Three large cleared areas are visible within MRS-2 on the 1966 aerial photographs. The activities associated with these cleared areas are not known.

1972: Training areas adjacent to the parcels include the hand to hand combat area, physical training area and pole orchard present to the south and southwest of the parcels.

1975: The portion of Parcel L20.17.2 that included the rifle instruction circle is being used as a parking area.

1980 and 1984: Training maps show no training areas in the vicinity of the Group 1 parcels.

Supporting documents

Literature Review and Base Inventory Report, Volume 1; Community Environmental Response Facilitation Act (CERFA) Report; Archives Search Reports; OE RI/FS Literature Review; Track 1 OE RI/FS; Comprehensive Basewide

Range Assessment; Track 0 Technical Memorandum;
Ordnance and explosive waste (OEW) Sampling and OEW Removal Action Reports; Fort Ord Final Report, OE-2.

Components

Aerial Photos

Pre-1940, 7/25/41, 8/17/49, 6/23/51, 7/3/51, 5/14/56, 58/59 (aerial contours), 1/11/65 (mosaic), 5/2/66, 12/17/75, 6/16/78, 4/13/85, 10/22/85, 3/25/86, 11/12/86, 11/4/88, 10/4/89, 7/6/92

Real Estate Records

1913: Department of the Interior, reprinted 1918
1915: Proposed Acreage Subdivisions
1922: Assessors Plats, Monterey County
3/18/88: Real Estate, Fort Ord

**Range Control Records/
Standard Operating Procedures**

Not applicable to this area

Range and Training Area Maps

8/45: Training Facilities
Circa 1954: Training Areas that Cannot Be Used at the Same Time
7/3/56: Range Complex
12/20/56: Fort Ord Training Areas & Facilities
7/15/57: Training Areas & Facilities
1/10/58: Training Areas & Facilities
12/31/58: Ranges & Training Facilities
6/30/61: Basic Information Training Facilities
4/27/64: Field Training Areas & Range Map
8/16/65: Close In Training Areas
1/67: Field Training Areas & Range Map
5/1/67: Close In Training Areas
3/13/68: Training Facilities Map
11/1/71: Training Facilities Plan
3/16/72: Training Ranges and General Road Map
7/1/72: Field Training Area and Range Map
2/23/73: Close In Training Areas
2/1/76: Ranges and Training Area Overlay
3/1/76: Close In Training Areas
12/1/76: Future Development Plans, Training Facilities Plan
6/1/77: Training Facilities Plan
1/78: Ranges and Training Area Overlay
7/15/78: Ranges and Training Area Overlay
3/80: Training Facilities Map
6/1/81: Ranges and Training Area Overlay

4/1/82: Ranges and Training Area Overlay
4/27/84: Field Training Areas and Range Map
6/84: Training Facilities Map
11/15/87: Ranges and Training Area Overlay

Base Development Plans and Maps

1922: Assessors Plats, Monterey Co.
1934: War Department, Camp Ord and Vicinity
1940: Fort Ord Locator Map
7/3/44: Fire Hydrants & Fire Telephones, Main Garrison
3/20/46: Fort Ord Master Plans
4/5/46: Fort Ord Master Plans
2/56: Main Garrison Layout
1/15/69: Post Locator Map
1972: Fort Ord and Vicinity (V895S)
3/1/75: Master Plan, Reservation Map
8/1/84: Fort Ord Military Installation Map (V795S)
1985: Fort Ord Locator Map
2/10/90: Fort Ord Locator Map, Main Garrison

SITE INVESTIGATION ACTIVITIES

Site Walks

Site Reconnaissance: A site reconnaissance of Parcel L20.17.2 was conducted on April 10, 2006. The reconnaissance was conducted by a two-person team that included a USACE UXO Safety Specialist accompanied by a GPS operator. The USACE UXO Safety Specialist walked a portion of the parcel using a hand-held magnetometer to survey the path walked. The GPS operator recorded the path walked documenting the location of any items found. No evidence of military munitions was observed during the site reconnaissance.

Property Transfer: Portions of the parcels were walked in support of the future transfer of the parcels and no evidence of military munitions was observed.

Geophysics

Four 100-foot by 100-foot grids associated with adjacent MRS-2 were established and sampled within Parcel L20.17.2. Two munitions debris items were found during geophysical sampling of MRS-2. It is not known if either of the munitions debris items were found within the four sample grids that were located within Parcel L20.17.2.

Schonstedt GA-52/Cx used during reconnaissance of parcel L20.17.2.

Excavations	None
Soil Borings	None
Wells	None

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	MRS-2 - Identified as a potential chemical training area. Site was sampled and no evidence of chemical training was found.
Small Arms Ranges	None

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS	MRS-2 - Identified as a potential chemical training area and landfill (Plate 4). Sampling for military munitions was conducted and two munitions debris items were found. As part of the remediation of IRP Sites 16 and 17, 468 2.36-inch practice rockets with inert filling were removed from disposal pits located in former landfill areas within and adjacent to MRS-2 (to the south of Parcel E2d.3.2). The disposal areas were fully excavated. Because the practice rockets were buried in discrete piles in a disposal area, the practice rockets are believed to be the result of disposal and are not related to military munitions use at MRS-2. The excavated areas within and adjacent to MRS-2 are considered Special Case Track 0 areas. This area, including the western portion of MRS-2, has been excavated, backfilled and re-graded. Any military munitions that might not have been located through excavation would most likely have been found during the re-grading process. The remainder of MRS-2 is undergoing additional evaluation under the Fort Ord Munitions Response RI/FS as a candidate Track 1 site.
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Incident Reports	
MEC	None
Munitions Debris	None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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3.0 GROUP 2 – PARCELS L20.2.2, L20.2.3.1, and L35.4

3.1 Description

The areas described in this section include the portions of Parcels L20.2.2, L20.2.3.1, and L35.4 that are adjacent to, but outside of the boundary of MRS-5, MRS-27E, MRS-27F/MRS-59B, MRS-59, MRS-59A, and MRS-45/45A (Plate 4). These parcels are located in the northeastern portion of the former Fort Ord adjacent to the East Garrison (Plate 5). This area is mostly undeveloped and is part of a habitat management area. These parcels include a Habitat Corridor and include an allowance for future development (*USACE, 1997*).

Parcel L20.2.2 lies on the south side of Inter-Garrison Road and is adjacent to MRS-45/45A and MRS-5 (Plate 5). MRS-45A was originally part of MRS-45, but for the purposes of property transfer and the MEC evaluation, MRS-45 was subdivided. Parcel L20.2.2 contains a campground and recreation area (Travel Camp) and the remnants of a former small arms ammunition firing range. The Travel Camp recreational area was established in the mid-1970s. The Travel Camp continues to be used today (coordinated through the BRAC office), by various organizations and groups including the Boy Scouts of America, horseback riders, and bicyclists.

Parcel L20.2.3.1 is located to the southwest of Parcel L20.2.2 and is adjacent to or in close proximity of MRS-5, MRS-27E, MRS-27F/MRS-59B, MRS-59, and MRS-59A (Plate 5). MRS-59B was originally part of MRS-59, but for the purposes of property transfer and the MEC evaluation, MRS-59 was subdivided as follows: MRS-59, MRS-59A, and MRS-59B. The portion of MRS-59 that lies to the south of Parcel L20.2.3.1 was transferred to the Bureau of Land Management (BLM) in 1996 (MRS-59). The property that included the remainder of the MRS-59 footprint (MRS-59A and MRS-59B) was retained by the Army and was to be transferred upon completion of a MEC evaluation. MRS-59A was recently evaluated for the presence of MEC in the Track 1 OE RI/FS (*MACTEC, 2004*). Based on the review of existing information, MEC is not expected to be found at MRS-59A. MRS-59A was included in the

Track 1 ROD. The Track 1 ROD is the decision document for the selected determination of No Further Action Related to MEC at MRS-59A (*Army, 2005a*).

Parcel L35.4 is located approximately 800 feet south of Inter-Garrison Road and is immediately adjacent to MRS-45A. A portion of Parcel L35.4 (0.115 acres) was previously evaluated in the Track 0 Approval Memorandum for the Group B parcels (*Army, 2005c*). Concurrence that this portion of Parcel L35.4 was suitable to plug-into the Track 0 process was granted by the USEPA on June 7, 2005 and the DTSC on June 23, 2005. The portions of these parcels included in this evaluation comprise approximately 102 acres of Parcel L20.2.2, 20 acres of Parcel L20.2.3.1, and 0.8 acres of Parcel L35.4.

3.2 History and Use

Prior to Army purchase, this area was ranch land owned by the David Jacks Corporation. The parcels are included within approximately 15,600 acres of land purchased by the Army in 1917 and used as a training area for cavalry, artillery, and infantry units stationed at the Presidio of Monterey. Tent pads were constructed on adjacent property to the east and north of Parcel L20.2.2 and the area was used as an encampment (Camp Ord) for these units. Camp Ord included ranges for the firing of small arms weaponry. Target bunkers associated with one of the earlier ranges (Known Distance Range) are present in the southeastern portions of Parcels L20.2.2 and L20.2.3.1. The Known Distance Range has been in use since at least the late 1930s (*MACTEC/Shaw, 2005*). Development of permanent structures occurred to the northeast of the parcels beginning in 1940 with the construction of a sewage treatment facility and a mule corral on the north side of Inter-Garrison Road. Beginning in 1945, Parcels L20.2.2, L20.2.3.1, and L35.4 were within training area “E-south.” The specific type of training that occurred in this area is not identified on the map. Beginning in about 1954, most of the parcels were within an area assigned to the 11th Infantry and were being used as Tactical Training Areas. The Tactical Training Area adjacent to Parcel L35.4 (east of) was identified in the Fort Ord Archives Search as MRS-45. At this same time, the southeastern portion of Parcel L20.2.2 was within an area assigned to the 759th Tank Battalion (*Army, 1954*). The only features identified within the area assigned to the 759th are a “Bayonet Training Area”

and a note that the Known Distance Ranges are “not in use”. By 1956 a Tank Driving Area was present in southeastern portion of Parcel L20.2.2. No range safety fans associated with the tank driving area or the area assigned to the 759th Tank Battalion are delineated on training facilities maps and it is not expected that this area was used for the firing of tank weaponry (*MACTEC, 2004*). From 1958 through 1972, the parcels were within an area assigned to the 4th Brigade. The mission of the 4th Brigade was to conduct combat support training (e.g., basic Army administration, food service, basic unit supply, field communications, and light wheel vehicle driving) (*Army, 1968*). Specific training areas or features identified within the parcels at this time included Non-Commissioned Officers Academy (NCOA) training and an area labeled as Division Support Services (DSS) training area. A second small arms ammunition firing range, East Garrison Range 3 (EG-3), was constructed between 1959 and 1961 and is present in the southeastern portion of Parcel L20.2.2 on a 1961 training map (*Army, 1961*). The targets and firing points for East Garrison Range 3 were within Parcel L20.2.2. The direction of fire was toward the southeast. In the mid-70s a recreation area that included a campground and recreational facilities was established within Parcel L20.2.2. The area, referred to as the Travel Camp, included a recreation building constructed in 1977, a covered BBQ area, campground, and restroom facilities with showers (Plate 5). By 1978, two additional training sites (MRS-27E and MRS-27F) were present in the vicinity of Parcel L20.2.3.1 (Plate 5). These sites were part of a group of 25 training sites identified as Bivouac areas during the Fort Ord Archives Search. Bivouac areas were overnight training and field exercise areas (*Army, 1980*). Training at these locations reportedly included the use of practice and pyrotechnic military munitions. Parcel L35.4 includes a concrete aboveground water storage tank constructed in 1983.

3.3 Area Investigations

3.3.1 Investigations Within Parcels L20.2.2, L20.2.3.1, and L35.4

Based on an extensive literature search that included a review of range control records, Fort Ord training facilities maps, aerial photographs, historical film footage, and historical archives searches and

conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on these parcels; consequently, no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. Investigations conducted under the Basewide RI/FS have been performed within these parcels. These investigations included activities associated with the characterization and remediation of small arms ammunition firing range EG-3 and site walks that were performed as part of the BRA at the Known Distance Range.

As discussed above, small arms firing range EG-3 and target bunkers associated with the Known Distance Ranges lie within Parcels L20.2.2 and L20.2.3.1. As part of the investigation of Range EG-3 and the target bunkers, a site walk, test pit excavation, and soil sampling were performed to evaluate the extent of spent small arms ammunition on the ground surface. Based on the sample results, soil containing lead and antimony associated with small arms ammunition at firing range EG-3 was removed (excavated; Interim-Action Site 39A, Study Area 2). No further action was required at the Known Distance Range target bunkers (Site 39A, Study Area 3; *HLA, 1998*). No MEC or munitions debris were reported to have been found during the characterization (site walks, test pit excavations and soil sampling) at Range EG-3 and the Known Distance target bunkers or during the remediation (excavation) at Range EG-3 (*HLA, 1997 and 1998*).

The Known Distance Range was investigated as part of the BRA to evaluate small arms and multi-use ranges for potential hazardous and toxic waste related to military munitions. The assessment of the Known Distance Range included a data review, site reconnaissance, mapping of portions of the site and site sampling. Under the BRA, the Known Distance Range was identified as HA-77. Prior to conducting the site reconnaissance, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photos and their locations (waypoints) uploaded into a Global Positioning System (GPS) unit. The site reconnaissance was conducted in May 2001, by a two-person team that included a military munitions specialist and a second team member trained in munitions recognition. The path of the site

reconnaissance is presented on Plate 5. The site reconnaissance included walking the southeastern portions of Parcels L20.2.2 and L20.2.3.1 and navigating to the waypoints using the GPS unit. Areas investigated included potential firing points and the target bunkers. Spent small arms ammunition was observed in a few locations and in August 2001 soil samples were collected. No military munitions or evidence of military training were identified during the reconnaissance or sampling. No further action related to chemical contamination was recommended for HA-77 (Known Distance Range) under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

In addition to the site reconnaissance conducted at HA-77, site reconnaissance's conducted at adjacent MRS-27E and MRS-59 included walking within a portion of Parcel L20.2.3.1 (Plate 5). No MEC or munitions debris were found during the site reconnaissance's conducted within MRS-27E and MRS-59 (HA-137 and HA-189). Descriptions of the site reconnaissance conducted at HA-137 and HA-189 are provided in Section 3.3.2.

In support of the future transfer of Parcel L35.4, a site visit was conducted in January 2005. The team performing the site visit included an Army representative, a representative of the DTSC, and the Army's contractor responsible for documenting property condition prior to transfer. All members of the team underwent ordnance recognition and safety training. The site visit included walking a portion of the parcel and documenting general site conditions. No evidence of military munitions was observed during the site visit.

A second site visit in support of the transfer of Parcels L20.2.2 and L20.2.3.1 was conducted in February 2006. The person performing the site visit was the Army's contractor responsible for documenting property condition prior to transfer. This person had undergone ordnance recognition and safety training prior to performing the site visit. The site visit included walking portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visit.

3.3.2 Investigation of Adjacent Areas

The areas adjacent to Parcels L20.2.2, L20.2.3.1, and L35.4 consist mostly of land that is undeveloped open space. The land immediately adjacent to Parcels L20.2.2, L20.2.3.1, and L35.4 (west side) is designated as a Habitat Corridor (*Army, 1997*). The parcels to the east of Parcel L20.2.2 were identified as Track 0 Plug-In as described in the *Track 0 Approval Memorandum, East Garrison Area 1, Former Fort Ord, California*, dated December 2003. The parcel immediately south of Parcel L20.2.3.1 (Parcel F1.2) was transferred to the BLM and is open to the public for recreational use (Plate 5). As described in Section 3.1, MRS-5, MRS-27E, MRS-27F/MRS-59B, MRS-59, MRS-59A, and MRS-45/45A lie adjacent to the Group 2 parcels. A discussion of investigations that have occurred within each of these MRSs follows.

3.3.2.1 MRS-27E

MRS-27E consists of approximately 29 acres and is immediately adjacent to Parcel L20.2.3.1 (Plate 5). This site was identified through the archives search as one of 25 training sites depicted on a historical training facilities map (*USAEDH, 1997*). The 25 training sites were used as bivouac areas (*Army, 1980*). Bivouac areas at Fort Ord were used for overnight training and field exercise. One of the 25 training sites (MRS-27Q) was chosen at random to survey for the presence of military munitions. Expended blank small arms ammunition, hand grenade safety levers, and a hand grenade fuze were found (*USAEDH, 1997*). Based on the results of the survey at MRS-27Q, further investigation was recommended for each of the 25 training sites, including MRS-27E.

Fort Ord Basewide Range Assessment

MRS-27E was investigated as part of a BRA to evaluate small arms and multi-use ranges for potential hazardous and toxic waste related to military munitions. The assessment of MRS-27E included a data review, site reconnaissance, and mapping of portions of the site. Under the BRA, MRS-27E was identified as HA-137. Prior to conducting the site reconnaissance, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas,

and roads) were identified from maps and photos and their locations (waypoints) uploaded into a GPS unit. The site reconnaissance was conducted in December 2001, by a two-person team that included a military munitions specialist and a second team member trained in munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. The site reconnaissance included walking within a portion of Parcel L20.2.3.1. No military munitions or evidence of military training were identified during the site walk and no further action related to chemical contamination was recommended for HA-137 (MRS-27E) under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

Military munitions that may have been used at MRS-27E include pyrotechnics (simulators, pyrotechnic signals and smoke-producing items) and blank small arms ammunition; however, no evidence of the use of military munitions was observed during the site reconnaissance conducted as part of the BRA and no impact from MRS-27E to adjacent Parcel L20.2.3.1 is expected. MRS-27E will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program, as a potential future Track 1 candidate site.

3.3.2.2 MRS-59, MRS-59B, and MRS-27F

MRS-59B was originally part of MRS-59, but for the purposes of property transfer and the MEC evaluation, MRS-59 was subdivided as follows: MRS-59, MRS-59A, and MRS-59B. The discussion of the investigation of MRS-59A is provided in Section 3.3.2.5. MRS-59 was identified during interviews conducted during the Preliminary Assessment/Site Investigation (PA/SI) phase of the Fort Ord Archives Search Report (Site OE-59; *USAEDH, 1997*). A portion of MRS-59 was transferred to the BLM in 1996 (Plate 4).

MRS-27F is approximately 10 acres in size and lies within the footprint of MRS-59 and MRS-59B (Plate 5). MRS-27F was identified through the archives search as one of 25 training sites depicted on a historical training facilities map (*USAEDH, 1997*). As described in the Fort Ord Range Regulations, a

training site is a facility located within a training area and used as an overnight bivouac areas. One of the 25 training sites was chosen at random to survey for the presence of military munitions. Based on the results of the survey, further investigation was recommended for each of the 25 training sites, including MRS-27F. MRS-27F is undergoing additional evaluation as a candidate Track 1 Site.

Fort Ord Munitions Response Program

MRS-59 and MRS-59B lie adjacent to Parcel L20.2.3.1. These sites were identified during interviews conducted during the PA/SI phase of the Fort Ord Archives Search (Site OE-59; *USAEDH, 1997*). The area (identified as K10 during the interview) was reported to have included a 2.36-inch rocket range in the early 1940s. The site was reportedly not active after this time and the interviewee had no first-hand knowledge of the range. Area K10 was identified as being located immediately to the west of MRS-59A (Plate 5). Ordnance that may have been used at area K10 was reported to have been 2.36-inch rockets. A site walk that included MRS-27F and MRS-59 was conducted in 1996 by the USACE UXO Safety Specialist. The reconnaissance of MRS-59 involved walking a portion of the site and sweeping the path walked using a Schonstedt Model GA-52/Cx magnetometer. Two pieces of mortar fragments from the incomplete detonation of a 60 millimeter (mm) mortar were found on the far west side of MRS-59 approximately 2,000 feet from Parcel L20.2.3.1. Expended pyrotechnic items were also found (*USAEDH, 1997*). On the basis of the reconnaissance performed, the ASR recommended further site investigation and random sampling at MRS-59 (*USAEDH, 1997*). The reconnaissance of MRS-59 did not extend into MRS-59B. MRS-59B is undergoing additional evaluation as a candidate Track 1 Site. MRS-59 will undergo additional evaluation in the ongoing former Fort Ord Munitions Response Program.

Fort Ord Basewide Range Assessment

MRS-27F, MRS-59, and MRS-59B were also investigated as part of a BRA for small arms and multi-use ranges. The assessment of MRS-27F, MRS-59, and MRS-59B for potential hazardous and toxic waste related to military munitions included a literature search, site reconnaissance, and mapping of the site. Under the BRA, MRS-27F was identified as HA-138, and MRS-59 (including MRS-59B) was identified

as HA-189. As part of the literature search, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photos and their locations (waypoints) uploaded into a GPS unit. The site reconnaissance was conducted by a two-person team that included a military munitions specialist, and a second team member trained in military munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. During the site walk of HA-138 no small arms ammunition, fighting positions, or MEC-related items were observed. Because no evidence of a range or stained soil was observed, no further action related to chemical contamination was recommended for HA-138 under the Fort Ord BRA (*MACTEC/Shaw, 2005*). No evidence of small arms ammunition, targets or MEC-related items were observed during the site walk of HA-189. One fighting position was observed, however. Access to the southern portion of HA-189 was limited to trails and roads due to dense vegetation. Because no target locations or concentrations of military munitions were found at this site, no further action related to chemical contamination was recommended for HA-189 under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

3.3.2.3 MRS-45 and MRS-45A

MRS-45 and MRS-45A, a former Tactical Training Area, consists of approximately 400 acres situated on the south side of Inter-Garrison Road and immediately adjacent to Parcels L35.4 and L20.2.2. MRS-45 was identified during the archives search and the site boundary was established in the ASR (*USAEDH, 1997*). The ASR recommended that MRS-45 undergo confirmatory sampling based on the results of an early site inspection (Site OE-45; *USAEDH, 1997*).

Fort Ord Munitions Response Program

CMS Environmental, Inc. (CMS) conducted sampling of MRS-45 and MRS-45A using SiteStats/GridStats (SS/GS) methodology (*USA, 2001*). According to the Fort Ord military munitions database, two hundred and twenty-four munitions debris items and five MEC items were removed from MRS-45. The number of MEC and munitions debris items reported in the after action report for MRS-45

differs from those numbers reported in the Fort Ord military munitions database. As part of quality assurance/quality control (QA/QC) process, the data collected by the contractor is subjected to review by the USACE. The evaluation includes a review of the field data and grid records generated by the contractor. As a result of the QA/QC review the actual number of items reported as MEC and MD was revised. With the exception of a fragment from a fragmentation hand grenade, all of the munitions debris items found at MRS-45 were pyrotechnic- or training-related and included rifle-fired smoke grenades, two 40mm projectile signals; practice, illumination, and smoke hand grenades; illumination signals; practice mines; hand grenade fuzes; boobytrap firing devices; and a smoke pot. A total of five MEC items (all pyrotechnic- or training-related items) were found during sampling of the 400-acre site. No evidence was found during sampling to indicate that this site was used as an impact area and no further military munitions investigation was recommended (USA, 2001). One of the MRS-45 sample grids (TC-3) was located within the portion of Parcel L20.2.2 overlapped by MRS-45A (Plate 5). This area is not designated as a Track 0 area, but is currently being evaluated as a Track 1 Plug-In site. A second MRS-45 sample grid (TC-2) was located partially within MRS-45A and Parcel L35.4. The portion of sample grid TC-2 that lies within MRS-45A and Parcel L35.4 is also being evaluated as a Track 1 Plug-In site. A third sample grid (TC-1) was located within MRS-45, approximately 120 feet west of MRS-45A and Parcel L35.4. No MEC was located within grids TC-1, TC-2 or TC-3 (USA, 2001). Items that were reported to have been found within Grids TC-1, TC-2 and TC-3 included small arms ammunition, small arms ammunition clips and ammunition links, and hand grenade safety levers. These items were not classified as munitions debris consistent with the Fort Ord classification protocol in-place at the time (1997). For the purposes of the basewide MMRP being conducted for the former Fort Ord and this Approval Memorandum, MEC does not include small arms ammunition .50 caliber and below. However, the presence of the hand grenade safety levers and small arms ammunition and small arms ammunition clips and links, may indicate that training with MEC at these locations did occur. The hand grenade safety levers and small arms related items are consistent with the use of MRS-45 as a tactical training area. On this basis the boundary of MRS-45/MRS-45A was expanded to include the portion of Parcel

L20.2.2 that contains sample grid TC-3 (Plate 5). MRS-45 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

To address the imminent threat to the public posed by the presence of MEC on the ground surface a Time Critical Removal Action (TCRA) was performed within land previously transferred to the BLM. This TCRA included a portion of MRS-45 and MRS-45A adjacent to Parcel L35.4. The TCRA consisted of visual surface sweeps conducted on the trails, paths, and accessible areas. The TCRA was conducted from December 2001 to February 2002 (*Parsons, 2002*). The surface removal was performed without the use of geophysical equipment and no vegetation was removed. The field crews walked open areas and trails visually searching for MEC and munitions debris. Only areas that were relatively clear of vegetation were searched. The field crews used personal digital assistants (PDAs) and GPS to record site data, navigate the site, and record the locations of any MEC and munitions debris that was observed. No MEC or munitions debris items were found within MRS-45, MRS-45A, or Parcel L35.4 (*Parsons, 2002*).

Fort Ord Basewide Range Assessment

MRS-45 and MRS-45A were also investigated as part of a BRA for small arms and multi-use ranges. The assessment of MRS-45 and MRS-45A for potential hazardous and toxic waste related to military munitions included a literature search, site reconnaissance, and mapping of the site. Under the BRA, MRS-45 and MRS-45A were identified as HA-175. As part of the literature search, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photos and their locations (waypoints) uploaded into a GPS unit. The site reconnaissance was conducted by a two-person team that included a military munitions specialist, and a second team member trained in military munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. The site walk of HA-175 was performed in December 2001. Evidence of military training included the presence of several fighting positions; however, no evidence of targets or range features were observed. No small arms ammunition or MEC items were found. Because no range-related features or

military munitions were found, no further action related to chemical contamination was recommended for HA-175 (MRS-45 and MRS-45A) under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

3.3.2.4 MRS-5

MRS-5 is approximately 30 acres and located in the East Garrison adjacent to Parcels L20.2.2 and L20.2.3.1 (Plate 5). MRS-5 was identified through a review of Fort Ord historic records completed for the Fort Ord ASR (*USAEDH, 1993*). The site was identified based on the finding of an expended 3.5-inch rocket motor in the branches of a tree.

Fort Ord Munitions Response Program

MRS-5 was created based on the discovery of an expended 3.5-inch rocket motor in the branches of a tree “south of East Garrison” (*USAEDH, 1997*). The expended 3.5-inch rocket motor was apparently moved from the site and taken to Building 2788 before it was reported to the Fort Ord Explosive Ordnance Disposal (EOD). Therefore, the exact location of the discovery is unknown (*MACTEC, 2004*). Sampling performed in 1994 included the establishment of grids within MRS-5 and adjacent MRS-59A. All anomalies detected were to have been investigated; however, based on available records, it is not known if the anomalies identified at MRS-5 were intrusively investigated. To supplement information collected during the sampling effort, a site walk was conducted by a military munitions specialist using a magnetometer to detect buried anomalies. The only anomalies found during the site walk were munitions debris (an expended illumination signal), small arms ammunition, and spent small arms ammunition. This information supports the conclusion that MRS-5 was used for general training and was not an impact area.

MRS-5 was evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-5 (*MACTEC, 2004*). Based on review of existing information, MEC is not expected to be found at MRS-5, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site (*Army, 2005a*). MRS-5 meets the Track 1, Category 3 criteria because

historical research and field investigations (site walks) and surface sampling conducted at this site identified evidence of past training involving only practice and pyrotechnic items that are not designed to cause injury. In the unlikely event that a MEC item of the practice or pyrotechnic types previously observed at the site is found at MRS-5, it is not expected that it could be caused to function through casual contact (i.e., inadvertent and unintentional contact). The rationale for taking no further action related to MEC at MRS-5 was presented in the Track 1 OE RI/FS, the Track 1 Proposed Plan (*Army, 2004*), and is included in the Track 1 ROD (*Army, 2005a*). MRS-5 was included in the Track 1 ROD. The Track 1 ROD is the decision document for the selected determination of No Further Action Related to MEC at MRS-5.

Fort Ord Basewide Range Assessment

MRS-5 was also investigated as part of a BRA for small arms and multi-use ranges. The assessment of MRS-5 for potential hazardous and toxic waste related to military munitions included a literature search. Under the BRA, MRS-5 was identified as HA-95. As part of the literature search, a review of historical maps and aerial photographs was conducted. No training areas were identified on any available training maps for the area. Additionally, HA-95 is located directly downrange and within the range safety fans of several small arms ammunition firing ranges that have been active on a periodic basis since at least the 1930s. Portions of HA-95 were walked as part of the reconnaissance conducted at other HA areas including, HA-77, HA-80, and HA-85. The site walks were conducted by a two-person team that included a military munitions specialist, and a second team member trained in military munitions recognition. No military munitions or evidence of military training were identified during the site walk and no further action related to chemical contamination was recommended for HA-95 (MRS-5) under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

3.3.2.5 MRS-59A

MRS-59A is approximately 41 acres and is located in the southern portion of the East Garrison (Plate 5). This area is currently undeveloped and the proposed reuse plans include development and habitat reserve.

The northern portion of MRS-59A lies adjacent to Parcel L20.2.3.1. MRS-59A was originally part of MRS-59, but for the purposes of property transfer and the MEC evaluation, MRS-59 was subdivided as follows: MRS-59, MRS-59A, and MRS-59B. MRS-59 was identified during interviews conducted during the PA/SI phase of the Fort Ord Archives Search (Site OE-59; *USAEDH, 1997*). The area (identified as K10 during the interview) reportedly included a 2.36-inch rocket range in the early 1940s. A portion of the land that included MRS-59 (Site OE-59) was transferred to the BLM in 1996. The majority of K10 was identified as being located within MRS-59. A small portion of area K10 lies within MRS-59A.

Fort Ord Munitions Response Program

Combined sampling in 10 sample grids in MRS-59A and 7 sample grids in adjacent site MRS-5 was conducted in 1994. All anomalies detected during sampling were to be investigated. However, based on the available sampling records, it is not known if the anomalies identified were intrusively investigated. Records indicate that munitions debris was removed during sampling of both sites; however, it is unknown whether this information is specific to areas sampled within MRS-59A or MRS-5.

Site reconnaissance activities (PA/SI) performed in 1996, identified munitions debris (an expended rifle smoke grenade and an expended illumination signal) and expended blank small arms ammunition, but no specific training locations were identified during the literature search or site reconnaissance.

A site walk was conducted in 2003 at a location selected in order to supplement information collected during previous reconnaissance efforts at this site. The site walk was conducted by a military munitions specialist using a magnetometer to detect buried anomalies. Items found during the site walk included munitions debris (two expended pyrotechnic signals), small arms ammunition, and small arms ammunition clips. No MEC was found during the site walk. The presence of expended pyrotechnics found during the 2003 site walk indicates that military munitions training was conducted in this general area.

MRS-59A was evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-59A (MACTEC, 2004). Based on review of existing information, MEC is not expected to be found at MRS-59A, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site (Army, 2005a). MRS-59A meets the Track 1, Category 3 criteria because historical research and field investigations identified evidence of past training involving military munitions and training at this site involved only the use of practice and pyrotechnic items that are not designed to cause injury. In the unlikely event that a MEC item of the practice or pyrotechnic types previously observed at the site is found at MRS-59A, it is not expected that it could be caused to function through casual contact (i.e., inadvertent and unintentional contact). The rationale for taking no further action related to MEC at MRS-59A was presented in the Track 1 OE RI/FS, the Track 1 Proposed Plan (Army, 2004), and is included in the Track 1 ROD (Army, 2005a). MRS-59A was included in the Track 1 ROD. The Track 1 ROD is the decision document for the selected determination of No Further Action Related to MEC at MRS-59A.

Fort Ord Basewide Range Assessment

MRS-59A was also investigated as part of a BRA for small arms and multi-use ranges. The assessment of MRS-59A for potential hazardous and toxic waste related to military munitions included a literature search, site reconnaissance, and mapping of the site. Under the BRA, MRS-59 (including MRS-59A) was identified as HA-189. As part of the literature search, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photos and their locations (waypoints) uploaded into a GPS unit. The site reconnaissance was conducted by a two-person team that included a military munitions specialist, and a second team member trained in military munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. No evidence of small arms ammunition, targets or MEC-related items were observed during the site walk of HA-189. One fighting position was observed, however, access to the southern portion of HA-189 was limited to trails and roads

due to dense vegetation. Because no target locations or concentrations of military munitions were found at this site, no further action related to chemical contamination was recommended for HA-189 under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

3.4 Incidental Munitions Debris Items

On May 5, 2005, a hiker walking on a trail within Parcel L20.2.3.1 discovered an expended 75mm MKI shrapnel projectile and an expended Model 1907M fuze lying on the ground (Plate 4). The hiker reported the discovery to the federal police who in-turn notified a USACE UXO Safety Specialist who responded to the call. The USACE UXO Safety Specialist examined the items determined that they were munitions debris and that the projectile and fuze were not related to one another. Because of the close proximity of the fuze and projectile to one another (immediately adjacent), it is the opinion of the USACE UXO Safety Specialist that both of these items were found at another location and placed along the trail where the hiker found them (*Huckins, 2006*). Had the projectile and fuze functioned as designed the fuze and projectile would have ended up a significant distance from one another. The USACE UXO Safety Specialist removed the items and disposed of them in a scrap bin for munitions debris.

Parcel L20.2.3.1 is in close proximity to the East Garrison (Plate 4). As discussed in Section 3.2, the East Garrison was used as an encampment for troops stationed at the Presidio of Monterey. Ranges for the firing of small arms ammunition are documented on historic training facilities maps in the East Garrison. Although it is possible that firing points for 75mm projectiles were also present, due to the close proximity of Parcel L20.2.3.1 to the East Garrison, it is not likely that this parcel would have been used as an impact area. Additionally, no evidence of a 75 mm impact area (e.g., projectiles, fuzes, shrapnel, or range related debris) has been observed during numerous USACE and USACE contractor site walks conducted within, or to the south and west of Parcel L20.2.3.1 (Plate 5).

3.5 Rationale for Track 0 Designation of Portions of Parcels L35.4, L20.2.2, and L20.2.3.1

MEC is not likely to be present on these parcels for the following reasons:

- A review of the military munitions program related documentation for the former Fort Ord including, the Archives Search Reports (*USAEDH, 1993, 1994 and 1997*), the Literature Review Report OE RI/FS (*HLA, 2000a*), the Track 1 OE RI/FS (*MACTEC, 2004*), the Comprehensive Basewide Range Assessment (*MACTEC/Shaw, 2005*), the Track 0 Technical Memorandum (*HLA, 2000b*), the Track 0 Approval Memorandum for East Garrison Area 1 (*Malcolm Pirnie, 2003*), and the Track 0 Plug-In Approval Memorandums for the Group B and C Parcels (*Army, 2005c and 2005d*), did not indicate that military munitions were used on Parcels L35.4, L20.2.2, and L20.2.3.1.
- Site reconnaissance that included walking portions of Parcels L20.2.2 and L20.2.3.1 were conducted as part of the characterization of Site 39A and as part of the BRA. The site walks were performed by personnel with ordnance recognition training. No MEC or munitions debris were found during site reconnaissance.
- A portion of Parcel L20.2.2 includes Range EG-3. Range EG-3 was investigated and remediated as part of Site 39A. Remedial activities included the excavation of several test pits, sample collection and the excavation and removal of soil containing elevated levels of metals. No MEC or munitions debris were reported to have been found during the characterization and remedial activities performed at Range EG-3.
- MRS-5 and MRS-59A were evaluated in the Track 1 OE RI/FS and no further action regarding munitions response was recommended. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-5 and MRS-59A (*Army, 2005a*).
- No MEC was found during sampling for military munitions in the MRS-45 sample grids that lie within the portions of Parcels L35.4 and L20.2.2 that are immediately adjacent to the proposed Track 0 portions of Parcels L35.4 and L20.2.2.

- Two munitions debris items found by a hiker. No evidence of an impact area was observed during site walks conducted in the surrounding area. The East Garrison area has been in use since at least the early 1930s as an encampment for cavalry and field artillery troops. On this basis, it is unlikely that these parcels were used as an impact area for 75mm projectiles.
- No evidence was found during the military munitions sampling of adjacent MRS-45 to indicate the use of military munitions other than practice and pyrotechnic items, or that these sites were used as impact areas.

3.6 Track 0 Checklist – Group 2

PARCELS

L35.4, L20.2.2, and L20.2.3.1

DESCRIPTION

Approximately 123 acres of undeveloped land that is part of a habitat management area. These parcels lie in the northeastern portion of the former Fort Ord and include the western portion of the East Garrison (Plate 4).

HISTORICAL USE

History suggests no use of military munitions. Prior to Army purchase, was ranch land (David Jacks Corporation). Purchased by the Army in 1917 and used as an encampment for artillery and cavalry units stationed at the Presidio of Monterey.

1934: Camp Ord and small arms firing ranges established to the east and in the southeastern portions of Parcels L20.2.1 and L20.2.3.1 (Known Distance Range).

1940: Construction of a sewage treatment facility (IRP Site 32) and a mule corral to the northeast of Parcel L20.2.3.1.

1945: The Group 2 parcels are within larger training areas labeled as “E-SOUTH” and “Combat Ranges”. Inter-Garrison Road makes up the northern boundary of training area E-SOUTH.

1954: The parcels lie within a larger training area (Tactical Training Area), located on the south side of Inter-Garrison Road that was assigned to the 11th Infantry. On the same training map, the southeastern portion of Parcel L20.2.2 was within an area assigned to the 759th

Tank Battalion. This area includes a location identified as a Bayonet Training Area.

1956: Tank driving area is present in the southeastern portion of Parcel L20.2.2.

1958: From 1958 through 1972, the parcels were within a larger training area assigned to the 4th Brigade. The mission of the 4th Brigade was to conduct combat support training. Specific training areas or features identified within the parcels at this time included a NCOA and a DSS training area.

1961: Between 1959 and 1961, East Garrison Range 3 (EG-3) was constructed in the southeastern portion of Parcel L20.2.2. EG-3 is shown on a 1961 training map.

1978: By 1978 a small portion of training site MRS-27F was present in the southwestern portion of Parcel L20.2.3.1. Training site MRS-27E is located immediately adjacent to Parcel L20.2.3.1.

1983: Concrete aboveground water store tank constructed within Parcel L35.4.

Supporting documents

Literature Review and Base Inventory Report, Volume 1; CERFA Report; Archives Search Reports; Site Characterization, Site 39A - East Garrison Ranges; Site 39A Interim Action Confirmation Report; OE RI/FS Literature Review; Final Track 1 OE RI/FS; Final SS/GS After Action-Report, Inland Range Contract, Former Fort Ord, Site OE-45; Final Report for Ordnance and Explosives Removal Action Training Site 25; Final Report, OEW Sampling and OEW Removal Action; Comprehensive Basewide Range Assessment Report; Track 0 ROD; Track 1 ROD; Track 0 Plug-In Approval Memorandums, Selected Parcels - Group C and Group B; Track 0 Technical Memorandum.

Components

Aerial Photos

Pre-1940, 7/25/41, 11/22/41, 8/17/49, 8/1/56, 58/59 (aerial contours), 1/11/65 (mosaic), 5/2/66, 12/17/75, 6/16/78, 4/13/85, 10/22/85, 3/25/86, 11/4/88, 10/4/89, 7/6/92.

Real Estate Records

1912: Salinas Quadrangle
 1915: Proposed Acreage Subdivisions
 1922: Assessors Plats, Monterey County
 3/18/88: Real Estate, Fort Ord

**Range Control Records/
 Standard Operating Procedures**

Ft. Ord Reg 350-5. 16 Apr 1984.

Ft. Ord Reg 350-5. 13 Apr 1982.

Fort Ord Regulation, FO Reg 350-5, Range Regulations, HQS 7th Inf Div & Ft Ord, CA. 9 Sep 1980.

Training Range Regulations, Regulation No. 350-5, Headquarters United States Army Training Center, Infantry And Fort Ord, California. 27 April 1973.

Range and Training Area Maps

6/20/40: Camp Ord, Ultimate Layout of Concurrent Training Camps
 8/45: Training Facilities
 Circa 1954: Training Areas that Cannot Be Used at the Same Time
 7/3/56: Range Complex
 12/20/56: Fort Ord Training Areas & Facilities
 7/15/57: Training Areas & Facilities
 1/10/58: Training Areas & Facilities
 12/31/58: Ranges & Training Facilities
 6/30/61: Basic Information, Training Facilities
 4/27/64: Field Training Areas & Range Map
 1/67: Field Training Areas & Range Map
 3/13/68: Training Facilities Map
 1/11/71: Training Facilities Plan
 3/16/72: Training Ranges and General Road Map
 7/1/72: Field Training Area and Range Map
 2/1/76: Ranges and Training Area Overlay
 12/1/76: Future Development Plans, Training Facilities Plan
 6/1/77: Training Facilities Plan
 1/78: Ranges and Training Area Overlay
 7/15/78: Ranges and Training Area Overlay
 3/80: Training Facilities Map

6/1/81: Ranges and Training Area Overlay
4/1/82: Ranges and Training Area Overlay
4/27/84: Field Training Areas and Range Map
6/84: Training Facilities Map
11/15/87: Ranges and Training Area Overlay

Base Development Plans and Maps

1922: Assessors Plats, Monterey Co.
1934: War Department, Camp Ord and Vicinity
1940: Salinas Quadrangle, Grid Zone “G”, U.S Army Tactical Map
11/28/41: East Garrison Topographical & Temporary Housing Layout
1/28/42: East Garrison, Layout of Buildings & Roads
1944: Army Map Service, Fort Ord Military Reservation
4/5/46: East Garrison Cantonment and Use Map
4/5/46: Reservation Boundary & Land Use Map
1972: Fort Ord and Vicinity (V895S)
3/1/75: Master Plan, Reservation Map
6/1/77: Future Development Plans, Reservation Plan
8/1/84: Fort Ord Military Installation Map (V795S)

SITE INVESTIGATION ACTIVITIES

Site Walks

Site Characterization, Site 39A: Portions of Parcel L20.2.2 were walked as part of site characterization activities performed at EG-3. With the exception of small arms range EG-3, spent small arms ammunition and target related features, no military munitions or evidence of military training were identified during the site walk, test pit excavations or remediation.

Basewide Range Assessment: Historical Area (HA) 77: Portions of Parcels L20.2.2 and L20.2.3.1 were walked in support of the investigation of HA-77 (Known Distance Range) for small arms and multi-use ranges. The assessment of HA-77 for potential hazardous and toxic waste related to military munitions included a site reconnaissance and soil sampling. The site reconnaissance and sampling were conducted by a two-person teams that included a military munitions specialist, and a second team member trained in military munitions recognition. The site walk of HA-77 was performed in May 2001 and included

walking within portions of Parcels L20.2.2 and L20.2.3.1. With the exception of spent small arms ammunition and small arms ammunition target related features, no military munitions or evidence of military training were identified during the site walk or follow-up sampling and no further action related to chemical contamination was recommended for HA-77 under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

HA-137: A portion of Parcel L20.2.3.1 was walked in support of the investigation of HA-137 (MRS-27E). The site reconnaissance was conducted by a two-person team that included a military munitions specialist, and a second team member trained in military munitions recognition. No military munitions or evidence of military training were identified during the site walk and no further action related to chemical contamination was recommended for HA-137 under the BRA (*MACTEC/Shaw, 2005*).

Property Transfer: Portions of the parcels were walked in support of the future transfer of the parcels and no evidence of military munitions was observed.

Geophysics

None

Excavations

Test pits were excavated to a depth of 2.5 feet below ground surface as part of the characterization activities conducted at Range EG-3 and one of the target bunkers at the Known Distance Range.

Excavation and removal of soil at Range EG-3 that contained metals at concentrations exceeding cleanup levels.

Grading and cutting during the installation of the water storage tank on Parcel L35.4.

Soil Borings

None

Wells

None

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	EG Ranges 1 and 2.

MILITARY MUNITIONS INFORMATION**Known or Suspected Adjacent MRS**

MRS-5 – Located adjacent to Parcels L20.2.2 and L20.2.3.1. Sampling performed in 1994 included the establishment of grids within MRS-5 and adjacent MRS-59A. All anomalies detected were to have been investigated; however, based on available records, it is not known if the anomalies identified at MRS-5 were intrusively investigated. To supplement information collected during the sampling effort, a site walk was conducted by a military munitions specialist using a magnetometer to detect buried anomalies. The only anomalies found during the site walk were munitions debris (an expended illumination signal), small arms ammunition, and spent small arms ammunition. MRS-5 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-5. Historical research and field investigations (site walks) and surface sampling conducted at this site identified evidence of past training involving only practice and pyrotechnic items that are not designed to cause injury. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-5. Based on review of existing information, MEC is not expected to be found at MRS-5, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site.

MRS-27E - Located adjacent to Parcel L20.2.3.1. No sampling has been performed at this site. A site reconnaissance was conducted as part to the Fort Ord Basewide Range Assessment. The site reconnaissance included walking a small portion of Parcel L20.2.3.1. No military munitions were found and no further action was recommended under the basewide program. MRS-27E will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program as a potential future Track 1 candidate site.

MRS-59/MRS-59A/MRS-59B/MRS-27F – MRS-59 was identified during interviews conducted during the PA/SI phase of the Fort Ord Archives Search Report. The area (identified as K10 during the interview) reportedly included rocket range in the early 1940s. A portion of MRS-59 was transferred to the BLM in 1996. The remaining portions of MRS-59 that were not transferred were re-named as MRS-59A and MRS-59B. The majority of K10 was identified as being located within MRS-59. A small portion of K10 lies within MRS-59A. MRS-27F, also identified during the Archives Search, was one of a number of training sites that were used as overnight bivouac areas. A site reconnaissance that included MRS-27F and MRS-59 was conducted in 1996 by the USACE UXO Safety Specialist. The reconnaissance of MRS-59 involved walking a portion of the site and sweeping the path walked using a Schonstedt Model GA-52/Cx magnetometer. Two pieces of mortar fragments from the incomplete detonation of a 60mm mortar were found on the far west side of MRS-59 approximately 2000 feet from Parcel L20.2.3.1. Expended pyrotechnic items were also found. MRS-59B and MRS-27F are undergoing additional evaluation as candidate Track 1 Sites. MRS-59 will undergo additional evaluation in the ongoing former Fort Ord MMRP. MRS-59A is adjacent to Parcel L20.2.3.1. MRS-59A was also evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-59A. Based on review of existing information, MEC is not expected to be found at MRS-59A, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site.

MRS-45 and MRS-45A – Immediately adjacent to Parcel L35.4 (Plate 5). Site was sampled (SiteStats/GridStats) and two hundred and twenty-four munitions debris items were removed. With the exception of a fragment from a fragmentation hand grenade, all of the munitions debris items were pyrotechnic- or training-related and included rifle-fired smoke grenades, two 40mm projectile signals; practice, illumination, and smoke hand grenades;

illumination signals; practice mines; hand grenade fuzes; boobytrap firing devices; and a smoke pot. A total of 5 MEC items (all pyrotechnic- or training-related items) were found during sampling of the 400-acre site. No evidence was found during sampling to indicate that this site was used as an impact area and no further military munitions investigation was recommended (*USA, 2001*). No MEC or munitions debris was found within MRS-45A. MRS-45A is undergoing additional evaluation as a candidate Track 1 Site. MRS-45 will undergo additional evaluation in the ongoing Fort Ord MMRP.

Incident Reports

MEC

None

Munitions Debris

Parcel L20.2.3.1 – On May 5, 2005, a hiker discovered an expended 75mm MKI shrapnel projectile and an expended Model 1907M fuze lying along a trail adjacent to one another. The hiker reported the discovery to a USACE UXO Safety Specialist who responded to the call. The USACE UXO Safety Specialist examined the items determined that they were not related to one another, were munitions debris and then disposed of the items in a scrap bin for munitions debris. Because of the close proximity of the fuze and projectile to one another, it is the opinion of the USACE UXO Safety Specialist that both of these items were found at another location and were placed along the trail where the hiker found them (*Huckins, 2006*).

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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4.0 GROUP 3 – PARCELS L4.1 AND L4.2

4.1 Description

These parcels comprise approximately 6.5 acres and are located within the southwestern corner of the former Fort Ord adjacent to the former Impact Area (Plate 6). The parcels lie on the south side of South Boundary Road, between the road and the former installation boundary. The area described in this section includes the portions of Parcels L4.1 and L4.2 that are adjacent to, but outside of the boundary of MRS-43A. Parcel L4.2 lies immediately adjacent or in close proximity to several other parcels (Plate 6) that were previously evaluated and categorized as Track 0 (*Track 0 Plug-In Approval Memorandum, Selected Parcels – Group B, Former Fort Ord, California*, dated May 27, 2005).

4.2 History and Use

Prior to purchase by the U.S. Government, the area that includes these parcels was ranch land owned by the David Jacks Corporation. The parcels were included within an approximately 15,600-acre parcel of land purchased by the U.S. Government in 1917. Army training was conducted by artillery, cavalry, and infantry troops stationed at the nearby Presidio of Monterey. By 1933, South Boundary Road was present in roughly the same location as it is today. By 1945, the Impact Area was established on the north side of South Boundary Road (*Army, 1945*). At that time, two firing ranges were present near the parcels within the Impact Area, the Austin Antitank Range, and a Machine Gun Transition Course. Based on the range fan configuration that is shown on the 1945 Fort Ord training facilities map, the firing points for the two ranges were several hundred feet to the northeast of the parcels and firing was away from the parcels toward the center of the Impact Area. No training was identified on the parcels on the south side of South Boundary Road on available training maps from the 1940s, 1950s, and 1960s. Based on interviews conducted as part of the Fort Ord Archives Search a training area was present to the northwest of the parcels (MRS-43). This area was reportedly used from 1942 to 1944 as a training area for “rifle grenades and shoulder launched projectiles” (*USAEDH, 1997*). From 1954 through 1988, small arms ammunition

firing ranges were present in the Impact Area north of South Boundary Road. Firing at these ranges was to the north or northeast away from the parcels. From 1976 through 1988, the area between South Boundary Road and the installation boundary (including MRS-43A) was identified as an “Air Defense Training Area (Q)”. It is believed that this area was used as a dry fire (non-firing) antiaircraft training area involving the set-up of .30 caliber and .50 caliber antiaircraft weapons (*Hall, 2005*).

4.3 Area Investigation

4.3.1 Investigations Within the Group 3 Parcels

Based on an extensive literature search that included a review of range control records, Fort Ord training facilities maps, aerial photographs, historical film footage, and historical archives searches and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on these parcels.

A site reconnaissance of Parcels L4.1 and L4.2 was conducted on April 10, 2006. The reconnaissance was conducted by a two-person team that included a USACE UXO Safety Specialist accompanied by a GPS operator. The USACE UXO Safety Specialist walked portions of the parcels using a hand-held magnetometer to survey the path walked. The GPS operator recorded the path walked documenting the location of any items found (Plate 7). No evidence of military munitions was observed during the site reconnaissance.

4.3.2 Investigation of Adjacent Areas

4.3.2.1 MRS-43A

MRS-43A was originally part of MRS-43, but for the purposes of property transfer and the MEC evaluation, MRS-43 was subdivided. This site lies between South Boundary Road and the former Fort Ord Installation boundary and is adjacent to Parcels L4.1 and L4.2 (Plate 7). MRS-43 was identified during interviews conducted for the ASR when a former Fort Ord Fire Chief indicated that a portion of the ridge in this site was used as a backstop for rifle grenades and shoulder-launched projectiles from

1942 to 1944. According to the former Fire Chief, MRS-43 consisted of firing positions (trenches) that were excavated along South Boundary Road. Firing was reportedly from the southeast to the northwest. The firing positions were buried when the use was discontinued. The target area (or backstop) described by the former Fort Ord Fire Chief is located approximately 1,800 feet to the northwest of Parcels L4.1 and L4.2. In 1996 prior to performing sampling and removal investigations at MRS-43 and MRS-43A, the Army's munitions contractor performed brush removal. According to the ASR, surface and subsurface sweeps were conducted by a UXO Safety Specialist as a safety measure for the brush cutters. During those sweeps, the specialist discovered "37mm black powder frag" at the northwest end of MRS-43. Based on the presence of 37mm black powder fragmentation, sampling was recommended in the ASR (*USAEDH, 1997*).

In 1999 the initial military munitions investigation was conducted at MRS-43 and MRS-43A and included SS/GS sampling. Eight of the SS/GS grids associated with the investigation were located within MRS-43A. No MEC or munitions debris were found within MRS-43A. MRS-43A is undergoing additional evaluation under the Fort Ord Munitions Response RI/FS as a candidate Track 1 site.

Eleven SS/GS grids associated with the 1999 investigation were located within MRS-43. Because munitions debris was found during SS/GS sampling in MRS-43, 100% grid sampling over portions of the site was conducted in 2000. Both MEC and Munitions debris were identified within MRS-43 and the entire site was subjected to a removal action to a depth of 4 feet (*USA, 2001*). The removal included the use of a combination of analog and digital geophysical equipment. Analog geophysical equipment was used over all of MRS-43 and as many of the operating grids as possible (the majority of the site) were also surveyed using digital geophysical equipment. Portions of MRS-43 could not be digitally surveyed due to terrain or vegetation constraints (*USA, 2001*). All anomalies identified during the removal were investigated and resolved. Both MEC and munitions debris were found during the removal action at MRS-43. MEC and Munitions debris were found adjacent to MRS-43 at the northwest end of the site. Based on the presence of these items the boundary of MRS-43 was expanded to the northwest to include

the area where MEC and munitions debris were discovered. MRS-43 will undergo additional evaluation in the ongoing former Fort Ord MMRP.

Fort Ord Basewide Range Assessment

MRS-43 and MRS-43A were also investigated as part of a BRA for small arms and multi-use ranges. The assessment of these sites for potential hazardous and toxic waste-related contamination included a literature review, site reconnaissance, and mapping of the site and in some cases site characterization soil sampling. Under the BRA, MRS-43 and MRS-43A were identified as HA-173 (*MACTEC/Shaw, 2005*). HA-173 encompasses all of MRS-43 and MRS-43A. Prior to conducting the site reconnaissance, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photos and their locations (waypoints) uploaded into a GPS unit. The Investigation at this historical area included site reconnaissance and sampling. The site reconnaissance and sampling was conducted in 2002 by a two-person team that included a military munitions specialist and a second team member trained in military munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. No military munitions were observed. No further action under the BRA is recommended (*MACTEC/Shaw, 2005*).

4.3.2.2 MRS-15DRO.1 and MRS-15DRO.2

These sites lie on the north side of South Boundary Road and are adjacent to Parcels L4.1 and L4.2 (Plate 6). MRS-15DRO.1 comprised approximately 268 acres and is bounded by General Jim Moore Boulevard on the west side, South Boundary Road on the south side, and MRS-15DRO.2 on the east (Plate 6). The boundary of MRS-15DRO.1 is based on transfer parcel delineation and not on evidence of munitions use. Over the years, portions of several firing ranges associated with the Impact Area were present within MRS-15DRO.1. Historical maps and photos indicate that the use and positioning of these ranges changed through time. These ranges included an antitank range and small arms ammunition firing ranges. Firing at these ranges was toward the north or northeast away from the parcels.

MRS-15DRO.2 includes approximately 35 acres and is bounded on the west by MRS-15DRO.1, on the south by South Boundary Road, and on the east by MRS-15MOCO.1. The boundary of MRS-15DRO.2 is based on transfer parcel delineation and not on evidence of munitions use. No ranges were present within MRS-15DRO.2.

The initial military munitions investigations conducted at MRS-15DRO.1 and MRS-15DRO.2 included random grid sampling, 4-foot removal action within the firebreak along the eastern margin of the site, and site-specific grid sampling. Munitions debris and MEC were identified within the eastern portion of MRS-15DRO.1 and the northeastern portion of MRS-15DRO.2 and these areas were subject to a removal action to a depth of 4 feet. Upon completion of the removal action, the removal area and the remaining portions of the sites were resurveyed using digital geophysical equipment. The digital geophysical survey of MRS-15DRO.1 and MRS-15DRO.2 on the southern margin of the sites included investigation up to the fence-line that runs parallel to South Boundary Road. Items found and removed during the geophysical survey at MRS-15DRO.1 and MRS-15DRO.2 were predominantly expended practice rockets, practice projectiles, and practice grenades. All anomalies identified during each phase of work were investigated and resolved. No evidence was found during SS/GS sampling in adjacent MRS-43A or during the site reconnaissance conducted within Parcels L4.1 and L4.2 to indicate that firing in the southern portion of MRS-DRO.1 or in MRS-DRO.2 would have been directed toward Parcels L4.1 and L4.2. MRS-15DRO.1 and MRS-15DRO.2 will undergo additional evaluation in the ongoing former Fort Ord MMRP.

Fort Ord Basewide Range Assessment

MRS-15DRO.1 and MRS-15DRO.2 were also investigated as part of a BRA for small arms and multi-use ranges. The assessment of these sites for potential hazardous and toxic waste-related contamination included a literature review, site reconnaissance, and mapping of the site and in some cases site characterization soil sampling. Several historical areas were investigated within the MRSs. The ranges within MRS-15DRO.1 were and identified as HA-24D, HA-25D, HA-26D, HA-61, and HA-62.

MRS-15DRO.1 was identified as HA-110. MRS-15DRO.2 was identified as HA-111 (*MACTEC/Shaw, 2005*). Prior to conducting the site reconnaissance, a review of historical maps and aerial photographs was conducted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photos and their locations (waypoints) uploaded into a GPS unit. The site reconnaissance was conducted by a two-person team that included a military munitions specialist and a second team member trained in military munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit.

HA-110 (MRS-15DRO.1)

This historical area encompasses all of MRS-15DRO.1 including HA-24D, HA-25D, HA-26D, HA-61D and HA-62. Investigations at these historical areas included site reconnaissance, sampling, and remediation. No further action under the BRA is recommended (*MACTEC/Shaw, 2005*).

HA-111 (MRS-15DRO.2)

This historical area encompasses all of MRS-15DRO.2. The literature review conducted under the BRA did not identify any small arms firing ranges within MRS-15DRO.2. No further action under the BRA is recommended (*MACTEC/Shaw, 2005*).

4.4 Rationale for Track 0 Designation of Parcels L4.1 and L4.2

MEC is not likely to be present on these parcels for the following reasons:

- A review of the military munitions program related documentation for the former Fort Ord including, the Archives Search Reports (*USAEDH, 1993, 1994, and 1997*), the Literature Review Report (*HLA, 2000a*), and the Comprehensive Basewide Range Assessment (*MACTEC/Shaw, 2005*), the Track 0 Plug-In Approval Memorandums for the Group B and C Parcels (*Army, 2005c and 2005d*), did not indicate that military munitions were used on Parcels L4.1 and L4.2.

- No evidence of military munitions was found on Parcels L4.1 and L4.2 during a site reconnaissance conducted by a USACE UXO Safety Specialist.
- No MEC or munitions debris were found during military munitions sampling in MRS-43A (including the portions of MRS-43A adjacent to Parcels L4.1 and L4.2).
- These parcels lie outside of the fenced Impact Area throughout its history.

4.5 Track 0 Checklist – Group 3 Parcels

PARCELS

L4.1 and L4.2

DESCRIPTION

These parcels comprise approximately 6.5 acres and are located within the southwestern corner of the former Fort Ord adjacent to the former Impact Area (Plate 6). The parcels lie on the south side of South Boundary Road, between the road and the former installation boundary.

HISTORICAL USE

Historical evidence suggests no use of military munitions.

Prior to Army purchase, this area was ranch land owned by the David Jacks Corporation. The parcels are included within an approximately 15,600 acres of land purchased by the Army in 1917 and used as an artillery range for troops stationed at the Presidio of Monterey.

1933-34: South Boundary Road established in roughly the same location as today.

1942-1945: Adjacent area (MRS-43) reportedly used as a training area for “rifle grenades and shoulder launched projectiles”.

1945: North side of South Boundary Road includes the Austin Antitank Range and Machine Gun Transition Course. Based on the range fan configurations, firing was away from the parcels toward the center of the Impact Area. The firing points were located several hundred feet away from the parcels. No training areas identified on the south side of South Boundary Road.

1954-88: Small arms ammunition firing ranges located on the north side of South Boundary

Road. Firing was away from the parcels toward the center of the impact area.

1976-88: Area between South Boundary Road and the Fort Ord boundary identified as an “Air Defense Training Area” (Q).

SUPPORTING DOCUMENTS

Literature Review and Base Inventory Report, Volume 1; Community Environmental Response Facilitation Act Report; Archives Search Reports; OE RI/FS Literature Review; GridStats/SiteStats Sampling After Action Report Site OE-43 and OE-15 DRO.1; After Action Report Geophysical Sampling, Investigation & Removal, Site Del Rey Oaks Group; Comprehensive Basewide Range Assessment Report; Track 0 Plug-In Approval Memorandums, Selected Parcels – Group C and Group B; Track 0 ROD.

Components

Aerial Photos

7/25/41, 8/17/49, 6/23/51, 5/14/56, 8/1/56, 1/11/65 (mosaic), 5/2/66, 12/17/75, 6/16/78, 4/13/85, 10/22/85, 3/25/86, 11/12/86, 11/4/88, 10/4/89, 7/6/92, 12/99.

Real Estate Records

1913: Department of the Interior, reprinted 1918
1915: Proposed Acreage Subdivisions
1922: Assessors Plats, Monterey County
3/18/88: Real Estate, Fort Ord

Range Control Records/ Standard Operating Procedures

Ft. Ord Pamphlet 350-5, Training, Fort Ord Range/Training Area Operating Procedures and Usage Guide, Headquarters, 7th Infantry Division (Light) and Fort Ord, Fort Ord California. 20 Jun 1991.

Fort Ord Regulation, FO Reg 350-5, Range Regulations, HQS 7th Inf Div & Ft Ord, CA. 9 Sep 1980.

Range and Training Area Maps

8/45: Training Facilities
Circa 1954: Training Areas that Cannot Be Used at the Same Time
7/3/56: Range Complex
12/20/56: Fort Ord Training Areas & Facilities
7/15/57: Training Areas & Facilities
1/10/58: Training Areas & Facilities
12/31/58: Ranges & Training Facilities

6/30/1961: Basic Information Training Facilities
 4/27/64: Field Training Areas & Range Map
 1/67: Field Training Areas & Range Map
 3/13/68: Training Facilities Map
 11/1/71: Training Facilities Plan
 3/16/72: Training Ranges and General Road Map
 7/1/72: Field Training Area and Range Map
 2/1/76: Ranges and Training Area Overlay
 12/1/76: Future Development Plans, Training Facilities Plan
 6/1/77: Training Facilities Plan
 1/78: Ranges and Training Area Overlay
 7/15/78: Ranges and Training Area Overlay
 3/80: Training Facilities Map
 6/1/81: Ranges and Training Area Overlay
 4/1/82: Ranges and Training Area Overlay
 4/27/84: Field Training Areas and Range Map
 6/84: Training Facilities Map
 11/15/87: Ranges and Training Area Overlay

Base Development Plans and Maps

1922: Assessors Plats, Monterey Co.
 1934: War Department, Camp Ord and Vicinity
 1944: Army Map Service, Fort Ord Military Reservation
 4/5/46: East Garrison Cantonment and Use Map
 4/5/46: Reservation Boundary & Land Use Map
 1972: Fort Ord and Vicinity (V895S)
 3/1/75: Master Plan, Reservation Map
 6/1/77: Future Development Plans, Reservation Plan
 8/1/84: Fort Ord Military Installation Map (V795S)
 2/10/90: Fort Ord Locator Map, Main Garrison

SITE INVESTIGATION ACTIVITIES

Site Walks

Site Reconnaissance: A site reconnaissance of Parcels L4.1 and L4.2 was conducted on April 10, 2006. The reconnaissance was conducted by a two-person team that included a USACE UXO Safety Specialist accompanied by a GPS operator. The USACE UXO Safety Specialist walked portions of the parcels using a hand-held magnetometer to survey the path walked. The GPS operator recorded the path walked documenting the location of any items found. No evidence of military munitions was observed during the site reconnaissance.

Geophysics	Schonstedt GA-52/Cx used during reconnaissance of Parcels L4.1 and L4.2.
Excavations	None
Soil Borings	None
Wells	None

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	1954-1988 in the Impact Area

MILITARY MUNITIONS INFORMATION**Known or Suspected Adjacent MRS**

MRS-43A – This site lies on the south side of South Boundary Road, adjacent to Parcels L4.1 and L4.2 (Plate 6). Identified during interviews conducted for the Archives Search. Reported to have included a back stop for rifle grenades and shoulder-launched projectiles from 1942 to 1944. The initial military munitions investigations conducted at MRS-43A included SiteStats/GridStats and 100% grid sampling over portions of the site. No MEC or munitions debris were identified within MRS-43A. MRS-43A is undergoing additional evaluation under the Fort Ord Munitions Response RI/FS as a candidate Track 1 Site.

MRS-15DRO.1 and MRS-15DRO.2 – These sites lie on the north side of South Boundary Road and are adjacent to Parcels L4.1 and L4.2. The boundaries of MRS-15DRO.1 and MRS-15DRO.2 are based on transfer parcel delineation and not on evidence of munitions use. The initial military munitions investigations conducted at MRS-15DRO.1 and MRS-15DRO.2 included random grid sampling, 4-foot removal action within the firebreak along the eastern margin of the site, and site-specific grid sampling. Munitions debris and MEC were identified within the eastern portion of MRS-15DRO.1 and the northeastern portion of MRS-15DRO.2 and these areas were subject to a removal action to a depth of 4 feet. Upon completion of the removal action, the removal

area was resurveyed using digital geophysical equipment. The digital geophysical survey of MRS-15DRO.1 and MRS-15DRO.2 on the southern margin of the sites included investigation up to the fence-line that runs parallel to South Boundary Road. Items found and removed included predominantly expended practice rockets, practice projectiles, and practice grenades. All anomalies detected within MRS-15DRO.1 and MRS-15DRO.2 were investigated and resolved. MRS-15DRO.1 and MRS-15DRO.2 will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

**Incident Reports
MEC**

None

Munitions Debris

None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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5.0 GROUP 4 – PARCEL E20c.1.3

5.1 Description

The area described in this section includes Parcel E20c.1.3, a portion of General Jim Moore Boulevard and associated right-of-way. The parcel is located in the west-central portion of the former Fort Ord, and lies between the Fitch Park military housing complex and Fitch Middle School (Plate 8). The parcel lies within a tract of land purchased from private landowners by the government in 1917 (*Arthur D. Little, Inc. [ADL], 1994*). Parcel E20c.1.3 lies adjacent to the former Fort Ord Impact Area and in the vicinity of two former munitions response sites that lie within the Impact Area, MRS-15SEA.2 and MRS-15SEA.3.

5.2 History and Use

Prior to Army purchase, this area was ranch land owned by the David Jacks Corporation. The parcel is included within approximately 15,600 acres of land purchased by the U.S. Government in 1917 and used as a training area for cavalry, artillery, and infantry units stationed at the Presidio of Monterey. By 1933, a road was established in roughly the same location as General Jim Moore Boulevard is today (*Army, 1933-34*). By 1945 this road was named North-South Road (*Army, 1945*). The Ord Village housing area was constructed to the west of the parcel between 1941 and 1942 with no additional development in this area until the 1950s (Plate 9). The first of two Fort Ord golf courses was completed to the northwest of the parcel in 1953. The 1956 Training Facilities map shows that the area on the east side of Parcel E20c.1.3 was assigned to “DIV ARTY” or Division Artillery. An area labeled as “FBTA” (possibly Field Battalion Training Area or Firing Battery Training Area) was located to the south of the golf course, between the parcel and the Ord Village housing area in 1956 (*Army, 1956*). Areas of this type are commonly used by artillery units to train personnel in the techniques to select, setup, camouflage, and operate an artillery position. Other activities performed at a site of this type might include transporting artillery equipment, the practice of loading and aiming of artillery with training (inert) ordnance, establishing perimeter security, and defending an artillery position. Munitions-related items

that might be used at a FBTA include artillery training ordnance, blank small arms ammunition, practice mines, artillery simulators, and pyrotechnics such as signals and smoke grenades. Live fire was not allowed at training areas of this type (*Hall, 2005*). Approximately 1,500 feet to the east of the parcel an area labeled as “RSOP” (Reconnaissance, Selection, and Occupation of Position) was present. Army field manuals describe RSOP as an activity to assess and prepare for movement of platoon-based or battery-based field artillery. Review of the 1957 and 1958 Fort Ord training facilities maps indicates that the area immediately adjacent to the parcel (to the east) was assigned to the 1st Brigade. The mission of the 1st Brigade was to conduct combat support (*Army, 1968*). Neither the FBTA or the RSOP are identified on the 1957 or later training maps. Construction of the Fitch Park housing area to the northeast of the parcel occurred in 1959. By 1961 the Fitch Middle School was constructed immediately adjacent to Parcel E20c.1.3 (west of the parcel). With the exception of the firing ranges present within the Impact Area to the southeast of Parcel E20c.1.3, no training areas are identified within 1,000 feet of the parcel after the 1950s.

5.3 Area Investigations

5.3.1 Investigations Within Parcel E20c.1.3

Based on an extensive literature search that included the review of range control records, Fort Ord training facilities maps, aerial photographs, historical film footage, and historical archives searches and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions within Parcel E20c.1.3. However, because this parcel along with the adjacent parcels to the east were, to be leased for the proposed construction of a golf course the Army asked the USACE Sacramento District Office (CESPK) to perform a site reconnaissance within the accessible areas of the proposed lease area (First Tee Lease Area) to obtain initial field data. Between February 23 and March 5, 2003 an investigation team that included a GPS operator, UXO technician and a USACE UXO Safety Specialist equipped with hand-held geophysical equipment, conducted geophysical surveys (site reconnaissance) of the First Tee Lease Area including Parcel E20c.1.3. The investigation was conducted

per USACE guidance (*USACE, 2000*). The USACE UXO Safety Specialist walked along open trails through the parcel searching for magnetic anomalies. If an anomaly was found, the USACE UXO Safety Specialist would uncover the anomaly (using hand tools) to identify and remove it. If the item was determined to be MEC or munitions debris the location was recorded using a GPS. No MEC or munitions debris was found within Parcel E20c.1.3.

5.3.2 Investigation of Adjacent Areas

The areas adjacent to Parcel E20c.1.3 are a mixture of developed and undeveloped land. Adjacent areas investigated include the First Tee Lease Area, MRS-15SEA.2, and MRS-15SEA.3.

5.3.2.1 First Tee Lease Area

The proposed First Tee Lease Area was to include Parcel E20c.1.1.1, Parcel E20c.1.3 and property adjacent to (east of) Parcel E20c.1.1.1. The proposed development was to include the construction of a golf course, driving range, and maintenance and administrative buildings. A site walk that included representatives of the DTSC, USEPA, and the Army, was conducted within a portion of the accessible areas of the proposed lease area on February 13, 2003. Parcel E20c.1.3 was not included in the site walk. All participants received military munitions recognition training and were accompanied by a USACE UXO Safety Specialist. No MEC was observed within Parcel E20c.1.1.1 during the site walk. Parcel E20c.1.1.1 is undergoing additional evaluation as a candidate Track 1 area.

As part of the evaluation of adjacent parcel E20c.1.1.1 for the proposed construction of a golf course, the Army asked the CESPCK to perform a site walk within the accessible areas of the First Tee Lease Area to obtain initial field data. Between February 23 and March 5, 2003 an investigation team that included a GPS operator, UXO technician and a USACE UXO Safety Specialist equipped with hand-held geophysical equipment, conducted geophysical surveys (site walks) of the First Tee Lease Area including Parcel E20c.1.1.1. The investigation was conducted per USACE guidance (*USACE, 2000*). The USACE UXO Safety Specialist walked along open trails through the parcel searching for magnetic anomalies. If

an anomaly was found, the USACE UXO Safety Specialist would uncover the anomaly (using hand tools) to identify and remove it. If the item was determined to be MEC or munitions debris the location was recorded using a GPS. No MEC was found within Parcel E20c.1.1.1

Munitions debris was found within Parcel E20c.1.1.1, mostly within the central and eastern portions of the parcel. Three munitions debris items (expended illumination signal, expended 3.5-inch rocket motor, and an expended 3.5-inch practice rocket) were found in the western portion of Parcel E20c.1.1.1, approximately 350 feet to the east of the boundary of Parcel E20c.1.3. Parcel E20c.1.1.1 is undergoing additional evaluation as a candidate Track 1 area.

5.3.2.2 MRS-15SEA.2

MRS-15SEA.2 lies adjacent to Parcel E20c.1.3 (Plate 8). MRS-15SEA.2 lies within the former Fort Ord Impact Area and includes portions of former firing ranges. The boundary of MRS-15SEA.2 was developed to support the transfer of Parcel E34 and not on evidence of munitions use. MRS-15SEA.2 included the firing points and some of the targets associated with small arms ammunition firing ranges. The ranges closest to parcel E20c.1.3 were Range 19 and M-1 Table IX (Plate 9). Several munitions responses to MEC were conducted on MRS-15SEA.2 including grid sampling, the clearance of fuel breaks, a removal within the small arms ammunition firing ranges, a surface TCRA, a Non-Time Critical Removal Action (NTCRA), and a 100% digital geophysical survey on all remaining portions of MRS-15SEA.2 not covered by the NTCRA. Twelve MEC items and one pound of bulk explosives and 1,371 munitions debris items were removed. All anomalies detected within the accessible portions of MRS-15SEA.2 were investigated and resolved. Inaccessible areas (Special Case Areas) will be addressed in a follow-up investigation. MRS-15SEA.2 will undergo additional evaluation in the ongoing former Fort Ord MMRP.

Fort Ord Basewide Range Assessment

MRS-15SEA.2 was investigated as part of a BRA for small arms and multi-use ranges. MRS-15SEA.2 included portions of Range 19, and M-1 Table IX). Under the BRA MRS-15SEA.2 was identified as HA-113, Range 19 was identified as HA-19D, and M-1 Table IX as HA-59D. The assessment of HA-113 included a literature search and a review of the information gathered during the military munitions investigation of the site. As part of the literature search, a review of historical maps and aerial photographs and a review of data collected during military munitions sampling was conducted. Based on the initial military munitions investigation a MEC removal was performed at MRS-15SEA.2. The Comprehensive BRA Report recommended that HA-113 be evaluated further based on the results of the removal action (*MACTEC/Shaw, 2005*).

The assessment of HA-19D included characterization sampling. Sampling results indicated that lead concentrations exceeded the USEPA residential preliminary remediation goal (PRG) and remediation was recommended. The remediation of the portion of HA-19D within Parcel E34 included excavation and removal of soil in the target areas where lead concentrations exceeded 400 milligrams per kilogram (mg/kg). Because remediation is complete, no further action related to chemical contamination was recommended for HA-19D under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

The assessment of HA-59D included a literature search and a review of the information gathered during the military munitions investigations, and a site reconnaissance. No evidence of a range including targets, firing lines, or fighting positions was encountered during the site reconnaissance. Because no evidence was identified that this area was a range, no further action is recommended for HA-59D under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

5.3.2.3 MRS-15SEA.3

MRS-15SEA.3 lies adjacent to Parcel E20c.1.3 (Plate 8). MRS-15SEA.3 lies within the former Fort Ord Impact Area and includes portions of former firing ranges. The boundary of MRS-15SEA.3 was

developed to support the transfer of Parcel E23.1 and not on evidence of munitions use. MRS-15SEA.3 includes a portion of Range 18, a former small arms ammunition firing range. Features associated with Range 18 that lie within Parcel E23.1 include some of the firing points and some of the targets. Several munitions responses to MEC were conducted on MRS-15SEA.3 including road clearances, grid sampling, the clearance of fuel breaks, a removal within the small arms ammunition firing range, a surface TCRA, NTCRA, and a 100% digital geophysical survey on all remaining portions of MRS-15SEA.3 not covered by the NTCRA. One-hundred twenty-four MEC items and 215 munitions debris item were removed. All anomalies detected within the accessible portions of MRS-15SEA.3 were investigated and resolved. Inaccessible areas (Special Case Areas) will be addressed in a follow-up investigation. MRS-15SEA.3 will undergo additional evaluation in the ongoing former Fort Ord MMRP.

Fort Ord Basewide Range Assessment

MRS-15SEA.3 was investigated as part of a BRA for small arms and multi-use ranges. MRS-15SEA.3 included a portion of former Range 18. Under the BRA MRS-15SEA.3 was identified as HA-114 and Range 18 was identified as HA-18D. The assessment of HA-114 included a literature search and a review of the information gathered during the military munitions investigation of the site. Based on the initial military munitions investigation (sampling) a MEC removal was performed at MRS-15SEA.3. The Comprehensive BRA Report recommended that HA-114 be evaluated further based on the results of the removal action (*MACTEC/Shaw, 2005*).

The assessment of HA-18D included characterization sampling. Sampling results indicated that lead concentrations exceeded the USEPA residential PRG and remediation was recommended. The remediation of the portion of HA-18D within Parcel E23.1 included the excavation and removal of soil in target areas where lead concentrations exceeded 400 mg/kg. Because remediation is complete, no further action related to chemical contamination was recommended for HA-18D under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

5.4 Incidental MEC Item

On March 18, 2005 a construction crew working along General Jim Moore Boulevard discovered an unfired 40mm high explosive cartridge (Model M406) approximately 20 feet from the edge of the road on the east side. The item was located about 40 feet north of Parcel E20c.1.3 (Plate 7). As per protocol, work was halted and the discovery was immediately reported to the federal police. The federal police responded to the report and then notified the USACE UXO Safety Specialist. The USACE UXO Safety Specialist determined that the MEC item was safe to remove and placed the item in the military munitions Safe Holding Area for later disposal. Because of the location of the discovery of the 40mm high explosive cartridge (adjacent to the General Jim Moore Boulevard and in the close proximity to a housing area) it is not believed that this item was associated with training activities in this area, but was discarded at this location.

5.5 Rationale for Track 0 Designation of Parcel E20c.1.3

MEC is not likely to be present on this parcel for the following reasons:

- A review of the military munitions program related documentation for the former Fort Ord including, the Archives Search Reports (*USAEDH, 1993, 1994 and 1997*), the Literature Review Report OE RI/FS (*HLA, 2000a*), the Track 0 Technical Memorandum (*HLA, 2000b*), the Track 1 OE RI/FS (*MACTEC, 2004*), the Comprehensive Basewide Range Assessment (*MACTEC/Shaw, 2005*), and the Site Visit Report for Parcels E20c.1.1.1 and E20c.1.1.2 (*USACE, 2003*), did not indicate that military munitions were used on Parcel E20c.1.3.
- No MEC or munitions debris or other evidence of training was found on Parcel E20c.1.3 during a site walk conducted by a USACE UXO Safety Specialist on the parcel in 2003.
- The presence of the 40mm high explosive cartridge, found on the north side of Parcel E20c.1.3 adjacent to General Jim Moore Boulevard, does not indicate military training involving military munitions occurred in this area.

- No MEC was found on adjacent Parcel E20c.1.1.1 during a site walk conducted by a USACE UXO Safety Specialist in 2003. The nearest munitions debris items found during the site walk were approximately 350 feet to the east of Parcel E20c.1.3.

5.6 Track 0 Checklist – Group 4

PARCEL	Parcel E20c.1.3
DESCRIPTION	Parcel E20c.1.3 approximately 10 acres (Plate 8). Portion of General Jim Moore Boulevard and associated right-of-way located between the Fitch Middle School and the Fitch Park housing area.
HISTORICAL USE	<p>History suggests no use of military munitions Prior to Army purchase was ranch land owned by the David Jacks Corporation. The parcels are included within an approximately 15,600-acre parcel purchased by the Army in 1917 and used as an artillery range for troops stationed at the Presidio of Monterey.</p> <p>1933: Dirt road in the approximate location of General Jim Moore Boulevard.</p> <p>1941: Ord Village housing area constructed approximately 3,500 feet to the west of the parcel beginning in 1941.</p> <p>1945: North-South Road (predecessor to General Jim Moore Boulevard) is identified on a 1945 Training Facilities map. The road is in the same location as present day General Jim Moore Boulevard. The Fort Ord Impact Area and associated ranges are present adjacent to the parcel. Firing at these ranges was directed away from the parcel toward the south and southeast.</p> <p>1953: Construction of one of two golf courses approximately 1,500 feet to the northwest of the parcel.</p> <p>1956: An area labeled FBTA is adjacent to the parcel (west side). The area immediately adjacent to the parcel on the east side is assigned to Division Artillery. A rectangular area identified as “RSOP” is present approximately 1,500 feet east of the parcel.</p> <p>1958-1959: PG&E transmission lines are present and run parallel to the parcel, approximately 380 feet to the east.</p>

1959: The Fitch Park Housing area is constructed adjacent to the parcel.
 1961: The Fitch Park Middle School is constructed on the west side of the parcel.
 With the exception of the adjacent Impact Area no training areas are identified within 1,000 feet of the parcel after the 1950s.

Supporting documents

Literature Review and Base Inventory Report, Volume 1; Community Environmental Response Facilitation Act (CERFA) Report; Archives Search Reports; OE RI/FS Literature Review; Track 1 OE RI/FS; Comprehensive Basewide Range Assessment.

Components

Aerial Photos

7/25/41, 11/22/41, 8/17-18/49, 6/23/51, 5/14/56, 58/59 (aerial contours), 1/11/65 (mosaic), 12/17/75, 6/16/78, 3/25/86, 10/4/89.

Real Estate Records

1913: Department of the Interior, reprinted 1918
 1915: Proposed Acreage Subdivisions
 1922: Assessors Plats, Monterey County
 3/18/88: Real Estate, Fort Ord

Range Control Records/ Standard Operating Procedures

Not applicable to this area

Range and Training Area Maps

8/45: Training Facilities
 Circa 1954: Training Areas that Cannot Be Used at the Same Time
 7/3/56: Range Complex
 12/20/56: Fort Ord Training Areas & Facilities
 7/15/57: Training Areas & Facilities
 1/10/58: Training Areas & Facilities
 12/31/58: Ranges & Training Facilities
 6/30/61: Basic Information, Training Facilities
 4/27/64: Field Training Areas & Range Map
 1/67: Field Training Areas & Range Map
 3/13/68: Training Facilities Map
 11/1/71: Training Facilities Plan
 1/7/72: Field Training Area and Range Map
 3/16/72: Training Ranges and General Road Map
 2/1/76: Ranges and Training Area Overlay
 12/1/76: Future Development Plans, Training Facilities Plan
 6/1/77: Training Facilities Plan
 1/78: Ranges and Training Area Overlay

7/15/78: Ranges and Training Area Overlay
 3/80: Training Facilities Map
 6/1/81: Ranges and Training Area Overlay
 4/1/82: Ranges and Training Area Overlay
 4/27/84: Field Training Areas and Range Map
 6/84: Training Facilities Map
 11/15/87: Ranges and Training Area Overlay

Base Development Plans and Maps

1922: Assessors Plats, Monterey Co.
 1934: War Department, Camp Ord and Vicinity
 1944: Army Map Service, Fort Ord Military Reservation
 3/20/46: Ord Village, General Road Map
 4/5/46: Fort Ord Master Plan, Reservation Boundary & Land Use Maps
 1972: Fort Ord and Vicinity (V895S)
 3/1/75: Master Plan, Reservation Map
 8/1/84: Fort Ord Military Installation Map (V795S)
 2/10/90: Fort Ord Locator Map, Main Garrison

SITE INVESTIGATION ACTIVITIES

Site Walks

Site Reconnaissance: A site reconnaissance conducted within the parcels that made up the proposed First Tee Lease Area, including a portion of Parcel E20c.1.3, was conducted in late February and early March of 2003 to obtain initial field data. The site walk team included a GPS operator, UXO technician and a USACE UXO Safety Specialist equipped with hand-held geophysical equipment. The investigation was conducted per USACE guidance (*USACE, 2000*). The USACE UXO Safety Specialist walked along open trails searching for magnetic anomalies. If an anomaly was found, the USACE UXO Safety Specialist would uncover the anomaly (using hand tools) to identify and remove it. If the item was determined to be MEC or munitions debris the location was recorded using a GPS. No MEC or munitions debris was found within Parcel E20c.1.3.

Property Transfer: A portion of the parcel was walked in support of the future transfer of this parcel and no evidence of military munitions was observed.

Geophysics	Schonstedt GA-52/Cx used during the site walk conducted over a portion of the parcel.
Excavations	None
Soil Borings	None
Wells	None

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	Ranges 18, 19 and 20 in the adjacent Impact Area Parcels E23.1 and E34)

MILITARY MUNITIONS INFORMATION**Known or Suspected Adjacent MRS**

Parcel E20c.1.1.1, Site Reconnaissance: A site reconnaissance conducted within the parcels that made up the proposed First Tee Lease Area, including Parcel E20c.1.1.1, was conducted in late February and early March of 2003 to obtain initial field data. The site walk team included a GPS operator, UXO technician and a USACE UXO Safety Specialist equipped with hand-held geophysical equipment. The investigation was conducted per USACE guidance (*USACE, 2000*). The USACE UXO Safety Specialist walked along open trails searching for magnetic anomalies. If an anomaly was found, the USACE UXO Safety Specialist would uncover the anomaly (using hand tools) to identify and remove it. If the item was determined to be MEC or munitions debris the location was recorded using a GPS. Munitions debris was found within Parcel E20c.1.1.1, mostly within the central and eastern portions of the parcel. Three munitions debris items (expended illumination signal, expended 3.5-inch rocket motor, and an expended 3.5-inch practice rocket) were found in the western portion of Parcel E20c.1.1.1, approximately 350 feet to the east of the boundary of Parcel E20c.1.3. Parcel E20c.1.1.1 is undergoing additional evaluation as a candidate Track 1 area.

MRS-15SEA.2 – This site is located adjacent to Parcel E20c.1.3 (Plate 7). MRS-15SEA.2 lies

within the former Fort Ord Impact Area and includes portions of former firing ranges. The boundary of MRS-15SEA.2 was developed to support the transfer of Parcel E34 and not on evidence of munitions use. MRS-15SEA.2 included the firing points and some of the targets associated with two small arms ammunition firing ranges (Ranges 19 and 20). Several munitions responses to MEC were conducted on MRS-15SEA.2 including grid sampling, the clearance of fuel breaks, a removal within the small arms ammunition firing ranges, a surface Time Critical Removal Action (TCRA), a Non-Time Critical Removal Action (NTCRA), and a 100% digital geophysical survey on all remaining portions of MRS-15SEA.2 not covered by the NTCRA. All anomalies detected within the accessible portions of MRS-15SEA.2 were investigated and resolved. Twelve MEC items and one pound of bulk explosives and 1,371 munitions debris items were removed. Inaccessible areas (Special Case Areas) will be addressed in a follow-up investigation. MRS-15SEA.2 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

MRS-15SEA.3 – This site is also located adjacent to Parcel E20c.1.3 (Plate 7). The boundary of MRS-15SEA.3 was developed to support the transfer of Parcel E23.1 and not on evidence of munitions use. MRS-15SEA.3 lies within the former Fort Ord Impact Area and includes a portion of Range 18, a former small arms ammunition firing range. Features associated with Range 18 that lie within Parcel E23.1 include some of the firing points and some of the targets. Several munitions responses to MEC were conducted on MRS-15SEA.3 including road clearances, grid sampling, the clearance of fuel breaks, a removal within the small arms ammunition firing range, a surface TCRA, a NTCRA, and a 100% digital geophysical survey on all remaining portions of MRS-15SEA.3 not covered by the NTCRA. All anomalies detected within the accessible portions of MRS-15SEA.3 were investigated and resolved. One-hundred twenty-four MEC items and 215 munitions debris item were removed. Inaccessible areas (Special Case

Areas) will be addressed in a follow-up investigation. MRS-15SEA.3 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

**Incident Reports
MEC**

None

Munitions Debris

None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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