

SECTION 1

PROJECT DESCRIPTION AND CHARACTERIZATION OF CONTAMINATION

This Accident Prevention Plan (APP), which incorporates the requirements for a Site Safety and Health Plan (SSHP), identifies the approach, methods, and operational procedures to be employed during the Remedial Investigation/Feasibility Study (RI/FS) for the former Trabuco Bombing Range, Rancho Santa Margarita, California. The purpose of the RI/FS is to characterize the site for the potential presence of unexploded ordnance (UXO) and munitions debris (MD) remaining from the former military activities at the Trabuco Bombing Range.

The team of Innovative Technical Solutions, Inc. (ITSI) and Parsons Infrastructure and Technology Group, Inc. (Parsons) (the ITSI/Parsons Team) will perform this scope of work on behalf of the Los Angeles District, Corps of Engineers under Contract Number W912PL-04-D-0024, Task Order Number 0005. This plan was developed in accordance with:

- U.S. Army Corps of Engineers (USACE) DID MR-005-06;
- USACE Engineering Manual (EM) 385-1-1, Safety and Health Requirements Manual (including Appendix A);
- USACE ER 385-1-95a Safety and Health Requirements for Ordnance and Explosives (OE) Operations;
- Code of Federal Regulations (CFR) Title 29, Part 1910.120, and 1926;
- California Code of Regulations (CCR) Title 8, Section 5192; and
- Other applicable regulations and good industrial hygiene practice.

The procedures and guidelines contained herein were based upon the best available information at the time of the plan's preparation. Specific requirements may be revised if new information is received or conditions change. Written amendments will document any changes made to the plan and will be included as an addendum to the SSHP. Subcontractors must comply with the requirements of this APP/SSHP, but may institute more rigorous requirements and procedures.

1.1 SITE DESCRIPTION

The former Trabuco Bombing Range comprises approximately 1,800 acres located in and adjacent to the City of Rancho Santa Margarita, located in Orange County, California. The site is a Formerly Used Defense Site (FUDS) and is being addressed under the Military Munitions Response Program (MMRP) by the Los Angeles District, USACE.

The former Trabuco Bombing Range is located partially in the residential and commercially developed areas of Rancho Santa Margarita, California, a relatively new community founded in 1985 and incorporated in 2000. The former range extends into O'Neil Regional Park, an undeveloped Orange County wilderness park centered on Trabuco Creek Arroyo and Tijeras Creek. Rancho Santa Margarita is located within Orange County and is bordered on the west by Mission Viejo, as shown on the site location map, Figure 1-1.

The project site for the RI/FS is located primarily within O'Neill Regional Park in the western part of Rancho Santa Margarita, bordering Mission Viejo, as shown on Figure 1-2.

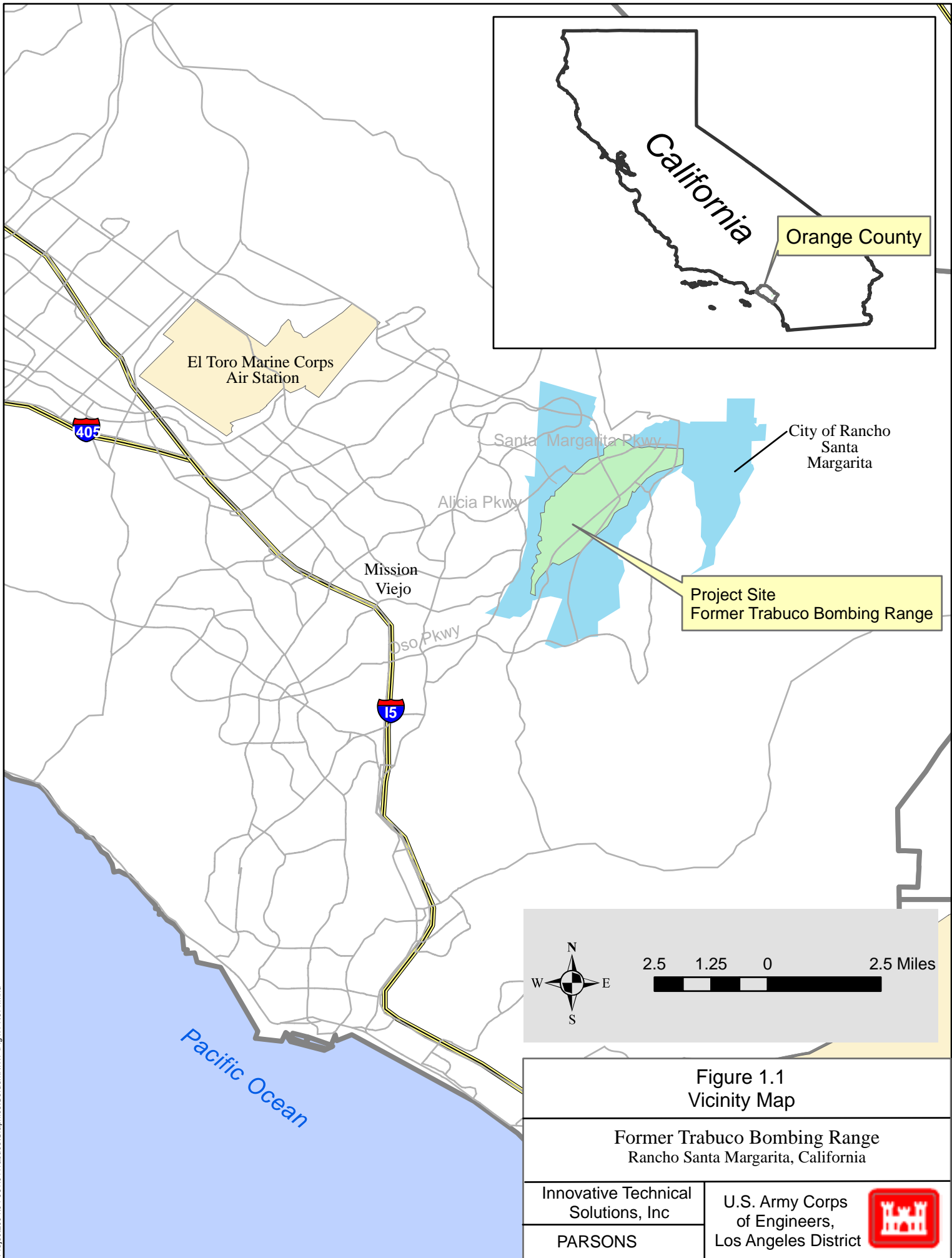
1.2 SITE HISTORY

The US Navy established the Trabuco Bombing Range in the early 1940s. From 1944 through 1956, pilots used the site as a practice bombing range in connection with Marine Corps Air Station (MCAS) El Toro. Sometime after 1956, the landowners resumed farming activities at the site until the land was developed.

No Department of Defense (DoD) records have been located regarding the type or number of ordnance items used for aircraft target practice; however, 3-, 4.5-, and 25-pound practice bombs as well as 2.25-inch, 3.5-inch, and 5-inch aircraft practice rockets have been found on the site. These ordnance items have been found on the surface or buried at shallow depths. Some of the practice bombs contained a smokeless powder expelling charge and a marker-load mix of stabilized red phosphorous or zinc oxide. The practice rockets found were completely inert. There is a historic adobe hut (Solano Adobe) on the site that had been tentatively identified as a possible bombing target.

On 16 June 1984, the Orange County Hazardous Devices Squad (OCHDS) and the MCAS El Toro, Explosive Ordnance Disposal (EOD) unit jointly conducted a surface sweep clearance operation which was completed on 30 June. Fourteen dump truck-loads of certified inert munitions debris and range-residue items were transported from the site, and over 400 material potentially presenting an explosive hazard (MPPEH) items suspected of containing spotting charges were destroyed.

Over the next several years, the MCAS El Toro EOD unit picked up one to five MPPEH items from the former range on approximately a quarterly basis. In 1991, IT Corporation, under contract with the USACE, removed 61 tons of munitions debris and MPPEH items from the former range that had been stockpiled in Upper Chiquita Canyon.



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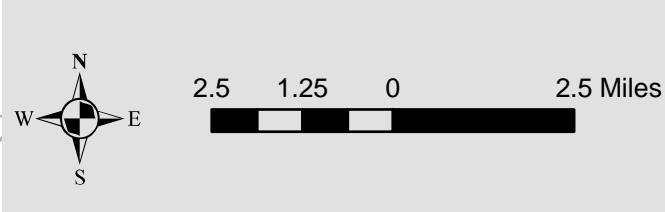


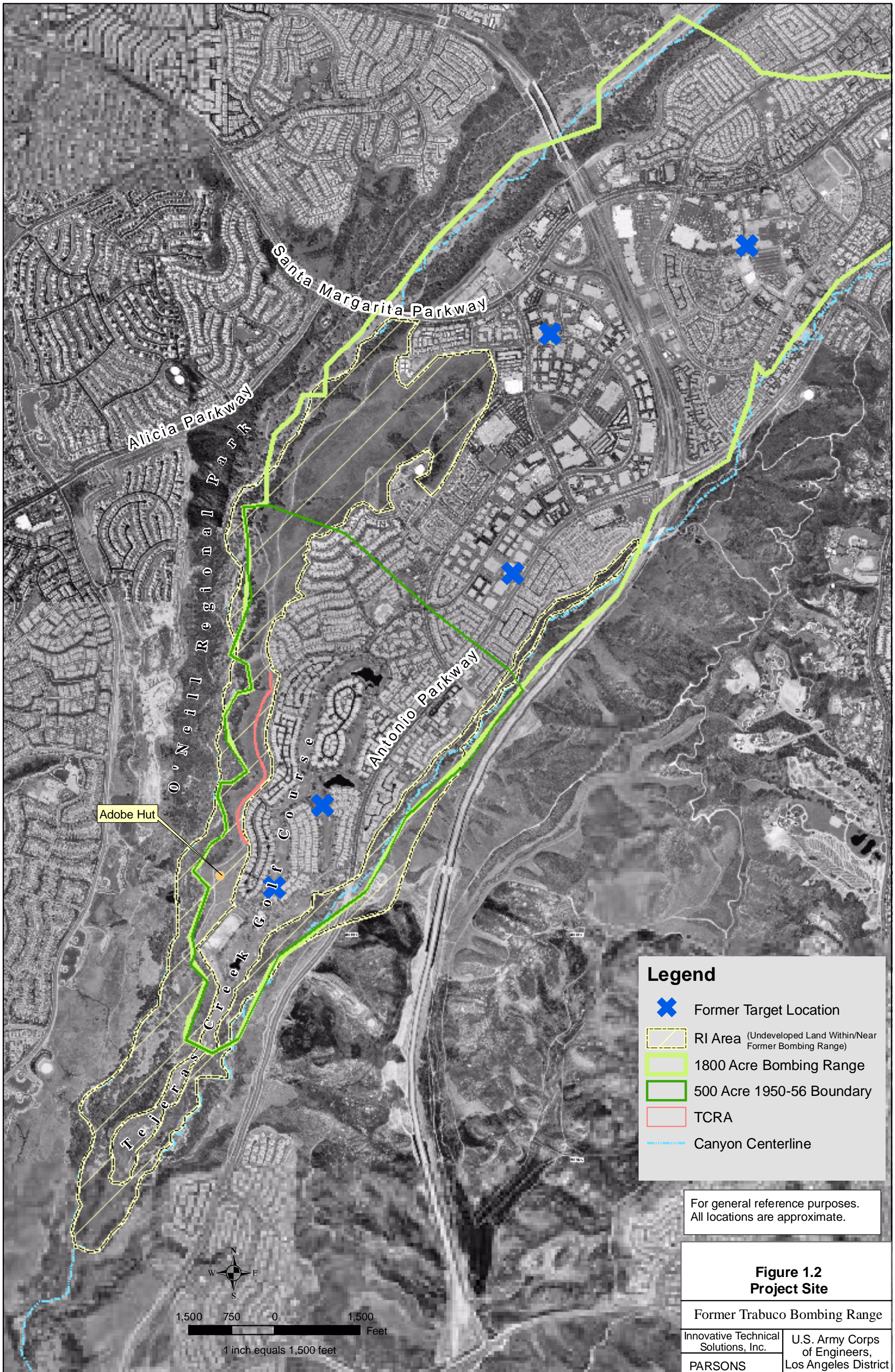
Figure 1.1
Vicinity Map

Former Trabuco Bombing Range
Rancho Santa Margarita, California

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Los Angeles District





Legend

- ✕ Former Target Location
- RI Area (Undeveloped Land Within/Near Former Bombing Range)
- 1800 Acre Bombing Range
- 500 Acre 1950-56 Boundary
- TCRA
- Canyon Centerline

For general reference purposes.
All locations are approximate.

**Figure 1.2
Project Site**

Former Trabuco Bombing Range	
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1,500 750 0 1,500
 Feet
 1 inch equals 1,500 feet

During September 2003, construction work on an extension of the Trabuco Creek Bikeway within the former Trabuco Bombing Range was halted when the construction contractor encountered munitions and explosives of concern (MEC), specifically a number of 3-pound miniature practice bombs containing a small spotting charge. A time critical removal action (TCRA) conducted for the Trabuco Creek Bikeway project in 2004 safely removed MD from approximately 3,300 feet of planned bikeway.

While records clearly indicate continual recovery of munitions debris and MPPEH at the former range, the only known ordnance-related injury occurred in the late 1950s. In that incident, a state forest ranger was injured when the spotting charge accidentally detonated while he was handling a 3-pound miniature bomb AN-MK-23.

1.3 PLANNED SITE ACTIVITIES

This APP/SSHP covers RI/FS field activities for the Trabuco RI/FS. Field activities include:

- Mobilization;
- Surface inspections;
- Vegetation removal;
- Geophysical data acquisition;
- Anomaly reacquisition;
- Removal of MEC and MD;
- Storage of UXO in an explosives magazine;
- Demolition of UXO; and
- Demobilization.

1.4 CONTAMINATION CHARACTERIZATION

The MEC that have been previously identified and might be encountered during the RI/FS are non-fragment-producing types of practice ordnance, which include those items listed in Table 1-1.

**TABLE 1-1
TYPES OF ORDNANCE**

No.	Nomenclature
1	Bomb, 3-pound (lb), Miniature, MK 5, and AN-MK 23
2	Bomb, 4.5-lb, Miniature, AN-MK 43
3	Bomb, 25-lb, Practice, MK 76/BDU 33
4	Rocket, 2.25-in, Practice, SCAR
5	Rocket, 3.5-in, Practice
6	Rocket, 5-in, Practice

All of the above rocket items are inert, and all of the bomb items contained either a signaling cartridge or a spotting charge, primarily the MK 4 signal.

1.5 STATEMENT OF CORPORATE HEALTH AND SAFETY POLICY

As detailed in the ITSI Corporate Health and Safety Program, the management of ITSI believes a consideration of health and safety is a necessary concern which operates at all levels of the company. As an employer, ITSI recognizes its responsibility to provide a safe and healthful work environment for employees.

The nature of our work demands the attention and active participation of every employee. Managers and supervisory personnel are expected to provide leadership which encourages compliance with safe work practices. In addition, each employee is expected to support this concern for health and safety through safe work practices, avoidance of unnecessary risk, and helping to recognize unsafe conditions. These efforts are a means of preventing injury to our employees, other project personnel, and the general public.

Although the ITSI Corporate Health and Safety Program is intended to satisfy the requirements of a number of federal, state, and local regulations, its primary focus is to provide a framework for maintaining a safe and healthy workplace for our employees.

1.6 ACCIDENT EXPERIENCE

The table below provides the ITSI experience modification rates for the last three years.

ITSI Accident Experience

Year	Experience Modification Rate	Experience Modification Rate
	Intrastate, CA	Interstate
2004	0.74	0.83
2003	0.80	0.88
2002	1.04	---