

Formerly Used Defense Sites (FUDS) Program

Nantucket Beach (Tom Nevers) Remedial Investigation/Feasibility Study

US Army Corps of Engineers, New England District
US Army Corps of Engineers, Baltimore District

July 6, 2011



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Nantucket Beach Presentation

- Introduction
- FUDS/CERCLA Process
- Brief History/Work Completed To-date
- Remedial Investigation
- Current Status/Project Schedule
- UXO Safety Presentation
- Final Questions/Concerns



Introduction: Project Team and Major Stakeholders

- USACE – New England District and Baltimore District
- MADEP
- Town of Nantucket
- Nantucket Conservation Foundation
- Nantucket Landbank Commission
- Private Residences
- Wompanoag Tribe



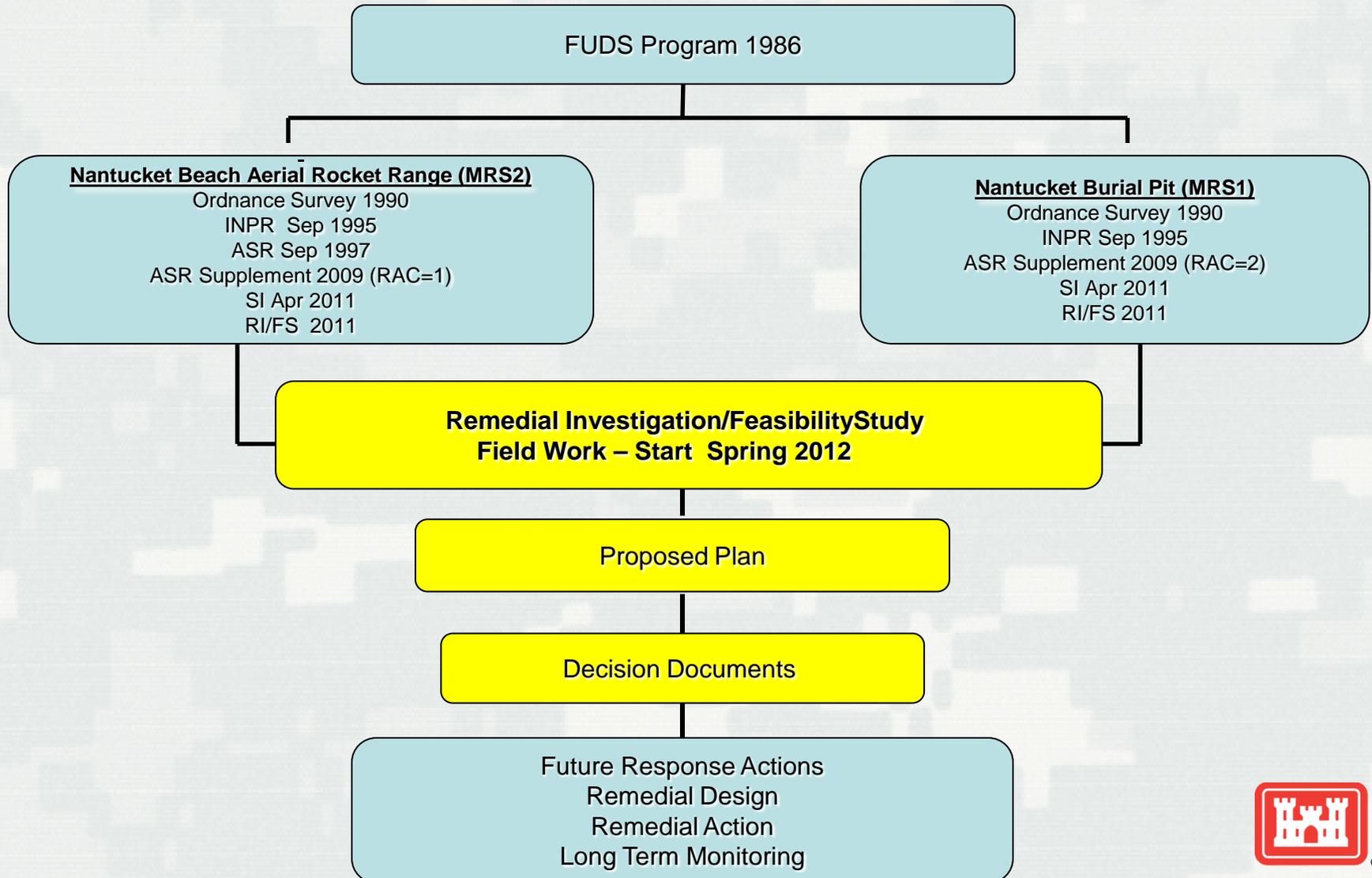


FUDS Program

- ❑ Congress Established the Formerly Used Defense Sites (FUDS) Program in 1986
- ❑ US Army Corps of Engineers Manages FUDS Program for Department of Defense (DoD)
- ❑ Engineer Regulation (ER) 200-3-1
- ❑ Comprehensive Environmental Response and Compliance Act (CERCLA)



CERCLA Process



History

- ❑ MRS 2: Air to Ground Aerial Rocket and Naval Gunnery Range Consisted of 3 Targets; operated from Sep 1943-1945; 5,155.4 acres (3075.8 land; 2079.6 water)
 - Eastern Most Target #1 on private residential property
 - Central Target #2 offshore in the ocean
 - Western most target #3 on NCF land

- ❑ MRS 1: Burial Pit 1945-1946;1.5 acres
 - Located off New South Road near Target #1

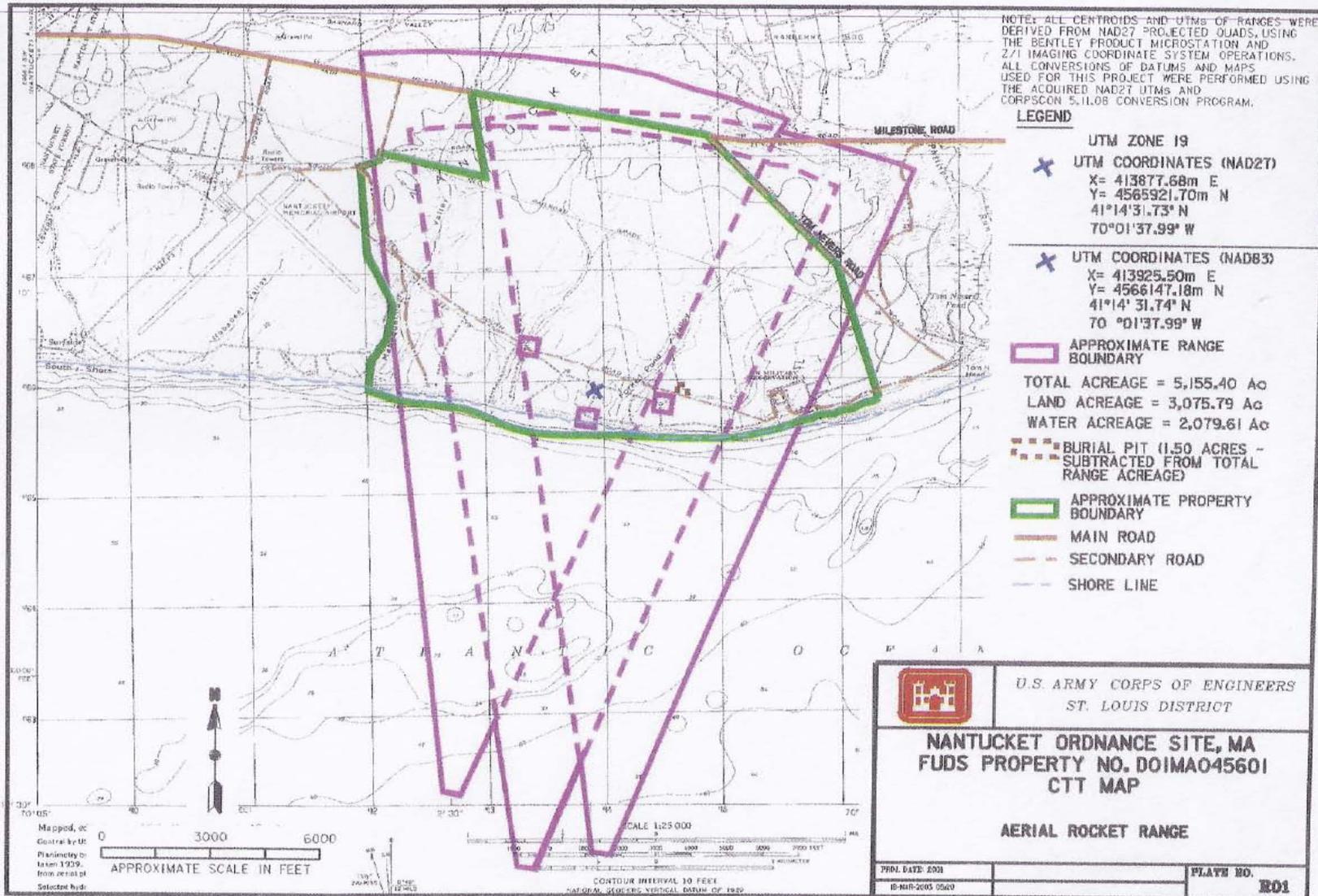


MRS 1 and MRS 2



Figure 2-2. Munitions Response Property Boundary

Aerial Range Boundaries





Work Completed To Date

- ▶ Site Inspection 6-8 April 2010
 - MEC Geophysical surveys
 - ▷ 6.65 acres of land; meandering paths in open areas/existing paths; 524 anomalies found (Schonstedt)
 - ▷ 1.11 acres underwater; mean high tide out 100 yards; 8 anomalies found (borehole gradiometer)



SI Geophysical Anomalies



Figure 3-1b. Anomalies and Geophysical Reconnaissance Findings.



Work Completed To-Date

▶ Samples Taken During SI 6-8 April 2010

- Aerial Rocket Range (MRS 2):
Surface Soil (3); Subsurface Soil (5);
Sediment (2); Surface Water (2);
Groundwater(3)

- Burial Pit (MRS 1): Surface Soil (1);
Subsurface Soil (2); Groundwater (1)



SI Sampling Locations

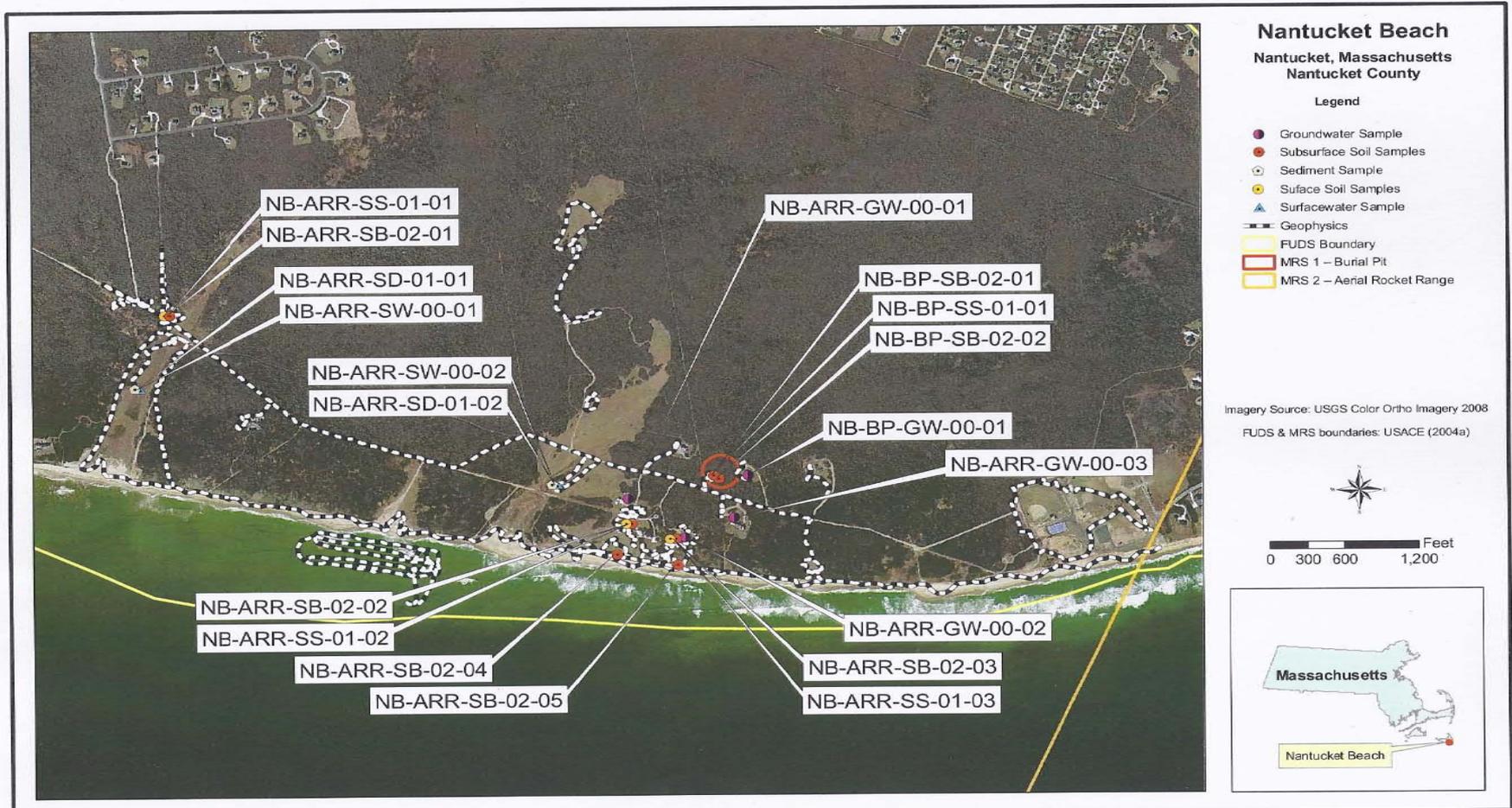


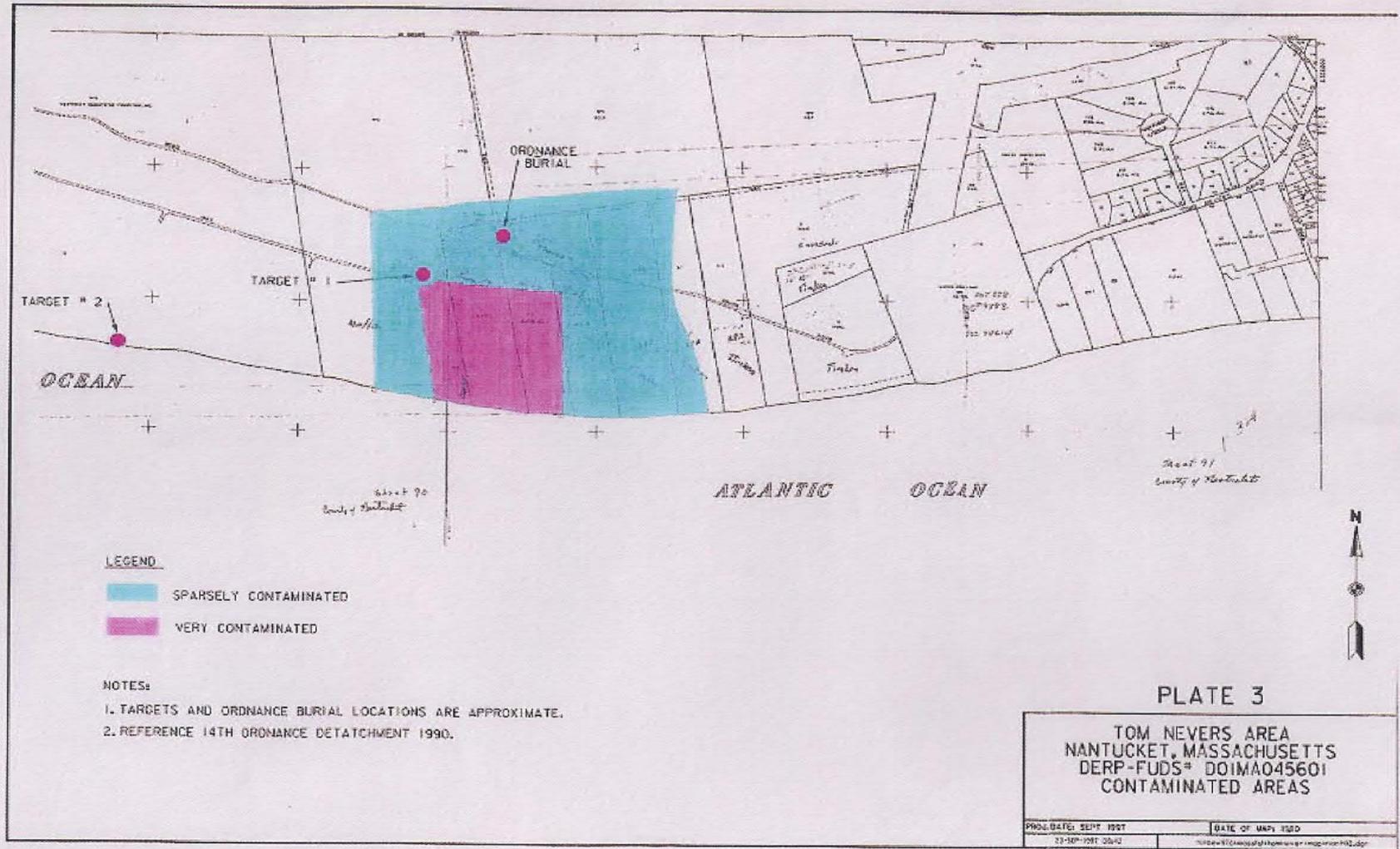
Figure 3-1a. Sample Locations and Geophysical Reconnaissance Path.

SI Conclusions and Recommendations

- Conduct RI/FS at both MRS1 and MRS2
- MRS 1: Elevated iron in subsurface soil exceeded screening criteria
- MRS 1: Numerous subsurface anomalies
- MRS 2: Elevated zinc surface soil exceeded screening criteria
- MRS 2: Munitions Debris found on land surface; numerous subsurface and underwater anomalies



Most Contaminated Areas



Remedial Investigation (RI/FS)

□ Purpose of a Military Munitions Response Program (MMRP) RI/FS

- ▶ To adequately determine the nature and extent of Munitions and Explosives of Concern (MEC) and munitions constituents (MC) at each MRS to develop future response actions.
- ▶ “The objective of the RI/FS process is not to remove all uncertainty, but rather to gather information sufficient to support an informed risk management decision regarding which remedy appears to be most appropriate for a given MRS.” — *Army MMRP RI/FS Guidance – November 2009*



Remedial Investigation

Field Work Activities

- ▶ Technical Project Planning Meetings
- ▶ Develop Work Plans
- ▶ Site Wide Geophysical Investigation
 - Upland, beach, dunes/bluff, ocean areas
 - ▷ airborne geophysics, land and ocean transects/grids
 - Dig percentage of anomalies to confirm on land; ocean (mag/dig)



Remedial Investigation

Field Work Activities (continued)

Sampling

- Surface Soil, Subsurface Soils, Sediments, Surface Water and Groundwater

Signage/Education

Human Health and Ecological Risk Assessment

Periodic Inspections



Current Status/Proposed Project Schedule

- ▶ 6 July: Site Visit with Contractors
- ▶ NLT 27 Sep 2011: Award Contract
- ▶ Oct 2011-Mar 2012: Develop Work Plans, Rights of Entries
- ▶ Spring/Summer/Fall 2012: Conduct RI Fieldwork
- ▶ Winter 2012-Winter 2013/2014: RI/FS Report Writing, Proposed Plan and Decision Document



Questions?



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