

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

Former Fort Ord, California

May 27, 2005

United States Department of the Army
Base Realignment and Closure (BRAC)
Former Fort Ord, California

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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 (Plate 1) 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 Technical Memorandum (*HLA, 2000b*) has been completed and a Record of Decision (ROD; *Army, 2002*) signed that 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 B) 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 thirty (30) parcels that have been grouped 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 and 3. 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 30 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. 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, Toro Park, and Highway 68 border former Fort Ord to the south and southeast. 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 (BRAC) Act. 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.

In preparation for transfer and reuse of former Fort Ord property, various military munitions-related investigative and removal/remedial activities have been performed. Potential chemical contamination at the former Fort Ord was investigated under the Basewide Remedial Investigation/Feasibility Study (*HLA, 1995*). 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 Remedial Investigation/Feasibility Study (RI/FS) consistent with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). An agreement was signed between the Army, the USEPA, and the DTSC to evaluate

military munitions at the former Fort Ord subject to the provisions of the Fort Ord Federal Facility Agreement (FFA) in April 2000 (Army, 2002).

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.
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).
3. *Track 2:* Sites where MEC items were present, and MEC removal actions have been completed.
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. 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 that 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 Record of Decision (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 30 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 an area as Track 0;
4. A checklist summarizing the key elements of Track 0 documentation; and
5. A map of the area detailing 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*).

1.3 Group B Parcels Background

The Track 0 Plug-In Group B Parcels are located primarily in the northern and extreme southern portions of the former Fort Ord (Plates 2 and 3). Each of the thirty Group B Parcels evaluated in this Approval Memorandum was identified as a Track 0 parcel; several of the parcels are located immediately adjacent to land previously approved as Track 0 parcels (*Final Record of Decision, No Action Regarding Ordnance-Related Investigation, Former Fort Ord, California, June 19, 2002*). This Approval Memorandum summarizes the evaluation of the parcels and outlines the rationale for recommending no action regarding a munitions response. For discussion purposes the parcels are grouped together based on proximity to one another (Group 1 through Group 9; Table 1).

2.0 GROUP 1 – PARCELS S3.2.1 and S3.2.2

2.1 Description

The Group 1 parcels S3.2.1 and S3.2.2 are located in the west-central portion of the former Fort Ord just north of the former Fort Ord main entrance and adjacent to the east side of Highway 1 (Plate 4). These parcels comprise approximately 11 acres of undeveloped land that is slated for development. No buildings or other structures are located on these parcels. The Group 1 parcels are surrounded by property that was previously evaluated under the Fort Ord MR RI/FS program and determined to be Track 0 (*Army, 2002*).

2.2 History and Use

These parcels lie on a tract of former agricultural land that was purchased from private landowners by the Army sometime after July 1, 1940 (*Arthur D. Little [ADL], 1994*). Development of adjacent parcels (north and east) began in the early 1940s with the construction of buildings and roads. Review of 1940s-era documentation including historical maps and aerial photographs does not indicate any specific training sites within these parcels. Both parcels lie within an area designated as a “Well Area, No Artillery Firing Or Demolitions” as shown on the 1945 Fort Ord Training Facilities Map (*Army, 1945*). Beginning in the early 1940s, the Army established small arms firing ranges at Munitions Response Site (MRS) 22 northwest of the parcels (west side of Highway 1). Firing at these ranges was toward the west into the dune faces in the opposite direction of the parcels. Also in the 1940s, widening of adjacent Highway 1 was performed. Adjacent parcels to the east were used for physical training and non-live fire rifle instruction. By 1956, a Machine Gun Square was established adjacent to or slightly overlapping the southeastern portion of Parcel S3.2.1. The machine gun squares were used for the practice of setting up and aiming of weapons or dry fire training (*USAEDH, 1993*). A Recoilless Rifle Training Range (MRS-20), also a non-live fire area, was present at that time approximately 1,300 feet south of the parcels. In 1972, additional road construction was completed that included the widening of Highway 1

and creation of an off ramp for a new Fort Ord main entrance at the south end of Parcel S3.2.1. First Avenue, which currently makes up the eastern boundary of Parcel S3.2.1, was also reconfigured at this time. Physical training areas present adjacent to the parcels in the 1970s and 1980s included hand-to-hand combat, rappelling, and unit training.

2.3 Area Investigations

2.3.1 Investigations Within Group 1 Parcels

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 on these parcels and consequently no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed.

One groundwater monitoring well and one soil boring associated with adjacent Installation Restoration Program (IRP) Site 20 is present on Parcel S3.2.1. The monitoring well has been sampled on at least an annual basis since 1992 and military munitions-related items have been reported during these activities.

In support of the future transfer of this property, a site visit of the Group 1 parcels 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 portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visit.

2.3.2 Investigation of Adjacent Areas

Parcels S3.2.1 and S3.2.2 lie at the south end of the Main Garrison of the former Fort Ord (Plate 4). The area immediately to the west includes Highway 1 and to the east is undeveloped land. The south end of the parcel lies adjacent to the main entrance to the former Fort Ord. All surrounding land is comprised of

Track 0 parcels that have been addressed previously in the Track 0 Record of Decision (*Army, 2002*) and have been, or will be transferred to the Fort Ord Reuse Authority (FORA) for retail and mixed use development. Installation Restoration Program (IRP) Site 20 lies to the east of the parcels. MRS-20 is approximately 1300 feet south of the parcels and is separated by a road and undeveloped land. The following sections provide additional descriptions of these adjacent areas.

Although MRS-22 lies within 500 feet of the Group 1 parcels, it was used primarily for the firing of small arms ammunition and is separated from the Group 1 parcels by Highway 1. Highway 1 was in this approximate location prior to the establishment of MRS-22. It is not likely that training at MRS-22 would have resulted in the presence of military munitions on the Group 1 parcels or any other parcels on the east side of Highway 1.

2.3.2.1 MRS-20 (Recoilless Rifle Training Area)

MRS-20 is approximately 7 acres located in the southwestern portion of the Main Garrison of the former Fort Ord north of Gigling Road and east of Highway 1 (Plate 4). MRS-20 was identified as a potential Recoilless Rifle Training Range through a review of Fort Ord historic records completed as part of the Fort Ord Archives Search (*USAEDH, 1993*). No evidence has been found to suggest that MRS-20 was used for anything in the past other than a troop training area for recoilless rifle familiarization.

In 1994, Human Factors Applications Inc. (HFA) completed a subsurface investigation east of MRS-20 (*HFA, 1994*). Sampling of an area down range and east of MRS-20 in the assumed target area was performed and no evidence of military munitions use was found. No military munitions items were found during grid sampling and no evidence was found to suggest that MRS-20 was used for firing of recoilless rifles or any other weapons. HFA recommended no further action for this site (*HFA, 1994*). Based on the minimum range safety distances for recoilless weapons ranges, it is not feasible that MRS-20 could have supported a live fire range.

Based on the investigation described above, MRS-20 was categorized as a Track 1 site. Track 1 sites are those suspected to have been used for military training with military munitions. MRS-20 was subsequently evaluated in the Track 1 OE RI/FS (*MACTEC, 2004*). Historical research and sampling conducted at this site found no evidence of past training involving military munitions. The Track 1 OE RI/FS therefore recommended no further military munitions investigation at MRS-20 (*MACTEC, 2004*).

2.3.2.2 IRP Site 20 – South Parade Ground, 3800 and 519th Motor Pools

IRP Site 20 is located in the southern portion of the Main Garrison on the north side of the main entrance immediately adjacent to the Group 1 parcels (Plate 4). IRP Site 20 includes former parade grounds, and two motor pools. The portion of IRP Site 20 that is adjacent to Parcel S3.2.1 was used as a physical training area and was investigated based on reports that the area was used as a landfill (*HLA, 1995b*).

IRP Site 20 was investigated for the presence of chemical contamination under the Basewide RI/FS program. Extensive field work was performed including site walks, soil boring investigations, geophysical surveys, and trenching. Trenching activities were completed to the east of Parcel S3.2.1 by military munitions specialists to investigate geophysical anomalies identified during characterization of IRP Site 20. No evidence of military munitions was found during this investigation. One monitoring well and two pilot borings were installed on Parcel S3.2.1 during the characterization of IRP Site 20. No evidence of military munitions was found during drilling.

2.4 Rationale for Track 0 Designation of Parcels S3.2.1 and S3.2.2

Parcels S3.2.1 and S3.2.2 meet the definition of Track 0 areas because they contain no evidence of MEC and have never been suspected as having been used for military munitions related training. This conclusion is based on the following rationale:

- Review of the military munitions program-related documentation for the former Fort Ord including the Archives Search Reports (*USAEDH, 1993, 1997*), the Literature Review Report completed under the basewide 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 these parcels.

- The land surrounding these parcels, including Highway 1, were previously determined to be Track 0; therefore, no impact to the Group 1 parcels associated with military munitions would have occurred.
- No evidence was found to indicate the use of military munitions on Parcel S3.2.1 during the intrusive investigations associated with IRP Site 20.
- No evidence was found to indicate the use of military munitions on nearby MRS-20; the site was evaluated as Track 1 and no further action is recommended.

2.5 Track 0 Checklist – Group 1 Parcels

PARCELS	S3.2.1 and S3.2.2
DESCRIPTION	Approximately 11 acres of undeveloped land within the former Fort Ord main garrison. Parcels lie adjacent to (east side) Highway 1 (Plate 4).
HISTORICAL USE	History suggests no use of military munitions. Prior to Army purchase, the land included ranch land. Acquired by the Army after July 1, 1940. 1940: Army begins establishment of the Beach Ranges (MRS-22) adjacent to the parcels. 1940s: Improvements made to Highway 1 including widening. 1956: Machine Gun Square established adjacent to (or partially overlapping) the southern portion of Parcel S3.2.1, near the approximate location of the future main entrance. Site MRS-20, a recoilless rifle training range, is established approximately 1300 feet to the south of Parcel S3.2.1. 1958: Machine Gun Square and recoilless rifle training area no longer shown on training facilities maps.

About 1972: Highway 1 improvements including widening and the creation of an off ramp for a new Fort Ord main entrance at the southern end of Parcel S3.2.1.

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; OEW Sampling and OEW Removal Action Report; Sampling/Characterization After Action Report, MRS-22 (Beach Ranges).

Components

Aerial Photos

Pre-1940, 7/25/41, 10/14/41, 8/17/49, 6/23/51, 7/3/51, 5/14/56, 58/59 (aerial contours), 1/11/65 (mosaic), 6/3/66, 3/13/69, 12/17/75, 4/13/85, 10/22/85, 3/25/86, 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
 12/1/76: Future Development Plans, Training Facilities Plan
 3/1/76: Close In Training Areas

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
 1944: Army Map Service, Fort Ord Military Reservation
 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

Portions of parcels walked during the site characterization activities associated with IRP Site 20.

Property Transfer: Portions of the parcels walked in support of the future transfer of these parcels, no evidence of the use of military munitions was observed.

Geophysics

None

Excavations

None

Soil Borings

Two pilot borings drilled as part of the site characterization activities associated with IRP Site 20.

Wells

One monitoring well installed at one of two pilot boring locations during site characterization activities associated with IRP Site 20.

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	None
Other Training Areas	Former machine gun square located adjacent to (or partially overlapping) the southern portion of Parcel S3.2.1.

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRSs	MRS-20 – Sampling of this site (a recoilless rifle training range) was conducted and no evidence of the use of military munitions was found (Plate 4). No further MEC-related investigation was recommended in the Track 1 OE RI/FS.
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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 – PARCEL E2d.3.1

3.1 Description

The Group 2 parcel (E2d.3.1) is within the former Fort Ord Main Garrison; the earliest and most heavily developed portion of the former Fort Ord. The parcel is located west of Third Avenue between 8th and 9th Streets (Plate 2). The parcel is approximately 25 acres and contains six structures including a 200,000-gallon aboveground water storage tank. The Group 2 parcel is largely surrounded by property that was previously evaluated under the Fort Ord MR RI/FS program and determined to be Track 0 (Army, 2002).

3.2 History and Use

This parcel lies on a tract of former agricultural land that was purchased from private landowners by the Army sometime after July 1, 1940 (ADL, 1994). The majority of the development around this parcel occurred in 1940 and 1941 and included the construction of troop barracks, chapels, theaters, motor pools, stables, maintenance facilities, a hospital, recreation areas, and the installation of water supply wells. At this same time construction of the base infrastructure (e.g., underground storage tanks, utilities, oil-water separators, and sumps) was occurring. The parcel lies within an area designated as “Well Area, No Artillery Firing Or Demolitions” as shown on the 1945 Fort Ord Training Facilities Map (Army, 1945). Review of 1940s era documentation including historical maps and aerial photographs does not indicate any specific training sites within this parcel. Nearby parcels were used for physical training and for military training without military munitions (e.g., rifle and mortar instruction). Mortar and rifle instruction included the practice of setting up and aiming of weapons or dry-fire training (USAEDH, 1993). In 1944, the eastern portion of the parcel was being used by a medical detachment and the western portion was identified as Women’s Army Corps (WAC) Area. By 1956, the eastern portion was no longer in use by the medical detachment and was designated as a salvage area. Between 1969 and 1975, the buildings on the eastern portion of the parcels were demolished. In 1977, Training Site 28 (TS 28 –

Pole Orchard), identified as a “close-in” training site, was established in the eastern portion of the parcel as a field communications training area. Communications training ceased in this location by 1985. The western portion of MRS-2 is adjacent to Parcel E2d.3.1. MRS-2 was identified as a possible chemical training area and landfill.

3.3 Area Investigations

3.3.1 Investigations Within Group 2 Parcels

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 on Parcel E2d.3.1 and consequently no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed.

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 PCBs, drums, and scrap metal. This site was originally inspected by the 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 were found during the investigation of IRP Site 25.

In support of the future transfer of this property, site visits of the Group 2 parcel were conducted in January and February 2005. The team performing the site visits 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 visits included walking portions of the parcel and documenting general site conditions. No evidence of military munitions was observed during the site visits.

3.3.2 Investigation of Adjacent Areas

This parcel lies within the central portion of the former Fort Ord Main Garrison (Plate 5). All parcels surrounding Parcel E2d.3.1, except the parcel immediately to the east, which is partially overlain by MRS-2, are Track 0 parcels as described in the Track 0 ROD (*Army, 2002*). 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 the eastern portion of Parcel E2d.3.1. The western portion of MRS-2 (south side of 8th Street) was identified as a former disposal area (Plate 5). The disposal area was investigated and remediated under the Fort Ord Basewide RI/FS (*HLA, 1995*) as IRP Site 16 (Section 3.3.2.1). Another disposal area located to the south of Parcel E2d.3.1, adjacent to IRP Site 16 and MRS-2 and was investigated as IRP Site 17.

Two instances of incidental inert military munitions (munitions debris) discoveries have been reported on an adjacent parcel. The parcel where these incidents occurred was previously identified as Track 0 (*Army, 2002*). In late 1993, an inert practice mine was removed by the 49th EOD from a parking area across the street from Parcel E2d.3.1. Fort Ord Range Control questioned the responding EOD personnel and found that the item was an inert training device. Because no training with military munitions was conducted in this area, it is likely that the practice mine was a discarded item (*HLA, 1994*). A second inert practice mine was also picked up in 1993 by the EOD from a building to the north of Parcel E2d.3.1. On September 8, 1993, the Fort Ord 49th EOD was called to Building 3107, the Thrift Shop, to remove a practice antitank (AT) mine that had reportedly been brought to this location to be sold at a garage sale-type event. The item was removed and returned to inventory for training. The presence of the practice AT mine at the Thrift Shop is not related to past training activities at this location and did not represent an explosive risk to the public. A detailed report documenting this incident was submitted to the DTSC and the USEPA on June 3, 2002.

3.3.2.1 IRP Sites 16 and 17

IRP Sites 16 and 17 are located on the east side of the central portion of the Main Garrison south of Parcel E2d.3.1. 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 hydrocarbons, VOCs, SOCs, dioxins, and metals associated with former disposal areas (Pete's Pond and Pete's Pond Extension). Remediation at IRP Site 17 included the excavation and removal of debris and soils containing hydrocarbons, dioxins, and metals released from a former disposal area. 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, 1999b*). 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 inert practice rockets (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 and is discussed in the Track 0 ROD (*Army, 2002*). 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.

3.3.2.2 MRS-2 (Chemical Training Area)

MRS-2 is approximately 34 acres and is located in the eastern portion of the former Fort Ord Main Garrison and divided by 8th Street (Plate 2). 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 ASR indicated that MRS-2 was not an impact area. In 1994, 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 Chemical Agent Identification Sets (CAIS) may have been buried. Four of the grids were located outside of the site boundary to the southeast of the site. The number of anomalies detected at the site was not specified in the HFA report. Two munitions debris items (a practice grenade and a practice bomb) were found and removed during grid sampling. The exact location and depth of burial of these items was not documented in the HFA report. On the basis of the sampling results, no further investigation was recommended (*HFA, 1994*). As described in Section 3.3.2.1, 468 inert 2.36-inch practice rockets 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*).

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.

However, research into the reports of the use of CAIS kits should be performed to verify the validity of reports that CAIS kits were buried in the site vicinity. The Track 1 OE RI/FS recommended that MRS-2 should be retained in the Track 1 process (*MACTEC, 2004*). Therefore, 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, 2005*).

3.4 Rationale for Track 0 Designation of Parcel E2d.3.1

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 Report (*USACE 1997*), the Literature Review Report OE RI/FS (*HLA, 2000*), 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 this parcel.
- No evidence was found during investigations conducted at IRP Site 25 to indicate the use or storage of military munitions.
- No evidence was found to indicate the use of military munitions on nearby MRS-2 or IRP Sites 16 and 17.
- This parcel is mostly surrounded by other Track 0 parcels and is situated in the oldest and most developed portion of the former Fort Ord. To date, there have been no reports of military munitions discoveries by the recipients of property surrounding this parcel.

3.5 Track 0 Checklist – Group 2 Parcels

PARCEL

E2d.3.1

DESCRIPTION

This parcel is in the Main Garrison within some of the earliest and most heavily developed portions of the former Fort Ord. The parcel is approximately 25 acres and contains six structures including a water storage tank (Plate 5).

HISTORICAL USE

History suggests no use of military munitions. Prior to Army acquisition this area was ranch land (David Jacks Corporation and Rancho Noche Buena).

The parcel is included within in a tract of acquired by the Army after July 1, 1940. No permanent structures were built on the property until 1941.

1940: Construction of support facilities on the surrounding parcels including motor pools, a hospital complex, barracks, warehouses, horse stables, theaters, chapels and water supply wells. This development included the installation of underground storage tanks, oil-water separators and sumps.

1941: Construction of Buildings T1443 (general storehouse), T2992 (warehouse), P2985 (water storage tank), and other water storage tanks.

1943: Construction of Buildings T2994 (general instruction building), T2995 (administration), and T2996 (general instruction).

1944: Buildings are present on the eastern side of the parcel. Designated as a "Medical Detachment Area." Buildings on the western portion of the parcel are designated as "WAC Area."

1945: Parcel within area identified on maps as "Well Area, No Artillery Firing or Demolitions."

1956: Eastern portion of the parcel designated as "Salvage."

1975: At some time prior to December 1975, but after 1969, all buildings within the eastern portion of the parcel are demolished.

1977: Training Site 28 (TS 28 - Pole Orchard) is present within the eastern portion of the parcel.

1980: TS 28 still present within the parcel.

1985: By 1985 it appears that TS 28 is no longer in use.

SUPPORTING DOCUMENTS

Literature Review and Base Inventory Report, Volume 1; Community Environmental Response Facilitation Act (CERFA) Report; Environmental Baseline Survey, Main Garrison Parcels; Archives Search Reports; OE RI/FS Literature Review; Track 1 OE RI/FS; Fort Ord Range Regulations (350-5); Fort Ord UST Management Plan; Groundwater Well Management Plan Update; Remedial Investigation Sites 16 and 17; Site 18 - 1600

Block Facility; Site Characterization Site 19 –
2200 Block Facility; Field Investigation and
Data Review, Solid Waste Management Units;

Components

Aerial Photos

Pre-1940, 7/25/41, 10/14/41, 11/22/41, 8/17/49,
6/23/61, 7/3/51, 5/14/56, 58/59 (aerial contours),
1/11/65 (mosaic), 5/2/66, 6/3/66, 10/18/74,
12/17/75, 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

Fort Ord Pam 350-5: Close In Training Areas

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
12/1/76: Future Development Plans, Training
Facilities Plan
3/1/76: Close In Training Areas
6/1/77: Training Facilities Plan
9/77: Close In Training Areas
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

Base Development Plans and Maps

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

1922: Assessors Plats, Monterey Co.
 1934: War Department, Camp Ord and Vicinity
 1940: Fort Ord Locator Map
 1944: Army Map Service, Fort Ord Military Reservation
 7/3/44: Fire Hydrants & Fire Telephones
 3/20/46: Fort Ord Master Plans
 4/5/46: Fort Ord Master Plans
 2/56: Main Garrison Layout
 8/17/63: Main Garrison Layout
 1/15/69: Post Locator Map
 1972: Fort Ord and Vicinity (V895S)
 3/1/75: Master Plan, Reservation Map
 6/1/77: Reservation Plan, Future Development Plans
 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**

HTW program: Asbestos survey of buildings on the parcel. Site walks conducted at IRP Site 25 and at SWMU FTO-022.
 Property Transfer: Portions of the parcel walked in support of the future transfer of the parcel, no evidence of the use of military munitions was observed.

Geophysics

None

Excavations

Development of parcel beginning in 1940. Building construction 1940 to about 1944.

UST Management Program: Oversight of the removal of USTs 2999.1 and 3039A.1.

Soil Borings

Six soil borings drilled during investigation of IRP Site 25.

Wells

Water supply wells: 1 (destroyed).

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	None

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS

MRS-2: Identified as a potential chemical training area and landfill (Plate 5). 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 inert 2.36-inch practice rockets 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 Track 1 site.

**Incident Reports
MEC**

None

Munitions Debris

None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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4.0 GROUP 3 – PARCELS E4.7.1, and E4.7.2

4.1 Description

The Group 3 parcels are located in the north central portion of the former Fort Ord and include the northern end of Imjin Road and associated right-of-ways. The combined approximate area is 10 acres (Plate 6). The surrounding property includes former military housing previously transferred to the City of Marina, habitat reserve areas that were transferred to the University of California at Santa Cruz, and a U.S. Army Reserve Center.

4.2 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*). In about 1946, Imjin Road (including Parcels E4.7.1 and E4.7.2) was established in approximately the same location. No formal development occurred in this area until land filling began to the southwest in 1956 (Area A of the OU2 Landfill) and to the south in 1960 (main OU2 Landfill). Training areas established in the vicinity included a Practice Mortar Range (MRS-13A) in the 1950s (*Army, 1954*). No references to practice mortar training are documented on training facilities maps after 1958. From 1964 through 1984, a light vehicle driving course was present west of Parcel E4.7.1 and a Field Communication Crewman Course was on the east side of Imjin Road. Both training areas were assigned to the 4th Brigade. The 4th Brigade was tasked with combat support training (e.g., basic Army administration, food service, basic unit supply, field communications, and light wheel vehicle driving). Construction of military housing adjacent to the Group 3 parcels occurred in the early 1980s.

4.3 Area Investigations

4.3.1 Investigations Within Group 3 Parcels

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 search

documents and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on E4.7.1 and E4.7.2, and consequently, no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. These parcels are within areas investigated under the former Fort Ord Basewide RI/FS program. In support of the future transfer of this property, a site visit of the Group 3 parcels 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 portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visits.

4.3.2 Investigation of Adjacent Areas

The Group 3 parcels lie adjacent to IRP Site 27, and a Track 0 parcel. The investigation of IRP Site 27 is discussed below. The northern end of Parcels E4.7.1 and E4.7.2 are bounded by Reservation Road, previously identified as a Track 0 parcel. A description of the adjacent Track 0 parcels is provided in the Track 0 ROD (*Army, 2002*).

4.3.2.1 IRP Site 27 – Army Reserve Motor Pool

IRP Site 27 is located adjacent to (east of) the Group 3 parcels. The site was the former motor pool for the Army reserve center and was investigated for the presence of chemical contamination under the Basewide RI/FS program. Areas of concern that were investigated included a vehicle wash rack, an oil/water separator, an underground waste oil storage tank, and a hazardous waste storage area. The investigation included a site walk, review of records documenting storage at the hazardous waste storage area, drilling and sampling of a soil boring and the excavation and removal of the underground storage tank. No evidence of the use or storage of military munitions at IRP Site 27 was found during the investigation (*HLA, 1994a*).

4.4 Rationale for Track 0 Designation of Parcels E4.7.1 and E4.7.2

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, 1997*), the Literature Review Report (*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 these parcels.
- Parcels E4.7.1 and E4.7.2 (Imjin Road) have been in this approximate location since at least 1946. Subsequent to this time, the road has undergone construction including widening and paving. No evidence of military munitions were reported during construction.

4.5 Track 0 Checklist – Group 3

PARCELS	E4.7.1 and E4.7.2
DESCRIPTION	These parcels include a portion of Imjin Road, and lie in the north central portion of the former Fort Ord. The parcels are made up of approximately 10 acres of road and associated right of ways (Plate 6).
HISTORICAL USE	History suggests no use of military munitions. Area was ranch land prior to purchase by the Army after July 1, 1940. 1946: Imjin Road is present in approximately the same location as it is today. 1956-1966: Area A Landfill in use to the southwest of the parcels (north side of Imjin Road). 1960: Landfilling begins to the south in the main OU2 Landfill. 1964–1972: Light vehicle driving course west side of Imjin road adjacent to Parcels E4.7.1 and E4.7.2. Filled Communication Crewman Course on the east side of Imjin Road. Both are assigned to the 4 th Brigade.

1964-1972: Imjin Road appears to be in the same location as it is today.
 1964-1984: Light Vehicle Driving Course on the west side of Imjin road.
 1982: Construction of military housing adjacent to the Group 3 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; After Action Report, MEC Grid/Stats Sampling, Site MRS-13A; Site MRS-13A After Action Report; OEW Sampling and OEW Removal Action; Remedial Action Confirmation Report, Area A, Operable Unit 2 Landfills; Predesign Technical Memorandum, Operable Unit 2, Fort Ord Landfills; Record of Decision No Action Regarding Ordnance-Related Investigation; Site Characterization Site 27 – Army Reserve Motor Pool.

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, 1/18/74, 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
 12/1/76: Future Development Plans, Training Facilities Plan
 3/1/76: Close In Training Areas
 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 County.
 1934: War Department, Camp Ord and Vicinity
 1944: Army Map Service, Fort Ord Military Reservation
 3/20/46: Fort Ord Master Plans
 4/5/46: Fort Ord Master Plans
 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

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

Geophysics

None

Excavations

None

Soil Borings

None

Wells None

ADJACENT AREAS

CBR Training Areas None
CWM Training Areas None
Small Arms Ranges None

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS None

Incident Reports
MEC None

Munitions Debris None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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5.0 GROUP 4 – PARCELS E11a.1, L35.4 (Portion), and L35.5

5.1 Description

The Group 4 parcels are located near the former Fort Ord East Garrison, former ranch land that was purchased by the Army in 1917 for use as encampment. Parcel E11a.1 is located between Inter-Garrison and Reservation Roads; Parcel L35.4 is located approximately 800 feet south of Inter-Garrison Road adjacent to MRS-45; and Parcel L35.5 is located south of Watkins Gate Road, approximately 200 feet from MRS-27E, 375 feet from MRS-45, and adjacent to MRS-57 (Plates 2 and 7). The three parcels comprise approximately 8 acres and contain two water storage tanks (Parcels L35.4 and L35.5) and undeveloped land that is part of a habitat management area (Parcel E11a.1). During the preparation of this document, the size of Parcel L35.4 was increased from 0.115 acres to 1.088 acres. The increase in the size of the parcel resulted in the overlap of a portion of Parcel L35.4 with MRS-45. Only the original parcel area (0.115 acres) that is outside of MRS-45 was evaluated in this Approval Memorandum. Unless stated otherwise, specific references to Parcel L35.4 refer to the original parcel configuration and do not include that portion of Parcel L35.4 that is now within MRS-45.

5.2 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. The area adjacent to the parcels (south and east) was used as an encampment (Camp Ord) for these units. Ranges for the firing of small arms weaponry were established at Camp Ord with firing at these ranges toward the south away from the parcels. These parcels lie within larger training areas throughout the Fort Ord's history. Development adjacent to Parcel E11a.1 began in 1940 with the construction of a sewage treatment facility and a mule corral on the east side of the parcel. Beginning in 1945, Parcel E11a.1 was within training area "E-North" and Parcel L35.4 was within "E-south." Inter-Garrison Road was the dividing line

between the two training areas. The specific type of training that occurred in these areas is not identified on the map. Parcel L35.5 was west of the East Garrison Known Distance Range, within an area labeled as “Combat Ranges.” Beginning in about 1954, the area on the north side of Inter-Garrison Road was assigned to the 20th Infantry and the area on the south side of Inter-Garrison Road was assigned to the 11th Infantry. The areas around Parcels L35.5 and L35.4 were identified as being Tactical Training Areas. From 1957 through 1972, Parcel E11a.1 was within an area assigned to the 1st Brigade. The mission of the 1st Brigade was to conduct combat support. Specific activities that occurred at least partly within Parcel E11a.1 included a light vehicle driving course and possibly a helipad associated with an aviation training site. From 1958 through 1972, Parcels L35.4 and L35.5 were within an area assigned to the 4th Brigade. The mission of the 4th Brigade was combat support training (e.g., basic Army administration, food service, basic unit supply, field communications, and light wheel vehicle driving). Specific training areas identified on the south side of Inter-Garrison Road included Non-Commissioned Officers Academy (NCOA) training, Division Support Services (DSS), and a maneuver area. By 1972, a PG&E natural gas line and electric transmission lines (running generally east to west) were in place just north of Parcel L35.5. In 1976, two training sites (MRS-66 and MRS-27Y) were located approximately 2000 to 3000 feet west of Parcel E11a.1. MRS-66 and MRS-27Y are believed to have been used for field communications training and as a bivouac area, respectively (*MACTEC, 2004*). Training at these locations included the use of practice and pyrotechnic military munitions. On training maps from 1977 through 1987, MRS-27E (Training Site 5) was present approximately 200 feet east of Parcel L35.5. Munitions Response Site 27E was one of several locations that may have been used as bivouac areas. Bivouac areas were overnight training and field exercise areas (*MACTEC, 2004*). The water tank on Parcel L35.4 was constructed in 1983 and the water tank on Parcel L35.5 was constructed in approximately 1989. Housing was constructed approximately 3000 feet west of Parcel E11a.1 (in areas including MRS-66) from 1987 through 1990.

5.3 Area Investigations

5.3.1 Investigations Within Group 4 Parcels

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 search documents and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on Parcels E11a.1, L35.4, and L35.5, and no military munitions-related investigations beyond the literature search (i.e., reconnaissance and sampling) have been performed.

In support of the future transfer of this property, a site visit of the Group 4 parcels 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 portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visits.

5.3.2 Investigations of Adjacent Areas

The areas adjacent to Parcels E11a.1, L35.4, and L35.5 consist of undeveloped open space land. Parcel E11a.1 lies immediately northwest of Parcel E11b.2, a Track 0 area described in the Track 0 ROD (*Army, 2002*). The portion of Parcel L35.4 evaluated in this Approval Memorandum is immediately adjacent to MRS-45, and Parcel L35.5 is within 500 feet of MRS-45, MRS-27E, and MRS-57 (Plate 7). These three MRSs were identified through Fort Ord archives search as having been used for training. Each of these sites has undergone investigation consisting of a site walk and/or site sampling. MRS-45, MRS-27E, and MRS-57 will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program.

5.3.2.1 MRS-27E

MRS-27E consists of approximately 29 acres and is approximately 200 feet east of L35.5 (Plate 7). This site was identified through the archives search as one of 25 training sites delineated on a 1984 training facilities map. The 25 training sites are believed to have been used as 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-27E. MRS-27E will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program.

MRS-27E was investigated as part of a basewide range assessment (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 Historical Area (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 Global Positioning System (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. 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.

5.3.2.2 MRS-45

MRS-45, a former Tactical Training Area, consists of approximately 400 acres on the south side of Inter-Garrison Road and immediately adjacent to the portion of Parcel L35.4 addressed in this Approval

Memorandum (Plate 7). The ASR recommended that the site undergo confirmatory sampling based on the results of an early inspection (*USAEDH, 1997*).

CMS Environmental, Inc. (CMS)/USA Environmental, Inc. conducted sampling of MRS-45 in 1997. The site, approximately 400 acres, was divided into 6 sectors for sampling. Sector 6 (approximately 35 acres) is adjacent to Parcel L35.4. Twelve 100- by 200-foot sample grids were established in Sector 6 and sampled using the SiteStats/GridStats (SS/GS) sampling program (Plate 7). Sampling of this sector resulted in the discovery of four live practice antitank mines (MEC). These MEC items were moved to a safe holding area and destroyed at a later date. A total of 12 MEC items (all pyrotechnic or practice/training-related items) were found during sampling in MRS-45. No MEC or munitions debris were found within the two sample grids that are adjacent to Parcel L35.4. No evidence was found during SS/GS sampling to indicate that this site was used as an impact area and no evidence of high explosive items was found (*USA, 2001*). No further military munitions investigation was recommended. MRS-45 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

5.3.2.3 MRS-57

MRS-57 lies on the south side of Watkins Gate Road and is immediately adjacent to Parcel L35.5 (Plate 7). MRS-57 was identified as an area of potential ordnance use based on information gathered during interviews conducted as part of the PA/SI phase of the archives search for known and suspected munitions response sites at the former Fort Ord. MRS-57 was identified in those interviews as Site K1, an area that included the use of rifle grenades, smoke grenades and shoulder launched projectiles in the 1940s, 1950s, and 1960s (*USAEDH, 1997*). A site reconnaissance of Site K1 was conducted in January 1996. A USACE UXO Safety Specialist walked a portion of Site K1 visually searching the path walked while simultaneously searching for subsurface anomalies using a magnetometer. Munitions debris, including an “expended 75mm shrapnel projectile” and expended flares and signals, were found. No evidence of other types of training or use as an impact area was identified as a result of this reconnaissance. Based on the presence of the “expended 75mm shrapnel projectile,” the USACE UXO

Safety Specialist assigned Site K1 a Risk Assessment Code (RAC) score of 4, which includes a recommendation for further military munitions investigation (*USAEDH, 1997*). The recommendation of further investigation was reviewed by the Ordnance and Explosives Mandatory Center of Expertise (MCX) and Design Center (*Army Corps of Engineers Huntsville Division [CEHND]*). The CEHND reviewed the recommendation and agreed further military munitions investigation in the form of site investigation and sampling was necessary at Site K1 and renamed the location Site OE [MRS-] 57 (*USAEDH, 1997*). MRS-57 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

To confirm that no military munitions with explosive safety risk (MEC) are present in this area two additional site reconnaissances were performed. The first site reconnaissance of the general area was conducted in January 1996 by a USACE UXO Safety Specialist as part of the PA/SI phase of the Archive Search. The reconnaissance was performed because interviews with a former Fort Ord fire chief identified a general area (K11) as a possible target location associated with adjacent MRS-57 (*USAEDH, 1997*). During the reconnaissance of Site K11 expended flares, signals, and blank small arms ammunition (munitions debris) were found in the area adjacent to Parcel L35.5. Based on the results of the reconnaissance which found no evidence of the use of military munitions (other than expended flares and signals), the USACE military munitions specialist assigned a Risk Assessment Code (RAC) score of 5 for Site K11 (which includes Parcel L35.5), which indicates that no further military munitions investigation is necessary. The recommendation of no further action was reviewed by the Ordnance and Explosives Mandatory Center of Expertise (MCX) and Design Center (*Army Corps of Engineers Huntsville Division [CEHND]*).

The second site reconnaissance was completed in October 1999, which consisted of a surface site inspection conducted over roads and trails primarily within the BLM land adjacent to Parcel L35.5. The reconnaissance was performed by the military munitions contractor performing the sampling and removal of military munitions at the former Fort Ord. A portion of the area walked included the dirt roads

adjacent to Parcel L35.5. No MEC was found in the parcel vicinity or in the general area. Four expended smoke grenades (munitions debris) were found on the dirt road adjacent to Parcel L35.5 (Plate 7).

5.4 Rationale for Track 0 Designation of Parcels E11a.1, L35.4 (Portion), and L35.5

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*), 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 these parcels.
- Except for practice and pyrotechnic items that are not designed to cause injury, no evidence was found to indicate the use of any military munitions items in the vicinity of Parcels L35.5 and L35.4.
- Construction of the water storage tanks on Parcels L35.4 and L35.5 involved the cutting and grading of the parcels. No reports of the finding of military munitions were reported.
- The water storage tanks on Parcels L35.5 and L35.4 are inspected regularly by the Marina Coast Water District and no reports of the finding of military munitions have been reported.

5.5 Track 0 Checklist – Group 4 Parcels

PARCELS

E11a.1, L35.4 (Portion), and L35.5

DESCRIPTION

Approximately 8 acres, area including two water storage tanks and undeveloped land that is part of a habitat management area (Plate 7).

HISTORICAL USE

History suggests no use of military munitions. Prior to Army purchase, area 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 southeast of the parcels.

1940: Construction of sewage treatment facility (IRP Site 32) and mule corral directly east of Parcel E11a.1.

1945: Parcel E11a.1 within larger training area labeled “E-NORTH” and Parcels L35.4 and L35.5 within larger training area labeled “E-SOUTH.”

1957: From 1957 through 1972, Parcel E11a.1 was within a larger training area assigned to the 1st Brigade. Training areas within the parcel included a portion of a light vehicle driving course and possibly a helipad/aviation training area.

1958: From 1958 through 1972, Parcels L35.4 and L35.5 were assigned to the 4th Brigade. Specific activities that occurred within the parcels included a Non-Commissioned Officers Academy (NCOA) and Division Support Services (DSS) training areas and a maneuver area.

1972: PG&E natural gas line and electric transmission lines constructed to the north of Parcel L35.5.

1976: Area to the west of Parcel E11a.1 (MRS-66) identified as “FWC FTX Area” (Field Wireman Course or Command, Field Training Exercise) and as “Training Site (TS) 25.”

1977: MRS-27E (TS-5) is located adjacent to Parcel L35.5 (southeast) from 1977 through 1987.

1983: Water tank on L35.4 constructed.

1989: Water tank on Parcel L35.5 constructed.

1987-1990: Housing constructed within MRS-66.

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; Final SS/GS After Action-Report, Inland Range Contract, former Fort Ord,

California, Site MRS-45; Interim Action Confirmation Report, Site 32 – East Garrison Sewage Treatment Plant; Comprehensive Basewide Range Assessment Report.

Components

Aerial Photos

Pre-1940, 7/25/41, 11/22/41, 8/17/49, 6/23/51, 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**

Not applicable to this area

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

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

Site walk conducted by USACE MEC contractor (site reconnaissance) on roads and trails within land previously transferred to the Bureau of Land Management. Part of the site walk included the dirt road that leads to Parcel L35.5 from Watkins Gate Road. The site walk was conducted by a two-person team that included a military munitions specialist using a GPS unit to record the path walked, and to document the location of any military munitions found. During this site walk, three expended smoke grenades (munitions debris) were found on the dirt road adjacent to the parcel.

Archives Search: Site reconnaissance conducted by USACE UXO Safety Specialist as part of the PA/SI phase of the Archive Search (January 1996). The general area that includes Parcel L35.5 was identified by a former Fort Ord fire chief as a possible target area (K11) associated with firing from MRS-57. During the site reconnaissance, expended flares and signals

were found (munitions debris) in parcel vicinity. The USACE UXO Safety Specialist assigned a Risk Assessment Code (RAC) score of 5 for the Site K11, which indicates that no further military munitions investigation is necessary. The recommendation of no further action was reviewed by the Ordnance and Explosives Mandatory Center of Expertise (MCX) and Design Center (Army Corps of Engineers Huntsville Division [CEHND]).

Geophysics

None

Excavations

Grading and cutting during the installation of the water tanks on Parcels L35.4 and L35.5.

Soil Borings

None

Wells

None

ADJACENT AREAS

CBR Training Areas

None

CWM Training Areas

None

Small Arms Ranges

None

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS

MRS-27E – Approximately 200 feet east of Parcel L35.5 (Plate 7). No sampling has been conducted at this site. A site reconnaissance was conducted as part of the Fort Ord Basewide Range Assessment. No military munitions were found and no further action was recommended under the basewide program. MRS-27E will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

MRS-57 – Immediately adjacent to Parcel L35.5. MRS-57 was identified during interviews conducted as part of the PA/SI. The area identified as Site K1, was identified as a possible firing point. No sampling has been conducted at this site. A site walk was performed by a USACE UXO Safety Specialist in January 1996. An expended 75mm shrapnel projectile and expended flares and signals (munitions debris) were observed. The USACE

UXO Safety Specialist assigned a Risk Assessment Code (RAC) score of 4 for Site K1. A RAC core of 4 includes a recommendation by the Ordnance and Explosives Mandatory Center of Expertise (MCX) and Design Center (Army Corps of Engineers Huntsville Division [CEHND]) for further military munitions investigation. MRS-57 will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

MRS-45 – Immediately adjacent to Parcel L35.4 (Plate 7). Site was sampled using SiteStats/GridStats sampling methodology. Twelve MEC and 225 munitions debris items were found. The 12 MEC items were deemed safe to remove for disposal. No evidence was found during sampling to indicate that this site was used as an impact area. No evidence of high explosive items was encountered. All MEC and munitions debris encountered during this sampling operation were pyrotechnic or training in nature. MRS-45 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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6.0 GROUP 5 – PARCELS E18.2.1 AND E18.2.2

6.1 Description

The Group 5 parcels are located in the west-central portion of the former Fort Ord and lie at the southern end of the Main Garrison. The parcels comprise approximately 4 acres of Gigling Road (Plates 2 and 8).

6.2 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*). Gigling Road has been in existence since at least 1933. The road served as the southernmost boundary of an area delineated on a 1945 Training Facilities map as a “Well Area, No Artillery Firing Or Demolitions.” Development of adjacent parcels began in 1946 with the construction of an aboveground water storage tank located approximately 900 feet north of the parcels. In the 1950s, several training areas were established north and south of Gigling Road. These training areas did not involve the use of military munitions and included machine gun squares, rifle instruction circles, and physical training areas. In 1954, several barracks were constructed on the north side of the road. Construction of related infrastructure (e.g., roads, utilities, and underground storage tanks) and other support buildings also occurred during this time. Development of adjacent land continued through the 1960s and early 1970s with construction of housing to the southwest (Marshall Park), a PG&E substation, an aboveground two-million gallon water storage tank, and the Hayes Hospital on the south side of Parcel E18.2.1. In late 1957 a chemical, biological and radiological (CBR) training area (munitions response site [MRS]-4A) was established on the south side of Gigling Road adjacent to Parcel E18.2.1 and E18.2.2. This training area does not appear on any training facilities maps after January 1958.

6.3 Area Investigations

6.3.1 Investigations Within Group 5 Parcels

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 on these parcels and no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. These parcels makeup a portion of Gigling Road, which has been in place since at least 1933. Subsequent improvements to Gigling Road over time included grading, paving, and the installation of sidewalks and underground utilities.

In support of the future transfer of this property, a site visit of the Group 5 parcels 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 driving on the Gigling road parcels. No evidence of military munitions was observed during the site visits and it is believed that any military munitions present on the property would already have been found because the parcels consist of open road surface and easement.

6.3.2 Investigations of Adjacent Areas

The Group 5 parcels lie adjacent to former military housing and military support facilities constructed in the late 1950s, 1960s, and early 1970s. Some military training occurred in the immediate vicinity of the parcels prior to and after development (MRS-39 and MRS-4A). MRS-39 was evaluated under the former Fort Ord Munitions Response Program, the results of which were presented in the Track 1 OE RI/FS (*MACTEC, 2004*). No impact to these parcels is expected from the past training activities conducted at MRS-39 (*MACTEC, 2004*).

These parcels lie in the southernmost portion of the main garrison and are adjacent to areas that were developed beginning in the 1950s, and include former barracks, support facilities, motor pools, recreational facilities, a hospital, and a PG&E substation. The property on the north side of Gigling Road bordering Parcels E18.2.1 and E18.2.2 are Track 0 parcels as described in the Track 0 ROD (*Army, 2002*). One military munitions response site (MRS-4A) lies south and adjacent to the parcels. The investigation of MRS-4A is discussed in the following section.

6.3.2.1 MRS-4A – Chemical, Biological and Radiological Training Area

MRS-4A is approximately 7 acres and is located adjacent to Gigling Road (Plate 8). The site encompasses an aboveground water storage tank and is adjacent to Parcels E18.2.1, E18.2.2, and a PG&E substation. This site was identified during the review of historical data performed as part of the former Fort Ord Archives Search (*USAEDH, 1997*). MRS-4A was identified in the ASR as having been used for chemical, biological, and radiological (CBR) training based on the presence of the site on a 1958 Fort Ord Training Facilities map (*Army, 1958*). A site walk was conducted; it was determined that pyrotechnic items were used. Based on this information sampling of MRS-4A was recommended in the Fort Ord ASR.

In 1994, HFA completed a subsurface investigation of MRS-4A (*HFA, 1994*). Six 100- by 100-foot grids were 100 percent sampled (i.e., every detected anomaly was investigated) and two munitions debris items were found. Based on the sampling results, further investigation and confirmatory sampling was recommended.

CMS Environmental, Inc. (CMS)/USA Environmental, Inc. conducted sampling of MRS-4A in 1997. Six 100- by 200-foot sample grids were established and sampled using the SiteStats/GridStats (SS/GS) sampling program. Sampling of this site resulted in the discovery of five munitions debris items and 70 MEC items including: one high explosive rifle grenade, two illumination signals, and 67 grenade fuzes found in a burial pit. On the basis of the SiteStats/GridStats results, a one-hundred percent (100%)

removal was conducted to a depth of 4 feet below ground surface. One MEC item (illumination signal) was found and removed during the removal action (*USA, 2000a*). Seven munitions debris items were found including practice hand grenades, an illumination signal, and a grenade fuze. No further military munitions investigation was recommended. MRS-4A will undergo additional evaluation in the ongoing former Fort Ord Munitions Response Program RI/FS.

6.4 Rationale for Track 0 Designation of Parcel E18.2.1 and E18.2.2

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 (*USACE, 1997*), the Literature Review Report (*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 these parcels.
- These parcels include a portion of Gigling Road, which had been in this same location since at least the early 1930s. Land to the north side of the parcels is Track 0. Prior to the development beginning in the 1950s, the Track 0 areas were used for training that did not involve the use of military munitions (e.g., physical training).
- Because these parcels consist of a road that is adjacent to developed areas, it is unlikely that these areas were used for training.

6.5 Track 0 Checklist – Group 5 Parcels

PARCELS	E18.2.1 and E18.2.2
DESCRIPTION	Includes a 4 acre (approximately) portion of Gigling Road in the southern most portion of the main garrison (Plate 8).

HISTORICAL USE

History suggests no military munitions were used. Gigling Road has been in existence since at least 1934.

Prior to Army purchase this area was ranch land owned by the David Jacks Corporation and T.A Work. The land was acquired by the Army after July 1, 1940.

1945: Gigling Road is the southern boundary of an area delineated on the 1945 Training Facilities map as a “Well Area, No Artillery Firing Or Demolitions”.

1946: Large above ground water storage tank constructed approximately 900 feet to the north.
1950s: Training areas established in the vicinity, including machine gun squares, rifle instruction circles and physical training areas.

1954: Barracks and support structures constructed adjacent to the parcels (to the north) including the installation of USTs.

1966: Additional physical training areas established adjacent to the parcels.

1968: Additional barracks constructed adjacent to the parcels.

About 1984: AST 4441 installed (210,000 gallon diesel) adjacent to Parcel E18.2.2.

SUPPORTING DOCUMENTS

Literature Review and Base Inventory Report, Volume 1; Community Environmental Response Facilitation Act (CERFA) Report; Archives Search Reports; Sampling and Removal After Action Report Site MRS-4A; OE Removal After Action Report, Site MRS-13B; OE RI/FS Literature Review; Environmental Baseline Survey, Surplus II Parcels; Interim Action Confirmation Report, Site 22 – 4400/4500 Motor Pool, West Block; Site Investigation Report, Buildings 2253, 3803, 4363, and 4534; Field Investigation and Data Review, Solid Waste Management Units.

Components**Aerial Photos**

Pre-1940, 7/25/41, 10/14/41, 8/17/49, 6/23/51, 7/3/51, 5/14/56, 58/59 (aerial contours), 1/11/65 (mosaic), 5/2/66, 5/10-10/18/74, 12/17/75, 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: Training Facilities, Basic Information
 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
 12/1/76: Future Development Plans, Training
 Facilities Plan
 3/1/76: Close In Training Areas
 6/1/77: Training Facilities Plan
 9/77: Close In Training Areas
 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: Fort Ord Master Plans
 4/5/46: Fort Ord Master Plans
 4/5/46: Reservation Boundary and Land Use
 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	Property Transfer: Portions of the parcels were driven in support of the future transfer of the parcel, no evidence of the use of military munitions was observed.
Geophysics	None
Excavations	None
Soil Borings	None
Wells	None

ADJACENT AREAS

CBR Training Areas	MRS-4A – A removal action was conducted at this site and no chemical-related military munitions items were found. This site will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.
CWM Training Areas	None
Small Arms Ranges	None

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS	MRS-4A – A military munitions removal action over the entire site was conducted. Both MEC and munitions debris were removed from the site. MRS-4A is located approximately 100 feet south of Parcel E18.2.1 (Plate 8). MRS-4A 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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7.0 GROUP 6 – PARCELS E18.3, E20c.1.2, and E20c.2.2

7.1 Description

The Group 6 parcels (E18.3, E20c.1.2, and E20c.2.2) are located in the west-central portion of the former Fort Ord, south of the Main garrison between the Fitch Park and the Marshall Park housing areas (Plates 2 and 9). The parcels comprise approximately 9 acres of land and include the majority of Normandy Road (Parcel E18.3) and two parcels that contain former Fort Ord infrastructure associated with cable television transmission and a water storage facility. Parcel E20c.1.2 includes cable television off-air equipment and several satellite transmission receiver dishes. Parcel E20c.2.2 includes a large aboveground water storage tank, an elevated water storage tower, and associated pumps and electrical generator.

7.2 History and Use

These parcels lie on tract of former agricultural land that was purchased from private landowners by the U.S. Government sometime after July 1, 1940 (*ADL, 1994*). Development of adjacent parcels (north and west) began in the early 1940s with the construction of buildings and roads. Several small buildings and a water supply well were present in this area prior to the purchase of the land (*Army, 1933-34*). The water supply well was located adjacent to a road that is in approximately the same location as the current Normandy Road (Parcel E18.3). Review of 1940s era documentation including historical maps and aerial photographs did not indicate any specific training sites within these parcels. Several buildings are present west of Parcel E18.3 on the aerial photographs from the 1940s. A nursery was established in the same general location as these buildings in the early 1940s and is identified on the 1946 facility map. During this same time period, an area approximately 200 feet south of Parcels E20c.1.2 and E20c.2.2 was being used as a practice hand grenade range (MRS-24B). By the 1950s, the practice hand grenade range and the nursery were no longer present. In 1953, construction of the Bachelors Officers Quarters (BOQ) began. The BOQ buildings are located south of Normandy Road. Additional BOQ construction occurred in 1956 and 1966. Development in Parcel E20c.2.2 began in 1954 with the construction of a large above ground

water storage tank. Other development including the construction of a pump house, water storage tower and buildings supporting radio and television transmission were completed in 1958 and 1959. In 1956, a mine and boobytrap training area (MRS-39) was established in approximately the same location as the former nursery. Other training in this area included map reading (*Army, 1957*). Construction of the Fitch Park housing area occurred in 1959. This housing area is located approximately 350 feet south of Parcels E20c.1.2 and E20c.2.2 and constructed over the former location of MRS-24B. Construction of the Marshall Park housing area occurred in 1961. The Marshall Park housing area is bounded to the south and east by Normandy Road and was constructed over the former location of MRS-39. During the early and mid-1960s, the only training identified in the immediate vicinity of these parcels was as a map reading area. No training activities are identified on available training maps in this area after this time period. In 1993, the Fort Ord Explosive Ordnance Disposal (EOD) team was called to investigate reports of the presence of military munitions found near a water tower in the vicinity of the BOQ. The EOD report states that a single rifle-fired smoke grenade (M23A1) and 100 rounds of M-1 ball and tracer ammunition were recovered. No other military munitions items were recovered. Further discussion of these items is provided in Section 7.3.2.5.

7.3 Area Investigations

7.3.1 Investigations Within Group 6 Parcels

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 on these parcels, and no military munitions investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. Each of the parcels was developed which resulted in ground disturbing activities (e.g., grading and excavating) taking place, during which no military munitions were reported as being found. In support of the future transfer of this property, a site visit of the Group 6 parcels 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 portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visits.

7.3.2 Investigation of Adjacent Areas

Parcels E18.3, E20c.1.2, and E20c.2.2 lie adjacent to former military housing that was constructed in the late 1950s and early 1960s. Some military training occurred in the immediate vicinity of the parcels prior to housing construction at MRS-24B, MRS-39, and MRS-49. Each of these sites was evaluated under the former Fort Ord Military Munitions Response Program, the results of which were presented in the Track 1 OE RI/FS (*MACTEC, 2004*) and discussed below. MRS-44EDC and MRS-50EXP are also adjacent to the parcels. Training activities at these sites occurred prior to and after construction of the Fitch and Marshall Park housing areas.

7.3.2.1 MRS-24B – Practice Hand Grenade Range

MRS-24B is approximately 14 acres in size and is located in the west-central portion of former Fort Ord to the south of the Main Garrison and just north of the Impact Area (Plate 9). MRS-24B was identified through a review of a 1946 Fort Ord historical map as part of the Supplement to the Fort Ord Archive Search Report (*USAEDH, 1994*). Initially, MRS-24 was identified as a new site (without subdivisions) as part of the November 1994 Archives Search Report (ASR) Supplement (*USAEDH, 1994*). The area is described as containing several practice and live rifle and hand grenade ranges based on review of a 1946 map. A site visit was conducted and a “piece of a warhead” was found just north of Eucalyptus Road (within current MRS-24A). This item was thought to be part of a high explosive rifle grenade. Based on this information, the area was subdivided into MRS-24A through MRS-24E and sampling of each site was proposed.

CMS Environmental ([CMS], now known as USA Environmental) completed sampling at MRS-24B in 1997 (*USA, 2000b*). It should be noted that the sample grids were placed in open spaces and that most of the area within the 1945 digitized boundaries are covered with housing with only small open areas. Military munitions items identified during sampling included one expended grenade fuze (model not reported). No MEC items were identified during sampling and no further investigation was recommended in the After Action Report (*USA, 2000b*).

MRS-24B was evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-24B (*MACTEC, 2004*). Based on review of existing information, MEC is not expected to be found at MRS-24B, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site (*Army, 2005*). MRS-24B meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of pyrotechnic items that are not designed to cause injury. In the unlikely event that a MEC item of the pyrotechnic type previously observed on the site is found at MRS-24B, 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 at MRS-24B was presented in the Track 1 Proposed Plan (*Army, 2004*), the Track 1 OE RI/FS (*MACTEC, 2004*), and is included in the Track 1 ROD (*Army, 2005*).

7.3.2.2 MRS-39 – Mine and Booby Trap Area

MRS-39 is approximately 12 acres and is located east of General Jim Moore Blvd. and south of Gigling Road in the Marshall Park housing area (Plates 2 and 9). This site was first identified on the 1957 and 1958 Fort Ord Training Areas & Facilities maps that were reviewed as part of the former Fort Ord Archives Search (*USAEDH, 1997*). MRS-39 was identified in the ASR as a Mine and Booby Trap Area based on the presence of the site as Mine and Booby Trap Area (MBA #4) on the “Map of Fort Ord Training Areas and Facilities” in 1957 (*Army, 1957*). Based on this information, sampling of MRS-39

was recommended. Because of the proximity of the site to roads and facilities present in the 1950s, it is expected that mine and booby trap training involved inert and/or practice items.

CMS conducted sampling of MRS-39 in 1997 and no MEC or munitions debris was found. On the basis of the sampling results no further investigation was recommended (*USA, 2000b*).

MRS-39 was evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-39 (*MACTEC, 2004*). Based on review of existing information, MEC is not expected to be found at MRS-39, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site (*Army, 2005*). MRS-39 meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of pyrotechnic items that are not designed to cause injury. In the unlikely event that a MEC item of the pyrotechnic type previously observed on the site is found at MRS-39, 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 at MRS-39 was presented in the Track 1 Proposed Plan (*Army, 2004*), the Track 1 OE RI/FS (*MACTEC, 2004*), and is included in the Track 1 ROD (*Army, 2005*).

7.3.2.3 MRS-44EDC

MRS-44EDC is located approximately 400 feet southeast of Parcel E20c.2.1, and is undeveloped open space (Plate 9).

MRS-44EDC was established based on the presence of fragmentation from 37mm high explosive (HE) projectiles found during a site reconnaissance conducted by a USACE UXO Safety Specialist. An investigation of MRS-44EDC was conducted to determine whether a removal action was warranted at the site. The investigation included sampling of grids randomly distributed throughout the site. Sixteen (16) MEC items and many munitions debris items were found during sampling at MRS-44EDC; however, none of the MEC items found are penetrating by design and, unless intentionally buried, would typically

be found on or near the ground surface. MRS-44EDC will undergo additional evaluation under the Fort Ord Military Munitions Response Program.

Fort Ord Basewide Range Assessment

MRS-44EDC was also investigated as part of a BRA for small arms and multi-use ranges. The assessment of MRS-44EDC 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-44EDC was identified as HA-174. 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 in February 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. Several blank small arms ammunition casings and one expended 75mm projectile casing was found. The expended 75mm projectile casing was found on the eastern side of HA-174 near Parker Flats Cut-Off. No other military munitions items or evidence of targets or range fans were observed. The locations of several fighting positions were mapped in the northern portion of HA-174 and on the north side of the HA-174 boundary. No military munitions were observed within and around the fighting positions. Additional evaluation of HA-174 will be conducted under the BRA upon the completion of the investigation of MRS-44EDC under the former Fort Ord MR RI/FS.

7.3.2.4 MRS-49 – former Rifle Grenade Range

MRS-49 encompasses approximately 28 acres located in the west-central portion of the former Fort Ord, south of the Main Garrison and just north of the Fitch Park military housing complex (Plate 9). MRS-49 was identified on the basis of an interview with conducted with a former Fort Ord Fire Chief Fred Stephani (*USAEDH, 1997*). Mr. Stephani stated the MRS-49 area was used as a rifle grenade range in the 1940s and 1950s and that “use ended when the Officers’ Club was built.” Firing was reportedly “from

the northwest into the south face of the canyon and up the canyon to the east.” The ridge located north of this canyon is referred to as Welch Ridge. The BOQ was built on Welch Ridge beginning in 1953.

Based on this information, a recommendation was made to conduct a site reconnaissance of this area.

Preliminary Assessment/Site Investigation

A site reconnaissance is conducted to look for evidence of past ordnance use. Visible evidence found during the site reconnaissance provides information on the type, extent, and magnitude of ordnance present. Physical features that may be present at a former site include impact craters caused by penetrating ordnance, the presence of MEC and/or munitions debris on the ground surface, and soil staining associated with the use of bulk explosives. The site reconnaissance conducted in 1996 was completed as part of the PA/SI phase of the archives search for known and suspected MRSs at the former Fort Ord. Several areas of potential ordnance use were identified based on information gathered during interviews conducted as part of the PA/SI. MRS-49 was identified in those interviews as a Rifle Grenade training area used during the 1940s and 1950s. A USACE UXO Safety Specialist walked over a portion of the site visually searching the path walked while simultaneously searching for subsurface military munitions using a magnetometer. No evidence of military munitions, or fragmentation, fuzes, or projectiles was observed. No evidence of other types of training or use as an impact area was identified as a result of reconnaissance. The USACE UXO Safety Specialist assigned MRS-49 a Risk Assessment Code (RAC) score of 5, which indicates that no further MEC-related investigation is necessary. The recommendation of no further action related to the investigation of military munitions was reviewed by the Ordnance and Explosives Mandatory Center of Expertise (MCX) and Design Center (Army Corps of Engineers Huntsville Division [CEHND]).

Fort Ord Basewide Range Assessment

MRS-49 was also investigated as part of a BRA for small arms and multi-use ranges. The assessment of MRS-49 for potential hazardous and toxic waste-related contamination included a data review, site reconnaissance, and mapping of the site. MRS-49 was identified as HA-179. 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) loaded 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 MEC recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. No evidence of military munitions was observed during the site reconnaissance conducted the HA-179 (MRS-49). Several fighting positions were found in the northeastern portion of the site, however, no targets or range features were identified and no further investigation for chemical contamination action is recommended for HA-179 (*Shaw, 2004*).

Fort Ord Military Munitions Response Program

A site walk was conducted at MRS-49 on March 7, 2004. The site walk path was selected to supplement information collected during previous reconnaissance efforts conducted at this site. The site walk was conducted by a two-person team, which included a military munitions specialist. The team swept the path walked using a Schonstedt Model GA-52/Cx magnetometer. The path was also recorded using a GPS unit. The position of any anomaly detected by the Schonstedt GA-52/Cx was recorded with the GPS. The items found during the site walk included an expended smoke signal, an expended smoke grenade, the candle housing for a 105mm illumination projectile (munitions debris) and small arms ammunition. A description of the site walk is included as an attachment to the Final Track 1 OE RI/FS (*MACTEC, 2004*).

MRS-49 was categorized as a Track 1 site and evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-49 (*MACTEC, 2004*). Based on review of existing information, MEC is not expected to be found at MRS-49, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site (*Army, 2005*). MRS-49 meets the Track 1, Category 3 criteria because historical research and field investigations (site walks) 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 on the site is found at MRS-49, it is not expected that it could be caused to function through casual contact (i.e., inadvertent and unintentional contact). The rationale of taking no further action at MRS-49 was presented in the Track 1 Proposed Plan (*Army, 2004*), the Track 1 OE RI/FS (*MACTEC, 2004*), and is included in the Track 1 ROD (*Army, 2005*).

7.3.2.5 MRS-50EXP

MRS-50EXP is approximately 85 acres in size, and is located adjacent to Parcel E18.3 (Plate 9). MRS-50EXP is currently undeveloped, but is the future site of a proposed military cemetery.

MRS-50EXP was not initially identified as a MRS in the ASR, but was created due to the expansion of the removal area associated with MRS-50. MEC and munitions debris were found at the boundary of MRS-50, which warranted an expansion of the investigation area in all directions. MRS-50EXP and the adjacent sites now comprise the Parker Flats Munitions Response Area (Parker Flats MRA). The investigation of MRS-50 and its expansion areas included a removal action conducted over the entire site to a depth of 4 feet below ground surface. During the removal, four hundred and twenty-five (425) MEC items were found and removed from MRS-50EXP. No high explosive or penetrating military munitions were found within 400 feet of Parcel E18.3. Some of the MRS-50EXP sample grids included the investigation of the shoulder of Parker Flats Road. Although the investigation of MRS-50EXP included the geophysical sampling of a portion of Parcel E18.3 (the shoulder of the road) this sampling was conducted strictly to clear the Parker Flats MRA up to the edge of the asphalt of the surrounding roads and not based on evidence that training occurred at this location. No MEC or munitions debris was found on the road shoulder in Parcel E18.3. Four military munitions items were found in three of the grids that overlap Parcel E18.3, but were found outside of the parcel. These included a hand grenade fuze (MEC), a practice hand grenade (MD) and two rifle fired parachute signals (MD). The hand grenade fuze was classified as a discarded military munitions (DMM) item by the contractor conducting the military munitions sampling and removal. Because the MEC item found adjacent to Parcel E18.3 was determined

to be DMM further sampling on the west side of Parcel E18.3 was not warranted. No military munitions were found within Parcel E18.3. The Parker Flats MRA is currently being evaluated in the Track 2 MR RI/FS.

On February 20, 1993 a single rifle smoke grenade (M23A1) and 100 rounds of M-1 ball and tracer ammunition were recovered from a fox hole located in the vicinity of the of the elevated water storage tower on Parcel E20c.2.2. The items were removed by the responding Fort Ord EOD personnel (*HLA, 1994b*). It was not documented if the rifle smoke grenade was MEC or munitions debris. It is assumed that the rifle smoke grenade was a MEC item because the incident form states that the items were taken to a safe holding area. Although several “fighting positions” were documented during the BRA in the vicinity (Section 7.3.2.3), because of the presence of infrastructure, including a water storage tank, an elevated water storage tower, buildings containing the water conveyance system (pumps, electrical switching, back-up generator, emergency fuel supply) and satellite transmission receiver dishes, it is unlikely that training occurred on Parcels E20c.1.2 and E20c.2.2.

7.4 Rationale for Track 0 Designation of Parcel E18.3, E20c.1.2 and E20c.2.2

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 (*USACE, 1997*), the Literature Review Report (*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 these parcels.
- Only a small number practice and pyrotechnic items have been found at nearby Sites MRS-24B, MRS-39, and MRS-49. No evidence was found to indicate extensive use of military munitions in this area. The training that occurred at these sites was limited to

practice and pyrotechnic items that are not designed to cause injury. The sites were evaluated as Track 1 and no further action is recommended.

- Due to the proximity of these parcels to developed areas and because they were developed early in the history of the former Fort Ord, the likelihood that these areas were used for training is remote.
- The results of the sampling and removal that was conducted within MRS-50EXP, adjacent to Parcel E18.3, did not indicate that training within the Parker Flats MRA would have included training on Parker Flats Road.

7.5 Track 0 Checklist – Group 6 Parcels

PARCELS	E18.3, E20c.1.2, and E20c.2.2
DESCRIPTION	Parcel E18.3 includes the majority of Normandy Road (approximately 6 acres). Parcels E20c.1.2 and E20c.2.2 are approximately 3 acres (Plate 9).
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>1941: Several small buildings observed in the vicinity, to the west of, the future location of Normandy Road (Parcel E18.3).</p> <p>1946: Nursery identified in the same location as the buildings observed on the 1941 aerial photos. Practice hand grenade range (MRS-24B) located to the south of Parcels E20c.1.2 and E20c.2.2.</p> <p>1954: Water tank construction.</p> <p>1956: Mine and Boobytrap training area (MRS-39) established in the same general area as the former nursery. Practice hand grenade range no longer identified on facility training maps.</p>

Officers Quarters constructed just to the north of Parcels E20c.1.1 and E20c.1.2.

1959: Fitch Park housing constructed in the former location of MRS-24B. The housing area is approximately 350 feet from Parcels E20c.1.2 and E20C.1.2.

1961: George C. Marshall Park housing constructed in the former location of MRS-39. Housing area bounded on the south and east by Normandy Road (Parcel E18.3).

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; Track 0 technical Memorandum; Data Summary and Work Plan Site 39 – Inland Ranges.

Components

Aerial Photos

Pre-1940, 7/25/41, 11/22/41, 8/17/49, 6/23/51, 5/14/56, 58/59 (aerial contours), 1/11/65 (mosaic), 6/3/66, 3/13/69, 12/17/75, 6/16/78, 3/25/86, 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
 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
 1/7/72: Field Training Area and Range Map
 2/23/73: Close In Training Areas

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

HTW program: Asbestos survey of buildings on Parcels E20c.1.2 and E20c.2.2.

Property Transfer: Portions of the parcel walked in support of the future transfer of the parcel, no evidence of the use of military munitions was observed.

Geophysics

None

Excavations

None

Soil Borings

None

Wells

“Well #1” (irrigation or water supply) noted on the 1946 Fort Ord Master Plan. Located near future location of Normandy Road.

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	None

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

MRS-49 - At least three site walks have been conducted at MRS-49 immediately adjacent to Parcels E20c.1.1 and E20c.1.2. These site walks were associated with the Fort Ord military munitions program and the Basewide Range Assessment. No evidence of military munitions was discovered during two of the site walks. An expended smoke signal, an expended smoke grenade, and the candle housing for a 105mm illumination projectile (munitions debris) and small arms ammunition were found during the third site walk. MRS-49 was evaluated in the Track 1 OE RI/FS. Based on the review of existing information, MEC is not expected to be found at this site and no further action related to MEC is required. The rationale for taking no further action at MRS-49 was presented in the Track 1 Proposed Plan, the Track 1 OE RI/FS, and is included in the Track 1 ROD (*Army, 2005*).

MRS-39 – Located approximately 600 feet from Parcel E18.3. Sampling of this site (mine and booby trap training area) was conducted and no evidence of military munitions was found. MRS-39 was evaluated in the Track 1 OE RI/FS. Based on the review of existing information, MEC is not expected to be found at this site and no further action related to MEC is required. The rationale for taking no further action at MRS-39 was presented in the Track 1 Proposed Plan, the Track 1 OE RI/FS, and is included in the Track 1 ROD (*Army, 2005*).

MRS-24B – Located approximately 250 feet from Parcels E20c.1.2 and E20c.2.2. Sampling of this site was conducted and one expended grenade fuze (munitions debris) was found. MRS-24B was evaluated in the Track 1 OE RI/FS. Based on the review of existing information, MEC is not expected to be found at

this site and no further action related to MEC is required. The rationale for taking no further action at MRS-24B was presented in the Track 1 Proposed Plan, the Track 1 OE RI/FS, and is included in the Track 1 ROD (*Army, 2005*).

MRS-50EXP – lies adjacent to Parcel E18.3. MRS-50EXP was not initially identified as a MRS in the ASR, but was created due to the expansion of the removal area associated with MRS-50. MEC and munitions debris were found at the boundary of MRS-50 which warranted an expansion of the investigation area in all directions. MRS-50EXP and the adjacent sites now comprise the Parker Flats Munitions Response Area (Parker Flats MRA). The investigation of MRS-50 and its expansion areas included a removal action conducted over the entire site to a depth of 4 feet. During the removal four hundred and twenty-five MEC items were found and removed from MRS-50EXP. Some of the MRS-50EXP sample grids included the investigation of the shoulder of Parker Flats Road. Although the investigation of MRS-50EXP included the geophysical sampling of a portion of Parcel E18.3 (the shoulder of the road) this sampling was conducted strictly to clear the Parker Flats MRA up to the edge of the asphalt of the surrounding roads and not based on evidence that training occurred at this location. No MEC or munitions debris was found on the road shoulder in Parcel E18.3. Four military munitions items were found in three of the grids that overlap Parcel E18.3, but were found outside of the parcel. These included a hand grenade fuze (MEC), a practice hand grenade (MD) and two rifle fired parachute signals (MD). The hand grenade fuze was classified as a discarded military munitions (DMM) item by the contractor conducting the military munitions sampling and removal. Because the MEC item found adjacent to Parcel E18.3 was determined to be DMM further sampling on the west side of Parcel E18.3 was not warranted. No military munitions were found within Parcel E18.3. No high explosive or penetrating military munitions were found within 400 feet of Parcel E18.3. The Parker Flats MRS is currently being evaluated in the

Track 2 Munitions Response Remedial
Investigation/Feasibility Study.

Incident Reports:
MEC

None

Munitions Debris

None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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8.0 GROUP 7 - PARCELS E29b.3, E29e, L20.13.1.1, L20.13.2, L20.13.3.2, and L20.13.4

8.1 Description

The Group 7 parcels comprise approximately 47 acres and are located within the southwestern corner of the former Fort Ord. These parcels make up a portion of South Boundary Road, and the South Boundary Road Right-of-Way (ROW) and the very southern portion of General Jim Moore Boulevard (Plates 3 and 10). Two parcels located on the south side of South Boundary Road, between the road and the former installation boundary, are also included. With the exception of the existing roads, these parcels are undeveloped.

8.2 History and Use

Prior to purchase, this area was ranch land owned by the David Jacks Corporation. The parcels were included within an approximately 15,600 acres 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 established in roughly the same location as it is today. By 1945, the Impact Area was established on the north side of South Boundary Road. At that time, two firing ranges were present near these parcels: the Austin Antitank Range and a Machine Gun Transition Course. Based on the range fan configuration that is shown on the map, firing points were several hundred feet from 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. From 1954 through 1988, small arms ammunition firing ranges were present on the north side of South Boundary Road adjacent to the parcels. 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 was identified as an “Air Defense Training Area (Q)”. The specific activities that occurred in Training Area Q are unknown.

8.3 Area Investigation

8.3.1 Investigations Within Group 7 Parcels

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 search documents and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on the Parcels E29b.3, E29e, L20.13.1.1, L20.13.2, L20.13.3.2, and L20.13.4, and with the exception of portions of Parcels L20.13.2, L20.13.3.2, and L20.13.4, no military munitions investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. Parcels L20.13.2, L20.13.3.2 and L20.13.4 include the right-of-way for South Boundary Road. A fence adjacent to MRS-DRO.1 and MRS-DRO.2 lies within the South Boundary Road right-of-way. The geophysical investigation of MRS-DRO.1 and MRS-DRO.2 included investigation up to the fence-line paralleling South Boundary Road. Because only small portions of Parcels L20.13.2, L20.13.3.2, and L20.13.4 were investigated the evaluation of these parcels is discussed in Section 8.3.2, Investigation of Adjacent Areas.

In support of the future transfer of this property, a site visit of the Group 7 parcels 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 and driving portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visit.

8.3.2 Investigation of Adjacent Areas

The Group 7 parcels border or lie adjacent to land owned by the cities of Seaside to the west and Del Rey Oaks to the south. These areas are undeveloped or include minimal development. Land on the north side of South Boundary Road is undeveloped and includes the former Fort Ord Impact Area. Within the

Impact Area and adjacent to the parcels are four munitions response sites (MRS-DRO.1, MRS-DRO.2, MRS-MOCO.1, and MRS-46). One munitions response site, MRS-43, lies adjacent to the parcels between South Boundary Road and the former Fort Ord boundary (Plate 10).

8.3.2.1 MRS-DRO.1 and MRS-DRO.2

These sites lie on the north side of South Boundary Road and are adjacent to Parcels L20.13.1.1, L20.13.2, L20.13.3.2, L20.13.4, and in close proximity to Parcels E29b.3 and E29e.

MRS-DRO.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-DRO.2 on the east (Plates 3 and 10). The boundary of MRS-DRO.1 is based on transfer parcel delineation and not on evidence of munitions use. Over the years, portions of three firing ranges associated with the Impact Area were present within MRS-DRO.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-DRO.2 includes approximately 35 acres and is bounded on the west by MRS-DRO.1, on the south by South Boundary Road, and on the east by MRS-MOCO.1. The boundary of MRS-DRO.2 is based on transfer parcel delineation and not on evidence of munitions use. No ranges were present within MRS-DRO.2.

The initial military munitions investigations conducted at MRS-DRO.1 and MRS-DRO.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-DRO.1 and the northeastern portion of MRS-DRO.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 rest of the sites were resurveyed using geophysical equipment. The geophysical survey of MRS-DRO.1 and MRS-

DRO.2 on the southern margin of the sites included investigation up to the fence-line that runs parallel to South Boundary Road. The fence lies within the South Boundary Road right-of-way associated with Parcels L20.13.2, L20.13.3.2, and L20.13.4. No MEC or munitions debris was found on Parcels L20.13.2, L20.13.3.2, or L20.13.4. Items found and removed during the geophysical survey at MRS-DRO.1 and MRS-DRO.2 were predominantly expended practice rockets, practice projectiles, and practice grenades. If the military munitions found at these sites were fired in this area, firing would have been to the north or northeast away from the parcels. MRS-DRO.1 and DRO.2 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

8.3.2.2 MRS-MOCO.1

MRS-MOCO.1 includes approximately 30 acres and lies on the north side of South Boundary Road, and is adjacent to Parcel L20.13.4 and in close proximity to Parcels E29b.3 and E29e. The boundary of MRS-MOCO.1 is based on transfer parcel delineation and not on evidence of munitions use. The investigation at MRS-MOCO.1 included one-hundred percent (100%) sampling (every detected anomaly was investigated) of thirteen 100-foot by 100-foot grids. No MEC or munitions debris was found. None of the Impact Area small arms ammunition firing ranges were located within this site. Based on these results, no further action was recommended. MRS-MOCO.1 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

8.3.2.3 MRS-43

This site lies between South Boundary Road and the former Fort Ord Installation boundary and is adjacent to Parcels L20.13.1.1 and L20.13.3.2, and overlaps a portion of Parcel L20.13.2. 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. In 1996, the Army's munitions contractor removed brush in this site to support an inspection for military munitions use in the area. According to the ASR, surface and subsurface sweeps were conducted by a UXO Specialist as a safety measure for the brush cutters. During those sweeps, the specialist discovered "37mm black powder frag" at the northwest end of the site. Based on the presence of 37mm black powder fragmentation, sampling was recommended in the ASR (*USAEDH, 1997*).

The initial military munitions investigations conducted at MRS-43 included SiteStats/GridStats and 100% grid sampling over portions of the site. No military munitions were identified within the southeastern portion of MRS-43 including the portion of MRS-43 that overlaps Parcel L20.13.2. Munitions debris and MEC were identified within the northwestern portion of MRS-43 and this area was subjected to a removal action to a depth of 4 feet. Upon completion of the removal action, the removal area was resurveyed using geophysical equipment. The geophysical survey of MRS-43 included the unpaved shoulder of South Boundary Road and extended beyond the existing MRS-43 boundary (as delineated in the ASR) at the northwest end of the site. As a result of the geophysical survey, both MEC and munitions debris were found adjacent to South Boundary Road and 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. No MEC or munitions debris was found on Parcel L20.13.2. MRS-43 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

8.3.2.4 MRS-46

MRS-46 comprises approximately 67 acres within the Impact Area, and is in close proximity to Parcel E29b.3. The boundary of MRS-46 is based on transfer parcel delineation and not on evidence of munitions use. Available records do not indicate that a range was located in this portion of the Impact Area. The area was inspected by a UXO Safety Specialist and expended small arms blank casings were

found. The ASR recommended that this area undergo sampling to determine if military munitions are present (*USAEDH, 1997*).

Sampling of MRS-46 was initially conducted as part of the investigation of the adjacent Impact Area. During the sampling, two 2.36-inch rockets (MEC) were found on the ground surface. The contractor conducting the sampling concluded that the two rockets were discarded military munitions (DMM); however, based on their presence, sampling of the entire site was conducted. One MEC item, a hand grenade fuze, was found during the sampling effort. A total of 10 munitions debris items (portions of practice rifle grenades) were also found and removed. In December 1999, the contractor conducting the sampling of MRS-46 was providing UXO escort to non-UXO qualified personnel working in the area. The UXO escort found a 2.36-inch rocket (MEC) on the ground surface. This item was found in a location that had not previously been sampled. Because a portion of MRS-46 was going to be leased to York School for the construction of an athletic field, the entire lease area was investigated using digital geophysical equipment. No MEC or munitions debris were discovered and no further military munitions-related investigation was recommended. MRS-46 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

In 2002, York School completed the construction of an athletic field and installation of an irrigation well within the portion of MRS-46 leased to them by the Army. The construction of the athletic field and installation of underground irrigation system involved considerable earth moving and grading during construction. In accordance with an operation and maintenance agreement between the California State Department of Toxic Substances Control and York School, York School provided UXO construction support in the form of an on-site UXO technician to observe these activities. No military munitions were found during the athletic field construction, installation of the irrigation well or irrigation system (*Parsons, 2002*).

8.3.3 Fort Ord Basewide Range Assessment

MRS-DRO.1, MRS-DRO.2, MOCO.1, MRS-43, and MRS-46 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-DRO.1 were and identified as HA-24D, HA-25D, HA-26D, HA-61, and HA-62, MRS-DRO.1 was identified as HA-110. MRS-DRO.2 was identified as HA-111, MRS-MOCO.1 as HA-116, MRS-43 as HA-173, and MRS-46 as HA-176. A site reconnaissance was conducted if warranted by the results of the data review. 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-DRO.1)

This historical area encompasses all of MRS-DRO.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-DRO.2)

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

HA-116 (MRS-MOCO.1)

This historical area encompasses all of MRS-MOCO.1. The literature review conducted under the BRA did not identify any small arms firing ranges within MRS-MOCO.1. No further action under the BRA is recommended (*MACTEC/Shaw, 2005*).

HA-173 (MRS-43)

This historical area encompasses all of MRS-43. The Investigation at this historical area included site reconnaissance and sampling. No military munitions were observed. No further action under the BRA is recommended (*MACTEC/Shaw, 2005*).

HA-176 (MRS-46)

This historical area encompasses all of MRS-46. The investigation at this historical area included a literature review only. Further evaluation is recommended after the site is evaluated in the ongoing former Fort Ord Military Munitions Response Program.

8.3.4 South Boundary Road Widening Project

In March of 2002, staking and surveying activities were being conducted along South Boundary Road (including Parcels L20.13.1.1, L20.13.2, and L20.13.4) to support widening of the road from General Jim Moore Boulevard to York Road. During this activity, the cartridge case from a 40mm multi-projectile (M576) with a live primer (MEC) was discovered adjacent to Parcel E29b.3. The cartridge case was damaged and the projectile was missing. As per contractor instruction, the item was reported by the on-call UXO Safety Officer who responded to the incident. The item was inspected and deemed safe to remove, and was transported to a safe holding area for later disposal. No other evidence of military munitions was discovered during the South Boundary Road widening project. Because the cartridge case was damaged and found lying adjacent to South Boundary Road, it is believed to have been discarded at this location and not present as the result of training activities.

8.4 Rationale for Track 0 Designation of Parcels E29b.3, E29e, L20.13.1.1, L20.13.3.2, L20.13.2, and L20.13.4

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 Track 1 OE RI/FS (*MACTEC, 2004*) did not indicate that military munitions were used on these parcels.
- These parcels were outside of the fenced Impact Area throughout its history.
- South Boundary Road has been in this location since at least 1933 and it is not likely that the road would have been used for training with military munitions.
- Based on the results of the sampling and removal investigation at MRS-43, training occurred away from Parcel E29e in the northwestern portion of the site.

8.5 Track 0 Checklist – Group 7 Parcels

PARCEL	E29b.3, E29e, L20.13.1.1, L20.13.2, L20.13.3.2, and L20.13.4
DESCRIPTION	Approximately 47 acres including a portion of South Boundary Road and associated right-of-ways. Also includes two parcels on the south side of South Boundary Road that will undergo development (Plate 10).
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.
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 a "Air Defense Training Area" (Q).

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; Ordnance and Explosive Removal Action, OE.

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

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
 6/30/1961: 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

Property Transfer: Portions of the parcel walked
 in support of the future transfer of the parcel, no
 evidence of the use of military munitions was
 observed.

Geophysics

None

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-43 – This site lies on the south side of South Boundary Road, adjacent to Parcels L20.13.1.1 and L20.13.3.2, in close proximity to Parcels L20.13.4 and E29e (Plate 10) and overlaps a portion of Parcel L20.13.2. 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-43 included SiteStats/GridStats and 100% grid sampling over portions of the site. No military munitions were identified within the southeastern portion of MRS-43, including the portion of MRS-43 that overlaps Parcel L20.13.2. Munitions debris and MEC were identified within the northwestern portion of MRS-43, and this area was subject to a removal action to a depth of 4 feet. Upon completion of the removal action the removal area was resurveyed using geophysical equipment. The geophysical survey of MRS-43 included the unpaved shoulder of South Boundary Road and extended beyond the existing MRS-43 boundary (as delineated in the ASR) at the northwest end of the site. As a result of the geophysical survey, both MEC and munitions debris were found adjacent to South Boundary Road and 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. No MEC or munitions debris was found on Parcel L20.13.2. This site will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

MRS-DRO.1 and MRS-DRO.2 – These sites lie on the north side of South Boundary Road and are adjacent to Parcels L20.13.1.1, L20.13.2, L20.13.3.2, L20.13.4, and in close proximity to Parcels E29b.3 and E29e. The boundaries of MRS-DRO.1 and MRS-DRO.2 are based on transfer parcel delineation and not on evidence of munitions use. The initial military munitions investigations conducted at MRS-DRO.1 and MRS-DRO.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-DRO.1 and the northeastern portion of MRS-DRO.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 geophysical equipment. The geophysical survey of MRS-DRO.1 and MRS-DRO.2 on the southern margin of the sites included investigation up to the fence-line that runs parallel to South Boundary Road. The fence lies within the South Boundary Road right-of-way associated with Parcels L20.13.2, L20.13.3.2, and L20.13.4. No MEC or munitions debris was found on Parcels L20.13.2, L20.13.3.2, or L20.13.4. Items found and removed included predominantly expended practice rockets, practice projectiles and practice grenades. MRS-DRO.1 and MRS-DRO.2 will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

MRS-MOCO.1 – This site lies on the north side of South Boundary Road and is adjacent to Parcel L20.13.4 and in close proximity to Parcels E29b.3 and E29e. The boundary of MRS-MOCO.1 is based on transfer parcel delineation and not on evidence of munitions use. 100% grid sampling was performed at MRS-MOCO.1 and no MEC or munitions debris was found. Based on these results, no further action was recommended. MRS-MOCO.1 will undergo additional evaluation in the Fort Ord Military Munitions Response Program.

MRS-46 – This site lies and in close proximity to Parcel E29b.3. The boundary of MRS-46 is based on transfer parcel delineation and not on evidence of munitions use. Sampling of MRS-46 was initially conducted as part of the investigation of the adjacent impact area. During the sampling two 2.36-inch rockets (MEC) were found on the ground surface. The contractor conducting the sampling concluded that the two rockets had been discarded at this location. However, based on their presence sampling of the entire site was conducted. One MEC item, a hand grenade fuze, was found during this sampling effort. A total of 10 munitions debris items (various portions of practice rifle grenades) were also found and removed. In December 1999, the contractor conducting the sampling of MRS-46 was providing UXO escort to non-UXO qualified personnel working in the area. The UXO escort found a 2.36-inch rocket (MEC) on the ground surface. This item was found in a location that had not previously been sampled. Upon completion of sampling the entire lease area was re-evaluated (sampled) using digital geophysical equipment. No MEC or munitions debris was discovered and no further action was recommended.

A digital geophysical evaluation (sampling) was also performed on a portion of Parcel L3.1 which lies on the south side of south boundary road between the road and the former Fort Ord installation boundary (Plate 11). This area was identified as the York School South Area. The investigation included a visual sweep and subsurface investigation using digital geophysical equipment. No MEC was found during sampling. Three munitions debris items (pieces of practice rifle grenades) were found and removed. Based on these results, no further action was recommended. MRS-46 and the York School South Area 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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9.0 GROUP 8 - PARCELS L3.1, L20.7.1, L20.7.2, L20.7.3, L20.7.4, L20.7.5, S4.2.1, S4.2.2, S4.2.3, and S4.2.4

9.1 Description

The Group 8 parcels comprise approximately 100 acres and are located on the south side of the former Impact Area extending from the entrance to York Road to Laguna Seca (Plates 3 and 11). These parcels include South Boundary Road and South Boundary Road Right-of-Way, and a portion of the future Highway 68 Right-of-Way. Several of the parcels are located on the south side of South Boundary Road between the road and the former Fort Ord installation boundary (Plate 11). With the exception of the existing roads, these parcels are undeveloped. No buildings or other structures are located on these parcels.

9.2 History and Use

Because these parcels include South Boundary Road and small portions of land between South Boundary Road and the installation boundary, no training using military munitions is thought to have occurred on these parcels. The following discussion regarding training activities applies to adjacent areas only.

Prior to purchase, this area was ranch land owned by the David Jacks Corporation. The parcels were included within approximately 15,600 acres of land purchased by the U.S. Government in 1917. Prior to the 1940s, Army training at the former Fort Ord was conducted by artillery, cavalry, and infantry troops stationed at the nearby Presidio of Monterey. By 1933, South Boundary Road was established in roughly the same location as it is today. By 1945, the Impact Area was established on the north side of South Boundary Road. No firing ranges were present adjacent to these parcels at this time. From 1954 through 1971, the Wolf Hill Training Area (MRS-47) was present adjacent to (north of) South Boundary Road. In 1956, the Laguna Seca Training Area was established on the southeast side of Parcel L20.7.5. Activities identified within the Laguna Seca Training Area included survey training and a RSOP (reconnaissance, selection, and occupation of position) area. Over time, the Laguna Seca Training area was assigned to

different groups including Division Artillery and the 1st Brigade. Firing ranges were established along South Boundary Road from the mid-60s through the early 70s. The firing points were several hundred feet from the parcels and the direction of fire at these ranges was to the north and northwest, away from the parcels. These ranges were deactivated and reactivated as necessary until base closure. Military munitions authorized for use at these ranges included small arms ammunition, mortars, and projectiles (Shaw, 2004). In 1995, Parcel L3.1, and a portion of MRS-46 located on the north side of South Boundary Road, were leased to York School.

9.3 Area Investigations

9.3.1 Investigations Within Group 8 Parcels

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 search documents, and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on Group 8 Parcels. Consequently, with the exception of Parcel L3.1, no military munitions investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed. Prior to the lease of Parcel L3.1 to York School, the DTSC and the USEPA requested that this parcel undergo a geophysical investigation to confirm the absence of military munitions. This investigation is described in Section 9.3.1.1.

In support of the future transfer of this property, a site visit of the Group 8 parcels 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 and driving portions of the parcels and documenting general site conditions. No evidence of military munitions was observed during the site visits.

9.3.1.1 Parcel L3.1 (York School South Area)

To support the lease of a portion of Parcel L3.1 (named York School South Area), a digital geophysical evaluation (sampling) was performed on the portion of Parcel L3.1 that lies on the south side of South Boundary Road between the road and the former Fort Ord installation boundary. The York School South Area was investigated in conjunction with the investigation of a portion of MRS-46, which was also to be leased to York School. The York School South Area investigation included a visual sweep and subsurface investigation to a depth of four-feet using digital geophysical equipment. No MEC was found during the geophysical investigation. Three munitions debris items (pieces of practice rifle grenades) were found and removed. The munitions debris found on Parcel L3.1 is thought to have been disposed on this parcel and not the result of training activities. Based on these results, no further action was recommended.

9.3.1.2 Vegetation Clearance

In 2004, a fuel break along South Boundary Road was widened from the York School lease area to Laguna Seca. Widening of the fuel break included the mechanical cutting and removal of all vegetation extending from the shoulder of the road to 55 feet south, and on the north side to the existing fuel break. This work was conducted within Parcels L20.7.1, L20.7.2, L20.7.4, L20.7.5, L3.1, S4.2.1, S4.2.2, S4.2.3, and S4.2.4 and was completed from July through September of 2004. The vegetation removal was performed with escort by a military munitions specialist. No MEC or munitions debris was found during the vegetation clearance work.

9.3.2 Investigation of Adjacent Areas

The Group 8 parcels border or lie adjacent to unincorporated areas and land owned by the City of Del Rey Oaks. Adjacent development includes a school, housing and recreation areas. Land on the north side of South Boundary Road is undeveloped and includes the former Fort Ord Impact Area. Within the Impact

Area and adjacent to the parcels are three munitions response sites (MRS-46, MRS-47, and MRS-30). Additionally, four former small arms ammunition firing ranges were present within the former Impact Area, adjacent to South Boundary Road.

9.3.2.1 MRS-30

MRS-30 is within the Impact Area and includes approximately 6 acres, and lies on the north side of South Boundary Road adjacent to MRS-47 and Parcel L20.7.5 (Plate 11). The boundary of MRS-30 was established in support of the lease of the property for the expansion of the Laguna Seca Raceway, and not based on evidence of munitions use.

A removal of all detected military munitions to a depth of four-feet was performed over the entire site in 1995. Twenty-five 100-by 100-foot grids were established and a surface and sub-surface investigation was performed. Two MEC items (75mm high explosive projectile and 81mm illumination mortar) were found and removed. Munitions debris removed included projectiles (57mm and 37mm), a projectile fuze, and pyrotechnic and practice items. Based on the results of the investigation, the USACE Huntsville Division (CEHND) recommended no further action at MRS-30. MRS-30 will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program.

Upon the completion of the removal action at MRS-30, approximately 30 to 40 feet of fill material was placed over most of MRS-30 in support of construction activities associated with the expansion of Turn 11 of the Laguna Seca Raceway.

9.3.2.2 MRS-46

MRS-46 includes approximately 67 acres and lies immediately adjacent to Parcel L20.7.1 and in close proximity to Parcel L3.1. The boundary of MRS-46 is based on transfer parcel delineation and not on evidence of munitions use. Available records do not indicate that a range was located in this portion of the Impact Area. The area was inspected by a UXO Safety Specialist and small arms expended blank

casings were found. The ASR recommended that this area undergo sampling to determine if military munitions are present (*USAEDH, 1997*).

Sampling of MRS-46 was initially conducted as part of the investigation of the adjacent Impact Area. During the sampling, two 2.36-inch rockets (MEC) were found on the ground surface. The contractor conducting the sampling concluded that the two rockets were discarded military munitions (DMM) discarded at this location; however, based on their presence, sampling of the entire site was conducted. No MEC were found during the remaining sampling effort. A total of 10 munitions debris items (various portions of practice rifle grenades) were found and removed. Because a portion of MRS-46 was going to be leased to York School for the construction of an athletic field, the entire lease area was investigated using digital geophysical equipment. No MEC or munitions debris were discovered during the digital geophysical investigation, and no further action was recommended. MRS-46 will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program.

In 2002, York School completed the construction of an athletic field and installation of an irrigation well within the portion of MRS-46 leased to them by the Army. The construction of the athletic field and installation of underground irrigation system involved considerable earth moving and grading during construction. In accordance with an operation and maintenance agreement between the California State Department of Toxic Substances Control and York School, York School provided UXO construction support in the form of an on-site UXO technician to observe these activities. No military munitions were found during the athletic field construction, installation of the irrigation well or irrigation system (*Parsons, 2002*).

9.3.2.3 MRS-47

MRS-47 (Wolf Hill) includes approximately 79 acres and lies along South Boundary Road immediately adjacent to Parcel L20.7.5 (Plate 11). The boundary of MRS-47 is based on transfer parcel delineation and not on evidence of munitions use. The ASR noted that “37mm projectiles were found just inside the

installation boundary at Wolf Hill” and that a final recommendation would be based on final removal actions (*USAEDH, 1997*).

MRS-47 has undergone two sampling investigations and a removal action. During sampling, evidence that the site was used as an impact area was found. MEC items found included high explosive mortars and projectiles. CMS conducted a 4-foot removal action over one-hundred percent (100%) of MRS-47 in 1997. Three hundred and fifty-eight 100- by 100-foot grids and partial grids (100% of MRS-47) were investigated. Two-hundred sixty-one MEC and one-hundred twenty-seven munitions debris items were found and removed. No MEC or munitions debris was found closer than 180 feet from the boundary of Parcel L20.7.5 No further military munitions investigation was recommended. MRS-47 will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program.

9.3.2.4 Fort Ord Basewide Range Assessment

MRS-30, MRS-46, and MRS-47 were also investigated as part of the 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 adjacent MRS. MRS-30 was identified as HA-160, MRS-46 as HA-176, and MRS-47 as HA-177. The boundary of each of the three historical areas includes all of the munitions response site. A site reconnaissance was conducted if warranted by the results of the data review. 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 (way points) loaded into a GPS unit. The site reconnaissance was conducted by a two-person team that included an 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-160 (MRS-30)

The investigation at this historical area included a literature review only. Because no small arms ranges were present within MRS-30, and because fill was placed over most of MRS-30 during the expansion of the Laguna Seca Raceway, no further action for HA-160 was recommended under the BRA (*MACTEC/Shaw, 2005*).

HA-176 (MRS-46)

The investigation at this historical area included a literature review only. Further evaluation is recommended for HA-176 after the site is evaluated under the ongoing former Fort Ord Military Munitions Response Program (*MACTEC/Shaw, 2005*).

HA-177 (MRS-47)

The investigation at this historical area included a literature review, site reconnaissance, and sampling. Because explosive compounds were detected in soil samples collected at HA-177, further evaluation of this area is recommended under the BRA (*MACTEC/Shaw, 2005*).

9.4 Rationale for Track 0 Designation of Parcels L3.1, L20.7.1, L20.7.2, L20.7.3, L20.7.4, L20.7.5, S4.2.1, S4.2.2, S4.2.3, and S4.2.4.

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 Track 1 OE RI/FS (*MACTEC, 2004*) did not indicate that military munitions were used on these parcels.
- These parcels historically were outside of the fenced Impact Area.

- No military munitions were found during the vegetation clearance within the parcels performed along South Boundary Road.
- South Boundary Road has been in this location since at least 1933, and it is not likely that the road would have been used for training with military munitions.
- No MEC was found within the portion of Parcel L3.1 sampled. The munitions debris found on Parcel L3.1 is thought to have been disposed on this parcel and not the result of training activities.
- No military munitions were found within the portion of MRS-46 where York School constructed an athletic field in the area previously sampled using digital geophysical equipment.

9.5 Track 0 Checklist – Group 8 Parcels

PARCELS

L3.1, L20.7.1, L20.7.2, L20.7.3, L20.7.4,
L20.7.5, S4.2.1, S4.2.2, S4.2.3, and S4.2.4

DESCRIPTION

Approximately 100 acres including South Boundary Road from the entrance to York School to the Laguna Seca Raceway. Also includes several parcels that include the future Highway 68 Right-of-Way and lie on the south side of South Boundary Road between the road and the former Fort Ord installation boundary (Plate 11).

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.
1945: North side of South Boundary Road includes the Impact Area. No ranges are present adjacent to these parcels.
1954-71: Wolf Hill Training Area (MRS-47) present.
1956-64: Laguna Seca Training Area established to the south of the parcels. Survey training Area also established in this area. Wolf Hill and Laguna Seca are initially assigned to Division Artillery.
1964: Range 23 STT present in the vicinity of Wolf Hill. Range firing point appears to be within the northern portion of Wolf Hill with the direction of firing to the northwest.
1972-88: Four small arms firing ranges established on the north side of South Boundary Road. Firing was away from the parcels toward the center of the Impact Area.
1978-88: A fifth small arms firing range established to the north of MRS-47.

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; Ordnance and Explosive Removal Action Reports.

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

Fort Ord Regulation 350-5, Appendix A, On-Post Ranges

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

Property Transfer: Portions of the parcels were driven and walked in support of the future transfer of the parcel, no evidence of the use of military munitions was observed.
Fuel break widening during July through September of 2004. Vegetation was removed 55

feet south of the road with escort by a military munitions specialist. No MEC or munitions debris was found during the vegetation clearance work.

Geophysics	Digital geophysical investigation of a portion of Parcel L3.1.
Excavations	None
Soil Borings	None
Wells	None

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	Mid 1960s through early 1970s in the Impact Area.

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS	<p>MRS-46 – This site lies immediately adjacent to Parcel L20.7.1 and in close proximity to Parcel E29b.3. The boundary of MRS-46 is based on transfer parcel delineation and not on evidence of munitions use. Sampling of MRS-46 was initially conducted as part of the investigation of the adjacent impact area. During the sampling, two 2.36-inch rockets (MEC) were found on the ground surface. The contractor conducting the sampling concluded that the two rockets had been discarded at this location. However, based on their presence sampling of the entire site was conducted. No MEC was found during this sampling effort. A total of 10 munitions debris items (practice rifle grenade parts) were found and removed. Upon completion of sampling the entire site was re-evaluated (sampled) using digital geophysical equipment. No MEC or munitions debris was discovered and no further action was recommended.</p>
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A digital geophysical evaluation (sampling) was also performed on a portion of Parcel L3.1 which lies on the south side of south boundary

road between the road and the former Fort Ord installation boundary. This area was identified as the York School South Area. The investigation included a visual sweep and subsurface investigation using digital geophysical equipment. No MEC was found during sampling. Three munitions debris items (pieces of practice rifle grenades) were found and removed. Based on these results, no further action was recommended. MRS-46 and the York School South Area will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

MRS-47 – This site lies immediately adjacent to L20.7.5 and close proximity to Parcels L20.7.4, S4.2.1 and S4.2.4. Initial sampling of MRS-47 was conducted in 1994 and three MEC items were found. Based on the sampling results, a removal action was performed over the entire site, including the areas (girds) sampled previously. Two-hundred sixty-one MEC items and 127 munitions debris items were removed. MRS-47 will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

MRS-30 – This site is adjacent to MRS-47 and Parcel L20.7.5 A removal of all detected military munitions to a depth of four-feet was performed over the entire site in 1995. Two MEC items (75mm high explosive projectile and 81mm illumination mortar) were found and removed. Munitions debris removed included projectiles (57mm and 37mm), a projectile fuze, and pyrotechnic and practice items. Based on the results of the investigation, the USACE Huntsville Division (CEHND) recommended no further action at MRS-30. MRS-30 will undergo additional evaluation under the ongoing former Fort Ord Military Munitions Response Program.

Incident Reports
MEC
Munitions Debris

None
None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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10.0 GROUP 9 – PARCEL S4.3

10.1 Description

Parcel S4.3 is located in the southeastern portion of the former Fort Ord and comprises a portion of the right-of-way for Highway 68. The parcel includes approximately 1.5 acres of undeveloped land immediately adjacent to Highway 68 (Plate 12). No buildings or other structures are located on this parcel.

10.2 History and Use

This parcel lies on a tract that was agricultural land (Rancho El Toro) prior to the acquisition of the property by the Army sometime after July 1, 1940. Review of 1940s era documentation including historical maps and aerial photographs does not indicate any specific training sites in this area. No specific training areas were identified within the parcel or in adjacent areas on the 1950s training facilities maps. In 1954, this portion of Fort Ord was assigned to Division Artillery. Beginning in 1957, a large area in the southeastern portion of the former Fort Ord, including the land containing this parcel, was assigned to the 1st Brigade. The mission of the 1st Brigade was to conduct basic combat training (*Army, 1968*). Starting in June of 1964, an area including the parcel was assigned to “G-3” (Operations and Plans). However, no specific training activities are noted on this parcel or in adjacent areas on the 1960s era maps. In 1972, a helicopter training area is established to the north of MRS-63 (a Track 1 site), approximately 4,000 feet north of Parcel S4.3. From 1976 through base closure, the parcel is within a larger area designated as an Engineer Training Area. No specific training activities are noted on the parcel or in the parcel vicinity. In 1978, a noise buffer is established along the southeastern perimeter of Fort Ord. Within the noise buffer, the firing of blank ammunition, pyrotechnics, explosives, and simulators was not allowed (*Army, 1978*). Based on the available historical information, the area around Parcel S4.3 was used for general training and maneuvers from the 1940s until base closure in 1994, with restrictions placed on the use of military munitions beginning in 1978.

10.3 Area Investigations

10.3.1 Investigations Within the Group 9 Parcel

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 search documents, and conducting interviews with former Fort Ord personnel, no evidence was found to indicate the use of military munitions on Parcel S4.3, and no military munitions-related investigations beyond the literature search (i.e., reconnaissance or sampling) have been performed.

In support of the future transfer of this property, a site visit of Parcel S4.3 was conducted in January 2005. The site visit was performed by a representative of the DTSC. The DTSC representative had previously undergone ordnance recognition and safety training. The site visit included walking and driving a portion of the parcel and documenting general site conditions. No evidence of military munitions was observed during the site visit.

10.3.2 Investigations of Adjacent Areas

Parcel S4.3 lies immediately adjacent to undeveloped property that was transferred to the Bureau of Land Management (BLM) in 1996. Future reuse of the surrounding former Fort Ord land will be habitat reserve under the jurisdiction of the BLM (*USAEDH, 1997*). The BLM property is open to the public for hiking, biking, and horseback riding with use restricted to marked trails. MRS-63 lies to the north of the parcel (Plate 12).

MRS-63 is approximately 28 acres and is located at the southern end of Fort Ord and east of the Laguna Seca Raceway within the BLM property (Plate 14). The southernmost boundary of MRS-63 lies approximately 100 feet north of Parcel S4.3. An area encompassing MRS-63 (Site “T”) was identified during interviews conducted during the Preliminary Assessment/Site Investigation (PA/SI) phase of the Fort Ord Archives Search (*USAEDH, 1997*). The Site T was identified as being used for training from

1948 to 1950. Site T included MRS-63 as well as nearby MRS-62. Military munitions reportedly used in Site T included small arms ammunition and flares.

10.3.2.1 MRS-63 (Canyon Training Area)

Site Investigations

Fort Ord Military Munitions Response Program

A site reconnaissance was completed in 1996 as part of the PA/SI phase of the archives search for known and suspected munitions response sites at the former Fort Ord. Several areas of potential military munitions use were identified based on information gathered during interviews conducted as part of the PA/SI. MRS-63 was identified in those interviews as a training area used from 1948 to 1950. Small arms ammunition and flares were reportedly used. A USACE UXO Safety Specialist walked a portion of the site, visually searching the path walked and searching for subsurface anomalies using a magnetometer. The area walked was within the western portion of the MRS-63 boundary, and also included land immediately west of the site. Expended blank small arms ammunition and expended pyrotechnics were found (munitions debris). No evidence of fragmentation, fuzes, or projectiles was observed. No evidence of other types of training or use as an impact area was identified during the reconnaissance. The USACE UXO Safety Specialist assigned MRS-63 a RAC score of 5, which indicates that no further military munitions-related investigation is necessary (*USAEDH, 1997*).

A follow-up site walk was conducted at MRS-63 on October 23, 2003. The site walk location was selected to supplement information collected during reconnaissance efforts conducted previously at this site. The site walk was conducted by a two-person team, which included a GPS operator. The site walk consisted of walking a portion of the site and visually inspecting the path and area immediately surrounding it for evidence of the use of military munitions. The path walked was recorded using a GPS unit. Expended blank small arms ammunition was observed, but no military munitions items or evidence of the use of military munitions were found during the site walk performed at MRS-63. Additional

information on the site walk is included as an attachment to the Final Track 1 OE RI/FS (*MACTEC, 2004*).

MRS-63 was evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended no further military munitions investigation at MRS-63 (*MACTEC, 2004*). Based on review of existing information, MEC is not expected to be found at MRS-63, and in accordance with the Track 1 ROD, no further action related to MEC is required for this site (*Army, 2005*). MRS-63 meets the Track 1, Category 3 criteria because historical research and field investigations identified evidence of past training involving only pyrotechnic items that are not designed to cause injury. In the unlikely event that a MEC item of the pyrotechnic type previously observed on the site is found at MRS-63, 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 at MRS-63 was presented in the Track 1 Proposed Plan (*Army, 2004*), the Track 1 OE RI/FS (*MACTEC, 2004*), and is included in the Track 1 ROD (*Army, 2005*).

Fort Ord Basewide Range Assessment

MRS-63 was also investigated as part of the BRA for small arms and multi-use ranges. The assessment of MRS-63 for potential hazardous and toxic waste-related contamination included a literature search, site reconnaissance, and mapping of the site. Under the BRA, MRS-63 was identified as HA-193. 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. Expended blank small arms ammunition, an open pit, concertina wire, and fence posts were found in the northern half of the site during the reconnaissance conducted at HA-193 (MRS-63). No evidence was found indicating that the site was used for other than firing of weapons using small arms blank ammunition. Also, no evidence of any military

munitions use was identified in the areas walked in the southern half of the site (adjacent to Parcel S4.3). Based on the absence of features that would indicate a training range (targets, range markers, and munitions debris), and the presence of only spent blank small arms ammunition casings, no further investigation for chemical contamination was recommended for HA-193 (MRS-63) under the Fort Ord BRA (*MACTEC/Shaw, 2005*).

10.4 Rationale for Track 0 Designation of Parcel S4.3

Parcel S4.3 meets the definition of a Track 0 area because it contains no evidence of munitions and explosives of concern (MEC) and has never been suspected as having been used for MEC-related activities. This conclusion is based on the following rationale:

- A review of the military munitions program related documentation for the former Fort Ord including, the Archives Search Reports (*USACE, 1997*), the Literature Review Report (*HLA, 2000a*), the Track 1 OE RI/FS (*MACTEC, 2004*) and the Basewide Range Assessment (*MACTEC/Shaw, 2005*) did not indicate that military munitions were used on this parcel.
- Other than expended blank small arms ammunition and expended pyrotechnic items, no evidence has been found to indicate the use of other military munitions on nearby MRS-63. MRS-63 was evaluated as Track 1 and no further action was recommended.
- Parcel S4.3 lies adjacent to Highway 68. Highway 68 (formerly Canyon Del Rey) was present in this approximate location prior to the purchase of the adjacent property by the U.S. Government in 1917. There is no reason to believe that training occurred on Highway 68.

10.5 Track 0 Checklist – Group 9 Parcel

PARCEL	S4.3
DESCRIPTION	Right-of-Way for Highway 68. Approximately 1.5 acres of undeveloped land immediately adjacent to Highway 68 (Plate 12).
HISTORICAL USE	<p>Historical evidence suggests no use of military munitions</p> <p>Agricultural land (Rancho El Toro) prior to Army purchase. The parcel was included in a tract of land acquired by the Army after July 1, 1940.</p> <p>1957: Assigned to the 1st Brigade. No specific training identified within the parcel boundary.</p> <p>1964: Within a larger area identified as “r” and assigned to G-3 (operations and plans). No specific training identified within the parcel boundary.</p> <p>1972: Helicopter training area approximately 4000 feet to the north.</p> <p>1976-88: Within a larger area identified as “R” Engineer Training Area. No specific training identified within the parcel boundary.</p> <p>1978-88: Parcel within an area that extends along the eastern boundary of Fort Ord designated as a “Noise Buffer Zone (In this area, no firing of blank ammo: Pyrotechnics, Explosives or Simulators).”</p>
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; Fort Ord Range Regulations (350-5).
<u>Components</u>	
Aerial Photos	Pre-1940, 7/3/51, 5/14/56, 1/11/65 (mosaic), 6/3/66, 3/13/69, 12/17/75, 3/25/86, 11/4/88, 10/4/89, 7/6/92.
Real Estate Records	<p>1912: U.S. Geological Survey</p> <p>1913: Department of the Interior, reprinted 1918</p> <p>1915: Proposed Acreage Subdivisions</p> <p>1922: Assessors Plats, Monterey County</p> <p>1940: Department of the Interior, USGS</p>

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: 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
 1/7/72: 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
 5/2/88: Master Plan, Training Facilities

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: Fort Ord Master Plan, Reservation
 Boundary & Land Use Maps
 1972: Fort Ord and Vicinity Map (V895S)
 3/1/75: Master Plan, Reservation Map
 6/1/77: Master Plan, Reservation Plan
 8/1/84: Fort Ord Military Installation Map
 (V795S)

SITE INVESTIGATION ACTIVITIES

Site Walks	Property Transfer: Portions of the parcel walked in support of the future transfer of the parcel, no evidence of the use of military munitions was observed.
Geophysics	None
Excavations	None
Soil Borings	None
Wells	None

ADJACENT AREAS

CBR Training Areas	None
CWM Training Areas	None
Small Arms Ranges	None

MILITARY MUNITIONS INFORMATION

Known or Suspected Adjacent MRS	<p>MRS-63 – This site was identified during interviews conducted as part of the PA/SI. The area, identified as Site T, was reportedly used for training that included the use of flares and small arms weapons from 1948 to 1950. This training area is not identified on available training facilities maps. No sampling has been conducted at this site. A site walk was performed by a USACE UXO Safety Specialist in January 1996. Expended blank small arms ammunition and expended pyrotechnic items were observed. The USACE UXO Safety Specialist assigned a Risk Assessment Code (RAC) score of 5 for Site T, which indicates that no further military munitions investigation is necessary.</p> <p>A follow-up site walk was conducted in October 2003 during the Track 1 OE RI/FS. Only expended blank small arms ammunition was found during the site walk. MRS-63 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</p>
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the use of pyrotechnic items that are not designed to cause injury. The rationale for taking no further action at MRS-63 was presented in the Track 1 Proposed Plan, the Track 1 OE RI/FS, and is included in the Track 1 ROD (*Army, 2005*).

Incident Reports

MEC

None

Munitions Debris

None

EVIDENCE OF PAST MILITARY MUNITIONS USE:	NONE
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11.0 REFERENCES

Arthur D. Little, Inc. (ADL), 1994. *Final Community Environmental Response Facilitation Act (CERFA) Report, Fort Ord, Monterey, California. Real Estate Fort Ord (Military Reservation)*. April.

Harding Lawson Associates (HLA), 1991. *Work Plan, Remedial Investigation/Feasibility Study, Fort Ord, California*. December 2.

_____, 1994a. *Draft Final Site Characterization Site 27 – Army Reserve Motor Pool, Fort Ord, California*. May 16.

_____, 1994b. *Draft Final Data Summary and Work Plan, Site 39 – Inland Ranges, Fort Ord, California*. May 17.

_____, 1995a. *Basewide Remedial Investigation/Feasibility Study Fort Ord, California, Volume II- Remedial Investigation Sites 16 and 17*. November 23.

_____, 1995b. *Draft Final Site Characterization, Site 20-South Parade Ground, 3800 and 519th Motor Pools, Fort Ord, California*. May 1.

_____, 2000a. *Draft Final Literature Review Report, Ordnance and Explosives, Remedial Investigation/Feasibility Study, Former Fort Ord, California*, January 4.

_____, 2000b. *Track 0 Technical Memorandum, Ordnance and Explosives, Remedial Investigation/Feasibility Study, Former Fort Ord, California*. January 21.

Human Factors Applications, Inc. (HFA), 1994. *OEW Sampling and OEW Removal Action. Fort Ord Final Report*. December 1.

_____, 1997. *Remedial Action Work Plan, Remediation Sites, Fort Ord, California*.

International Technology Corporation (IT), 1999a. *Draft Remedial Action Confirmation Report, Area A, Operable Unit 2 Landfills, Former Fort Ord, California*. March.

_____, 1999b. *Remedial Action Confirmation Report and Post-Remediation Health Risk Assessment, Sites 16 and 17 Remedial Action Basewide Remediation Sites, Former Fort Ord, California*. April.

_____, 2001. *Draft Final Remedial Action Confirmation Report and Post-Remediation Screening Risk Assessment Area A, Operable Unit 2 Landfills, Former Fort Ord, California*. Revision 0, April.

MACTEC Engineering and Consulting, Inc. (MACTEC), 2004. *Final Track 1, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California*. June 21.

MACTEC Engineering and Consulting, Inc., / Shaw Environmental, Inc. (MACTEC/Shaw), 2005. *Draft Final Comprehensive Basewide Range Assessment Report, Former Fort Ord, California, Revision 0*.
March 31.

Parsons Infrastructure and Technology Group, Inc. (Parsons), 2002. *York School Letter of Final Report*.
May 28.

USA Environmental Inc. (USA), 2000a. *Draft Final, SiteStats/GridStats Sampling and OE Removal After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-4A*. October 23.

_____, 2000b. *Final, After Action Report SiteStats/GridStats OE Sampling, Inland Range Contract former Fort Ord, California Site 24-B and OE-39*. December 30.

_____, 2001. *Final SiteStats/GridStats Sampling After-Action Report, Inland Range Contract, former Fort Ord, California, Site OE-45*. September 30.

U.S. Department of the Army (Army), 1933-34. *Camp Ord and Vicinity, Terrain Map*. Prepared under the direction of the Chief of Engineers.

- _____, 1945. *Training Facilities, Fort Ord and Vicinity, California*. Revised August 1945.
- _____, 1954. *Training Areas that cannot be used at same time: (as presented in use)*. Circa 1954.
- _____, 1957. *Map of Fort Ord Training Areas & Facilities. Enclosure I to Annex "H."* Revised: 15 July 1957.
- _____, 1958. *Map of Fort Ord Training Areas & Facilities. Enclosure I to Appendix I to Annex "H"*. Revised: 10 January 1958.
- _____, 1968. *U.S. Army Training Center Infantry, Company D, 4th Battalion, 1st Brigade*. June.
- _____, 1978. *Ranges and Training Area Overlay, Fort Ord and Vicinity. Appendix C to Fort Ord Reg 350-5*. Revised as of January 1978.
- _____, 1994. *Record of Decision, Operable Unit 2, Fort Ord Landfills, Fort Ord, California*. July 15.
- _____, 2000a. *Superfund Proposal Plan: No Action is Proposed for Selected Areas at Fort Ord, California*. February 1.
- _____, 2000b. *Ordnance and Explosives, Remedial Investigation/Feasibility Study Work Plan, Former Fort Ord, California*. May 15.
- _____, 2002. *Final Record of Decision, No Action Regarding Ordnance-Related Investigation, Former Fort Ord, California*. June 19.
- _____, 2004. *Superfund Proposed Plan: No Further Action is Proposed for Track 1 Sites at Former Fort Ord*. September 15.
- _____, 2005. *Record of Decision, No Further Action Related Munitions and Explosives of Concern – Track 1 Sites, No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22), Former Fort Ord, California*. March 10.

U.S. Army Engineer Division, Huntsville (USAEDH), 1993. *Archives Search Report Fort Ord, California, Monterey County, California. Prepared by U.S. Army Corps of Engineers St. Louis Division.* December.

_____, 1994. *Archives Search Report (Supplement No. 1) Fort Ord, California, Monterey County, California. Prepared by U.S. Army Corps of Engineers St. Louis Division.* November.

_____, 1997. *Revised Archives Search Report Fort Ord California, Monterey County, California. Prepared by U.S. Army Corps of Engineers St. Louis Division.* December.