

USA Environmental, Inc.

July 14, 2004

USA-CE-OERS-895

US Army Engineering and Support Center, Huntsville
ATTN: CEHNC-CT-E (Mr. Eduardo J. Marrero)
4820 University Square
Huntsville, AL 35816-1822

RE: Contract Number DACA87-00-D-0036, Task Order 0014, Ordnance and Explosives (OE)
Removal Action at Castner Range, Fort Bliss, Texas

Dear Mr. Marrero;

In accordance with the Modification to Task Order 0014 Scope of Work and Contract Requirements, USA Environmental, Inc. is submitting the Draft Addendum for Area 6 (INS Property) for review and comments.

Distribution and number of copies are in accordance with the Scope of Work and the USAESCH Project Manager instructions.

USA Environmental, Inc. is pleased that the US Army Engineering and Support Center, Huntsville selected us to perform this work and we look forward to working with USAESCH on this project.

Sincerely,



George R. Spencer
Operations Manager

Copies/Distribution:

- 4 Copies - U.S. Army Engineering and Support Center, Huntsville, ATTN: CEHNC-OE-DC (Mr. Bob Nore), 4820 University Square, Huntsville, AL 35816-1822
- 5 Copies - Commander, US Army Air Defense Artillery Center Fort Bliss, ATTN: ATZC-DOE-M (Mr. David Dodge), Building 624, Fort Bliss, TX 79916-6803
- 1 Copy - U.S. Army Corps of Engineers, Albuquerque District, ATTN: HTRW Branch (Mr. David Henry) 4101 Jefferson PL, Albuquerque, NM 87109

ADDENDUM 1
ORDNANCE AND EXPLOSIVES (OE) REMOVAL ACTION

AT

AREA 6, CASTNER RANGE, FORT BLISS, TEXAS

DACA87-00-D-0036

TASK ORDER: 0014

PROJECT No: K06TXCAST06SWF

PREPARED FOR

U.S. ARMY ENGINEERING AND Support Center, Huntsville

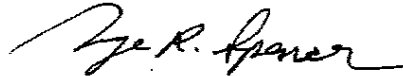
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JULY 9, 2004

**Addendum 1 – Ordnance and Explosives (OE) Removal Action
Castner Range – Fort Bliss, Texas**

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Appendix A: Scope of Work

Appendix B: Maps and Drawings

Appendix C: (See Approved Work Plan)

Appendix D: (See Approved Work Plan)

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Appendix G: (See Approved Work Plan)

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ADDENDUM 1

1.0 INTRODUCTION

In accordance with the scope of work (SOW), Revised 18, May 2004 USA Environmental, Inc. (USA) will be performing an additional clearance at Castner Range, Fort Bliss, Texas. This addendum supplements the approved Final Work Plan, Ordnance and Explosives (OE) Removal Action at Castner Range, Fort Bliss, Texas, with Revision 5 date July 28, 2003. The approved Work Plan procedures and other data is referenced as applicable rather than reiterated in this Addendum.

1.1 SITE LOCATION

See approved Final Work Plan

1.2 SITE HISTORY

See approved Final Work Plan

1.3 TOPOGRAPHY

See approved Final Work Plan

1.4 CLIMATE

See approved Final Work Plan.

1.5 TECHNICAL MANAGEMENT PLAN

All site operations will be in accordance with the USAESCH Scope of Work (see Appendix A) revised 18 May 2004. The objective of this Removal Action is to safely locate, identify, and dispose of all unexploded ordnance (UXO) items in Area 6 (INS area), approximately 45-acres adjacent to Area 2. All site operations will be performed consistent with Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan (NCP) (Sections 300.120(d) and 300.400(e)(1) and the approved Explosive Safety Submission (ESS) and Final Work Plan.

1.6 CHEMICAL WARFARE MATERIEL

- See approved Final Work Plan.

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1.7 UNEXPLODED ORDNANCE DISPOSAL

It is a USAESCH policy that an identified UXO item with an intact fuze is detonated in place (BIP). In the event that an unidentified OE/UXO item is discovered, work on that item will cease and the site will be secured. The USA Team will take photographs and measurements (if possible) of the item such that they can identify the item from ordnance publications. If this procedure results in a positive identification of the item, then work will resume and the item will be handled in accordance with the standard UXO disposal policies and procedures. If the UXO item cannot be identified, then USA will notify the USACE Safety Representative and wait for further directions.

1.8 TECHNICAL SCOPE OF WORK

USA will perform an OE Removal Action on approximately 45 acres at the Castner Range site. Castner Range is divided into areas of varying acreage as shown in the Table 1-1. This removal action will be a mag and dig operation. The Removal Action will be a subsurface clearance to depth.

TABLE 1-1: INS OE REMOVAL AREA

<i>AREA</i>	<i>ACRES</i>
<i>1. North Hills</i>	<i>253</i>
<i>2. Hondo Pass</i>	<i>337</i>
<i>3. Museum & Poppy Area</i>	<i>327</i>
<i>4. City Of El Paso Access</i>	<i>148</i>
<i>5. Fusselman Canyon</i>	<i>226</i>
6. INS Property	45
<i>7. TBD</i>	<i>436</i>
<i>Total</i>	<i>1772</i>

The terrain is generally flat with gravelly soil. The brush that is present generally is ankle to waist high. Brush is open enough to permit walking through. Due to the sensitive nature of the site no brush clearing is allowed. Expected ordnance items include the 37mm projectile based on previous clearances.

1.9 OE REMOVAL

USA personnel will perform a Mag & Dig removal to depth of all detectable subsurface metallic anomalies.

1.10 ORGANIZATION

Figure 1-1 identifies the project team members for the RA. Figure 1-2 provides an organization chart for the field activities. The field team management organization will consist of a Senior UXO Supervisor (SUXOS) who will manage all site operations and who reports directly to the USA Project Manager, a UXO Safety Officer (UXOSO)/UXO Quality Control Specialist (UXOQCS) who reports to the SUXOS on site with a direct line of communications to the USA Safety/Quality Manager.

Addendum 1 – Ordnance and Explosives (OE) Removal Action
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FIGURE 1-1: PROJECT TEAM

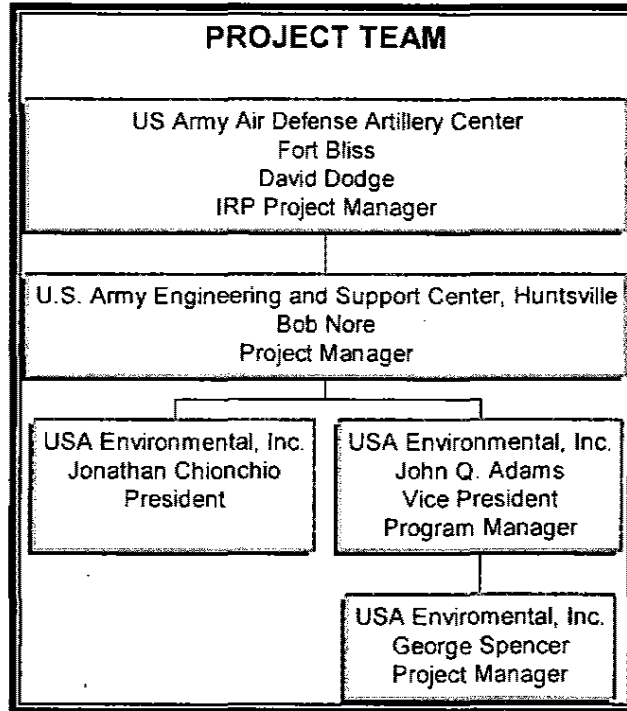
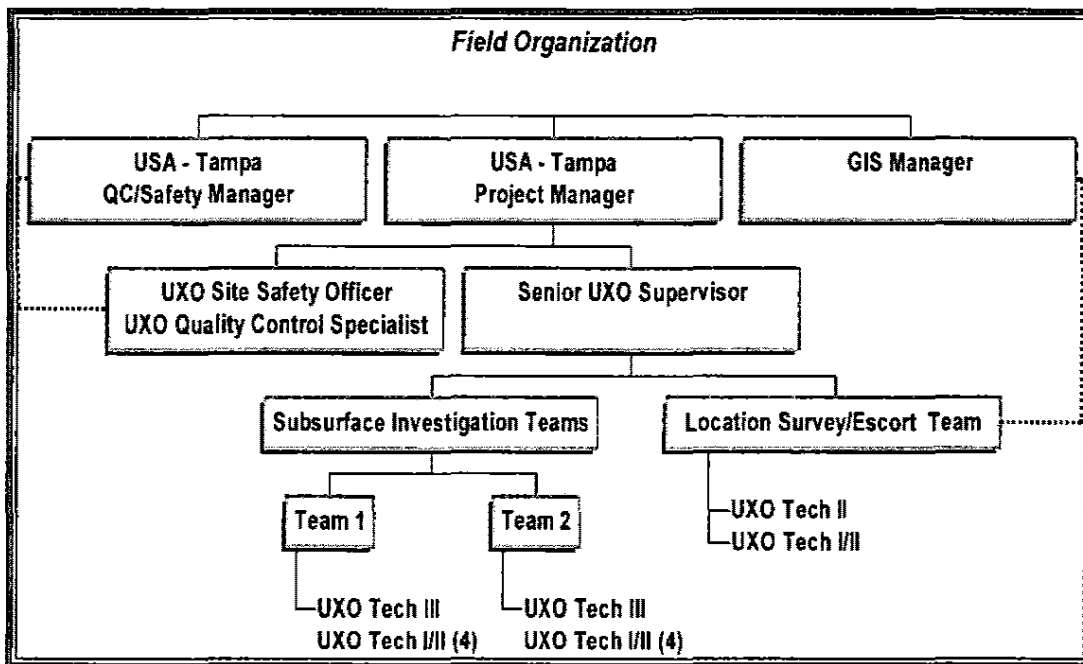


FIGURE 1-2: FIELD ORGANIZATION



**Addendum 1 – Ordnance and Explosives (OE) Removal Action
Castner Range – Fort Bliss, Texas**

1.11 UXO PERSONNEL AND QUALIFICATIONS

See approved Final Work Plan

1.12 MOBILIZATION

USA will perform operations in a systematic manner using proven operating techniques and methods. USA will begin mobilization following written approval of this Addendum and receipt of notification to proceed (NTP) from the USAESCH Contracting Officer. USA will systematically build and establish its operational capability at the Castner Range Site. The objective of this phase is to ensure that the proper attention is dedicated to coordinating with the customer and moving to the operational phase as soon as practical. USA will mobilize the SUXOS and UXOSO/UXOQCS to perform mobilization activities. Actions performed during this phase include:

- Establish a work site trailer;
- Identify/procure, package, ship, and inventory project equipment;
- Coordinate with local sources for communications and other support;
- Receive and store explosives in the Fort Bliss Ammunition Supply Point (ASP) magazines as approved;
- Finalize operating schedules.

USA will site a site work trailer in the parking lot of the Border Patrol Museum on Trans Mountain Highway at Castner Range. The site trailer will be used for administrative purposes and storage of site equipment. USA will install electrical power, two telephone lines (one dedicated fax), and a monitored security system in the trailer. Off-site alternate emergency communications will be by cellular telephone. The security system will provide additional security for equipment and the facility during non-duty hours and weekends.

1.13 SITE SPECIFIC TRAINING

See approved Final Work Plan

1.14 GENERAL SITE PRACTICES

See approved Final Work Plan

1.15 PREPARATION OF WORK AREAS

See approved Final Work Plan

1.15.1 LOCATION SURVEYS AND MAPPING

USA established a master grid system for Castner Range during the initial work at Castner Range. Based on data provided USA will determine Area 6 boundary coordinates and install survey grids within Area 6 using a Trimble Real-Time Kinematic Global Positioning System (RTK-GPS) Total Station; Model 4700 survey equipment that is accurate to plus or minus one centimeter. USA will establish 60 x 60 meter grids.

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TABLE 1-2: MARKING MATERIALS

Marker	Used to Mark
Red Pin Flag	UXO (or subsurface anomaly)
Blue Pin Flag	Non-Hazardous Scrap
White Pin Flag	Temporary Marker
Survey Laths	Grid Corners

1.15.1.1 Survey Personnel

The GPS Survey Team will consist of two (2) UXO Technicians. The Survey Team will be trained and experienced in the use of the GPS system. The team will install boundaries and internal grids and capture any significant cultural and terrain features of the site for inclusion in the final report and drawings. At the completion of the area grid layout the two UXO Technicians will be reassigned to the two investigation teams.

1.16 OE SUBSURFACE INVESTIGATIONS

Teams consisting of all UXO qualified personnel will perform subsurface investigations in Area 6. Once sufficient grids have been completed to warrant the start of anomaly investigations and maintain team separation distances, the UXO Team Leader will direct the UXO Technicians to begin investigating the subsurface anomalies. During this operation, the Team Leader will disperse the UXO Technicians across the operating grid in a manner that maximizes the separation distance between individual technicians. Excavation of anomalies will be performed in accordance with the procedures outlined in the following subparagraphs.

1.16.1 PERSONNEL

Investigation teams will consist of a UXO Technician III and UXO Technicians I/II.

1.16.2 SEARCH LANES

Each grid will be sub-divided into individual search lanes. Individual search lanes will consist of an approximately 1.5 meter wide parallel paths that run parallel to one boundary of the operating grid. Search lanes will run adjacent to each other and completely cover the entire operating grid. To layout the search lanes, the UXO Team Leaders will have personnel perform the following:

- Select two opposing boundary lines for installation of the pre-marked lane base lines;
- Install one of the pre-marked base lines along each boundary;
- Layout rope or twine between the marks on both base lines to mark individual lane boundaries.

1.16.3 EQUIPMENT

The equipment requirements for this activity include:

- Schonstedt GA-52Cx and/or White Eagle Spectrum magnetometers, which will be used to detect subsurface metallic anomalies and/or UXO. If encountering ore-bearing rocks the Team will use

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- whichever magnetometer provides to most accurate response to the target(s);
- Pre-marked baselines that will be used to subdivide the grid into individual search lanes;
- Rope reels containing nylon rope/twine (Used to mark individual search lanes);
- Miniature Open Front Barricade (MOFB) as engineering controls in selected areas;
- Assorted colored pin flags that will be used to mark boundaries, UXO, and anomaly locations (See Table 1-2);
- Miscellaneous common hand tools (i.e. shovels, trowels, hammers, screwdrivers, etc.);
- Forms and logbooks to record activities and contamination levels.

1.16.4 ENGINEERING CONTROLS

See approved Final Work Plan

1.16.5 ANOMALY INVESTIGATIONS

After the individual search lanes have been established, the UXO Team Leader will direct personnel to begin searching each lane with a magnetometer. UXO personnel will start at one end of each lane and will move forward toward the opposing base line. During the forward movement the individual will move the magnetometer from one side of the lane to the other. Both forward movement and the swing of the magnetometer will be performed at a pace that ensures that the entire lane is searched and that the instrument is able to appropriately respond to subsurface anomalies.

Anomalies encountered (Mag & Dig) will be excavated by carefully digging along side of where the anomaly is located, removing the earth overburden using a shovel. Throughout the excavation, the UXO Technician will use a magnetometer to check and verify the location of the anomaly. When the overburden has been removed to within 6 inches of the anomaly, the UXO Technician will remove the remaining earth using a trowel or other small digging implement. Anomalies will be pursued to depth. At the completion of investigation the hole will be checked with a magnetometer to ensure no metallic contacts remain.

1.16.6 RECORDS

The UXO Team Leaders will prepare and maintain a detailed accounting of activities performed at each grid. The Daily Operations Record will include information pertaining to the following.

- The date and time operations began;
- The date and time operations were completed;
- The type(s) and amounts of explosives used;
- The location, depth, number, type, and description of UXO and OE items encountered;
- An estimated weight, in pounds, of the OE related scrap metal removed from the grid;
- The location of all UXO items will be determined by tape measurements from two grid corners and a UTM coordinate determined. These distances will be measured and recorded to plus or minus one foot.

1.17 OE/UXO DISPOSAL

See approved Final Work Plan.

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Castner Range – Fort Bliss, Texas**

1.18 REMOVAL AND DISPOSAL OF SCRAP METAL

See approved Final Work Plan

1.19 QUALITY CONTROL

See approved Final Work Plan

1.20 REPORTS AND DOCUMENTATION

- See approved Final Work Plan

1.21 DEMOBILIZATION

See approved Final Work Plan

1.22 EXPLOSIVES MANAGEMENT PLAN

See approved Final Work Plan

1.23 EXPLOSIVES SITING PLAN

This plan outlines the procedures USA will use to perform the OE Removal Action at Area 6 and describes the safety criteria to be employed during OE operations.

1.24 ORDNANCE AND EXPLOSIVE AREAS

Ordnance and explosive areas are defined within the SOW include the six Areas comprising 1,772 acres within Castner Range,

1.24.1 SAFE SEPARATION DISTANCES

The safe separation distances for the public during intrusive operations will be the Minimum Separation Distance based on DOD 6055.9-STD Table C5.T1, or as calculated by USAESCH's Engineering Directorate, Structural Branch for the MPM. If conditions dictate, with the approval the of the USAESCH, the MSD may be reduced to fit the situation, but in no case will the distance be less than 1/600ft², the K50 based on overpressure, or 200 feet minimum, whichever is greater. Table 1-3 shows the MPM and MSD for the initial Areas.

TABLE 1-3: MINIMUM SEPARATION DISTANCES

Area	MPM	Max. Frag. Range (ft.)	*Unintentional Detonation		**Intentional Detonation	
			Range to No More than 1 Hazardous Fragment per 600 sq. ft. (ft.)	K50 Range to 0.9 psi Overpressure (ft.)	Maximum Fragment Range (ft.)	K328 Overpressure Range (ft.)
1	40 mm M406	345	N/A	23	345	153

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Area	MPM	*Unintentional Detonation			**Intentional Detonation	
		Max. Frag. Range (ft.)	Range to No More than 1 Hazardous Fragment per 600 sq. ft. (ft.)	K50 Range to 0.9 psi Overpressure (ft.)	Maximum Fragment Range (ft.)	K328 Overpressure Range (ft.)
2	37mm MK II	980	200	20	980	131
3	75 mm HE M48	1701	234	60	1701	396
4	75 mm HE M48	1701	234	60	1701	396
5	75 mm HE M48	1701	234	60	1701	396
6	37mm MK II	980	200	20	980	131

Notes:

* Team separation distance for unintentional detonations is the K50, or 200 feet minimum whichever is greater. Maximum fragmentation distance for other personnel.

** MSD for intentional detonations is maximum fragment range of the MPM or item being detonated.

1.24.2 DEMOLITION AREAS

OE will be disposed of in the areas where the item(s) are encountered. Items that are acceptable to move (unfuzed) may be consolidated, with the concurrence of the USACE OE Safety Specialist, to one location within an operating area to reduce the number of demolition shots and the fragmentation contamination. In areas where an acceptable fragmentation distance cannot be achieved, approved methods of mitigation, such as sandbags, berms, tamping, or barricades, will be employed to reduce the fragmentation hazard. If these methods of disposal are determined to be impractical, USA will notify the on-site USACE OE Safety Specialist who will notify the Explosive Ordnance Disposal (EOD) unit.

1.25 FOOTPRINT AREAS

Foot print areas for intrusive and demolition operations within Area 6 are depicted on the Quantity Distance (QD) Map in Appendix B.

1.25.1 BLOW-IN-PLACE

See approved Final Work Plan

1.25.2 COLLECTION POINTS

See approved Final Work Plan

1.25.3 CONSOLIDATED SHOTS

See approved Final Work Plan

1.26 EXPLOSIVE STORAGE MAGAZINES

See approved Final Work Plan

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Castner Range – Fort Bliss, Texas**

1.27 ENGINEERING CONTROLS

USA will use engineering controls (in accordance with HNC-ED-CS-S-98-7) to reduce fragmentation distances of demolition shots. In areas where an acceptable fragmentation distance cannot be achieved, items safe to move may be moved to another area, with the concurrence of the USACE OE Safety Specialist, as long as the movement does not require transportation on public roads. If these methods of disposal are determined to be impractical, USA will notify the on-site USACE OE Safety Specialist.

1.28 GEOPHYSICAL INVESTIGATIVE PLAN

NOT REQUIRED FOR MAG & DIG REMOVAL ACTION

1.29 SITE SAFETY AND HEALTH PLAN

See approved Final Work Plan

1.30 LOCATION SURVEYING AND MAPPING PLAN

This chapter details procedures USA will use to perform location surveying and mapping at Castner Range. This plan was developed in accordance with DID OE-005-07. USA will establish boundaries and install internal 60 x 60-meter survey grids using Global Positioning System (GPS) equipment.

1.31 UNEXPLODED ORDNANCE (UXO) SAFETY PROVISION

The USA Survey Team e will consist of UXO Technicians therefore no UXO escort is required.

1.31.1 CONTROL POINTS

See approved Final Work Plan

1.31.2 MAPPING

See approved Final Work Plan

1.32 DIGITAL DATA

See approved Final Work Plan

1.33 ITEMS AND DATA

See approved Final Work Plan

1.34 WORK, DATA AND COST MANAGEMENT PLAN

See approved Final Work Plan

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1.35 PROPERTY MANAGEMENT PLAN

This Property Management Plan (PMP) has been prepared in accordance with DID OE-005-09 and FAR Part 45.5 and its supplements.

1.36 OBJECTIVE

The objective of this plan is to ensure control and accountability procedures for all aspects of the equipment used during the Castner Range project. Equipment is separated into field equipment, office equipment, and consumables.

1.37 DESCRIPTIONS AND QUANTITIES

Equipment and materials used during this project will primarily be limited to field equipment due to the short duration anticipated. Minimal office equipment needed for generating forms and reports will be located at the site work trailer located at the Border Patrol Museum. All other command center operations will be conducted by USA Tampa.

To perform this project, initially the following equipment will be utilized:

TABLE 1-4: FIELD EQUIPMENT

Equipment Item	Quantity	User
F-150	3	SUXOS, UXOSO/UXOQCS, Survey.
F-250	2	Sweep Teams, Intrusive Teams.
Schonstedt 52-CX	13	Sweep Teams, Intrusive Teams, Survey, UXOQCS.
Video/Camera Equipment	1	SUXOS.
Handheld Radio/cellphone	5	SUXOS, Survey, UXOSO/UXOQCS, Intrusive Teams.
Cellular Telephone	3	SUXOS, UXOSO, UXOQCS.
First Aid Kit, Portable Eyewash	5ea	1 Per Vehicle.
Demolition equipment	1 set	Demolition Team.
Fire Suppression Equipment	7	1 for Each Vehicle, 2 10B:C for DEMO Vehicle.
GPS Unit and Accessories	1	Survey.
Portable Sanitation Facilities	2	Site Personnel.
Storage Container	1	Site Personnel.
MOFB (GFE)	2	Intrusive Teams

TABLE 1-5: OFFICE EQUIPMENT

Equipment Item	Quantity	User
Computer	1	SUXOS, UXOSO/QCS, Survey.
Printer	1	SUXOS, UXOSO/QCS, Survey.
Fire Suppression Equipment	1	2A: 10B:C for Office Space.

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TABLE 1-6: CONSUMABLES

Equipment Item	Quantity	User
PPE (Gloves, Glasses, snake chaps)	14ea	All USA Personnel
Excavation Equipment (Shovels, Trowels, Buckets, etc.)	2ea	Intrusive Teams, UXOQCS.
Log Books, Computer Accessories	1set	SUXOS, UXOSO/QCS, Survey, Team Leaders

1.37.1 SOURCES AND ACQUISITION

See approved Final Work Plan

1.37.2 DOCUMENTATION

See approved Final Work Plan

1.37.3 BASIS OF SELECTION

See approved Final Work Plan

1.37.4 WORK PLAN VEHICLE ALLOWANCE

See approved Final Work Plan.

1.37.5 VEHICLE REQUIREMENTS

See approved Final Work Plan.

1.37.6 EXCEPTIONS

See approved Final Work Plan

1.38 CONSUMABLES AND PERSONAL PROPERTY

None of the equipment to be used on the project site is included in USA's overhead.

1.39 STORAGE PLAN

See approved Final Work Plan

1.40 ULTIMATE DISPOSITION

See approved Final Work Plan

1.41 PROPERTY TRACKING LOG REPORT

See approved Final Work Plan

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1.42 PROPERTY LOSS, DAMAGE OR DESTRUCTION NOTIFICATION

See approved Final Work Plan

1.43 SAMPLING AND ANALYSIS PLAN

NOT REQUIRED BY SCOPE OF WORK

1.44 QUALITY CONTROL PLAN

See approved Final Work Plan

1.45 ENVIRONMENTAL PROTECTION PLAN

See approved Final Work Plan

1.46 INVESTIGATIVE DERIVED WASTE PLAN

NOT REQUIRED BY SCOPE OF WORK

1.47 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

See approved Final Work Plan

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APPENDIX A

A.0 SCOPE OF WORK

This appendix contains a copy of the USAESCH Scope of Work (SOW) for Ordnance and Explosives (OE) Removal Action, Castner Range – Fort Bliss, Texas, Revised 18 May 2004.

**SCOPE OF WORK (SOW)
ORDNANCE AND EXPLOSIVES (OE) REMOVAL ACTION
CASTNER RANGE - FORT BLISS, TEXAS**

18 July 2001
Revised 15 July, 2002
Revised 30 July 2002
Revised 28 August 2002
Revised 14 January 2003
Revised 18 May 2004

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK. The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) - Installation Restoration Program (IRP). Ordnance and Explosives (OE) contamination may exist on property presently owned by the Department of the Army.

1.1. OE is a safety hazard and may constitute an imminent and substantial endangerment to the local populace and site personnel. During removal action, it is the Government's intent that the OE contractor shall destroy all OE encountered, on-site. This action will be performed in accordance with (IAW) the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, Section 104) and the National Contingency Plan (NCP) (Sections 300.120(d) and 300.400(e)(1)). The provisions of 29 CFR 1910.120 shall apply for this site.

1.1.1. In addition, this action is being completed under Chapter 12, DoD 6055.9, Department of Defense Ammunition and Explosives Safety Standards. DoD real property that is known to contain OE contamination and may endanger the general public, may not be released from DoD custody until the most stringent efforts have been made to ensure appropriate protection of the public.

1.2. Due to the inherent risk in this type of operation, the unexploded ordnance (UXO) contractor shall be limited to a 40-hour work week: either five 8-hour days or four 10-hour days. UXO personnel shall not perform UXO-related tasks more than 10 hours a day and shall not work during hours of darkness.

1.3

GENERAL DESCRIPTION.

1.3.1 Castner Range is located in the northeast limits of El Paso, Texas. The Range includes the eastern slopes of the rugged Franklin Mountains and the low-lying alluvial fans to the east of the mountain slopes. The mountainous portions are characterized by sparse vegetation and steep exposed rock faces, which are dissected by numerous canyons. The remaining area east of the mountain slopes is located on the gentle sloping outwash with sandy-gravelly soil supporting desert foliage typical of the El Paso vicinity. Castner Range was originally established in 1926 and included approximately 3,473 acres. A Deed of Cession was obtained from the State of Texas in October 1928 enlarging the Castner Range Area. Subsequently, an additional 4,800 acres were acquired by purchase in 1939. From the time Castner Range was established until its closure in 1966, the Range was used as an ordnance impact area for a number of different weapon types.

1.3.2 All areas where OE clearance activity is taking place shall be surveyed and mapped showing grid identification and location. An overall project map and the individual area maps shall be included as part of the final report.

2.0 OBJECTIVE. The Contractor shall perform an ordnance and explosives (OE) removal action on 1,772 acres at the Castner Range site. The initial 1,291 acres is divided into 5 areas of varying acreage as shown in the table below. The areas are listed by order of priority. This removal action shall be a mag and dig operation. For purposes of this SOW "mag" is defined as a geophysical instrument either magnetometer or EM. For estimation purposes assume 50 anomalies per acre for surface clearance and 25 anomalies per acre for subsurface clearance. The RA in all areas shall be a clearance to depth. Also located within Areas 1, 3 and 5 are scattered piles of construction debris. These range from knee to waist high. For estimation purposes, assume ¼ acre worth of piles in Area 1, ¼ acres worth of piles in Area 3 and ½ acre worth of piles in Area 5. The contractor shall remove the debris piles prior to conducting removal action activities in these Areas. The contractor shall propose the method of removal of the debris piles in the work plan. The Contractor shall coordinate with Fort Bliss (Mr. David Dodge) before moving any debris piles. It is expected that the debris will be disposed of in the Fort Bliss landfill.

The terrain is generally flat (except around OB/OD Area B), with gravelly soil. The brush that is present, generally is ankle to waist high. Brush is open enough to permit walking through. Due to the sensitive nature of the site no brush clearing will be allowed. Expected ordnance items may range from hand/rifle grenades and 37 mm to 105 mm projectiles. OE items removed during previous removal actions include but not limited to the following: 37mm, 40mm, 75mm, and 105mm projectiles. 60mm mortar rounds, 3" practice stokes mortar rounds, 2.36" rockets and hand/rifle grenades.

<i>AREA</i>	<i>ACRES</i>
<i>1. North Hills</i>	<i>253</i>
<i>2. Hondo Pass</i>	<i>337</i>
<i>3. Museum & Poppy Area</i>	<i>327</i>
<i>4. City Of El Paso Access</i>	<i>148</i>
<i>5. Fusselman Canyon</i>	<i>226</i>
<i>6. INS Property</i>	<i>45</i>
<i>7. TBD</i>	<i>481436</i>
<i>Total</i>	<i>1772</i>

Acreages may change more or less depending on site conditions and OE items found. The Government will provide the coordinates for areas where previous removal actions have taken place and these areas will not be redone. In addition to the acreages in the above table the contractor shall propose a unit price per acre for any additional acreage that may be added to this effort.

3.0 DESCRIPTION OF SERVICES.

3.1 (TASK 1): SITE VISIT

3.1.1 Another pre-bid site visit will not be conducted. A site visit was conducted in July 2001, when the first RFP was sent to the contractors.

3.1.2 A site visit is authorized for the Contractor that receives this TO. The site visit shall be for 2 people and shall not exceed 3 days to include travel time. If the Contractor intends to walk over Castner Range then one person must be a qualified UXO personnel. The Contractor must also have and approved ASSHP if the range is going to be visited. A copy of the ASSHP used for the pre-bid site visit will be provided to the Contractor upon request to CEHNC.

3.2 (TASK 2) TECHNICAL PROJECT PLANNING (TPP)

Not used for this SOW.

3.3 (TASK 3) WORK PLAN (FFP)

The Contractor shall prepare a site specific WP describing how all subsequent work required under this contract is to be performed. The WP shall describe the specific work proposed in order to meet the objectives and requirements of this SOW. The WP shall also describe (in specific terms) the policies, organization, objectives, functional activities, and specific Contractor Quality Control (QC) activities required to achieve the objectives for this project. The Contractor shall propose and justify methods and procedures that are well suited to the anticipated site conditions. The Contractor shall consider technical requirements for site characterizations as well as safety, security, and environmental regulations applicable to this site. The WP shall describe the goals, methods, procedures, and personnel used for performing a removal action on the site. The WP shall be prepared according to Data Item Description (DID) OE-005-01. The associated sub-plans shall be prepared according to the appropriate DID. A Sampling and Analysis Plan and Investigative Derived Waste Plan are not required under this SOW. The DIDs are available on the web at

<http://www.hnd.usace.army.mil/oew/policy/dids/didindx.html>

The Contractor shall submit the draft and final WP for review in accordance with paragraph 4.0 of this SOW.

3.4 (TASK 4) GEOPHYSICAL PROVE-OUT (GPO) / INVESTIGATION TEST-PLOT

NOT USED FOR THIS SOW.

3.5 (TASK 5) GEOPHYSICAL SURVEY (T&M) The Contractor shall perform a mag assisted surface/subsurface clearance operation for this removal action on 1772 acres. The Contractor shall propose, in the work plan, the instrument to be used and a method for testing the instruments daily.

3.6 (TASK 6) LOCATION SURVEYING AND MAPPING (T&M)

Location surveying and mapping shall be according to DID OE-005-07 and the approved WP.. The coordinate system used for this TO shall be the UTM coordinate system. Setting of control monuments and boundary locations of removal action areas shall be performed by a Professional Land Surveyor licensed in the State of Texas. The Contractor shall use existing monuments where available. Layout of grids within the boundary area may be performed by the Contractor. Monument coordinates from previous activities at this site will be provided by the Government. It is expected that the Contractor will have to set 2 monuments. The Contractor shall determine and propose the most effective method of site layout. The Contractor shall determine OE locations to the nearest foot and submit location data with the weekly status report. The site data shall include a map of the entire site with grids and other pertinent features shown. A tabulated list of grid corners in UTM coordinates shall be submitted in a Microsoft Excel Spreadsheet version 98 or higher. OE location data shall be submitted in a Microsoft Excel Spreadsheet version 98 or higher. Data shall include grid number where found, item number assigned, type of item, location in UTM coordinates to nearest foot, and depth below ground surface. The Contractor shall submit a map showing the area boundary, area control monuments and grid layout before OE removal activities begin. This map shall be submitted in hard copy and an electronic copy to CEHNC. Survey data shall be submitted by hard copy and on a CD ROM. Other methods of submittal must be proposed and approved by the Contracting Officer(CO).

3.7 (TASK 7) ESTABLISH A GEOGRAPHICAL INFORMATION SYSTEM (GIS) (FFP)

The Contractor shall establish and manage a GIS in accordance with DID OE-005-14 Geographical Information System Plan.

3.8 (TASK 8) PREPARE EXPLOSIVE SAFETY SUBMISSION (ESS) (FFP)

The Contractor shall prepare an ESS in accordance with DID OE-060. The Contractor shall submit a draft version to CEHNC and, after receipt of comments, shall submit a final version to CEHNC for approval. The Contractor shall not start work at the site until approval of the WP and ESS is received.

3.9 (TASK 9 and 9A) PERFORM OE/UXO REMOVAL (T&M)

The Contractor shall, utilizing qualified personnel, implement site OE/UXO removal actions as specified in the approved WP. This task shall be accomplished according to approved WP procedures and CEHNC guidance. It is expected that engineering controls will be necessary while performing portions of this removal action, specifically in portions of Areas 1, 2, and 3. The contractor shall propose methods of engineering controls in the WP. Only engineering controls approved by CEHNC shall be used. Task 9A shall consist of a subsurface removal of approximately 45 acres on the INS property adjacent to Area 2. Costs for updating the work plan, surveying and mapping, performing the subsurface removal, and updating the final report

shall all be included in Task 9A. Field effort for this task shall be completed by 30 September 2004.

3.9.1 The Contractor shall remove and dispose of all OE and/or scrap removed during this removal action. The contractor shall propose a method of disposal, in the WP, of all OE scrap removed from this site. The preferred method of disposal is for the scrap to be turned over to a processor (such as a smelter) for final disposition. The Contractor shall be responsible for the destruction, if required, of all OE encountered during removal action activities, utilizing qualified personnel and in accordance with all aspects of the project WP. All UXO shall be blown in place (BIP). All excavation shall be cleared and back-filled level with the surrounding ground. The Contractor shall restore such areas to their prior condition. Detonation holes shall be left open to weather and recover naturally. The Contractor shall maintain a detailed accounting of all OE items and components encountered. This accounting shall include the amounts of OE, the identification and condition, depth located, disposition, and location/mapping. This accounting shall be part of the Final Report. The accounting system shall also account for all demolition materials used to detonate OE. If a scenario is encountered that precludes the contractor from detonating an UXO item in place, an unidentifiable UXO is located, or a suspected toxic chemical munitions is encountered, the contractor shall secure the area, notify CEHNC, and await instructions.

3.9.2 Final Disposition of AEDA / Range Residue. The Contractor shall furnish all necessary personnel and equipment to make final disposition on all recovered Ammunition, Explosives, and Dangerous Articles (AEDA) and Range Residue. The methodology to accomplish this task shall be proposed in the WP.

The Contractor shall follow the provisions of DOD 4160.21-M when making final disposition of AEDA/Range Residue. The Contractor shall complete a DD Form 1348-1A. The local scrap dealer shall be identified in the WP. The contractor shall also include in the WP the written statement from the dealer that the scrap will be processed through a smelter or furnace prior to resale or release.

Inspection of AEDA/Range Residue. The UXO contractor shall ensure that this property is 100% properly inspected IAW the inspection procedures specified in the WP. Qualified UXO personnel shall perform the inspection. UXO contractor personnel responsible for certifying

AEDA/Range residue must meet the qualification requirements specified in DID 0T-025. AEDA/Range residue certification will be entered on the DD 1348-1A as follows:

“This certifies and verifies that the AEDA residue, Range Residue, and/or Explosive Contaminated property listed has been 100 percent properly inspected and to the best of our knowledge and belief, are inert and/or free of explosives or related material.”

The certification requires dual signatures. The SUXOS shall sign as the certifier, and the USAESCH OE Safety Specialist will sign as the verifier.

3.9.3 Quality Control. In order to evaluate the effectiveness of the geophysical investigation and evaluation methods, the Contractor shall develop a QC Process that shall ensure a quality product for all aspects of the project and includes any work performed by any subcontractor on the project. The Contractor shall develop the procedures and submit those procedures for all phases and types of work in the WP for the project. The Contractor shall ensure that documentation is maintained and provided in the Final Report that supports the QC process. In addition to the QC process by the Contractor, the Government shall perform Quality Assurance (QA) on all phases and types of work done on the project. If a piece of ferrous metal equivalent in size to a MK II hand grenade or larger is found during the QA process, this will constitute a QA failure. Any UXO item found during the QA process shall constitute a safety failure as well as a QA failure. Any work that fails the Government QA process shall be re-done by the Contractor, with full documentation provided detailing how the problem was corrected.

3.9.4 UXO Quality Control Specialist (UXOQCS). The individual performing the UXO QC shall not be involved in the performance of other OE field tasks. The UXOQCS shall be a separate function and is not envisioned as a full-time position. The UXOQCS shall meet the minimum prerequisites of an UXO Technician III and have the training, knowledge, and experience necessary to implement the Contractor's QC plan as outlined in DID OE-025. Any exceptions must be approved by the CO.

3.10 (Task 10) FINAL REPORT (FFP)

The contractor shall prepare a Final Report in accordance with DID OE-030. This report shall be submitted as Draft and Final versions according to section 4.0 of this SOW.

3.11 (TASK 11) PUBLIC LIAISON: (T&M).

It is expected that some private homes may fall inside of exclusion zones during this removal action. When working in a sector where the exclusion zone may impact homes or businesses, the Contractor shall provide an individual to coordinate resident evacuations for the removal action at the Castner Range. This person shall keep detailed records of conversations and activities performed in conjunction with this task. The Contractor shall propose for this person on a weekly unit cost at 40 hours per week. The Corps and/or Fort Bliss shall have final hire approval of the candidate that the Contractor selects for this position. The ideal candidate shall be a long-term resident of the local area who will represent the Contractor and the Corps in a professional manner, and who is personable and able to successfully interact with local residents. The Contractor shall arrange, hotel, meals, transportation (if needed) for persons displaced due to ordnance related evacuations. It is not expected that any evacuations will be for an overnight period. The contractor shall keep the Fort Bliss POC and Huntsville PM fully informed of any evacuation efforts planned.

4.0 SUBMITTALS AND CORRESPONDENCE

4.1 Format and Content of Engineering Reports. The Final Report shall be prepared in accordance with DID OE-030. The requirement for a video tape has been deleted.

4.2 Review Comments. Various reviewers will have the opportunity to review submittals made by the Contractor under this Contract. The Contractor shall review all comments received through the CEHNC Project Manager (PM) and provide responses to all comments. The Contractor shall not non-concur with any comment without coordinating with the Project Manager . If the Project Manager , is unavailable, then the Contractor shall resolve the comment through the CEHNC TM. The Contractor shall also note in the response to comments when text is moved within the document.

4.3 Draft Reports. Each page of draft reports shall be stamped "DRAFT". Submittals shall include incorporation and notation of all previous review comments accepted by the Contractor.

4.4 Identification of Responsible Personnel. Each report shall identify the specific members and title of the Contractor's staff and Contractors that had significant, specific input into the reports' preparation or review. All final submittals shall be stamped with the seal of a registered Professional Engineer-In-Charge.

4.5 Presentations. The Contractor shall make presentations of work performed as required. Each presentation shall consist of a summary of the work accomplished and anticipated followed by an open discussion among those present.

4.6 Correspondence. The Contractor shall keep a record of each phone conversation and written correspondence affecting decisions relating to the performance of this TO. A summary of the phone conversations and written correspondence shall be submitted with the monthly status report to the CO.

4.7 Weekly Status Reports. The Contractor shall submit weekly status reports in accordance with DID OE-085.

4.8 Monthly Status Reports. The Contractor shall submit monthly status reports in accordance with DID OE-080.

4.9 On-Site Coordination. The Contractor shall keep the CO's on-site representative (if someone is on site) informed of day-to-day field activities occurring on site. Where Contractor activities are likely to require coordination with various other activities at the site, the Contractor shall notify the point of contact(POC) identified by the CO sufficiently ahead of time to allow for coordination activities to take place.

4.10 Computer Files. All final text files generated by the Contractor under this contract shall be furnished to the CO in Microsoft Word 6.0 or higher software, IBM PC compatible format and Microstation 95 format. All meta data shall be in FGDC Standard Format. All final CADD/GIS data, design drawings, and survey data generated by the Contractor under this TO shall be submitted in the proper format and media that will permit loading, storage, and use without modification or additional software on the Fort Bliss GIS systems. Fort Bliss uses ESRI (Arcview, Arc Explorer). All coordinates shall be in UTM, Zone 13, NAD 83.

4.11 Public Affairs. The Contractor shall not publicly disclose any data generated or reviewed under this TO. The Contractor shall refer all requests for information concerning site conditions to the Fort Bliss Public Affairs Office (PAO) (Ms. Jean Offut). Reports and data (including all digital data) generated under this Contract are the property of the DoD and distribution to any other source by the Contractor, unless authorized by the CO, is prohibited.

4.12 Addressees. The Contractor shall furnish copies of the plans, maps, and reports as identified in paragraph 4.13 to each addressee listed below in the quantities indicated with the exception of the ESS. The ESS shall be sent to CEHNC only. A copy of the final WP and the Final Report with all associated data and files on a CD ROM shall be included with each hard copy submitted. The Contractor shall use express mail services for delivering these plans and reports. Following each submission, comments generated as a result of their review shall be incorporated.

A.1.1.1	ADDRESSEE	COPIES
	Commander US Army Engineering and Support Center Huntsville ATTN: CEHNC-OE-DC (Mr. Bill Sargent/Robert Nore) P.O. Box 1600 Huntsville, AL 35807-4301 or for express-mail,	4
A.1.2	4820 UNIVERSITY SQUARE Huntsville, AL 35816-1822 Commander US Army Air Defense Artillery Center Fort Bliss ATTN: ATZC-DOE-M (David Dodge) Fort Bliss, TX 79916-6816 Commander 741 st Ordnance Group (EOD) Bldg. 11000, Sanitary Landfill Road Fort Bliss, TX 79916-6803	5 1 (Finals only)

4.13 Submittals. The Contractor shall submit all deliverable data to the CO and other reviewers shown in Section 4.12. All submittals shall be delivered to all addressees no later than the close of business (COB) on the day indicated in this paragraph.

SUBMITTAL	DOCUMENT	DATE DUE
OE-005	Draft Work Plan	21 days after NTP
OE-005	Final Work Plan	15 days after receipt of comments
OE-030	Draft Final Report	21 day after project completed
OE-030	Final Final Report	15 days after receipt of comments
OE-060	Draft ESS	21 days after NTP
OE-060	Final ESS	15 days after receipt of comments

5.0 REFERENCES.

5.1 29CFR 1910, Occupational Safety and Health Administration (OSHA) General Industry Standards.

5.2 29CFR 1926, Construction Industry Standards.

5.3 29CFR 1926.120/29CFR 1926.65 - Hazardous Waste Site Operations and Emergency Response.

5.4 40CFR 300, National Contingency Plan.

5.5 NIOSH/OSHA/USCG/EPA (DHHS(NIOSH) Publication #85-115) (OCT 85), Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities.

5.6 DID OE-005-01 Type II Work Plan

5.7 DID OE-005-02 Technical Management Plan

5.8 DID OE-005-03 Explosives Management Plan

5.9 DID OE-005-04 Explosives Siting Plan

- 5.10 DID OE-005-05 Geophysical Investigation Plan
- 5.11 DID OE-005-06 Site Safety and Health Plan
- 5.12 DID OE-005-07 Location Surveys and Mapping Plan
- 5.13 DID OE-005-08 Work, Data, and Cost Management Plan
- 5.14 DID OE-005-09 Property Management Plan
- 5.15 DID OE-005-11 Quality Control Plan
- 5.16 DID OE-005-12 Environmental Protection Plan
- 5.17 DID OE-015 Accident/Incident Reports
- 5.18 DID OE-025 Personnel and Work Standards
- 5.19 DID OE-030 Site Specific Final Report
- 5.20 DID OE-040 Disposal Feasibility Report
- 5.21 DID OE-045 Report/Minutes, Record of Meetings
- 5.22 DID OE-055 Telephone Conversations/ Correspondence Records
- 5.23 DID OE-060 Conventional Explosives Safety Submissions (ESS)
- 5.24 DID OE-080 Monthly Status Report
- 5.25 DID OE-085 Weekly Status Report
- 5.26 DID OT-090 Ordnance Filler Report

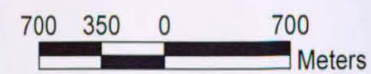
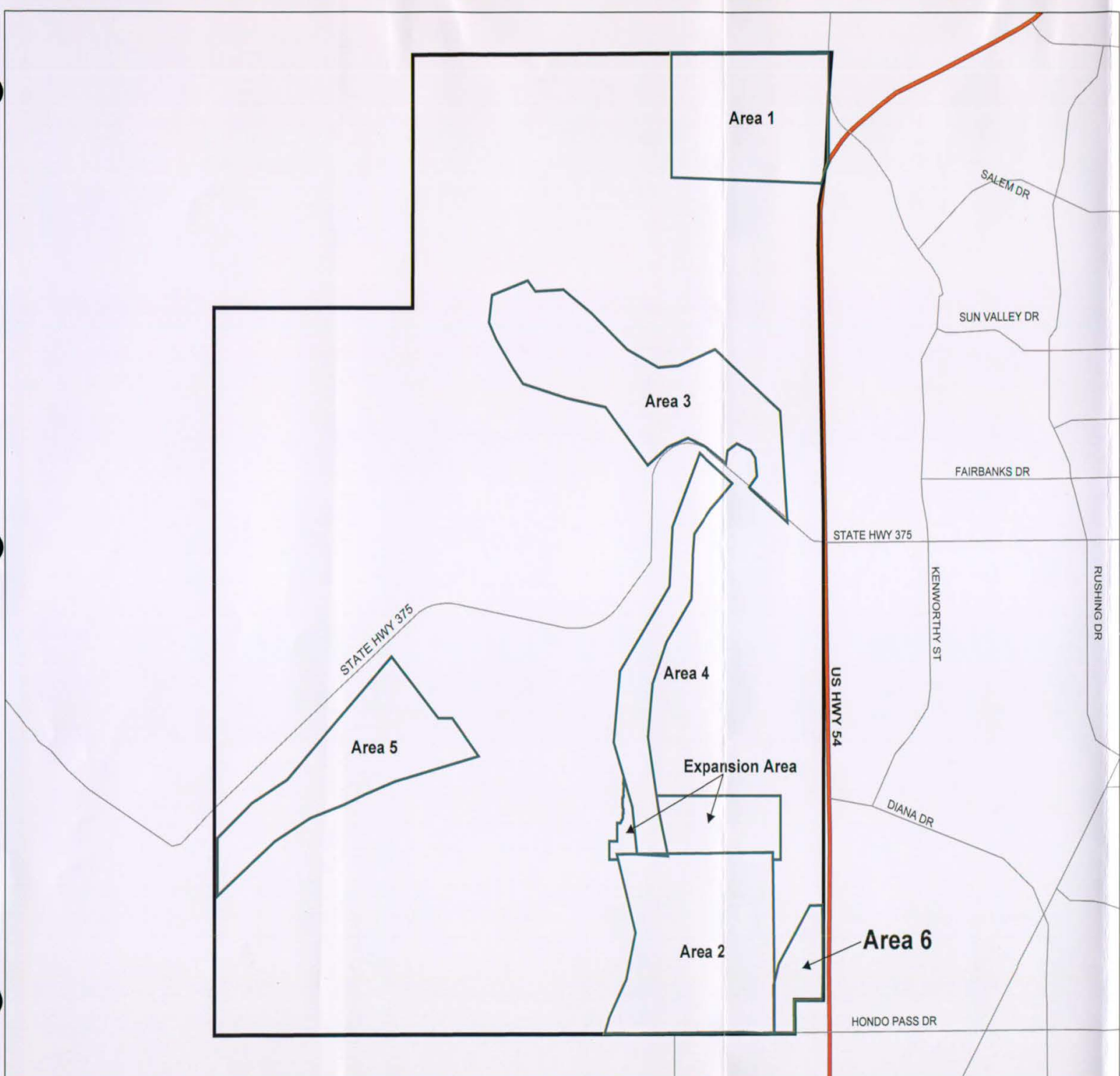
**Addendum 1 – Ordnance and Explosives (OE) Removal Action
Castner Range – Fort Bliss, Texas**

APPENDIX B

B.0 MAPS AND DRAWINGS

Castner Range Work Plan Drawings are in Appendix B of the approved Work Plan. This appendix contains the following additional drawings:

- Figure B-1 Castner Range Areas 1-6.
- Figure B-2 Area 6, QD.
- Figure B-3 Area 6, grids.



Data is projected to the UTM Coordinate System:
Zone 13, NAD83, Units in Meters.

Ft. Bliss
Castner Range
El Paso, Texas

Figure B-1 Site Map

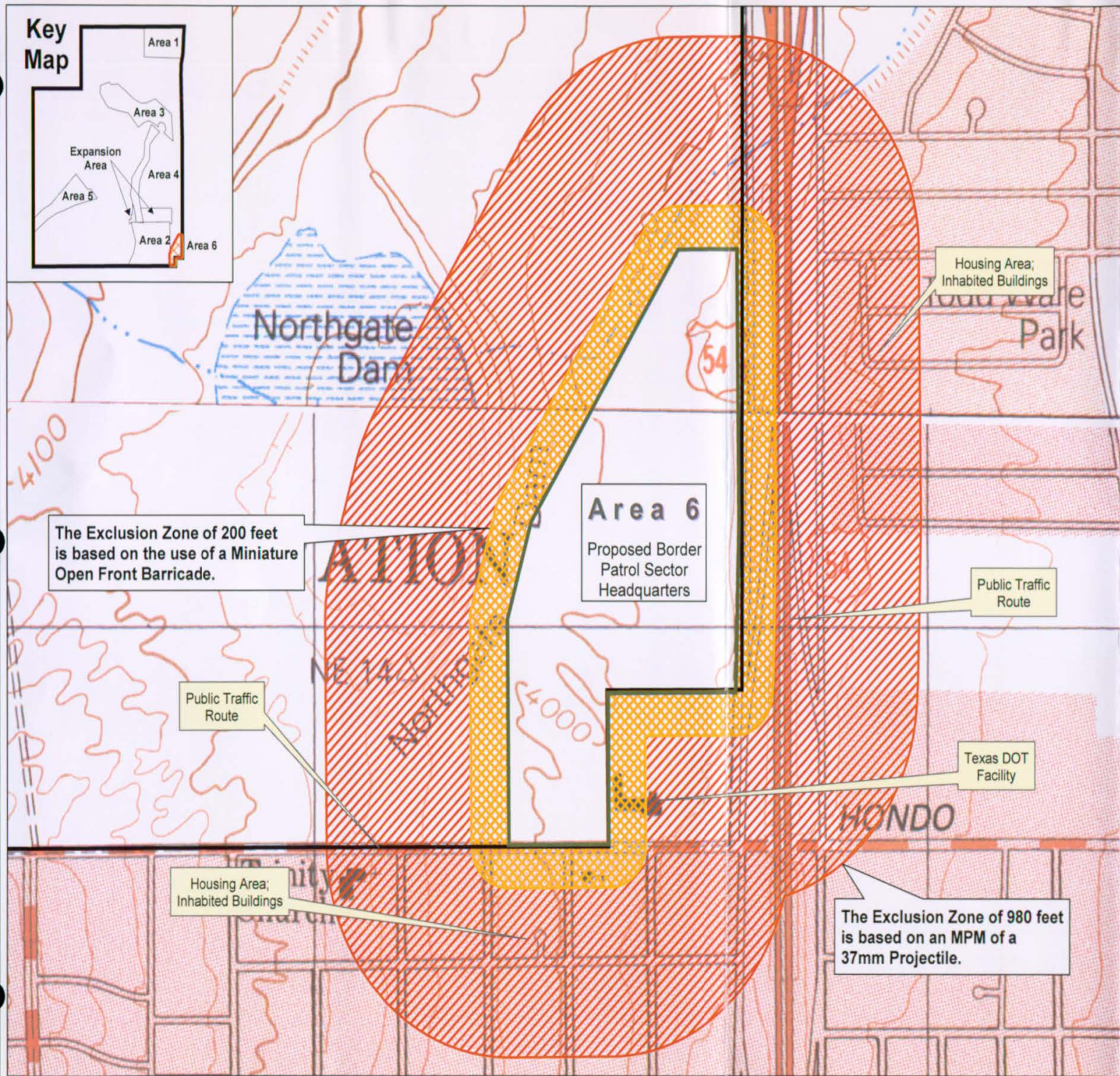
Legend

- UXO Areas
 - Castner Boundary
- Major Roads**
- Limited Access
 - Highways
 - Secondary Roads
 - Other
 - Highway Ramp

USA Environmental, Inc. U.S. Army Engineering And Support Center
Huntsville, AL

Drawn By: JAL	Scale: 1" = 700 m	Rev:
Checked By: GS	Date Drawn: 7-13-2004	
Submitted By: GS	Plot Date: 7-13-2004	

Key Map



The Exclusion Zone of 200 feet is based on the use of a Miniature Open Front Barricade.

The Exclusion Zone of 980 feet is based on an MPM of a 37mm Projectile.



Data is projected to the UTM Coordinate System: Zone 13, NAD83, Units in Meters.

**Ft. Bliss
Castner Range
El Paso, Texas**

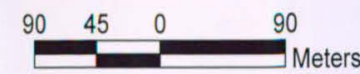
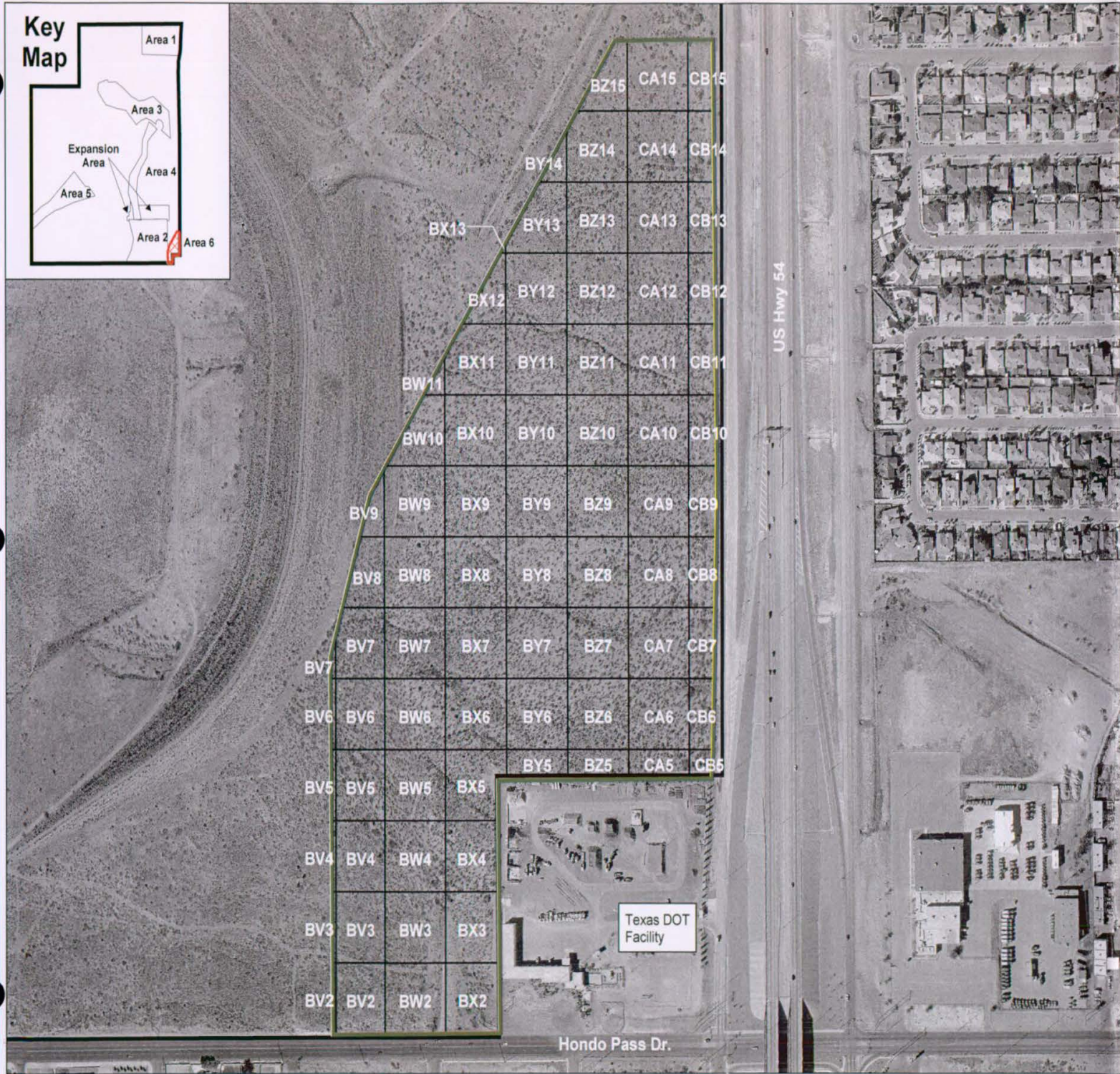
**Figure B-2
QD/ Grid Map**

Legend

-  Area 6 Boundary
-  200ft MOFB MSD
-  980ft 37mm MSD
-  Castner Boundary

USA Environmental, Inc.		U.S. Army Engineering And Support Center Huntsville, AL	
Drawn By: JAL	Scale: 1" = 150 m	Rev:	
Checked By: GS	Date Drawn: 7-13-2004		
Submitted By: GS	Plot Date: 7-13-2004		

Key Map






Data is projected to the UTM Coordinate System:
Zone 13, NAD83, Units in Meters.

Ft. Bliss
Castner Range
El Paso, Texas

Figure B-3
Grid Map

Legend

-  Grids
-  Area 6 Boundary
-  Castner Boundary

USA Environmental, Inc.		U.S. Army Engineering And Support Center Huntsville, AL	
Drawn By: JAL	Scale: 1" = 90 m	Rev:	
Checked By: GS	Date Drawn: 7-13-2004		
Submitted By: GS	Plot Date: 7-13-2004		

