Former Maneuver Area A Remedial Investigation Fort Bliss, Texas

Public Meeting
November 16, 2016

Agenda

- Purpose
- Terminology
- Location and Use of Former Maneuver Area A
- Description of the Remedial Investigation
- Remedial Investigation Results
- Alternatives for Remedial Action
- Preferred Alternatives for Each Site

Purpose

- Fulfill the requirement to seek public input into the Decision Document for four sites within Fort Bliss Former Maneuver Area A
- Present the proposed plan and the preferred alternative at each of the four sites within the Former Maneuver Area A
- The public comment period ends December 6, 2016

Terminology

- Remedial Investigation (RI) – in depth study of a contaminated site to determine the nature and extent of contamination
- Munitions and Explosives of Concern (MEC) – military munitions that may pose an explosive risks (i.e., unexploded ordnance) to receptors

4.2-inch mortar discovered at Fort Bliss Maneuver Area A

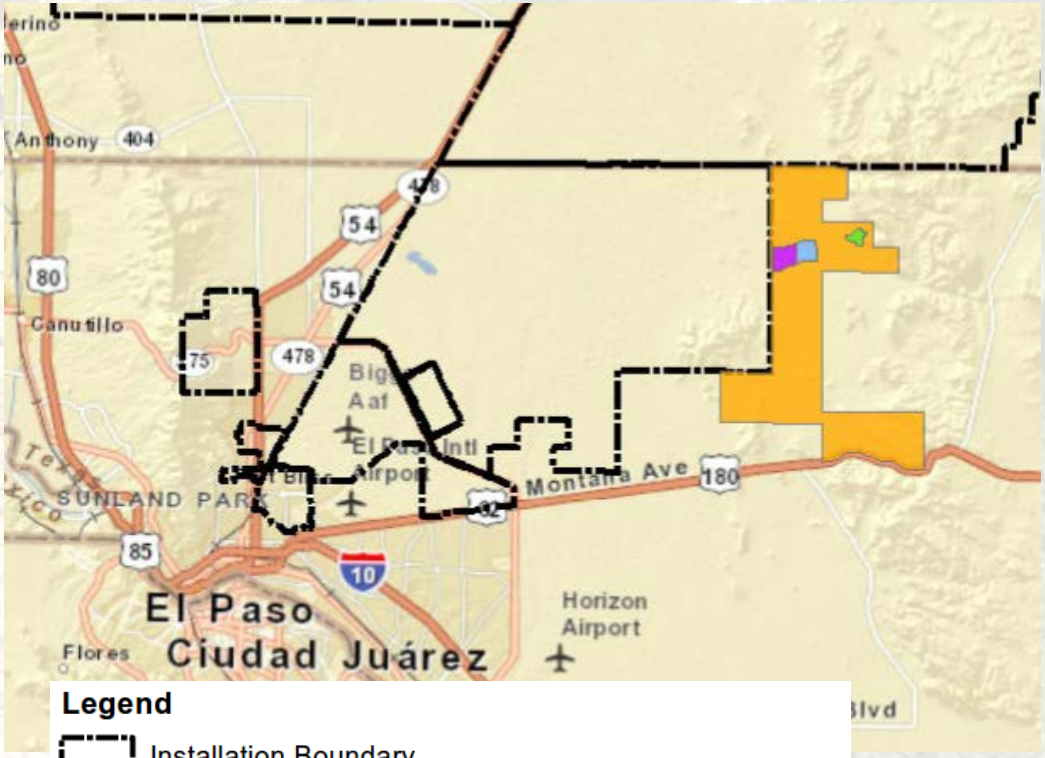
Terminology

- Munitions Constituents (MC) – materials or their breakdown products released from unexploded ordnance or other munitions
- Munitions Debris (MD) – remnants of military munitions (e.g., fragments, projectiles, casings) remaining after use or disposal (item has detonated but pieces of the item remain)

Types of munitions debris

Location and Use of Former Maneuver Area A

- Former Maneuver Area A is located east of Fort Bliss
- The site was historically utilized for military training exercises
- None of the land is currently owned by or located in an areas utilized by Fort Bliss for training activities

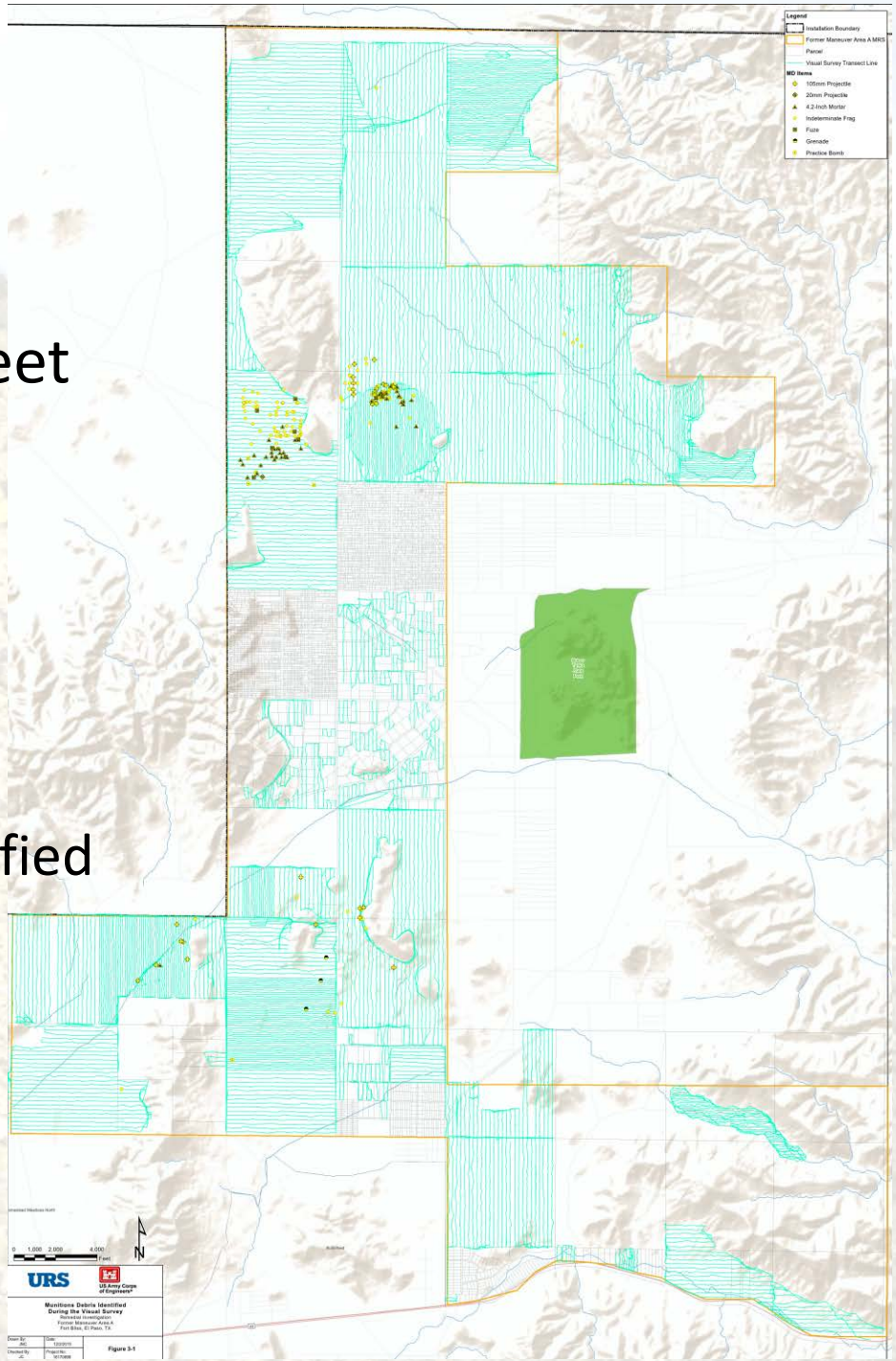


Description of the Remedial Investigation

- RI fieldwork was completed in 2013
- The fieldwork consisted of the following (discussed further on following slides):
  - Visual Surveys
  - Geophysical/Intrusive Investigation
  - MC Sampling
  - MEC Disposal

Visual Surveys

- A total of 5,033,28 linear feet of visual transects were completed. MD identified included:
  - (32) 105mm fragments
  - (3) 20mm fragments
  - (138) 4.2-inch fragments
  - (201) fragments of unspecified ordnance
  - (9) fuzes
  - (3) grenades
  - (9) practice bombs



Geophysical/Intrusive Investigation

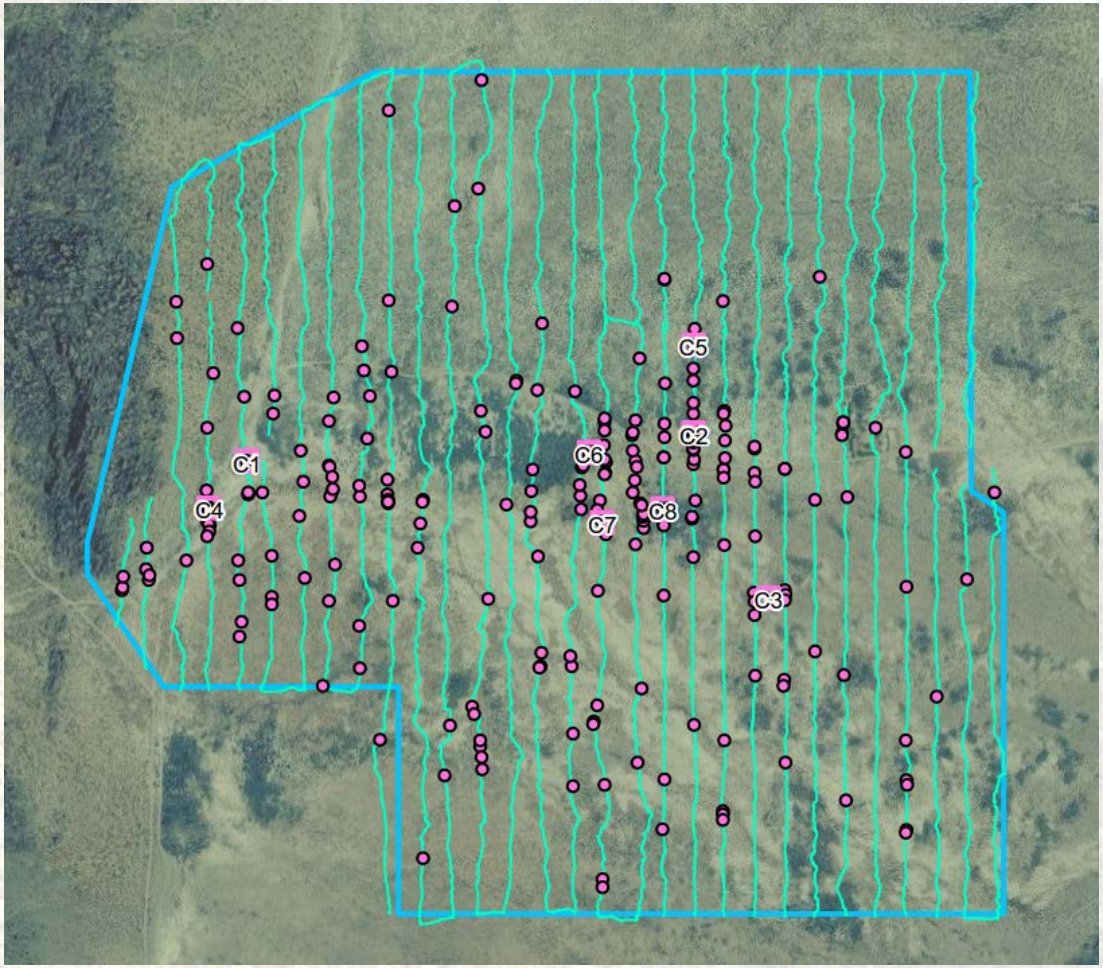
- Geophysical investigations were completed at 12 smaller areas within Former Maneuver Area A


DGM Collection in litter mode

- All anomalies identified during the geophysical investigation were included in the intrusive investigation

Geophysical/Intrusive Investigation

- Example of geophysical investigations transects completed in MRS FTBLS-002-R-04

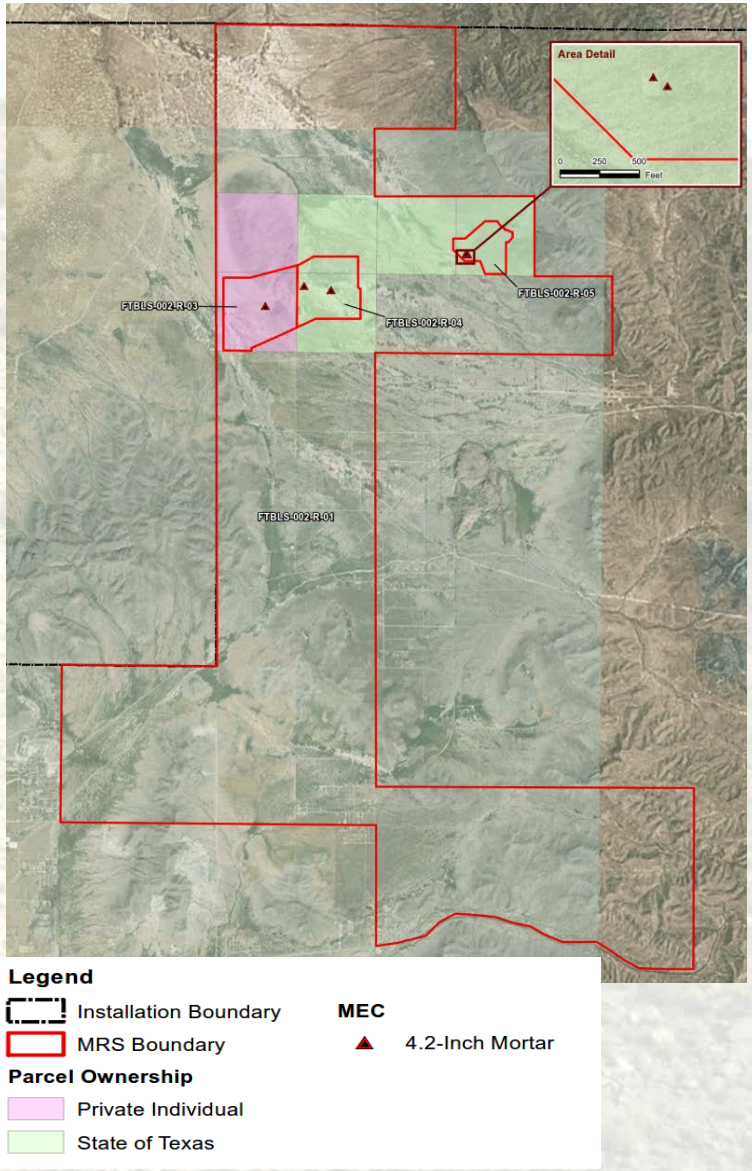


MEC Disposal

Disposal of a 4.2-inch mortar

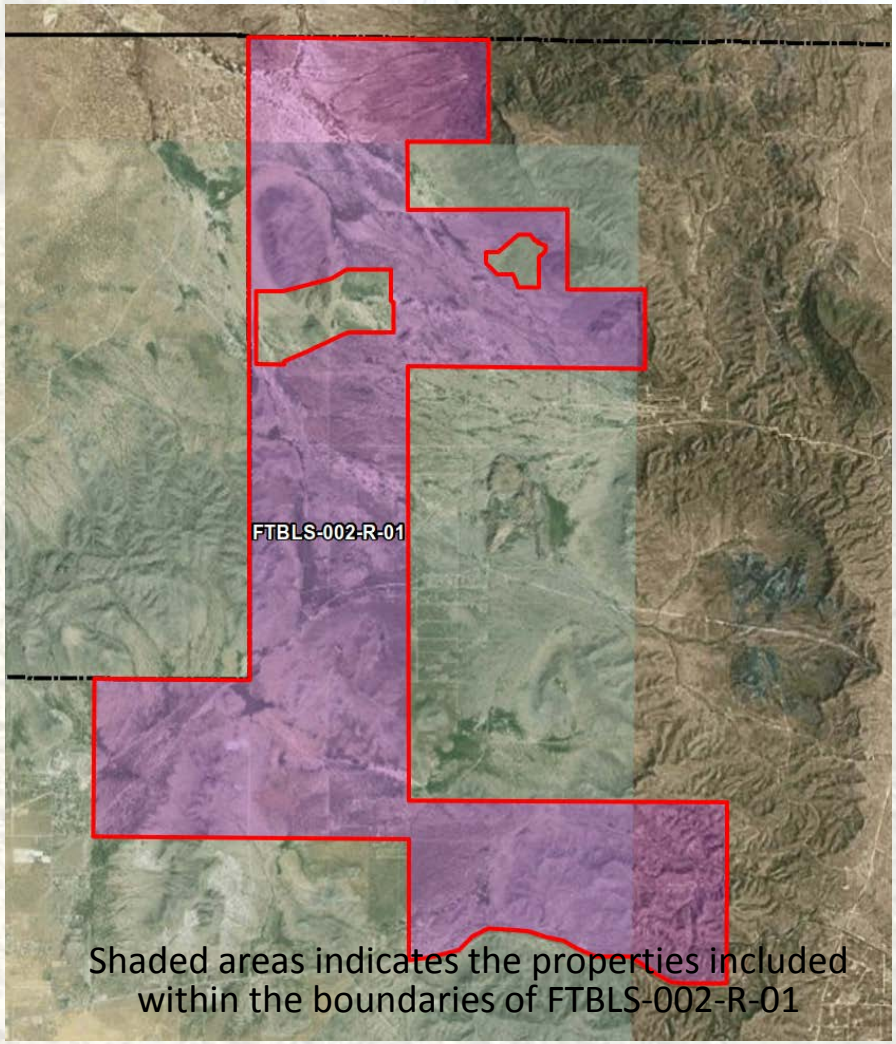
Remedial Investigation Results

- Based on the results of the RI, the Former Maneuver Area A was subdivided into smaller areas
  - Former Maneuver Area A (FTBLS-002-R-01)
  - Former Maneuver Area A (FTBLS-002-R-03)
  - Former Maneuver Area A (FTBLS-002-R-04)
  - Former Maneuver Area A (FTBLS-002-R-05)



Former Maneuver Area A (FTBLS-002-R-01)

- Encompasses 23,357 acres
- Property owned by 2,514 landowners and the State of Texas (Texas General Land Office)
- Current uses include residential homes, commercial businesses, light industry, and undeveloped land



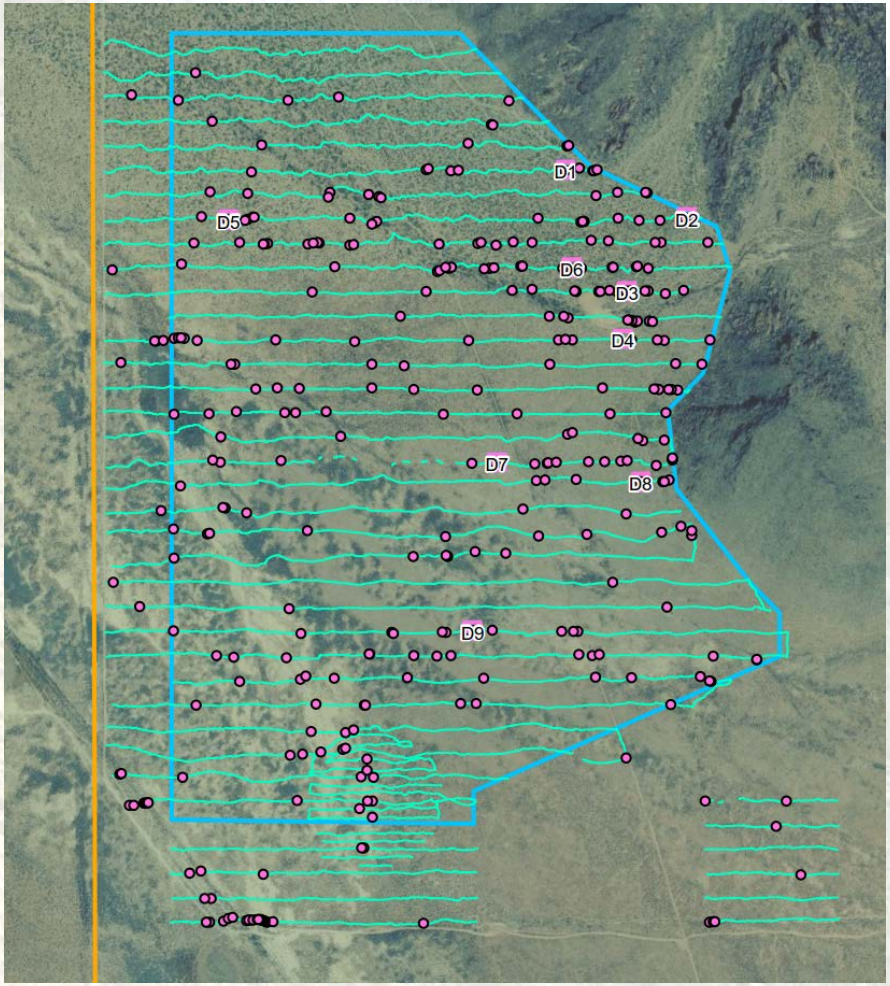
Shaded areas indicates the properties included within the boundaries of FTBLS-002-R-01

Former Maneuver Area A (FTBLS-002-R-01)

- No MEC discovered
- 34 MD items identified on the surface and 25 MD items recovered in the subsurface
- Some MD items included:
  - 105mm projectile fragments
  - 4.2-inch mortar fragments
  - Practice bombs
  - Grenade fragments

Former Maneuver Area A (FTBLS-002-R-03)

- 520 acres
- Privately owned
- Sparsely vegetated, undeveloped land utilized for ranching and recreation



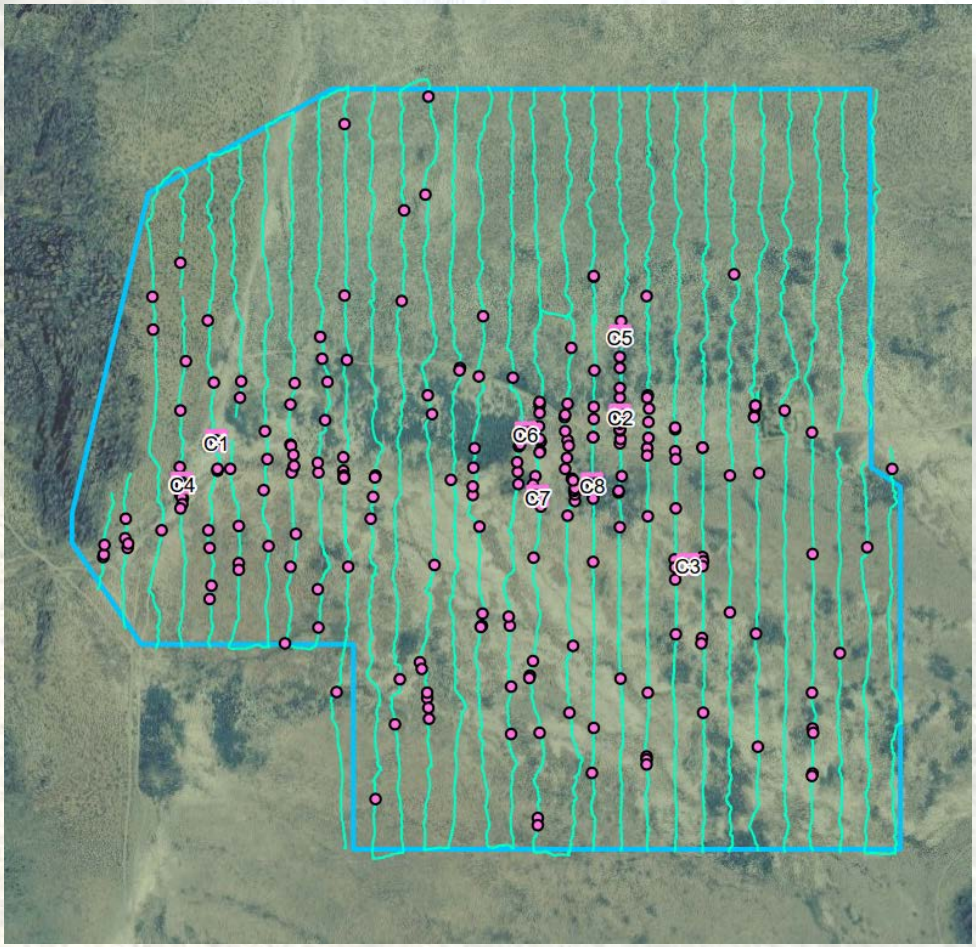
Geophysical investigation transects at FTBLS-002-R-03

Former Maneuver Area A (FTBLS-002-R-03)

- One MEC item discovered
- 87 MD items identified on the surface and 378 MD items recovered from the subsurface
  - 4.2-inch mortar fragments
  - M2 fuzes
  - Bomb Fins
  - Flare Casings
  - 37mm Casings
- Concentrated areas of 4.2-inch mortar MD suggests the area was historically used as a target
- MC sampling completed at FTBLS-002-R-03 indicated contaminants of concern are below TCEQ screening levels

Former Maneuver Area A (FTBLS-002-R-04)

- Encompasses 397 acres
- Owned by the State of Texas (Texas General Land Office) and leased to a private individual
- Site is located within a larger fenced area
- Undeveloped land utilized for ranching and recreation



Geophysical investigation transects at FTBLS-002-R-04

Former Maneuver Area A (FTBLS-002-R-04)

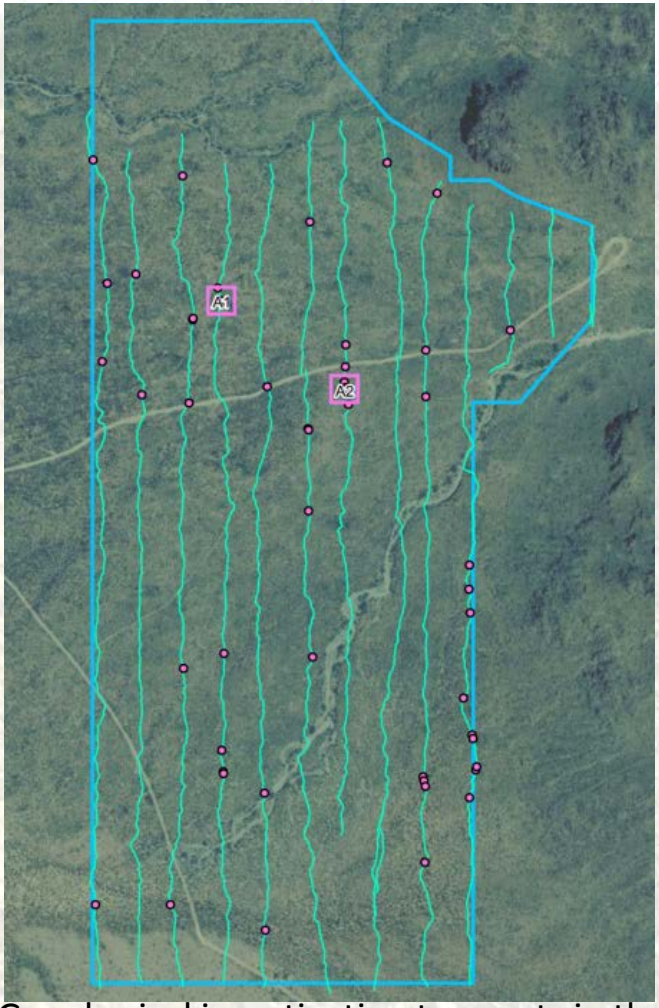
- Two MEC items identified
- 78 MD items discovered on the surface and 355 MD items recovered from the subsurface
  - 4.2-inch mortar fragments and baseplates
  - M2 fuzes
- Concentrated areas of MD suggest the area was historically used as a target for 4.2-inch mortars
- MC sampling completed at FTBLS-002-R-04 indicated all contaminants of concern are below TCEQ screening levels

Former Maneuver Area A (FTBLS-002-R-05)

- Encompasses 203 acres
- Currently owned by the State of Texas (Texas General Land Office) and leased to a private individual
- Site is located within a larger fenced area
- Undeveloped land utilized for ranching and recreation

Former Maneuver Area A (FTBLS-002-R-05)

Geophysical investigation transects in the western portion of FTBLS-002-R-05



Geophysical investigation transects in the eastern portion of FTBLS-002-R-05

Former Maneuver Area A (FTBLS-002-R-05)

- Two MEC items identified
- 4 MD items identified on the surface and 69 MD items were recovered in the subsurface
  - 4.2-inch mortar fragments
  - M2 fuzes
- Concentrated areas of MD suggest the area was historically used as a target for 4.2-inch mortars
- MC sampling completed at FTBLS-002-R-05 indicated all contaminants of concern are below TCEQ screening levels

Alternatives for Remedial Action

- The feasibility study considered the following alternatives to address MEC and/or MD identified at the four sites:
  - No Action
  - Public Awareness Program
  - Land Use Controls
  - MEC Surface Clearance
  - MEC Surface and Subsurface Clearance

No Action

- No Action alternative assumes No Further Action would be taken
  - No land use controls would be implemented
  - No capital or operations and maintenance costs
  - This alternative is required as a baseline comparison purposes

Public Awareness Program

- The public awareness program would include the following:
  - Maintaining the administrative record and information repository
  - Preparing and issuing press releases
  - Preparing and distributing fact sheets
  - Updating the Public Affairs Mailing List
  - Public Meetings

Land Use Controls

- The land use controls alternative would include the following:
  - Implementing the public awareness program
  - Installation of physical barriers (fences) and warnings (signs)
  - Periodic inspections to assess the condition of the site

MEC Surface Clearance

- The MEC surface clearance alternative would include the following:
  - Completing a 100 percent surface clearance of the site
  - Implementing the public awareness program
  - Periodic inspections to assess the condition of the site

MEC Surface Clearance and MEC Subsurface Removal

- The MEC surface clearance and MEC subsurface removal alternative would include the following:
  - Completing surface clearance of the entire site
  - Completing a subsurface clearance to 4 feet below ground surface of the entire site

Evaluation of Alternatives

- Each alternative was evaluated against the following nine criteria:
  - Overall Protection of Human Health and the Environment
  - Compliance with Applicable or Relevant and Appropriate Requirements
  - Short-Term Effectiveness
  - Long-Term Effectiveness and Permanence
  - Reduction of Toxicity, Mobility, and Volume through Treatment
  - Implementability
  - Cost
  - State Acceptance
  - Community Acceptance

Selection of Preferred Alternatives

The alternatives were evaluated for each site. Based on the results of the evaluations a preferred alternative has been selected for each site. The preferred alternative:

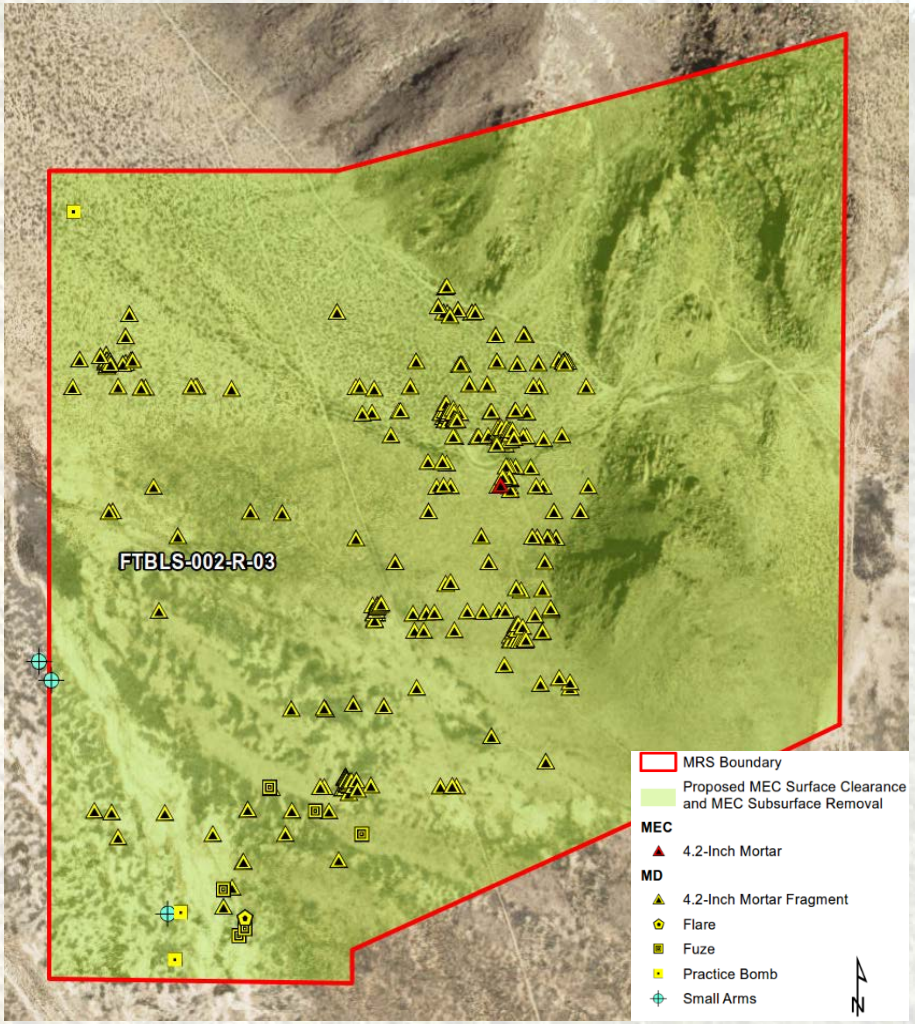
- Is technically and administratively feasible
- Provides the best balance of cost and reduction of risk to human health

Preferred Alternative for Former Maneuver Area A (FTBLS-002-R-01)

- The preferred alternative is the Public Awareness Program. This alternative was selected because:
  - No MEC items identified
  - Limited amounts of MD identified
  - No risks to human health identified

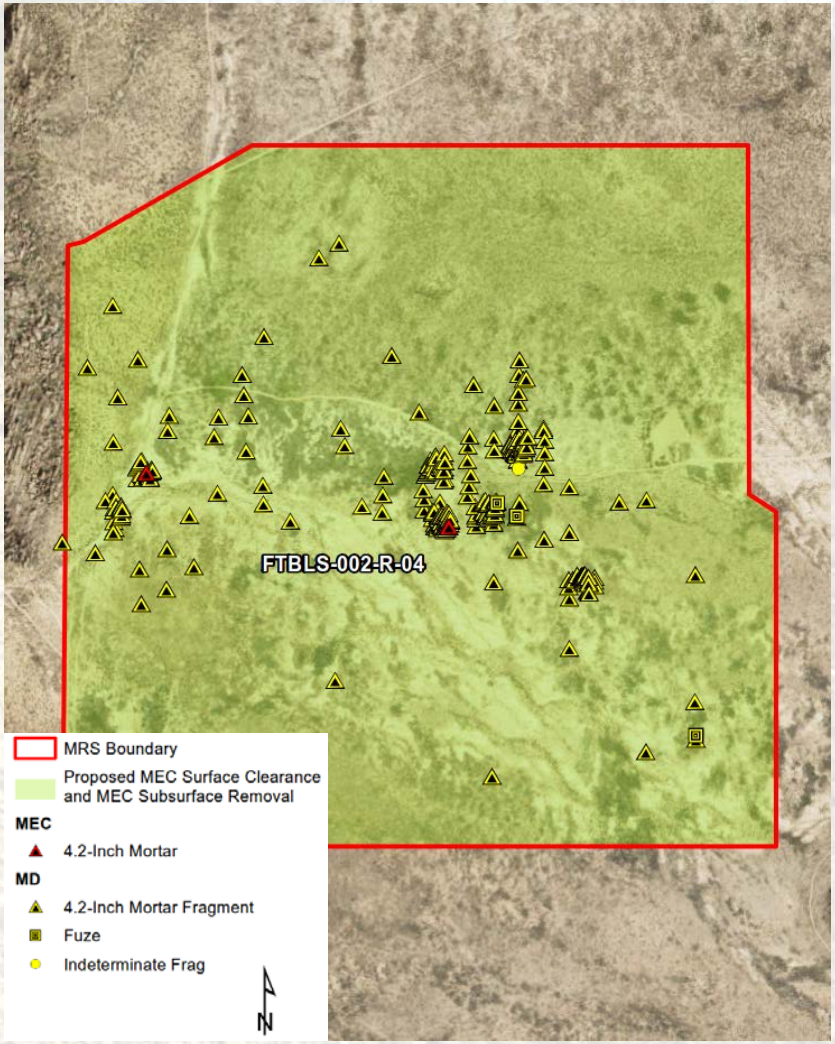
Preferred Alternative for Former Maneuver Area A (FTBLS-002-R-03)

- The preferred alternative is MEC surface clearance and MEC subsurface removal. This alternative was selected because:
  - MEC identified at this site
  - MD identified at this site in concentrations suggesting it was a target area
  - There is the potential for interactions between receptors and MEC items
  - The remedy is technically feasible and provides the best balance of effectiveness and risk reduction



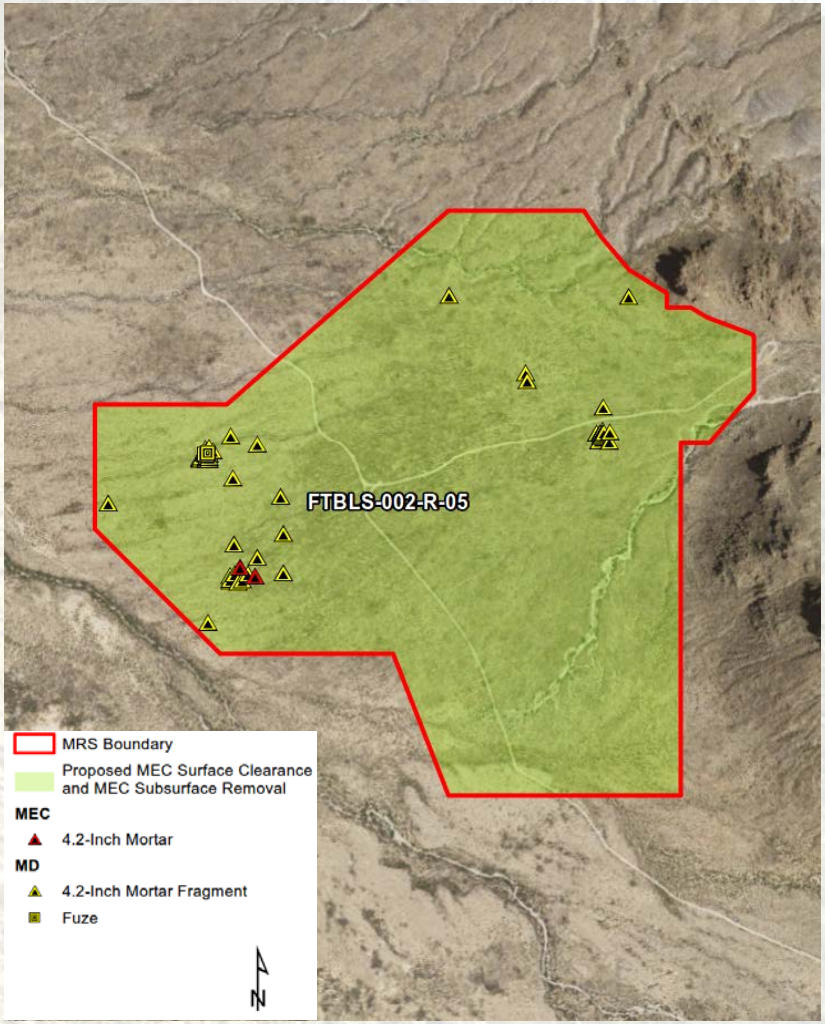
Preferred Alternative for Former Maneuver Area A (FTBLS-002-R-04)

- The preferred alternative is the MEC surface clearance and MEC subsurface removal. This alternative was selected because:
  - MEC identified
  - MD identified in concentrations suggesting it was a target area
  - There is the potential for interactions between receptors and MEC items
  - The remedy is technically feasible and provides the best balance of effectiveness and risk reduction



Preferred Alternative for Former Maneuver Area A (FTBLS-002-R-05)

- The preferred alternative is MEC surface clearance and MEC subsurface removal. This alternative was selected because:
  - MEC identified
  - MD identified in concentrations suggesting it was a target area
  - There is the potential for interactions between receptors and MEC items
  - The remedy is technically feasible and provides the best balance of effectiveness and risk reduction



General Information

Comments on the Proposed Plans will be accepted until December 6, 2016

The Proposed Plans are available for review at:
Directorate of Public Works – Environmental (DPW-ED)
Building 622 Taylor Road
Fort Bliss, Texas 79916
Ron Baca
Phone: (915) 568-7979

Comments or questions should be addressed to:
United States Army Corps of Engineers – Tulsa District
Attn: Frank Roepke
1645 South 101st East Avenue
Tulsa, Oklahoma 74128
Phone: (918) 669-7444
E-mail: frank.roepke@usace.army.mil

Questions