

# Project Specifics



Former Waikane Valley Training Area  
Engineering Evaluation/Cost Analysis  
(EE/CA)



# Discussion Objectives

- Define Project Objectives
- Present Site History and Past Studies
- Sampling Procedures
- Evaluation Criteria



# EE/CA Objectives

- Characterize OE Risk
- Identify Risk Reduction Alternatives
- Analyze/Compare Alternatives
- Recommend Risk Reduction Actions
- Involve Public in Decision Making



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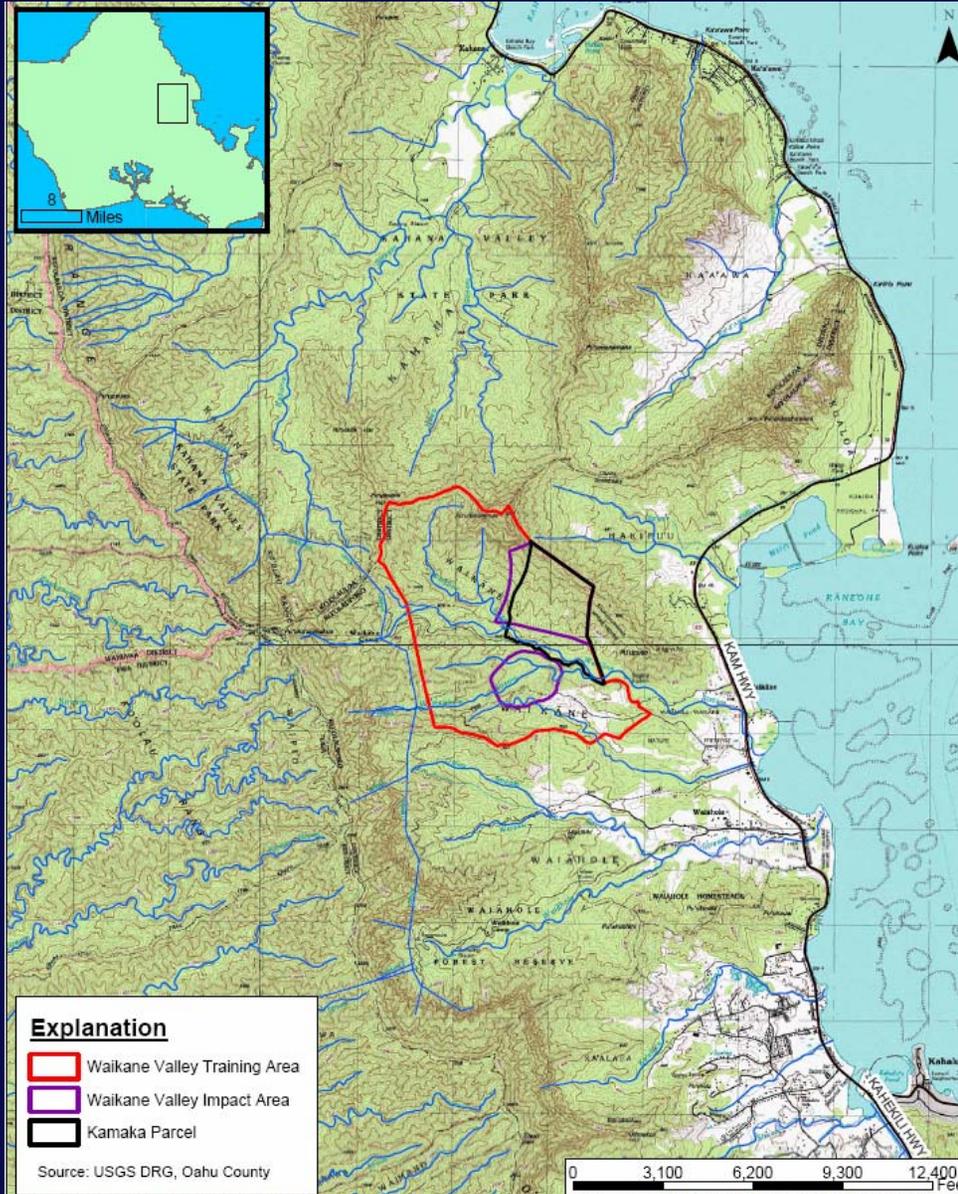
# Waikane Valley Project Site

- Approximately 874 Acres
- Used by the Army from 1942 until 1953
- USMC assumed the lease in 1953 and used the area until 1976
- Used for Jungle Training and as an Artillery Impact Area

# Site Location



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# Land Use

- Mostly Undeveloped with Pockets of:
  - Residential
  - Recreational
  - Agricultural



# Military Activity

- Reportedly Utilized as Maneuver and Impact Areas For Jungle and Assault Training
- Suspected Impact Area, Possibly Used for the Firing of:
  - Field Artillery Pieces
  - Mortar and/or Bazooka Rounds
  - Rifle Grenades
  - Possible Aircraft Practice Bombs
- Facilities Dismantled by 1976



# Previous Investigations

## ■ Military EOD Sweeps

- Conducted in 1976 and 1984
- Recovered 40,000+ pounds of practice ordnance
- Discovered and destroyed High Explosive projectiles, rockets, grenades and rifle grenades

## ■ Archeological Studies

- Reports of dud mortars, projectiles and bazooka rockets



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# Most Probable Munition

- 75mm High Explosive Projectile
  - Diameter = 75 mm
  - Length = 210 mm
  - Material = Steel

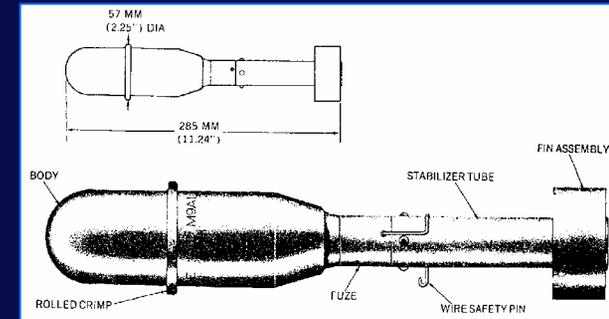


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# Other Potential OE Items

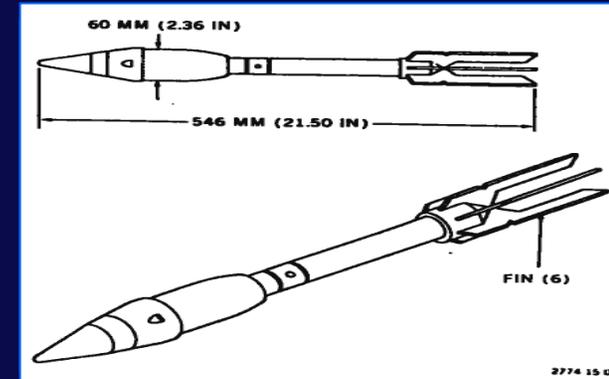
## ■ M9A1 Rifle Grenade

- Diameter = 57 mm (2.25 inches)
- Length = 285 mm (11.2 inches)

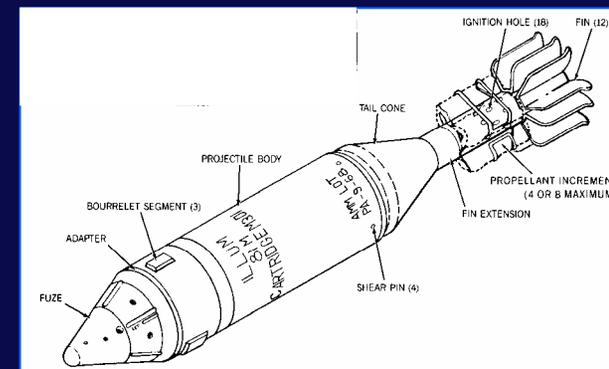


## ■ M7A1 Practice Bazooka Rounds

- Diameter = 60 mm (2.36 inches)
- Length = 546 mm (21.5 inches)



## ■ 81 mm Illumination Mortar Rounds





# OE Sampling Procedures

- Ground reconnaissance Surveys
- Geophysically Map 20 acres in suspected impact areas, valleys, and drainages
- 10 acres Mag and Flag
- 10 acres Digital Geophysics
  - Grids (Size is terrain/vegetation dependant)
  - Transects (6' wide path)
  - Super Transects (15' wide path)
- Brush Clearing Minimization





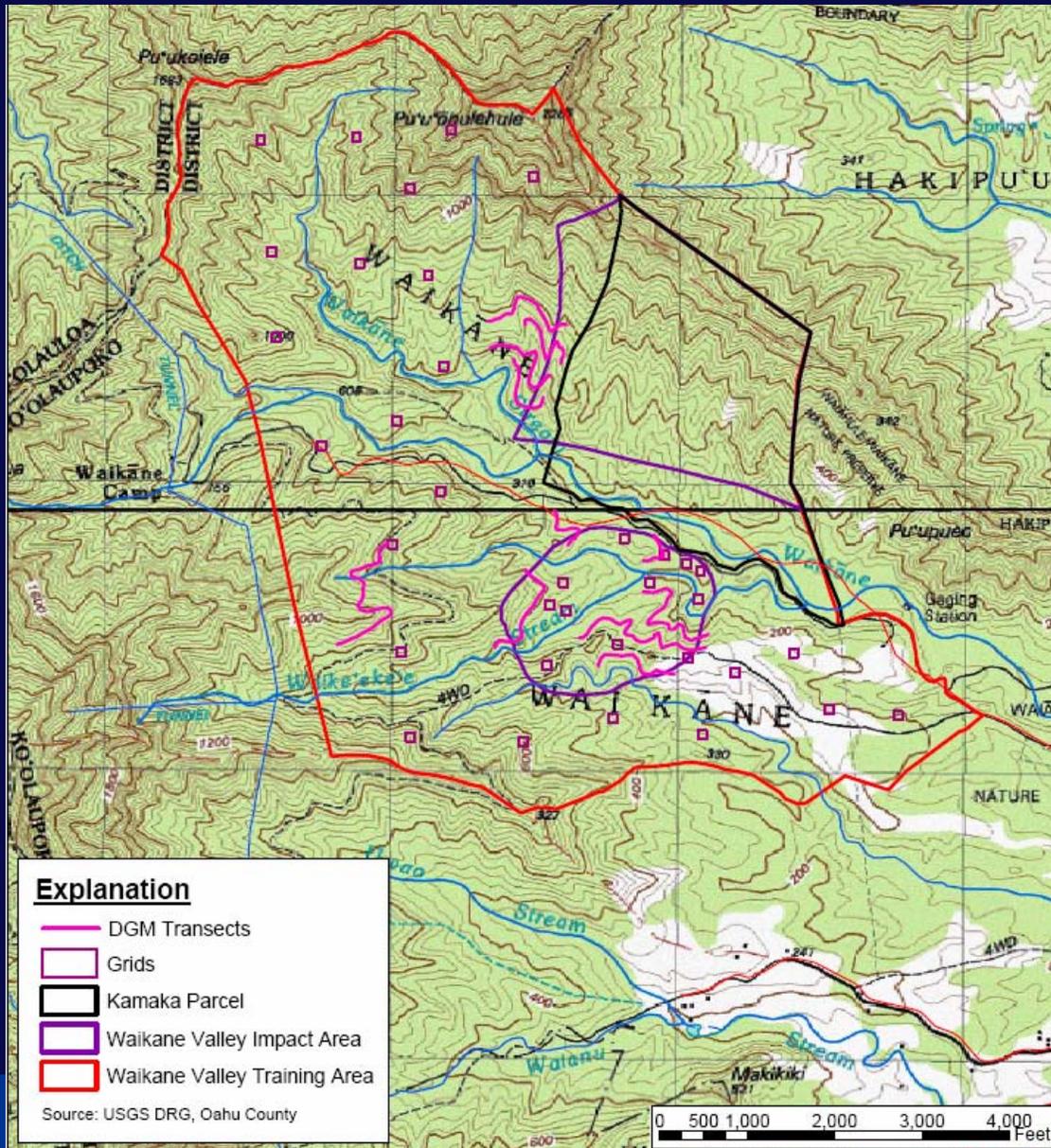
# OE Sampling Procedures

- Suggest Grid Locations Based on Known or Suspected Impact Areas
- Transect Data Collection Provides Sample Coverage to Identify Unknown Impact Areas
- Grids may be Relocated Based on Meandering Path Data



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# DGM Grids and Transects





# OE Sampling Procedures

- Geophysical Mapping
  - Collect Data From Transects and Grids
  - Select Target Anomalies
  - Reacquire Targets
- Intrusive Sampling
  - Excavate Target Anomalies
  - Identify Anomaly
  - Record findings
- OE Disposal
- Scrap Management



# Safety is Paramount

- Safety is #1 Concern
- UXO Safety Specialists On Site At All Times
- Minimum Separation Distances Will be Established
- All Items Excavated Will Be Strictly Controlled Until Properly Disposed
- All Occurrences of Ordnance, Ammunition, Explosive Items, Components, and Scrap Will Be Recorded



# Evaluation Criteria

- Current and Documented Future Land Use
- OE Risk Factors – Include potential for exposure, likelihood and severity of an incident, OE sensitivity, OE depth, site stability, site activities
- Risk Evaluation