



**USA Environmental, Inc.**  
A Small Business • Munitions Response Services

**Professionalism  
Responsiveness  
Cost Effectiveness**

## **UXO Construction Support / Anomaly Avoidance**

Geotechnical investigations, environmental assessments, or construction activities can occur at sites potentially affected by previous military use. To ensure the safety of personnel on Architect, Engineering, or Construction projects where the environment may be contaminated with Unexploded Ordnance (UXO), USAE designs the best approach and provides DoD Explosives Safety Board (DDESB) Technical Paper (TP)-18 qualified and experienced UXO technicians available On-Call or On-Site to recognize and mitigate the risk to on-site workers.

### **USAE performs construction support / avoidance for:**

- Geotechnical and geophysical investigations
- Horizontal construction, such as roads, pathways, fence installation
- Building foundations for vertical construction
- Biological, cultural and archaeological surveys
- Installation of underground utilities
- Underground environmental investigation activities
- All types of earth moving operations: vegetation clearance, site layout, trenches for utilities, practice ranges, etc.

**Safety is our highest priority.** Through USAE's training to on-site workers, or through daily safety briefings by USAE's UXO Safety Officers and Supervisors, USAE reminds field personnel to maintain UXO awareness, and to follow the 3Rs procedures: Recognize, Retreat, Report.

USAE has successfully performed hundreds of anomaly avoidance and/or construction support projects at locations throughout the United States, and at logistically challenging locales such as Alaska, Puerto Rico, Guam, Tinian, Hawaiian Islands, and Japan. We understand the importance of keeping to project schedules, and tailor our services specific to our customers' needs.

### **Anomaly Avoidance / Escort Activities**

- Surface — UXO qualified individuals escort construction crews, surveyors, biologists, or other personnel to ensure they do not come in contact with any suspected munitions items while performing their specific non-intrusive activities.
- Subsurface — UXO qualified individuals check the subsurface with a geophysical instrument for potential metallic objects, and then directs all activity away from any anomalies.

### **Intrusive Activities**

- In low probability areas, UXO support personnel are on hand to observe intrusive activities. If munitions are encountered, work stops until the munitions hazard is cleared.
- In medium-to-high probability areas, construction support is performed by clearing to appropriate depths prior to construction through the use of appropriately selected geophysical instruments.



**UXO Construction Support during soil operations  
Camp Foster, Okinawa, Japan**



**UXO Technician lowering a Bore Hole Gradiometer  
probe into a geotechnical bore hole, Waikoloa, HI**



**UXO Avoidance as Surveyors Plot Transects during  
Range Construction, Okinawa, Japan**