

**APPENDIX B**

**County North MRA Conceptual Site Model  
(Formerly Development North MRA)**

## 7.0 DEVELOPMENT NORTH MRA CONCEPTUAL SITE MODEL

The Development North MRA CSM profiles are based on existing information and data provided by the Army and contained in the Fort Ord Administrative Record. Tables and figures associated with the Development North MRA are located at the end of Section 7.0.

### 7.1 Development North MRA Facility Profile

The facility profile provides information on location, physical boundaries, roadways and access, structures and utilities, historical military use, and administrative controls associated with the MRA.

#### 7.1.1 Boundaries and Access

The Development North MRA is located in the north-central portion of the former Fort Ord, bordered by Inter-Garrison Road to the north, the CSUMB MRA to the west, Gigling Road and the Parker Flats MRA to the southwest, and a portion of Watkins Gate Road and additional former Fort Ord property to the south and east (Figure 7.1-1). The Development North MRA is wholly contained within the jurisdictional boundaries of County of Monterey.

The Development North MRA encompasses approximately 506 acres and fully contains USACE property transfer parcels L5.7 and L20.2.1 and portions of USACE property transfer parcels E19a.3 and E19a.4 (Table 7.1-1 and Figure 7.1-1). The remaining portions of USACE property transfer parcels E19a.3 and E19a.4 are contained in the Parker Flats MRA (Section 5.1.1).

Inter-Garrison Road, located along the northern boundary of the MRA, and Gigling Road, located along a portion of the southern boundary of the MRA, are active roadways with vehicle traffic on a daily basis. These are major roadways of the FORA transportation network. Watkins Gate Road also borders a portion of the southern boundary of the MRA and crosses through the southeastern portion of the MRA. A number of unpaved roadways and dirt trails are located throughout the MRA (Figure 7.1-1). The Development North MRA is open land, and no fences, gates, or barricades restrict access to the property. Detailed information on roadways and access is provided in Table 7.1-2.

#### 7.1.2 Structure and Utilities

The Development North MRA contains four existing buildings (Figure 7.1-1; Army 2007). Detailed information concerning location, size, description of structures, presence of ACM and/or LBP, if evaluated, and year constructed is provided in Table 7.1-3. A water tower is located in the southeastern portion of the MRA, but is not included as part of the FORA ESCA property transfer (Shaw/MACTEC 2006).

The Development North MRA is not served by any utilities. However, telephone, electrical line, high-powered transmission, and natural gas lines extend across portions of the MRA in

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various locations (Figure 7.1-1). A water line oriented in a north-south direction enters the MRA from the northern boundary and extends to the water tower located in the southeastern portion of the MRA. More detailed information on utilities within the MRA is provided in Table 7.1-2.

### 7.1.3 Historical Military Use

Initial use of the Development North MRA began in approximately 1917 when the U.S. government purchased more than 15,000 acres of land and designated it as an artillery range. No training maps from this time period have been found, and no pre-World War II-era military munitions have been removed during previous Army response actions within the Development North MRA.

Figure 7.1-2 shows the locations of known training sites within the MRA. Table 7.1-4 summarizes the historical military uses of these areas within the Development North MRA.

The Archives Search Report and historical training facilities maps indicate that the Development North MRA was used for troop training and maneuvers, including combat ranges and bivouac areas. The specific type of training that would have occurred in the combat ranges is unknown.

To facilitate previous MEC investigations and removal activities, the historical use areas were divided into MRSs. The MRA is comprised of five MRSs (Table 7.1.1 and Figure 7.1-3). The Development North MRA also includes property that is not part of any MRS (Figure 7.1-3).

The MRSs were identified through a review of Fort Ord records and included the following historical use areas (USACE 1997a and Army 2006):

- MRS-27E - Combat Range, Bivouac Area, and Troop Training Area
- MRS-27F - Combat Range, Bivouac Area, and Troop Training Area
- MRS-45 - Troop Training Area
- MRS-57 - Combat Range and Troop Training Area
- MRS-59 - Combat Range and Troop Training Area

### 7.1.4 Administrative Controls

A number of administrative controls have been and will be imposed on the Development North MRA, including land use covenants, county ordinances, FORA resolutions, an MOA between FORA and the DTSC, habitat-related requirements, and BOs. The applicable administrative controls are described in more detail in Table 7.1-5. These administrative controls are enforceable and place constraints on field-related activities and future development activities until such time that remediation has been completed and the regulatory agencies have made a determination as to the closure status of the MRA.

## 7.2 Development North MRA Physical Profile

The physical profile provides information on topography, geology, vegetation, surface water, and groundwater associated with the MRA that may affect the location, movement, detectability, and recovery of military munitions.

### 7.2.1 Topography and Geology

The terrain of the Development North MRA is primarily rolling hills. The elevation ranges from approximately 210 to approximately 370 feet msl with 2 to 15 percent slopes (Figure 7.2-1). The surface soils are characterized as eolian (sand dune) and terrace (river deposits), which consist of unconsolidated materials of the Aromas and Old Dune Sand formations. The primary soil type present in the Development North MRA is Oceano Loamy Sand (Figure 7.2-1). Soil conditions at the MRA consist predominantly of weathered dune sand, which provides a relatively good environment for conducting geophysical surveys, including electromagnetic and magnetic surveys. Table 7.2-1 provides more detailed information on the geology of the former Fort Ord and soils encountered within the MRA.

### 7.2.2 Vegetation

Vegetation in the Development North MRA consists primarily of coastal coast live oak woodland with smaller areas of maritime chaparral and grassland (Table 7.2-2 and Figure 7.2-2; USACE/Jones & Stokes 1992). Vegetation varies from sparsely vegetated areas to heavy brush. Past field activities have noted the presence of poison oak in the area.

### 7.2.3 Surface Water and Groundwater

Groundwater investigations associated with the Basewide RI/FS have resulted in the installation of a number of groundwater monitoring wells on former Fort Ord property near the Development North MRA. The Salinas Groundwater Basin is the main hydrogeologic unit that underlies the MRA. The depth to groundwater is estimated to be greater than 100 feet bgs. One known monitoring well is located in the northeastern portion of the MRA, and several monitoring wells are located to the northwest of the MRA (Figure 7.2-1). The occurrence of groundwater beneath the MRA is not expected to influence geophysical surveys conducted for MEC remediation activities.

No surface-water features or delineated wetlands are reported to be present on the Development North MRA; however, several aquatic features (i.e., vernal pools, ponds) are present to the south and southeast of the MRA (Figure 7.2-2).

## 7.3 Development North MRA Release Profile

The release profile provides information on the MRA with respect to investigation and removal history, location and extent of military munitions, such as MEC, MPPEH, and MD, and history and conditions of HTW.

### 7.3.1 Investigation and Removal History

Numerous investigation and removal operations were performed by the Army in the Development North MRA, which included:

- PA/SI at MRS-27E and MRS-27F in January 1996 and at MRS-59 in February 1996 (USACE 1997a)
- SS/GS sampling of 86 100-foot by 200-foot grids to a depth of 4 feet at MRS-45 between May and July 1997 (USA 2001h)
- TCRAs and visual surface searches at MRS-45 and MRS-57 between December 2001 and February 2002 (Parsons 2002c)
- Several field latrines investigated for MEC between March and November 1997 (USA 2001f)

These investigations and removal actions are summarized in Table 7.3-1. During the removal actions, no known burial pits containing MEC were encountered or documented in the MRA. The results of these investigations and removal actions with respect to the types of MEC recovered are summarized in Table 7.3-2, and MEC and MD are shown on Figures 7.3-1, 7.3-2, and 7.3-3. The types of MEC and MD found in the Development North MRA are consistent with use as a training and maneuver area.

### 7.3.2 Types of MEC Recovered and Hazard Classification

Table 7.3-2 includes a summary of MEC recovered from the Development North MRA and associated hazard classification scores. All MEC removed from the MRA were identified and assigned a hazard classification. Hazard classification scores range from 0 to 3 according to the following descriptions:

Hazard Classification Score	Description
0	Inert MEC that will cause no injury
1	MEC that will cause an injury or, in extreme cases, could cause major injury or death to an individual if functioned by an individual's activities
2	MEC that will cause major injury or, in extreme cases, could cause death to an individual if functioned by an individual's activities
3	MEC that will kill an individual if detonated by an individual's activities

The hazard classification provides a qualitative assessment of risk for MEC. These classifications will be used as inputs in future risk assessments for the Development North MRA. It should be noted that SAA is not considered in the risk assessment because SAA poses no explosive risk.

### 7.3.3 Location of MEC and MD

Figures 7.3-1, 7.3-2, and 7.3-3 show the location of MEC and MD previously removed from the Development North MRA. A summary of the MEC and MD encountered during previous investigations and removal actions in the Development North MRA is provided in Table 7.3-3 and included:

- 7 UXO items
- 12 ISD items (MPPEH that could not be classified as UXO, DMM, or MD)
- 2,224 pounds of MD (includes MD-E and MD-F items if weights were documented)

The MEC items encountered during previous removal actions were located near the western and southern boundaries with the CSUMB MRA and in the northeastern corner of the Development North MRA, where three UXO items were encountered in one location (Figure 7.3-2). The weight of MD found in individual sampling grids ranged from zero to greater than 100 pounds (Figures 7.3-1 and 7.3-3). The grids in the northern portion of the MRA contained the majority of the MD, with the exception of a number of grids bordering the CSUMB MRA to the east. The MD identified on Figures 7.3-1 and 7.3-3 include SAS but not SAA.

The MMRP database indicates that the majority of the MEC removed from the MRA were located on the surface. Figure 7.3-4 shows the distribution of MEC recovered at specified depth intervals.

### 7.3.4 HTW History and Conditions

A BRA was conducted by the Army to evaluate the potential presence of COCs related to HTW at known or suspected small arms ranges and military munitions training sites within the former Fort Ord (Shaw/MACTEC 2006). The areas are identified as HAs. The objectives of the BRA investigation activities were to identify which HAs could be eliminated from consideration for potential remediation related to COCs, and to identify areas that require additional investigation for potential chemical contamination or should be considered for remediation/habitat mapping related to COCs.

Table 7.3-4 summarizes the findings of the BRA with respect to HTW for each MRS. As stated in the FOSET, based on the BRA, no further action has been recommended for HAs within this MRA (Army 2007).

### 7.3.5 Regulatory Status

Work completed to date has been documented in after action reports, which have received regulatory reviews; however, the regulatory agencies have identified the following outstanding issue:

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- The CERCLA process must be completed for the Development North MRA, including development of an RI/FS, development of a Proposed Plan, and completion of a ROD.

## 7.4 Development North MRA Land Use and Exposure Profile

The land use and exposure profile provides information on the MRA with respect to cultural resources, the current and reasonably foreseeable future uses of the land, and the potential human receptors that may be exposed to military munitions.

### 7.4.1 Cultural Resources

According to archaeological records, the greater Monterey Peninsula was occupied by Native American groups, including the Ohlone (Costanoan) Indians (EA 1991). Monterey County has designated the southeastern margin of the former Fort Ord as an archaeologically sensitive zone based on two known archaeological sites (EA 1991). The remaining portions of the former Fort Ord have been designated as having low or no archaeological sensitivity. The Development North MRA is located in the north-central portion of the former Fort Ord in an area designated as having low archaeological sensitivity.

Actions to be taken at the CSUMB MRA will be in compliance with the Programmatic Agreement Among the Department of the Army, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Regarding the Base Closure and Realignment Actions at Fort Ord, California.

### 7.4.2 Current Land Use

The current uses for the MRA include habitat. There are residual structures that were in support of the training at the MRA, but these have been abandoned. Reportedly, the area is accessed by day recreational users, including hikers and mountain bikers. There is also evidence of trespasser activity and illegal dumping.

### 7.4.3 Reasonably Foreseeable Future Land Use

Table 7.4-1 and Figure 7.4-1 identify the proposed uses of the MRA by parcel. As indicated in the Base Reuse Plan, this area is planned for development (i.e., residential and school site), habitat reserve with borderland interface, and habitat reuse, which includes habitat reserve and habitat corridor. It is important to note that the general development land use category encompasses infrastructure activities such as roadway and utility construction as well as commercial/retail, parks, and borderland activities.

### 7.4.4 Potential Receptors

A number of potential human receptors that could come in contact with residual MEC have been identified for current and future land use scenarios. The potential human receptors include:

- Construction Workers (persons conducting surface and subsurface construction activities) – current/future
- Utility Workers (persons installing and maintaining surface and subsurface utilities) – current/future
- Trespassers (persons not authorized to enter or use an area) – current/future
- Firefighters (may require installation of fire breaks) – current/future
- Emergency Response Workers (police and emergency medical technicians conducting surface activities) – current/future
- Ancillary Workers (biologist, archaeologists) – current/future
- Residents (persons conducting surface and subsurface activities) – future
- Recreational Users (persons biking and on foot) – future

## 7.5 Development North MRA Ecological Profile

The ecological profile provides information on the MRA with respect to biological resources, plant communities and habitats, threatened and endangered species, and habitat management. This information is discussed below and provided in Table 7.5-1.

As discussed in Section 7.3.4, COCs related to HTW have been previously addressed and no further action was recommended. Therefore, potential exposure of ecological receptors to the primary risk factors has been mitigated to an acceptable level and ecological receptor exposure is not considered further in this CSM.

The HMP identifies the Development North MRA as development (including residential/school site), habitat reserve with borderland development areas along an NRMA interface, and habitat corridor (Figure 7.5-1). The NRMA separates the development category land from the adjacent habitat reserve area. The NRMA and habitat reserve areas support plant and animal species that require implementation of mitigation measures identified in the HMP to ensure compliance with the ESA and to minimize impacts to listed species.

FORA will implement the mitigation requirements identified in the HMP for MEC activities in accordance with the BOs developed during formal consultation between the Army and the USFWS under Section 7 of the ESA. For habitat areas, these measures include conducting habitat monitoring in compliance with Chapter 3 of the HMP (USACE 1997b). For borderland areas, FORA will follow best management practices while conducting work to prevent the spread of exotic species, limit erosion, and limit access to the NRMA.

### 7.5.1 Major Plant Communities and Ecological Habitats

Vegetation in the Development North MRA consists primarily of coastal coast live oak woodland with smaller areas of maritime chaparral and grassland (Table 7.2-2 and Figure 7.2-2; USACE/Jones & Stokes 1992). Vegetation varies from sparsely vegetated areas to heavy brush. Past field activities have noted the presence of poison oak in the area.



## 7.5.2 Threatened and Endangered Species and Critical Habitat

Special-status biological resources are those resources, including plant, wildlife, and native biological communities, that receive various levels of protection under local, state, or federal laws, regulations, or policies. The closure and disposal of former Fort Ord is considered a major federal action that could affect several species proposed for listing or listed as threatened or endangered under the federal ESA.

The HMP for former Fort Ord complies with the USFWS BOs and establishes the guidelines for the conservation and management of wildlife and plant species and habitats that largely depend on former Fort Ord land for survival (USACE 1997b). The HMP incorporated conservation measures pursuant to USFWS BOs dated prior to issuance of the HMP in April 1997. Since April 1997, three additional BOs have been issued that are relevant to MEC removal activities (USFWS 1999, 2002, and 2005). Future MEC remediation is required to be consistent with the applicable conservation measures.

Threatened or endangered plant species identified as having possible occurrence in the Development North MRA include sand gilia (endangered) and Monterey spineflower (threatened). A portion of the Development North MRA has been designated as critical habitat for the Monterey spineflower by the USFWS.

In 2004, the CTS was identified as a threatened species. CTS may be found as far as 2 km from aquatic breeding habitats. As shown on Figure 7.5-1, it is possible the CTS may be found in the Development North MRA because the MRA is within 2 km of aquatic features that may provide breeding habitat for the CTS.

## 7.5.3 Other Communities and Species of Concern

As identified in the HMP, a number of species could be found on the Development North MRA, which have been identified in Table 7.5-2 by parcel. The vegetation on the MRA consists primarily of native oak woodland with smaller areas of maritime chaparral and grassland. The following species are identified in the HMP as having possible occurrence in the Development North MRA: sandmat manzanita, California black legless lizard, and Monterey ornate shrew.

## 7.6 Development North MRA Pathway Analysis

As discussed in Sections 7.3.4 and 7.5, potential exposure of human and ecological receptors to COCs related to the HTW program has been evaluated by the Army. Based on the Army's evaluation in the FOSET, no further action relative to the COCs is required under the ESCA RP. Therefore, no further discussion of potential exposure to human or ecological receptors to COCs relative to the HTW program is presented in this pathway analysis. The primary focus of the exposure pathway analysis is for human health risk from MEC that are potentially present.

### 7.6.1 Exposure Pathways

An exposure pathway analysis was conducted for the Development North MRA using the information gathered in the CSM profiles. Exposure pathways for the Development North MRA are presented on Figure 7.6-1 and discussed below.

#### *Source*

Source areas within the Development North MRA were addressed during the Army's previous removal actions. The historical source areas within the Development North MRA are shown on Figure 7.1-3, and recovered MEC and MD from the MRA are shown on Figures 7.3-1, 7.3-2, and 7.3-3. The source areas include troop training and maneuver areas.

Figure 7.6-2 illustrates the most likely release mechanisms for MEC being found in the Development North MRA, which included:

- Firing, Intentional Placement, Mishandling/Loss, Abandonment, and Burial (Troop Training and Maneuvers)

#### *Access*

The Development North MRA is not restricted by fencing or road barricades.

#### *Receptor / Activity*

Table 7.6-1 identifies the potential human receptors and exposure media as Ground Surface or Below Grade.

### 7.6.2 Exposure Pathway Analysis

As discussed above, Figure 7.6-1 graphically presents the exposure pathways analysis for the Development North MRA. The graphic shows the current and future potentially incomplete and potentially complete pathways for activities in the Development North MRA.

A small risk of MEC exposure remains to current and future receptors during surface and intrusive activities. The risk of surface exposure was greatly reduced as a result of surface removal actions in accessible areas of the MRA, and there is a low expectation of finding subsurface MEC in the majority of the MRA. Surface removal was not conducted in the southeastern portion of the MRA containing MRS-27E, MRS-27F, and MRS-59 because MEC were not expected to be present. All current and future receptors anticipated to conduct subsurface activities would be at risk of exposure. The risk is greater in areas planned for residential and development reuse because subsurface activities would be more intense and greater amounts of MEC would be anticipated in those areas. That expectation is based on the result of previous investigations and removal actions within and adjacent to the MRA.

## 7.7 Development North MRA Conclusions and Recommendations

Potential exposure of human and ecological receptors to COCs related to the HTW program has been evaluated by the Army. Based on the Army's evaluation in the FOSET, no further action relative to the COCs is required under the ESCA RP. The CSM has identified a potential for human health risk associated with residual (or potential present) MEC in the Development North MRA.

As required by the AOC, the SEDR provides conclusions and recommendations for each MRA. Generally, the SEDR recommendations identify that a particular MRA falls into one or more of the following categories:

- No response action or no further response action is appropriate
- Response action is necessary
- Additional data are required to fill data gaps
- Proceed to RI

The MEC encountered within the Development North MRA are consistent with the historical use as a troop training area. Based on the information as presented in the CSM, the Development North MRA falls into the category of proceed to RI; therefore, the recommendation is:

- Proceed with Documentation – Prepare RI/FS and subsequent

The proposed pathway to regulatory closure incorporating the above recommendation is presented in Section 13.0 of this SEDR.

Table 7.1-1  
Development North MRA –Parcel Numbers, Acreage, and MRS Identifiers

USACE Parcel Number (for land transfer)	Acreage (approximate)	MRS Identifier
E19a.3	45	MRS-45
E19a.4	134	MRS-45
L5.7	73	MRS-45
L20.2.1	254	MRS-27E, MRS-27F, MRS-45, MRS-57, MRS-59
<b>MRA TOTAL</b>	506	

Table 7.1-2  
Development North MRA – Site Features

Feature	Description
Roadways	<ul style="list-style-type: none"> <li>• Inter-Garrison Road, located along the northern boundary of the MRA, and Gigling Road, located along a portion of the southern boundary of the MRA, are active roadways with daily vehicle traffic. These are major roadways of the FORA transportation network.</li> <li>• Watkins Gate Road also borders a portion of the southern boundary of the MRA and crosses through the southeastern portion of the MRA.</li> <li>• A number of unpaved roadways and dirt trails are located throughout the MRA.</li> </ul>
Structures and Utilities	<ul style="list-style-type: none"> <li>• The MRA contains four existing buildings, which are all field range latrines.</li> <li>• A water tower is located in the southeastern portion of the MRA, but is not included as part of the FORA ESCA property transfer.</li> <li>• The MRA is not served by any utilities.</li> <li>• Telephone, electrical line, high-powered transmission, and natural gas lines extend across portions of the MRA in various locations.</li> <li>• A water line oriented in a north-south direction enters the MRA from the northern boundary and extends to the water tower located in the southeastern portion of the MRA.</li> </ul>
Fencing and Access	<ul style="list-style-type: none"> <li>• The MRA is open land, and no fences, gates, or barricades restrict access to the property.</li> </ul>

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Table 7.1-3  
 Development North MRA – Existing Structures and Buildings

Parcel Number	Facility Number	Area (square feet)	Description	Asbestos-Containing Material	Lead-Based Paint	Year Built
E19a.4	4B38	179	Field Range Latrines	unknown	Unknown	Unknown
L20.2.1	4A49	189	Field Range Latrines	unknown	Unknown	Unknown
L20.2.1	4A18	182	Field Range Latrines	no ACM	Unknown	Unknown
L20.2.1	4B65A	181	Field Range Latrines	unknown	Unknown	Unknown

Table 7.1-4  
Development North MRA – Historical Military Use

Location	Description
<p>MRS-27E (Training Site 5) and MRS-27F (Training Site 6)</p>	<ul style="list-style-type: none"> <li>• An area identified as “Combat Ranges 1 and 2,” which includes this MRS area, is shown on a 1945 Training Facilities map. The specific type of training that occurred in that area is unknown (Army 2006).</li> <li>• A Basic Information Fire Break map from the fire department’s 1960 scrap book indicates that this MRS is in an “area of unusual hazard and possible live DUD area” (USACE 1997a).</li> <li>• This MRS is identified as a former training site located in an area identified as Bivouac on a 1964 training map (USACE 1997a).</li> <li>• On 1976 through 1987 ranges and training maps, this MRS is identified as Training Site 5 (USACE 1997a).</li> <li>• As defined in the Fort Ord Regulations, a training site is a training facility located within a training area and used as an overnight bivouac area (Army 2006).</li> </ul>
<p>MRS-45</p>	<ul style="list-style-type: none"> <li>• The 1945 training facilities map indicates that this MRS is within the area identified as “E-South.” The specific type of training that occurred in that area is unknown (Army 2006).</li> <li>• 1950s training maps indicate that an area including this MRS was a training area for the 11th Infantry in 1951, the 3rd Brigade in 1957, and the 1st Brigade in 1958. Maps show the area with names Bench Mark Blanco Training Area and Tactical Training Area. MRS-45 was identified as a Tactical Training Area (USACE 1997a).</li> <li>• Appears to be a training area for the 1st Brigade in 1968 (USACE 1997a).</li> </ul>
<p>MRS-57 and MRS-59</p>	<ul style="list-style-type: none"> <li>• An area identified as “Combat Ranges 1 and 2,” which included this MRS, was shown on a 1945 training facilities map (Army 2006).</li> <li>• 1950s training maps indicate that an area including this MRS was a training area for the 11th Infantry in 1951 and the 3rd Brigade in 1957 and 1958 (USACE 1997a).</li> <li>• A Basic Information Fire Break map from the fire department’s 1960 scrap book indicates that this is in an “area of unusual hazard and possible live DUD area” (USACE 1997a).</li> <li>• MRS appeared to be in an area used for Tactical Training in 1965 and a training area for the 3rd Brigade in 1968 (USACE 1997a).</li> </ul>

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Table 7.1-5  
Development North MRA – Administrative Controls

Type	Description
Land Use Covenants	<ul style="list-style-type: none"> <li>To further ensure protection of human health and the environment, the Army has agreed to enter into CRUPs with the State of California. The CRUPs place additional use restrictions on all of the transferring property, as appropriate.</li> <li>Due to Fort Ord's former use as a military installation, the property may contain MEC and there remains a risk of encountering subsurface MEC. Any person conducting ground-disturbing or intrusive activities (e.g., digging or drilling) must comply with the applicable municipal code. Any alterations, additions, or improvements to the property in any way that may violate excavation restrictions are prohibited. No actual or potential hazard exists on the surface of the property from MEC that may be in the subsurface of the property provided the CRUPs are adhered to (Army 2007).</li> <li>The CRUPs are defined in the "Memorandum of Agreement Among the Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College, and the Department of Toxics Substances Control Concerning the Monitoring and Reporting of Environmental Restrictions on the Former Fort Ord, Monterey County, California."</li> <li>These restrictions involve the enforcement of site review and reporting requirements and agency cost recovery/reimbursement requirements as imposed by the DTSC.</li> </ul>
Restrictions to Digging / Excavation	<ul style="list-style-type: none"> <li>Monterey County Ordinance 16.10 prohibits excavation, digging, development, or ground disturbance of any type on the former Fort Ord that involves the displacement of 10 or more cubic yards of soil without approval.</li> </ul>
FORA Resolution 98-1	<ul style="list-style-type: none"> <li>An approved FORA resolution that contains proposed and suggested measures to avoid or minimize hazardous material impact.</li> </ul>
ESCA MOA	<ul style="list-style-type: none"> <li>MOA between FORA and the jurisdictions for the purpose of defining terms of an agreement for holding and managing (ownership and responsibilities) property while remedial work is accomplished under an ESCA.</li> <li>MOA establishes FORA's ownership during the MEC remediation period; identifies that jurisdictions need to provide public safety response from police, fire, and other emergency personnel as needed; establishes control of access to ESCA properties during the MEC remediation period; and agreement that access to properties will be governed by the restrictions included in the Land Use Covenant accompanying the transfer of the property.</li> </ul>
Habitat Management Plan	<ul style="list-style-type: none"> <li>The HMP incorporated conservation measures pursuant to USFWS BOs dated prior to issuance of the HMP in April 1997. Specific MEC activities were addressed in Chapter 3 of the HMP (USACE 1997b).</li> </ul>
Biological Opinions/ Critical Habitat	<ul style="list-style-type: none"> <li>Since the release of the HMP, three additional BOs have been issued that are relevant to the MEC remediation period (USFWS 1999, 2002, and 2005). Accordingly, some information has been updated and additions have been made to the sections that address MEC activities.</li> <li>A portion of the Development North MRA has been designated as critical habitat for the Monterey spineflower by the USFWS.</li> <li>Future MEC work is required to be consistent with the applicable conservation measures.</li> </ul>

Table 7.2-1  
Development North MRA – Geology and Soils

Type	Description
General Geology	<ul style="list-style-type: none"> <li>• The former Fort Ord is located within the Coast Ranges Geomorphic Province, which consists of northwest-trending mountain ranges, broad basins, and elongated valleys generally paralleling the major geologic structures.</li> <li>• The former Fort Ord is located at the transition between the mountains of the Santa Lucia Range and the Sierra de la Salinas to the south and southeast, respectively, and the lowlands of the Salinas River Valley to the north.</li> <li>• The geology of the former Fort Ord generally reflects this transitional condition. Older, consolidated rocks are characteristically exposed in the mountains near the southern base boundary but are buried under a northward-thickening sequence of younger, unconsolidated alluvial fan and fluvial sediments in the valleys and lowlands to the north. In the coastal lowlands, these younger sediments commonly interfinger with marine deposits.</li> <li>• The former Fort Ord and the adjacent areas are underlain, from depth to ground surface, by one or more of the following older, consolidated units: Mesozoic granite and metamorphic rocks; Miocene marine sedimentary rocks of the Monterey Formation; and upper Miocene to lower Pliocene marine sandstone of the Santa Margarita Formation (and possibly the Pancho Rico and/or Purisima Formations).</li> <li>• Locally, these units are overlain and obscured by geologically younger sediments, including: Pliocene-Pleistocene alluvial fan, lake, and fluvial deposits of the Paso Robles Formation; Pleistocene eolian and fluvial sands of the Aromas Sand; Pleistocene to Holocene valley fill deposits consisting of poorly consolidated gravel, sand, silt, and clay; Pleistocene and Holocene dune sands; recent beach sand and alluvium.</li> <li>• Depth to groundwater is likely to be more than 100 feet bgs. Layers of perched groundwater may be present.</li> </ul>
Topography and Soils	<ul style="list-style-type: none"> <li>• Terrain consists of rolling hills.</li> <li>• Elevation ranges from approximately 210 to 370 feet msl with 2 to 15 percent slopes.</li> <li>• The surface soils are characterized as eolian (sand dune) and terrace (river deposits), which consist of unconsolidated materials of the Aromas and Old Dune Sand formations.</li> <li>• The primary soil type present in the MRA is Oceano Loamy Sand with 2 to 15 percent slopes.</li> </ul>

References: EA 1991, HLA 1995, and the Fort Ord MMRP Database



## Section 7 – Development North MRA Conceptual Site Model

Table 7.2-2  
Development North MRA – Vegetation

USACE Parcel Number	MRS Identifier	Vegetation
E19a.3	MRS-45	Coastal coast live oak woodland with smaller areas of maritime chaparral and grassland
E19a.4	MRS-45	Coastal coast live oak woodland with smaller areas of grassland
L5.7	MRS-45	Coastal coast live oak woodland with smaller areas of grassland
L20.2.1	MRS-27E, MRS-27F, MRS-45, MRS-57, MRS-59	Coastal coast live oak woodland with smaller areas of grassland

Reference: USACE/Jones & Stokes 1992

Table 7.3-1  
Development North MRA – Investigation, Sampling, and Removal Activities

Activity	Summary
MRS-27E	<ul style="list-style-type: none"> <li>In January 1996, a USACE UXO Safety Specialist conducted a munitions response (site walk) that included MRS-27E as part of a PA/SI (USACE 1997a). MD including expended flares and illumination signals were found. No evidence of other types of training or use as an impact area was observed.</li> </ul>
MRS-27F	<ul style="list-style-type: none"> <li>In January 1996, a USACE UXO Safety Specialist conducted a munitions response (site walk) that included MRS-27F as part of a PA/SI (USACE 1997a). Expended pyrotechnics items and two pieces of mortar fragments from the incomplete detonation of a 60mm mortar were found in MRS-59. The two pieces of mortar fragments were found to the southwest of MRS-27F, on the far western side of MRS-59. The specific location of the expended pyrotechnics was not identified.</li> <li>Additionally, a review of Range Control files (DUD Records) included the incomplete entry for an item reportedly located within Training Site 6. No other information in the entry was provided (Army 2007).</li> </ul>
MRS-45	<ul style="list-style-type: none"> <li>Between May and July 1997, SS/GS sampling was conducted on 86 100-foot by 200-foot grids to a depth of 4 feet (USA 2001h). With the exception of an HE hand grenade fragment and two grids containing unknown fragments, no evidence of HE munitions was encountered and all MEC and MD removed from MRS-45 were pyrotechnic or training in nature (USA 2001h).</li> <li>Between December 2001 and February 2002, a TCRA was conducted in MRS-45. Field crews walked open areas and trails, visually searching for MEC and MD. MEC and MD encountered were removed or destroyed (Parsons 2002c).</li> </ul>
MRS-57	<ul style="list-style-type: none"> <li>In January 1996, a USACE UXO Safety Specialist conducted a munitions response (site walk) that included MRS-57 as part of a PA/SI (USACE 1997a). Expended flare and signals were found during the site walk.</li> <li>Four expended smoke grenades were found on a dirt road adjacent to MRS-57 during a munitions response (investigation) completed in October 1999 (Army 2007).</li> </ul>
MRS-59	<ul style="list-style-type: none"> <li>In January 1996, a USACE UXO Safety Specialist conducted a munitions response (site walk) in an area within MRS-59 as part of a PA/SI (USACE 1997a). The site walk occurred in an area south of the portion of MRS-59 located within the Development North MRA. MD (expended pyrotechnics) and two fragments from the incomplete detonation of a 60mm mortar were found; the location appears to be south of the portion of MRS-59 that is located within the Development North MRA. No evidence of the use of 2.36-inch rockets reportedly used at MRS-59 was observed.</li> </ul>
Field Latrines	<ul style="list-style-type: none"> <li>Between March and November 1997, the ground beneath several field latrines in the Development North MRA was investigated and “cleared” of MEC (USA 2001h).</li> </ul>

## Section 7 – Development North MRA Conceptual Site Model

Table 7.3-2

## Development North MRA – Types of MEC Removed and Hazard Classification

MEC ITEMS	UXO	DMM	ISD	Hazard Classification
Cap, blasting, electric, M6	0	0	1	1
Flare, parachute, trip, M48	0	0	1	2
Flare, surface, trip, M49 series	0	0	1	1
Fuze, grenade (model unknown)	0	0	1	1
Grenade, hand, illumination, MK I	0	0	1	1
Grenade, hand, practice, MK II	0	0	2	1
Grenade, hand, riot, CS, M7A3	0	0	1	1
Grenade, hand, smoke, M18 series	1	0	0	1
Mine, antitank, practice, M10	3	0	0	1
Pot, 10 pounds, smoke, HC, screening, M1	1	0	0	1
Pyrotechnic mixture, illumination (0.5 pound) *	0	0	0	1
Signal, illumination, ground, M131	1	0	0	2
Signal, illumination, ground, M21A1	1	0	0	1
Simulator, projectile, airburst, M74 series	0	0	2	1
Unknown DUD (Model Unknown)	0	0	1	0
AP Mine Practice M2 (Model Unknown)	0	0	1	0
<b>MRA TOTAL</b>	<b>7</b>	<b>0</b>	<b>12</b>	

Note: \* MMRP database identified item as ISD with a quantity of zero.

Reference: Fort Ord MMRP Database

*Please note: Munitions descriptions have been taken directly from the Army's MMRP Database and/or other historical documents. Any errors in terminology, filler type, and/or discrepancies between model number and caliber/size are a result of misinformation from the data sources.*

Table 7.3-3  
Development North MRA – Summary of Recovered MEC and MD

Type	Summary
UXO	7 items
ISD	12 items (MPPEH that could not be classified as UXO, DMM, or MD)
MD	2,224 pounds (includes MD-E and MD-F items if weights were documented)
Aerial Extent	<ul style="list-style-type: none"> <li>The MEC items encountered during previous removal actions were located near the western and southern boundaries with the CSUMB MRA and in the northeastern corner of the Development North MRA, where three UXO items were encountered in one location.</li> <li>The weight of MD found in individual sampling grids ranged from zero to greater than 100 pounds. The grids in the northern portion of the MRA contained the majority of the MD, with the exception of a number of grids bordering the CSUMB MRA to the east.</li> </ul>
Vertical Extent	<ul style="list-style-type: none"> <li>The MMRP database indicates that the majority of MEC items encountered were on the ground surface.</li> </ul>

## Section 7 – Development North MRA Conceptual Site Model

Table 7.3-4  
Development North MRA – HTW History and Conditions

Type	Summary
HA-137 (MRS-27E)	<ul style="list-style-type: none"> <li>The evaluation of HA-137 (MRS-27E) included a literature search and site reconnaissance. No SAA, fighting positions, or MEC-related items were observed. Because no evidence of a range or stained soil was observed, no further action related to chemical contamination was recommended for HA-137 under the BRA.</li> </ul>
HA-138 (MRS-27F)	<ul style="list-style-type: none"> <li>The evaluation of HA-138 (MRS-27F) included a literature search and site reconnaissance. No SAA, fighting positions, or MEC-related items were observed. Because no evidence of a range or stained soil was observed, no further action related to chemical contamination was recommended for HA-138 under the BRA.</li> </ul>
HA-175 (MRS-45)	<ul style="list-style-type: none"> <li>The evaluation of HA-175 (MRS-45) included a literature search, review of the information gathered during the munitions response, and reconnaissance of the site. No evidence of SAA, targets, or MEC-related items was observed. Several fighting positions were observed. Because no evidence of a range or concentrated areas of military munitions was found at this site, no further action related to chemical contamination was recommended for HA-175 under the BRA.</li> </ul>
HA-187 (MRS-57)	<ul style="list-style-type: none"> <li>The evaluation of HA-187 (MRS-57) included a literature search and reconnaissance of the site. Blank casings, a signal flare, and two ammunition boxes were found during the site visit. No other military munitions-related items, fighting positions, or targets were observed. Because no target locations or concentrated areas of military munitions were found at the site, no further action related to MC was recommended for HA-187 under the BRA.</li> </ul>
HA-189 (MRS-59)	<ul style="list-style-type: none"> <li>The evaluation of HA-189 (MRS-59) included a literature search and site reconnaissance. No evidence of SAA, targets, or MEC-related items was observed; however, one fighting position was located. Access to the southern portion of HA-189 was limited to trails and roads due to dense vegetation. Because no target locations or concentrated areas of military munitions were found at this site, no further action related to MC was recommended for HA-189 under the BRA.</li> </ul>

Reference: Army 2007

Table 7.4-1  
Development North MRA - Future Land Use by Parcel

USACE Parcel Number	MRS Number	Land Use Category	Description	Acreage
E19a.3	MRS-45	Development	Commercial / Horse Park	45
E19a.4	MRS-45	Habitat	Reserve	134
L5.7	MRS-45	Development	Public Middle School	68
	MRS-45	Development	School Buffer	5
L20.2.1	MRS-45	Habitat	Habitat Corridor	142
	MRS-57	Habitat	Habitat Corridor	22
	MRS-27E	Habitat	Habitat Corridor	29
	MRS-27F, MRS-59	Habitat	Habitat Corridor	6
	No related MRS	Habitat	Habitat Corridor	55
<b>MRA - TOTAL</b>				<b>506</b>

Table 7.5-1  
Development North – Ecological Information

Type	Summary
<p><b>Biological</b></p>	<ul style="list-style-type: none"> <li>• Dominant vegetation in the area is coastal coast live oak woodland with smaller areas of maritime chaparral and grassland. These biological communities are described below:                             <ul style="list-style-type: none"> <li>• Coast Live Oak Woodland and Savanna - The live oak woodland is an open-canopied to nearly closed-canopied community with a grass or sparsely scattered shrub understory. Oaks provide nesting sites and cover for birds and cover for many mammals. Common wildlife species in coast live oak woodland include black-tailed deer, California mouse, raccoon, California quail, scrub jay, and Nuttall’s woodpecker. Red-tailed hawks and great-horned owls nest and roost in the inland coast live oaks, but probably make little use of the coastal oaks because the tightly spaced branches discourage them from entering the tree canopies.</li> <li>• Maritime chaparral is one of the dominant vegetation types within former Fort Ord, characterized by a wide variety of evergreen, sclerophyllus (hard-leaved) shrubs occurring in moderate to high density on sandy, well-drained substrates within the zone of coastal fog. This community is primarily dominated by shaggy-barked manzanita. Other species found in the shrub layer include chamise, toro manzanita, sandmat manzanita, toyon, blue blossom ceanothus, and Monterey ceanothus. The greatest diversity of wildlife species at former Fort Ord occurs in the chaparral. Birds such as orange-crowned warbler, rufous-sided towhee, and California quail nest in the chaparral. Small mammals such as California mouse and brush rabbit forage in this habitat and serve as prey for gray fox, bobcat, spotted skunk, and western rattlesnake.</li> <li>• Grasslands - Annual grasslands dominated by introduced species such as slender wild oats, soft chess, and riggut brome are the most common grassland community within the former Fort Ord. Perennial grasslands are of two types at former Fort Ord: valley needlegrass grassland and blue wildrye. Common wildlife species include California ground squirrel, Heerman’s kangaroo rat, narrow-faced kangaroo rat, western meadowlark, and kestrel.</li> </ul> </li> </ul>
<p><b>Habitat Management Plan / Biological Opinions</b></p>	<ul style="list-style-type: none"> <li>• The USFWS BO required that an HMP be developed and implemented to reduce the incidental take of listed species and loss of habitat that supports these species. The HMP for former Fort Ord complies with the BO and establishes the guidelines for the conservation and management of wildlife and plant species and habitats that largely depend on former Fort Ord land for survival. The HMP incorporated conservation measures pursuant to BOs dated prior to issuance of the HMP in April 1997.</li> <li>• To maintain compliance with habitat management and monitoring requirements presented in the HMP, biological resources are monitored after MEC removal activities have been completed. The HMP specifies mitigation measures to monitor the successful regeneration of species and habitat following removal of MEC. Monitoring includes conducting follow-up monitoring for a period of 5 years after MEC removal to document habitat conditions. Since the inception of the MEC removal program, the Army had elected to augment the monitoring program, where feasible, to include the collection of baseline data prior to MEC removal. Baseline data have been collected to provide additional information on preexisting species composition and distribution of herbaceous annual sensitive species. Both baseline and follow-up data are used to compare community regeneration to HMP success criteria.</li> <li>• The HMP identifies the area as habitat reserve, habitat corridor, and development with borderland development areas along the western portion of the MRA designated for residential reuse, and along portions of the southern and eastern boundaries adjacent to the NRMA interface. The NRMA separates the development category land from the</li> </ul>

Table 7.5-1  
Development North – Ecological Information

Type	Summary
	<p>adjacent habitat reserve area. The NRMA and habitat reserve areas support plant and animal species that require implementation of mitigation measures identified in the HMP to ensure compliance with the ESA and to minimize impacts to listed species.</p> <ul style="list-style-type: none"> <li>• The HMP identified principal management categories. The Development North MRA is identified as development (including residential) with borderlands interface, habitat reserve, and habitat corridor. These principal management categories are defined as: <ul style="list-style-type: none"> <li>• Development - lands in which no management restrictions are contained under the HMP. Some plans for salvage of biological resources for these parcels may be specified.</li> <li>• Habitat Reserve – land in which no development is allowed. Management goals for the area are conservation and enhancement of threatened and endangered species.</li> <li>• Borderland Development Area – land abutting the NRMA that is slated for development. Management of these lands includes no restrictions except along the development/reserve interface.</li> <li>• Habitat Corridor – land between major reserve areas. These lands are to be managed to promote connections between conservation areas.</li> </ul> </li> <li>• FORA will implement the mitigation requirements identified in the HMP in accordance with the BO developed during formal consultation between the Army and the USFWS under Section 7 of the ESA. For habitat areas, these measures include conducting habitat monitoring in compliance with Chapter 3 of the HMP (USACE 1997b).</li> <li>• Since April 1997, three additional BOs have been issued that are relevant to the MEC remediation activities (USFWS 1999, 2002, and 2005). Future MEC remediation is required to be consistent with the applicable conservation measures.</li> </ul>
<p>Threatened and Endangered Species/ Critical Habitat</p>	<ul style="list-style-type: none"> <li>• Special-status biological resources are those resources, including plant, wildlife, and native biological communities, that receive various levels of protection under local, state, or federal laws, regulations, or policies. The closure and disposal of former Fort Ord is considered a major federal action that could affect several species proposed for listing or listed as threatened or endangered under the federal ESA.</li> <li>• Threatened or endangered plant species identified as having possible occurrence in the Development North MRA include sand gilia (endangered) and Monterey spineflower (threatened).</li> <li>• In 2004, the CTS was identified as a threatened species. CTS may be found as far as 2 km from aquatic breeding habitats. Most of the Development North MRA is located within 1 km of an aquatic feature in which CTS may be present.</li> <li>• A portion of the Development North MRA has been designated as Critical Habitat for the Monterey spineflower.</li> </ul>



## Section 7 – Development North MRA Conceptual Site Model

Table 7.5-2  
Development North MRA – HMP Category by Parcel and Possible Occurrence of HMP Species

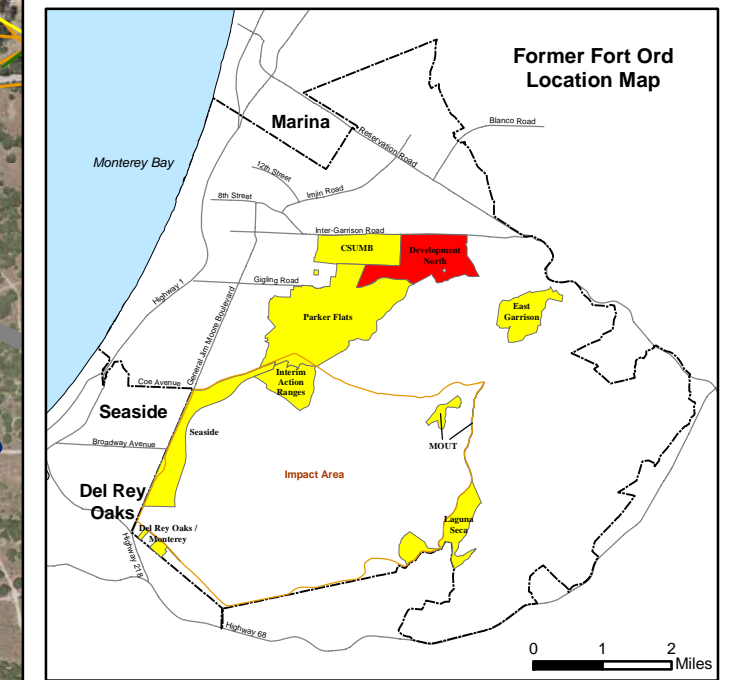
USACE Parcel Number	HMP Designated Use	HMP Species
E19a.3	Development	Monterey spineflower; sandmat manzanita; California black legless lizard; Monterey ornate shrew; California tiger salamander
E19a.4	Habitat Reserve	Monterey spineflower; sandmat manzanita; California black legless lizard; Monterey ornate shrew; California tiger salamander
L5.7	Development	Monterey spineflower; Monterey ornate shrew; California tiger salamander
L20.2.1	Habitat Corridor/Recreation	sand gilia; Monterey spineflower; sandmat manzanita, Monterey ornate shrew; California tiger salamander

Reference: USACE 1997b

Table 7.6-1  
Development North MRA – Potential Receptors and Exposure Media

Potential Receptor	Exposure Media			Exposure Media		
	Current	Ground Surface	Below Grade	Future	Ground Surface	Below Grade
Construction Workers	✓	✓	✓	✓	✓	✓
Utility Workers	✓	✓	✓	✓	✓	✓
Trespassers	✓	✓		✓	✓	
Firefighters	✓	✓	✓	✓	✓	✓
Emergency Response Workers	✓	✓		✓	✓	
Ancillary Workers	✓	✓	✓	✓	✓	✓
Residents				✓	✓	✓
Recreational Users				✓	✓	✓

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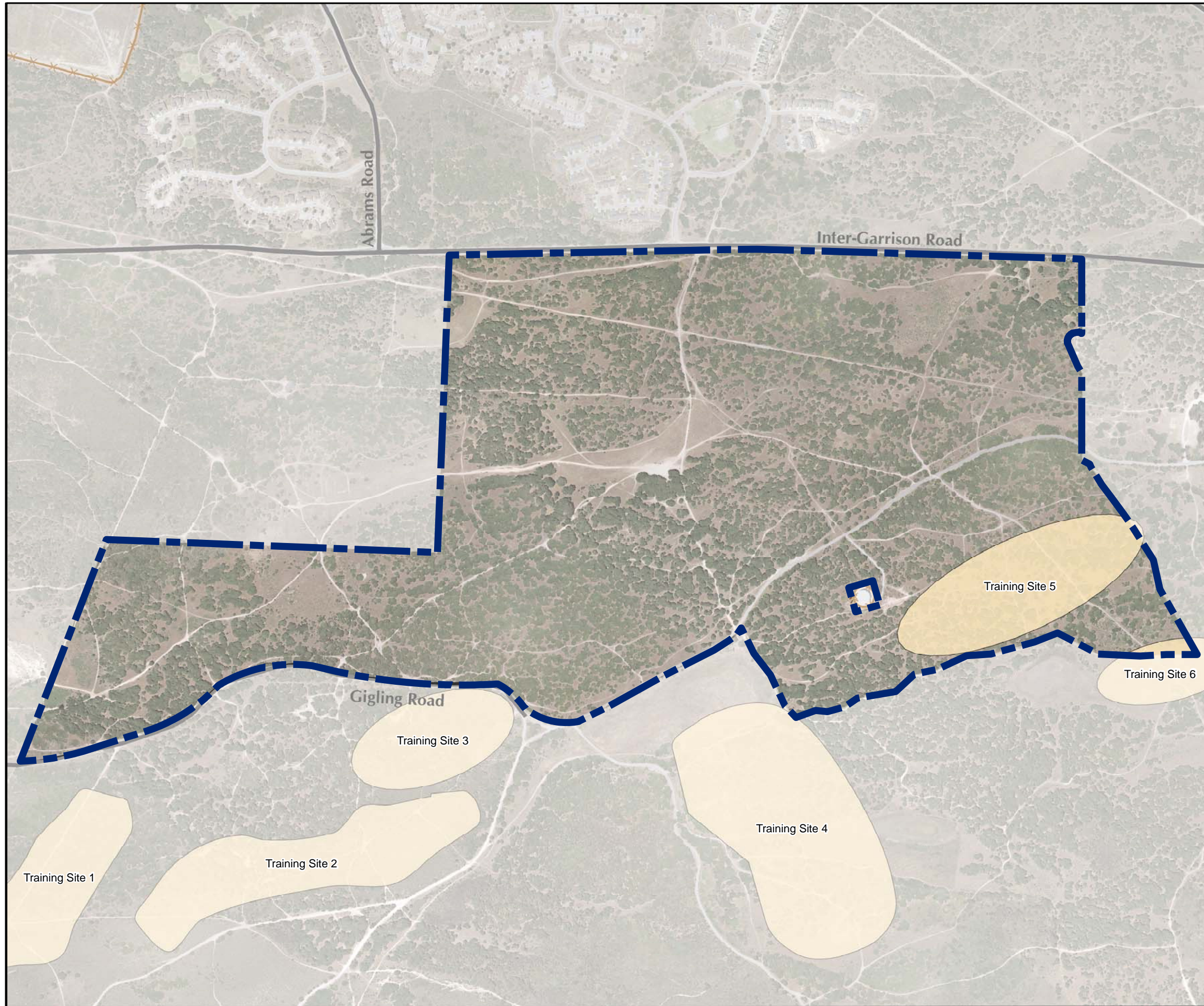
Westcliffe  
Engineers, Inc.

**Development North MRA  
Facility Profile Physical Features**

FORA ESCA RP  
Monterey County, California

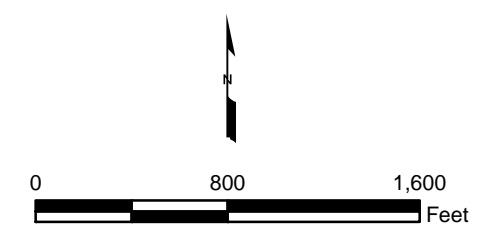
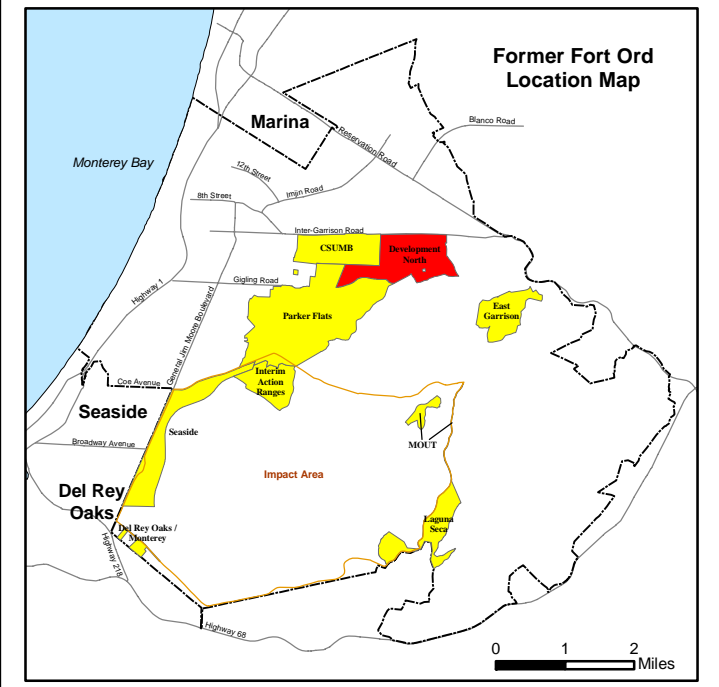
Figure 7.1-1

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### Legend

- Training Site
- Munitions Response Area
- Major Road
- Fence

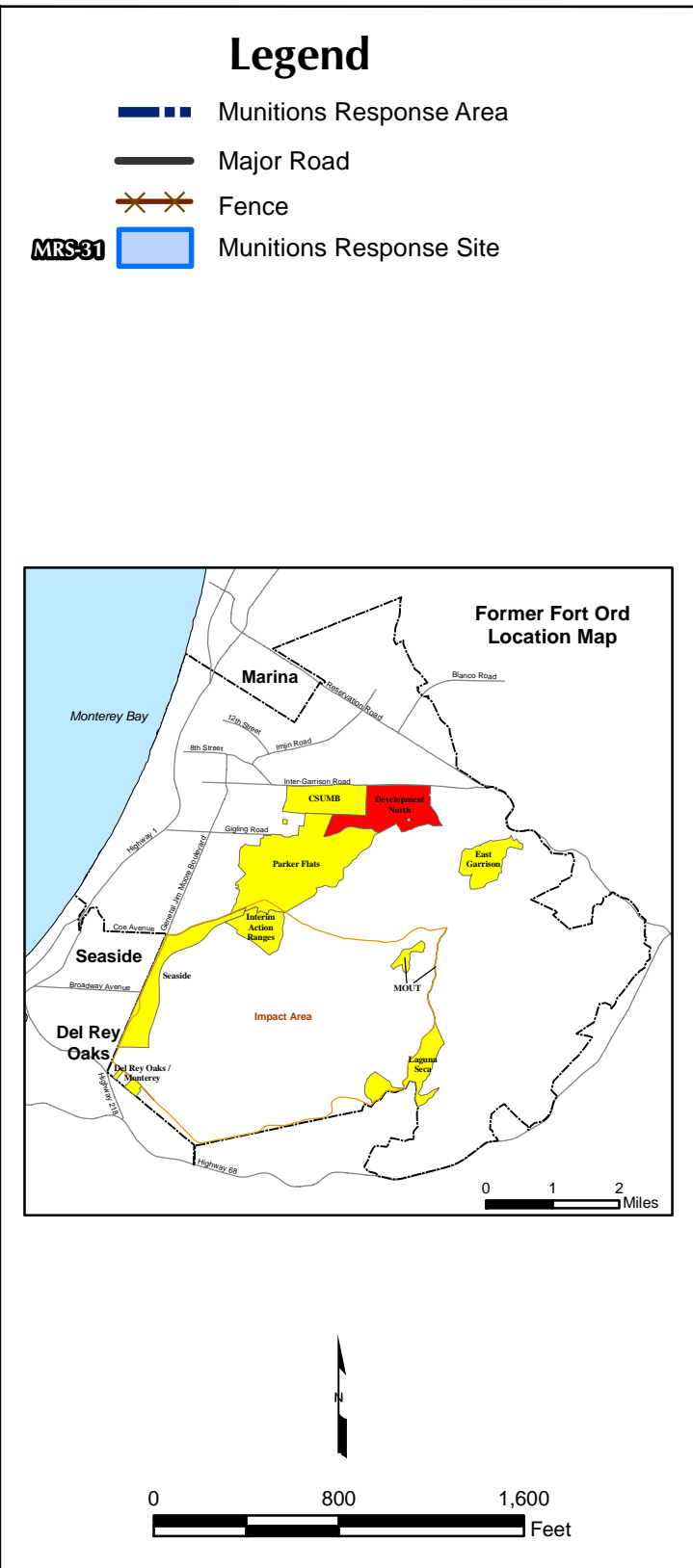
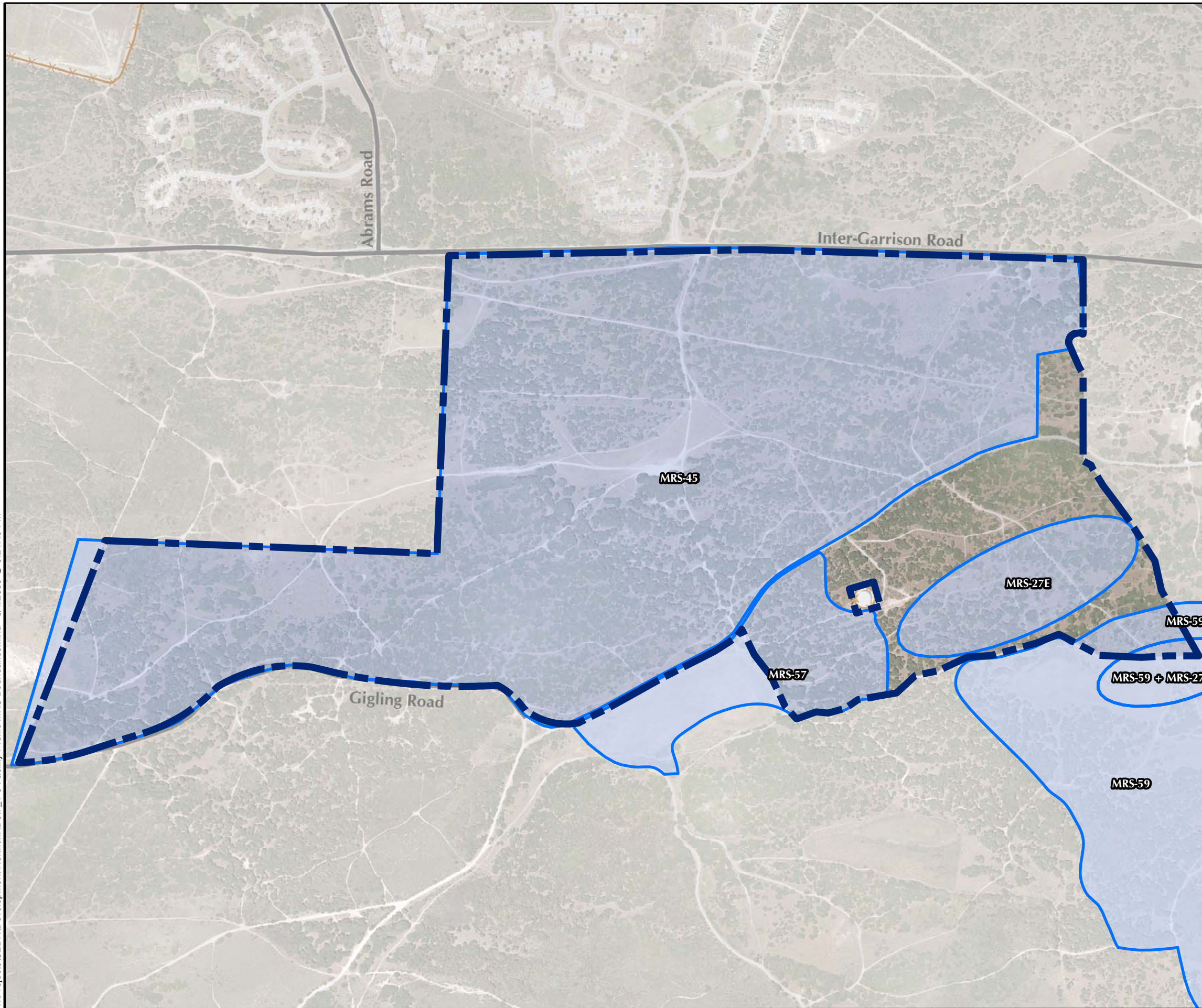


**Development North MRA  
Facility Profile  
Ranges and Training Sites**

FORA ESCA RP  
Monterey County, California

Figure 7.1-2

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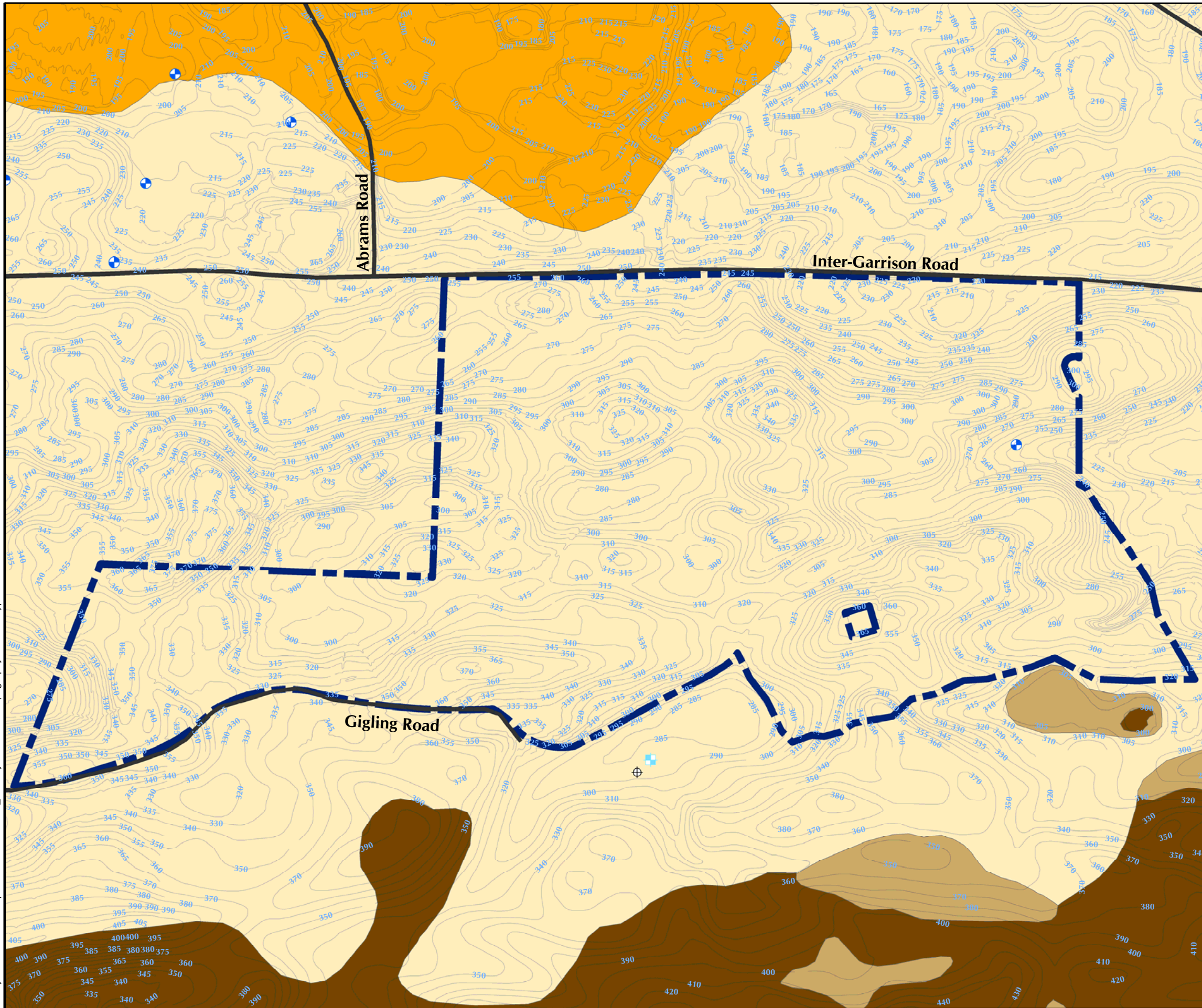
**LFR**  
**WESTON SOLUTIONS**  
**Westcliffe Engineers, Inc.**

**Development North MRA Facility Profile**  
**Munitions Response Site Boundaries**

FORA ESCA RP  
 Monterey County, California

**Figure 7.1-3**

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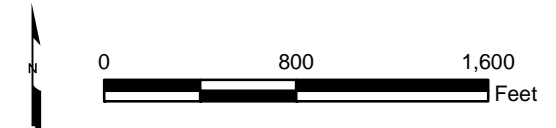
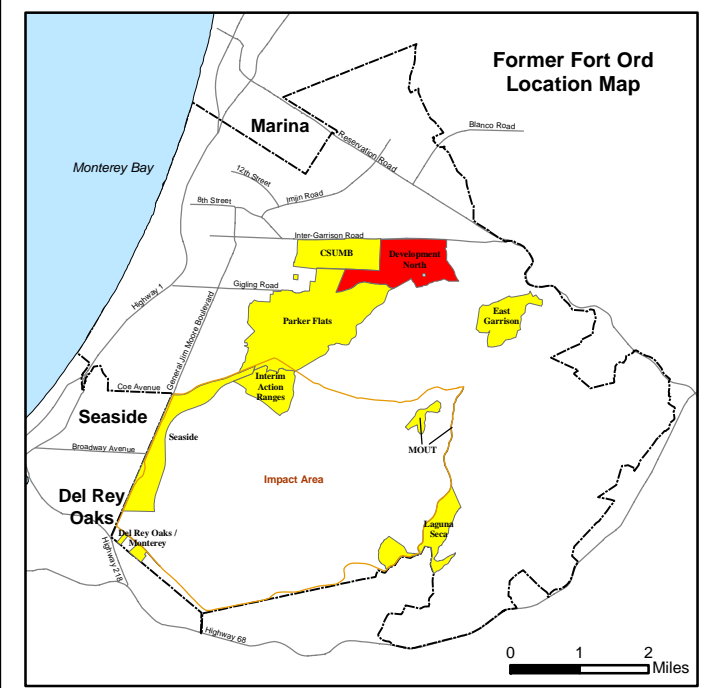


### Legend

- Environmental Well
- Abandoned Well
- Water Supply Well
- 540 Topography 5ft
- Munitions Response Area
- Major Road

### Soil Type

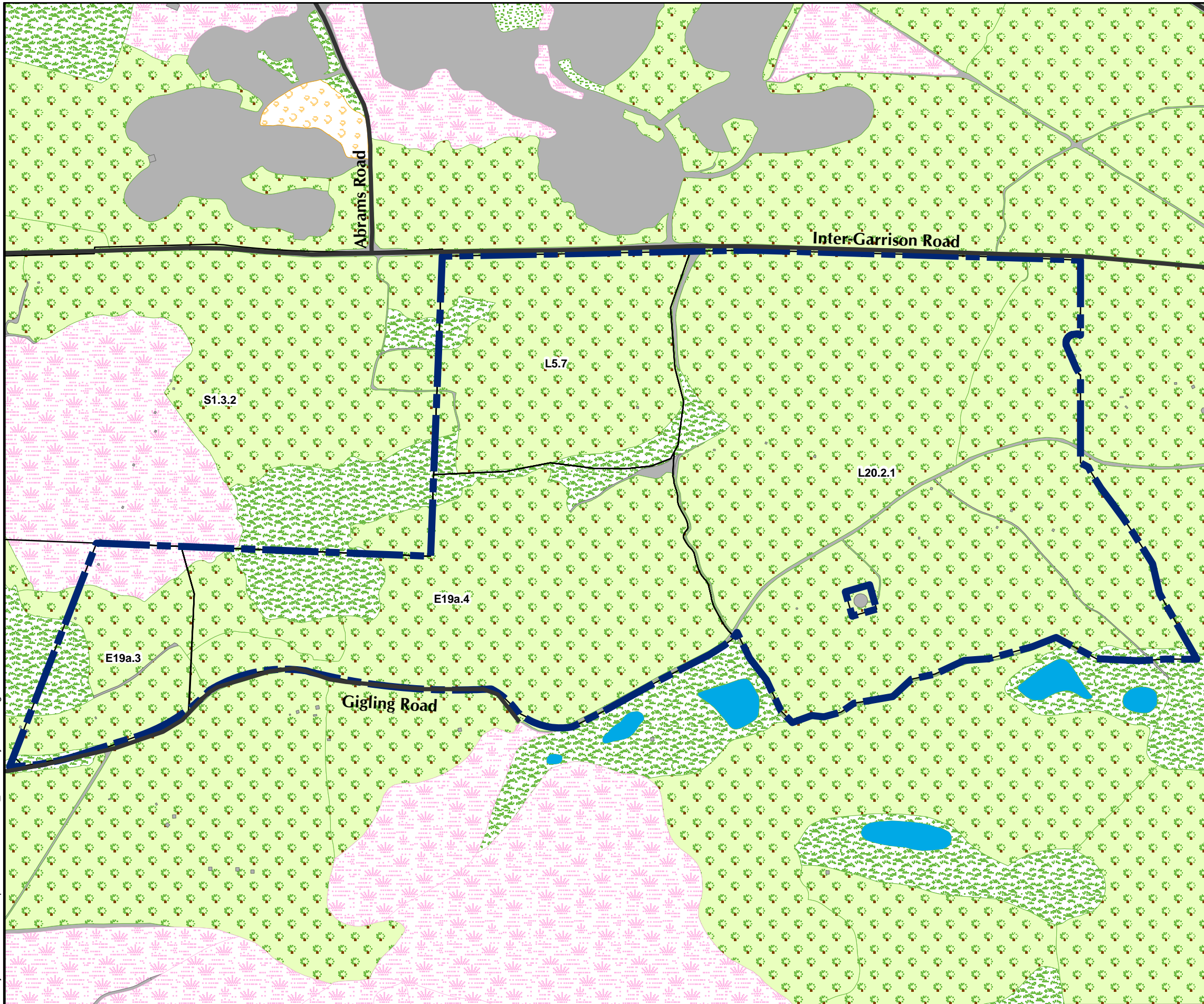
- Arnold-Santa Ynez Complex
- Baywood Sand, 2 to 15 Percent Slopes
- Oceano Loamy Sand, 2 to 15 Percent Slopes
- Antioch Very Fine Sandy Loam, 2 to 9 Percent Slopes



**Development North MRA  
Physical Profile  
Topography and Soil Type**  
FORA ESCA RP  
Monterey County, California

Figure 7.2-1

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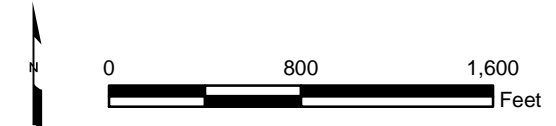
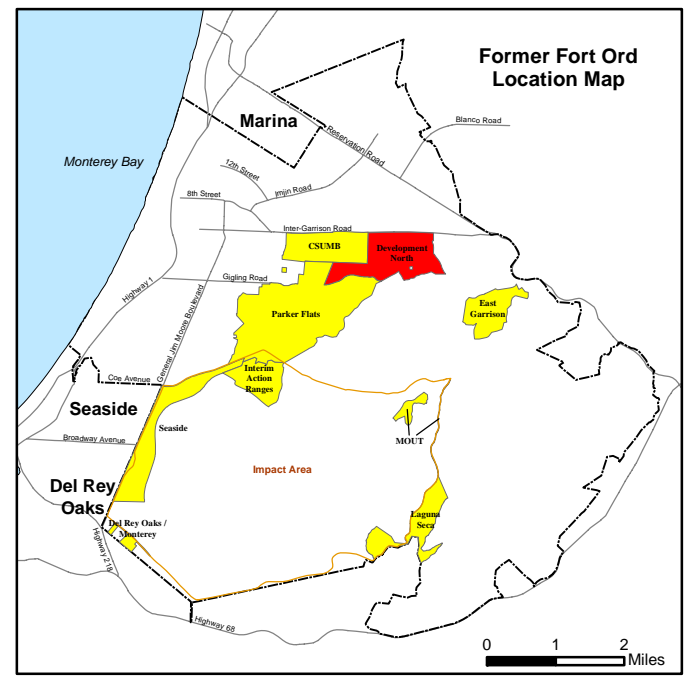
### Legend

- Munitions Response Area
- Major Road
- USACE Parcel

### Vegetation Type

- Grassland
- Maritime Chaparral
- Inland Coast Live Oak Woodland
- Coastal Scrub
- Coastal Coast Live Oak Woodland
- Aquatic Feature
- Developed / Disturbed

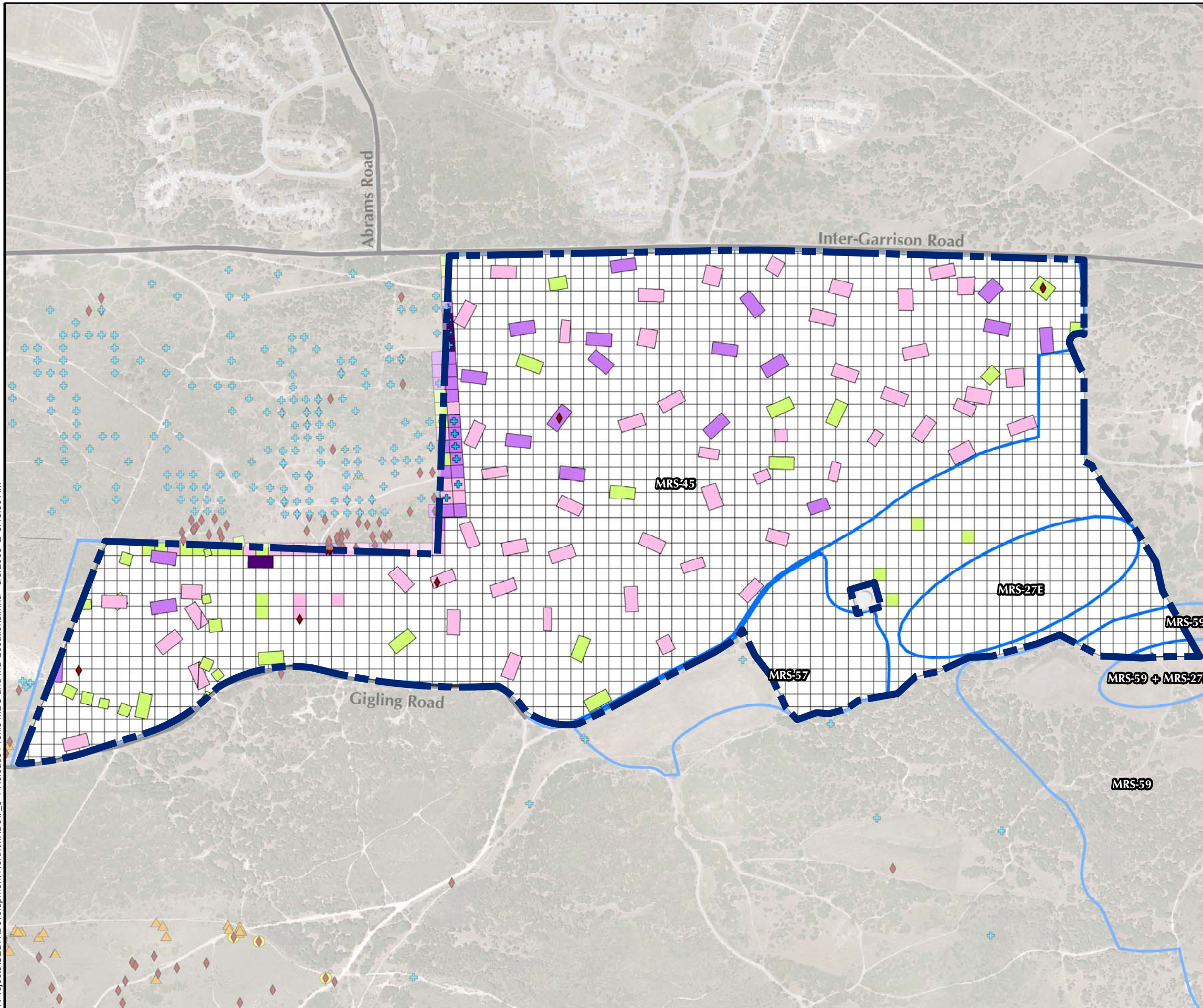
Source: Flora and Fauna Baseline Study of Fort Ord, California, Jones and Stokes Association Inc., December 1992.



**Development North MRA  
Physical Profile  
Generalized Vegetation Communities**

FORA ESCA RP  
Monterey County, California

Figure 7.2-2



### Legend

- Munitions Response Area
- Munitions Response Site
- Major Road

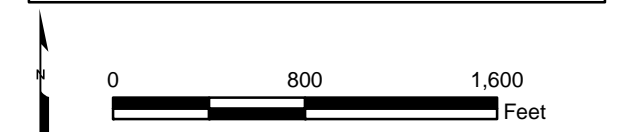
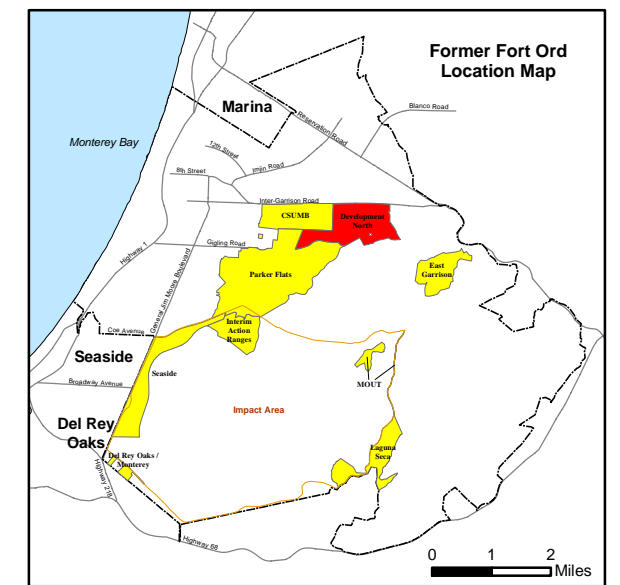
### MEC Type

- Unexploded Ordnance (UXO)
- Discarded Military Munition (DMM)
- Insufficient Data (ISD)
- Burial Pit Containing MEC

### Munitions Debris (MD) by Weight (total pounds per grid)

- No Data
- 0
- < 10
- 10 to 100
- > 100

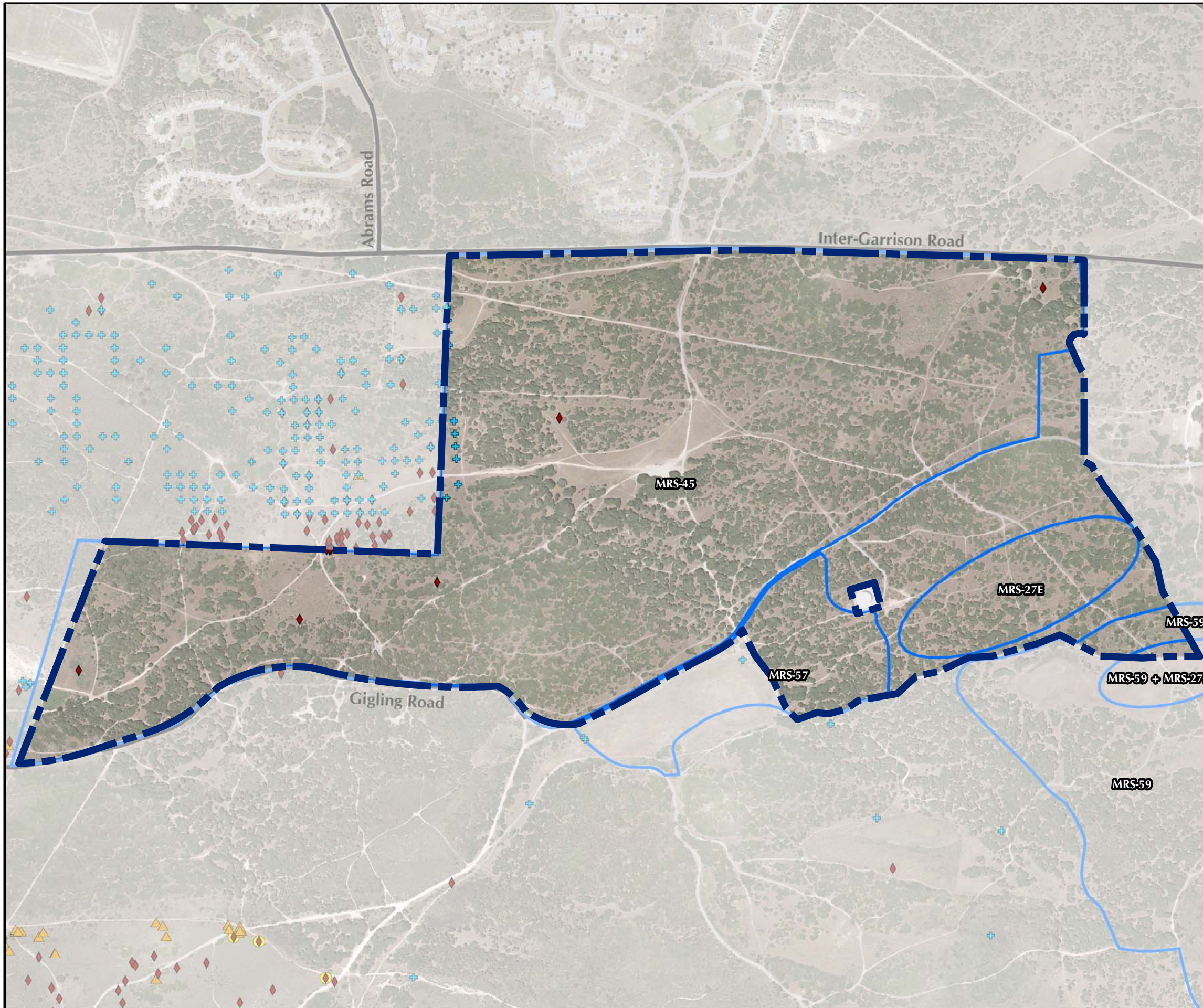
Note: Munitions Debris (MD) includes scrap related to small arms ammunition.



Development North MRA  
Release Profile  
MEC and MD Locations  
FORA ESCA RP  
Monterey County, California

Figure 7.3-1

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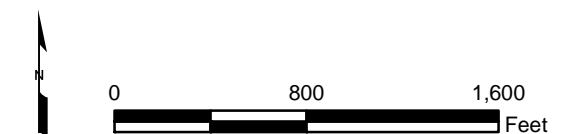
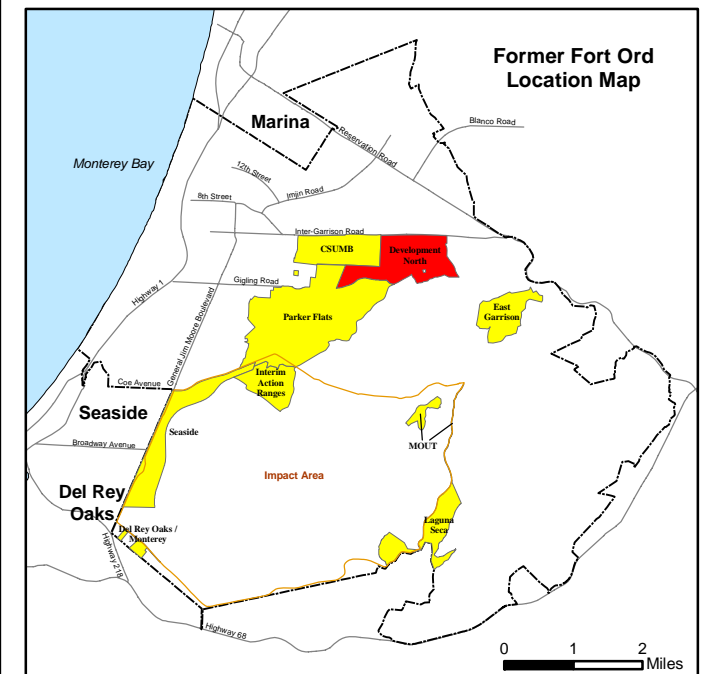
### Legend

- Munitions Response Area
- Munitions Response Site
- MRS-45**
- Major Road

### MEC Type

- Unexploded Ordnance (UXO)
- Discarded Military Munition (DMM)
- Insufficient Data (ISD)
- Burial Pit Containing MEC

Note: MEC locations may include more than one item.

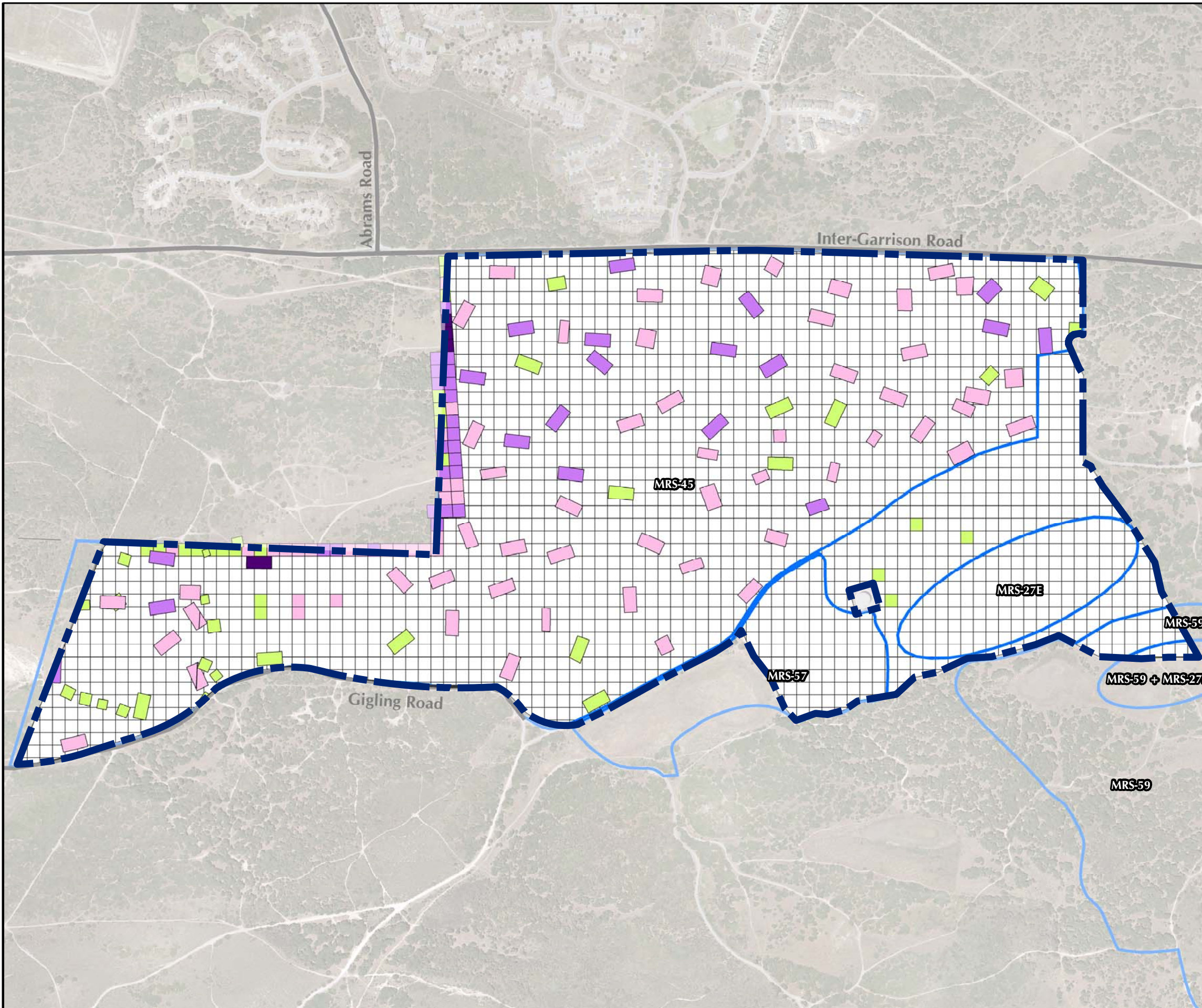


**Development North MRA**  
**Release Profile**  
**MEC Locations**  
 FORA ESCA RP  
 Monterey County, California

Figure 7.3-2



T:\Projects\SEDR\Development North\MXDs\17\_3-3 Release Profile MD Locations.mxd - 6/5/2008 @ 8:42:24 AM



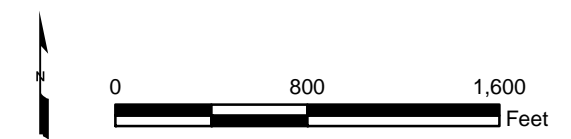
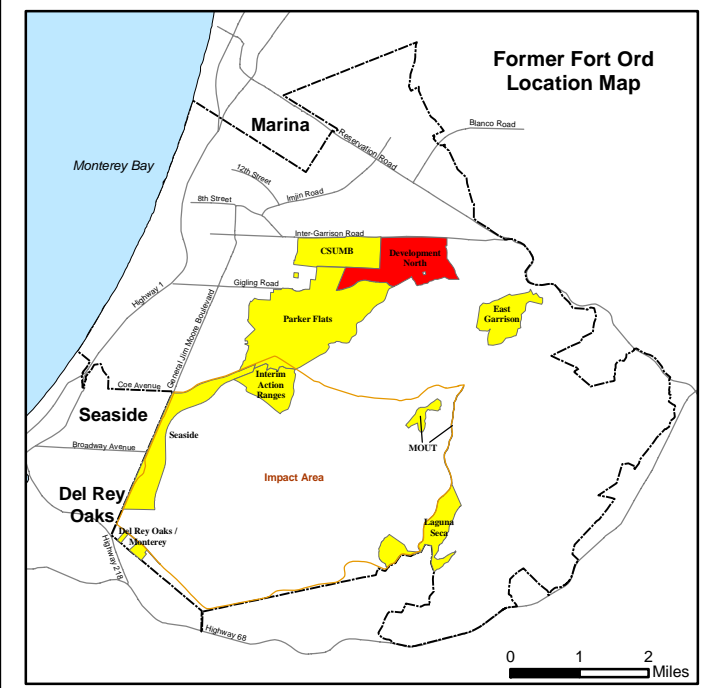
### Legend

- Munitions Response Area
- Munitions Response Site
- Major Road

### Munitions Debris (MD) by Weight (total pounds per grid)

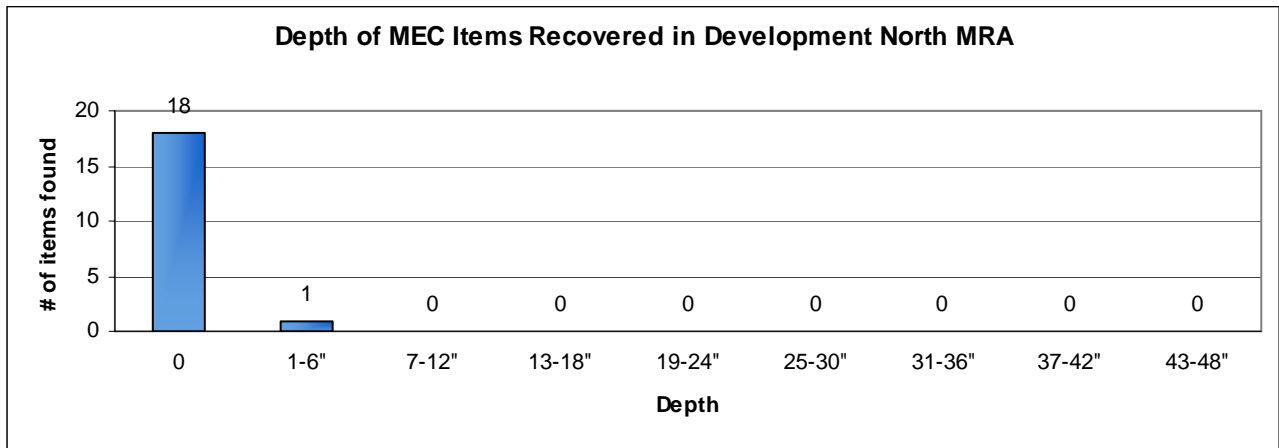
- No Data
- 0
- < 10
- 10 to 100
- > 100

Note: Munitions Debris (MD) includes scrap related to small arms ammunition.



**Development North MRA  
Release Profile  
MD Locations  
FORA ESCA RP  
Monterey County, California**

Figure 7.3-3



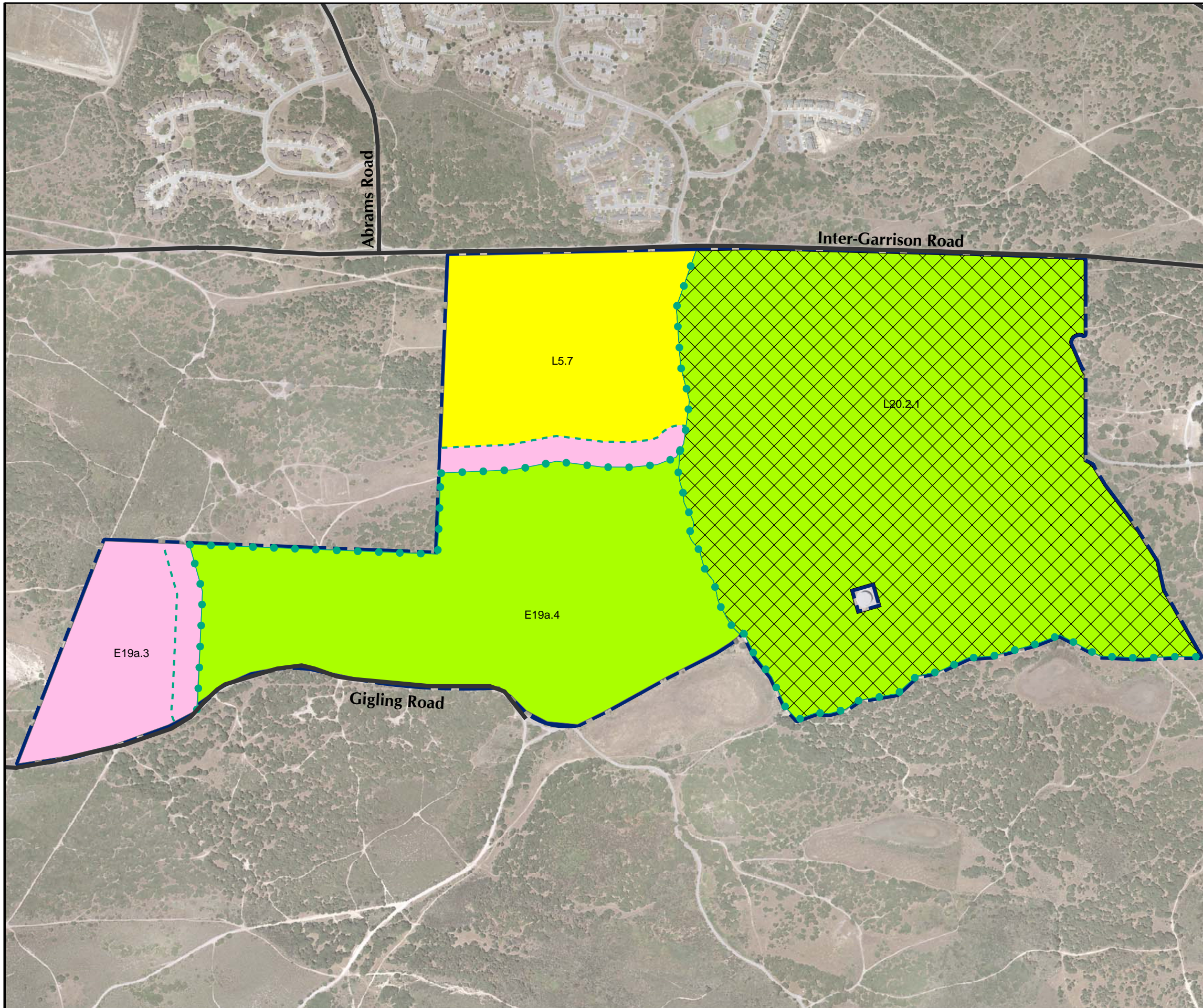
**Westcliffe  
Engineers, Inc.**

**Development North MRA  
Distribution of MEC  
Recovered by Depth Interval**

FORA ESCA RP  
Monterey County, California

**Figure 7.3-4**

T:\Projects\SEDR\Development North\MXD\7\_4-1 Land Use Profile Reuse Plan.mxd - 6/4/2008 @ 3:45:30 PM



### Legend

■ ■ ■ Munitions Response Area

— Major Road

□ L5.7 USACE Parcel

### Future Land Use

■ Residential (Proposed School Site)

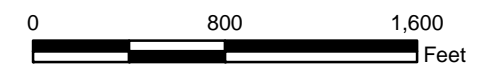
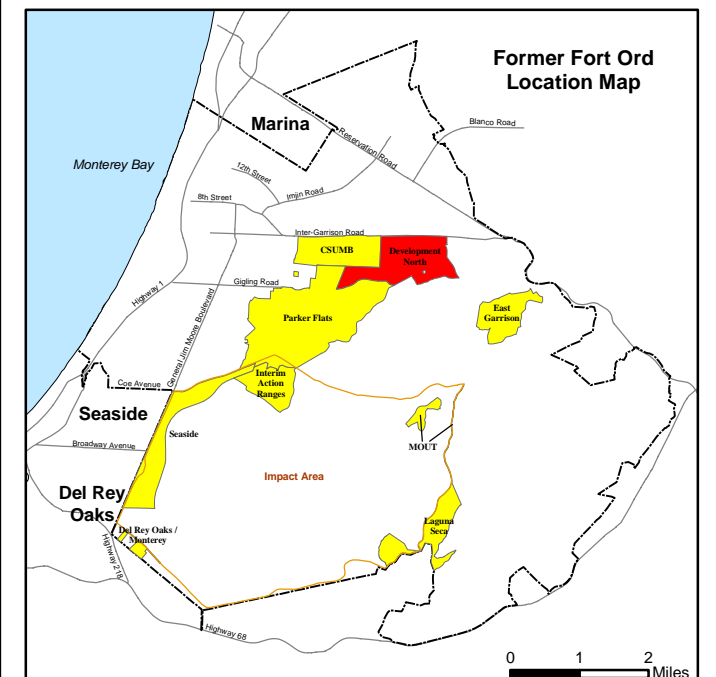
■ Non-Residential

■ Habitat Reserve

■ Habitat Corridor

● ● ● Borderland Interface

- - - 200-Foot Buffer from Borderland Interface



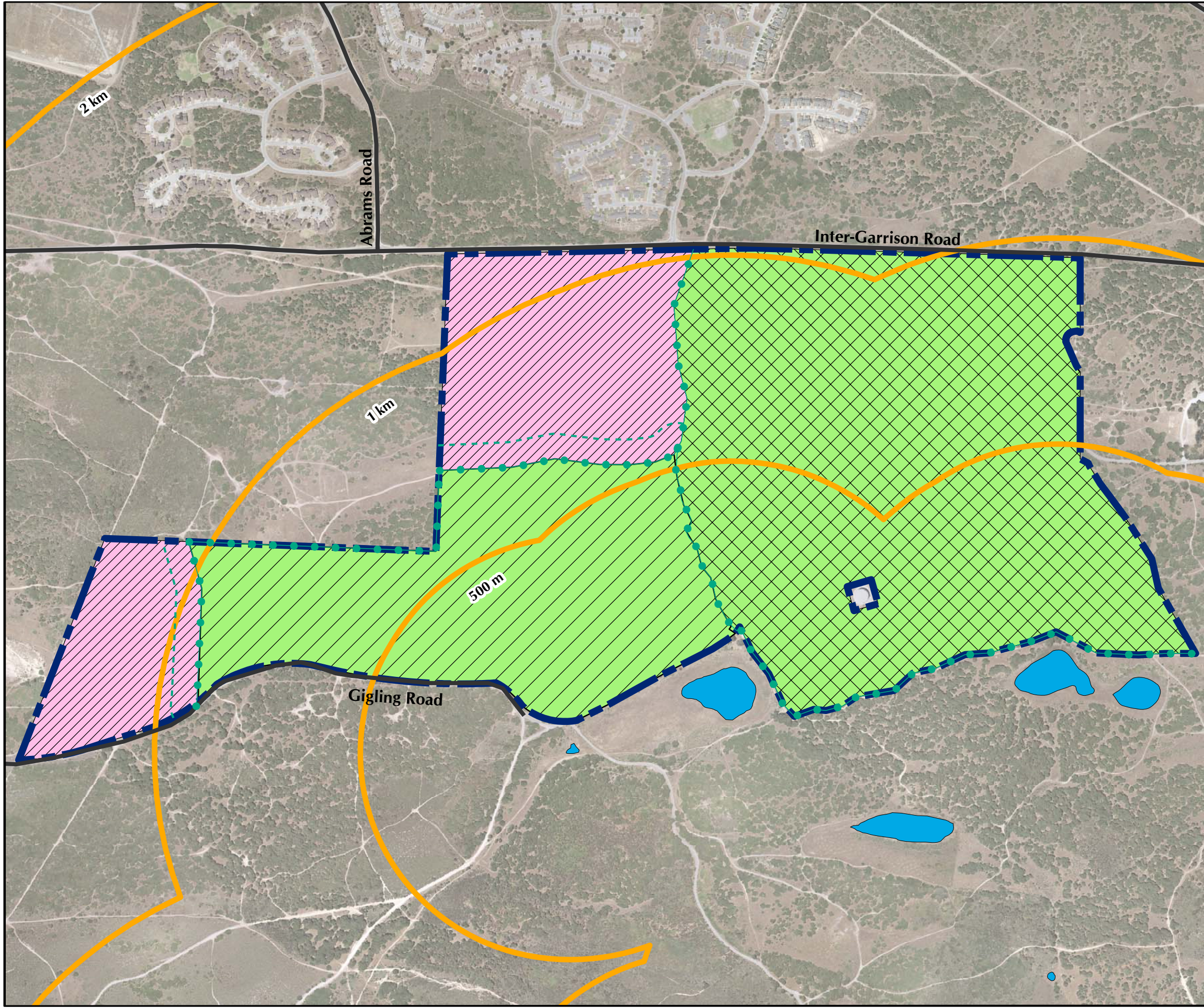
Westcliffe Engineers, Inc.

### Development North MRA Land Use Profile Reuse Plan







FORA ESCA RP  
Monterey County, California

Figure 7.4-1

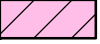




T:\Projects\SEDR\Development\North\MXD\7\_5-1 Ecological Profile Habitat Type.mxd - 6/4/2008 @ 1:01:24 PM

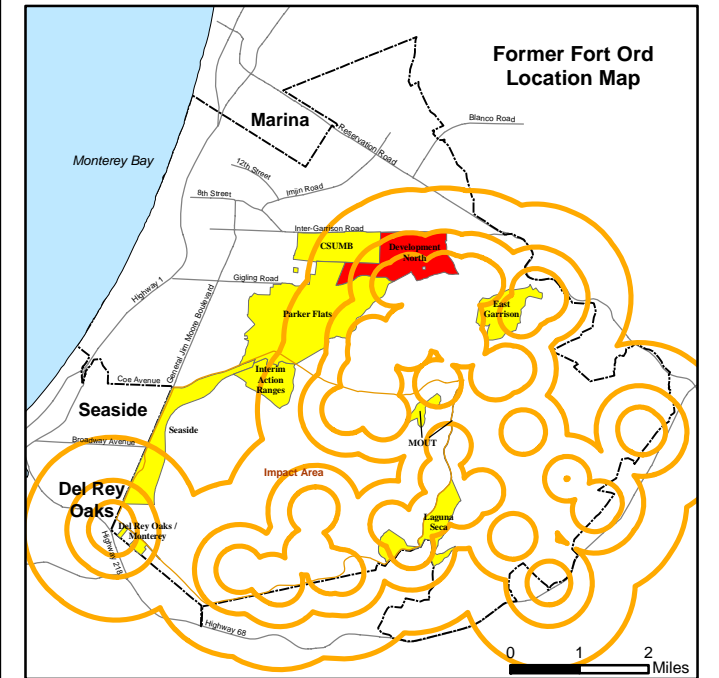


### Legend

-  Munitions Response Area
-  California Tiger Salamander Buffer
-  Major Road
-  Borderland Interface
-  200-Foot Buffer from Borderland Interface
-  Aquatic Features

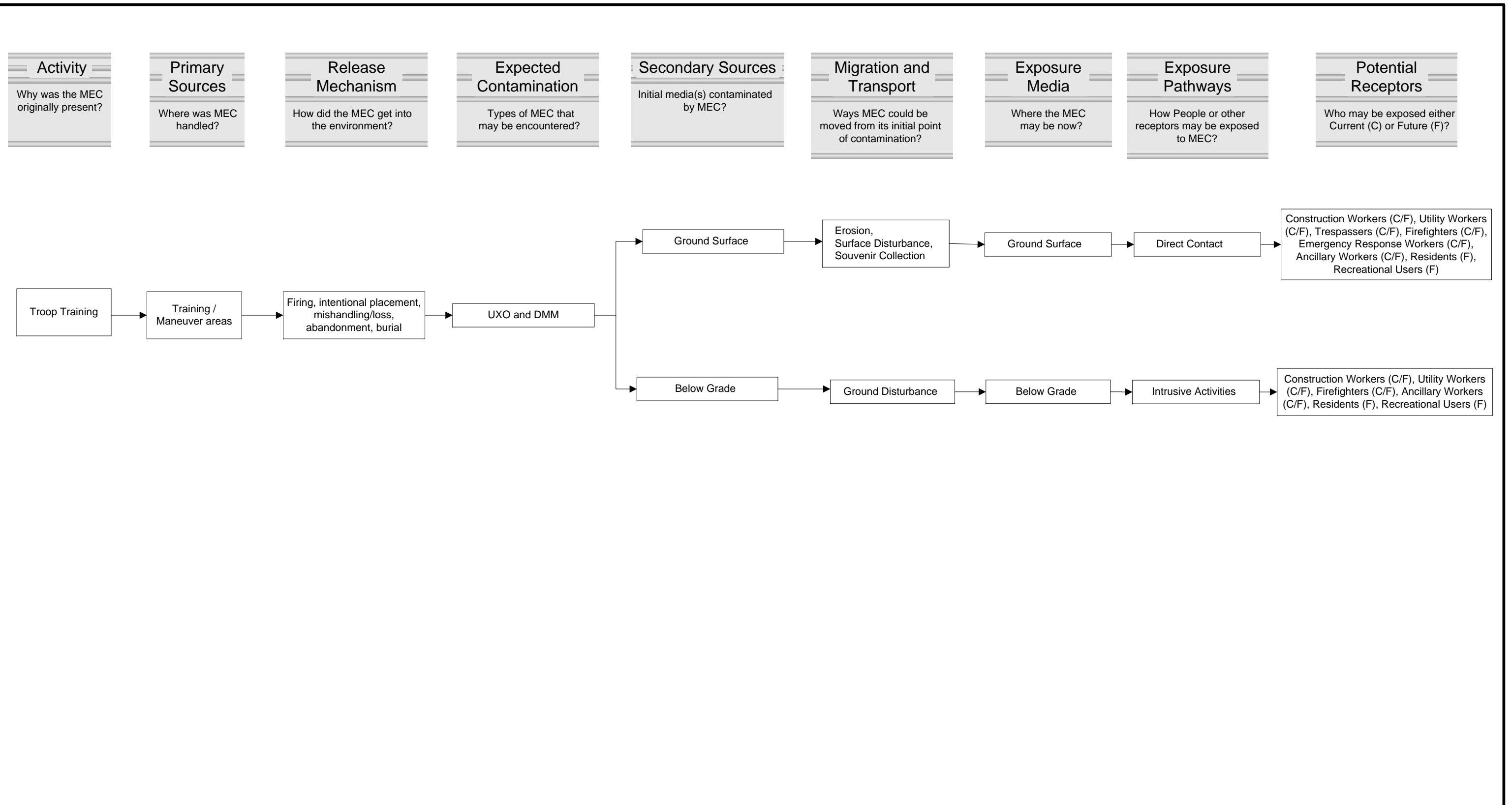
### Habitat Management Plan Category

-  Development (includes future Residential and Non-Residential areas)
-  Development with Reserve or Restrictions
-  Habitat Corridor
-  Habitat Corridor with Development
-  Habitat Reserve

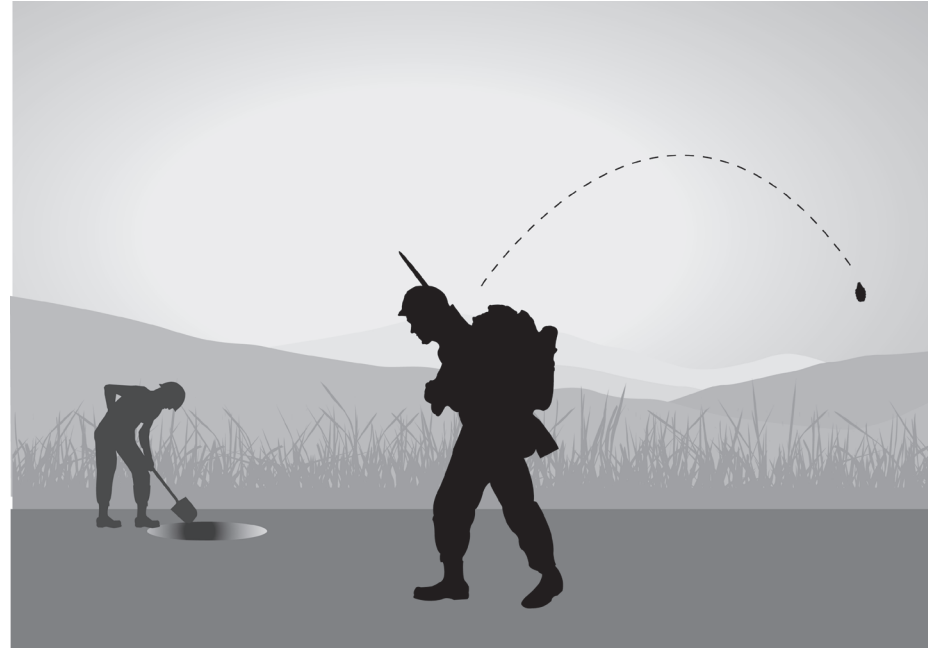


**Development North MRA**  
**Ecological Profile**  
**Habitat Type**  
 FORA ESCA RP  
 Monterey County, California

Figure 7.5-1



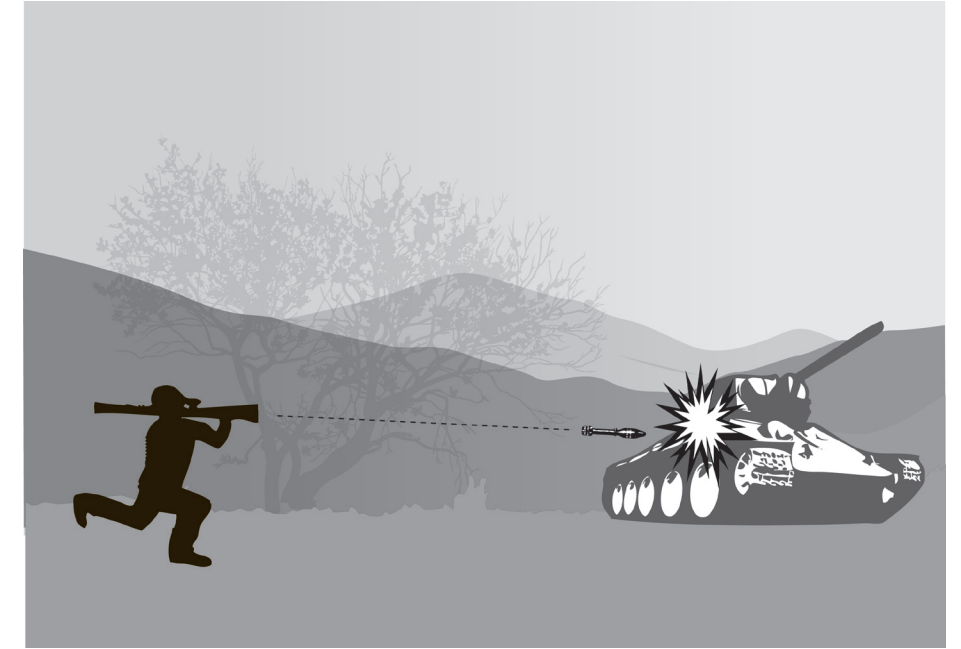
  <b>Westcliffe Engineers, Inc.</b>	<p><b>Development North MRA</b> <b>Pathway Analysis</b> <b>Flowchart</b></p> <p>FORA ESCA RP Monterey County, California</p>
<p><b>Figure 7.6-1</b></p>	



Burial / Mishandling / Loss



Troop Training



Direct Fire