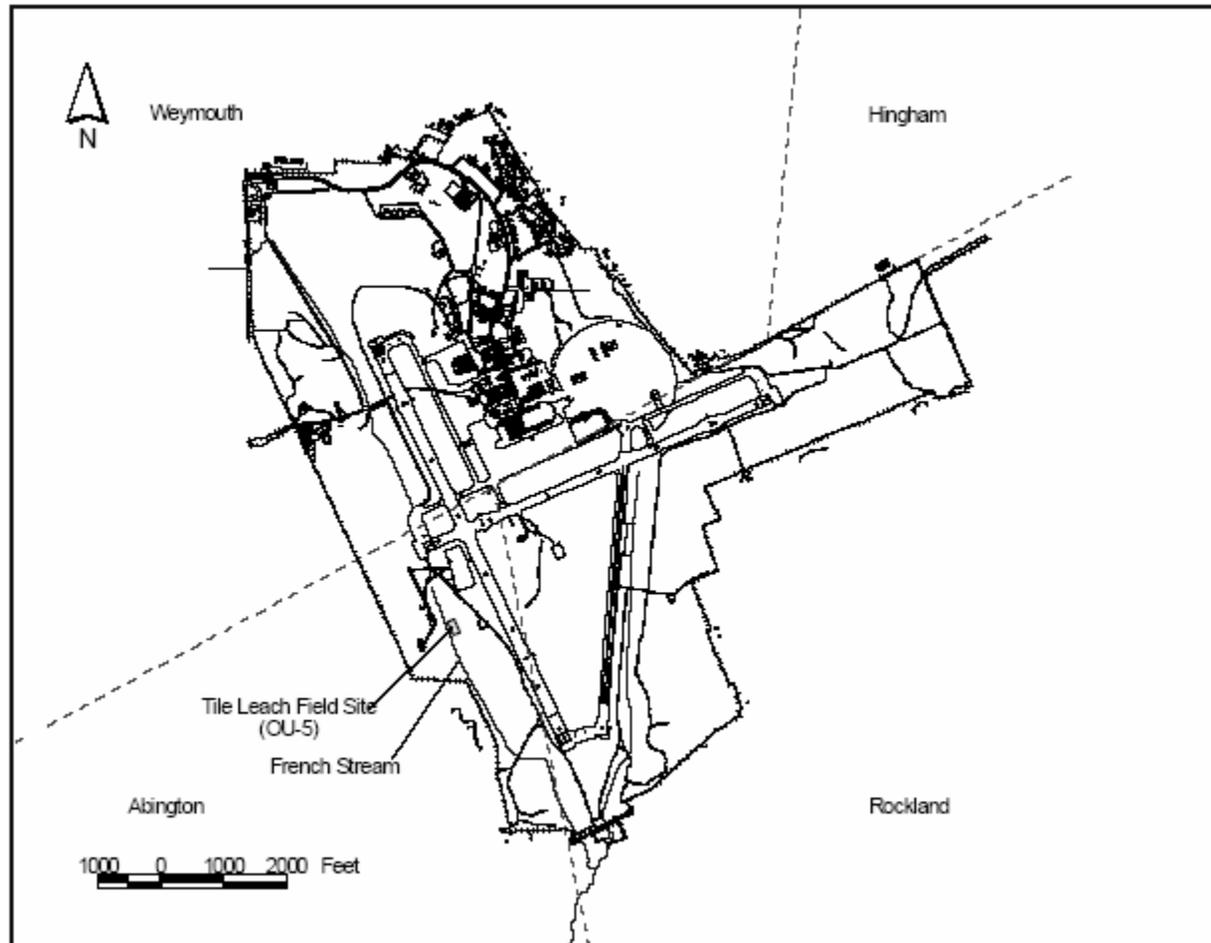


Updates on Supplemental Investigations
Conducted At The
Tile Leach Field (OU-05) and AOC 8 (Former
Radio Receiver Bldg. 70)

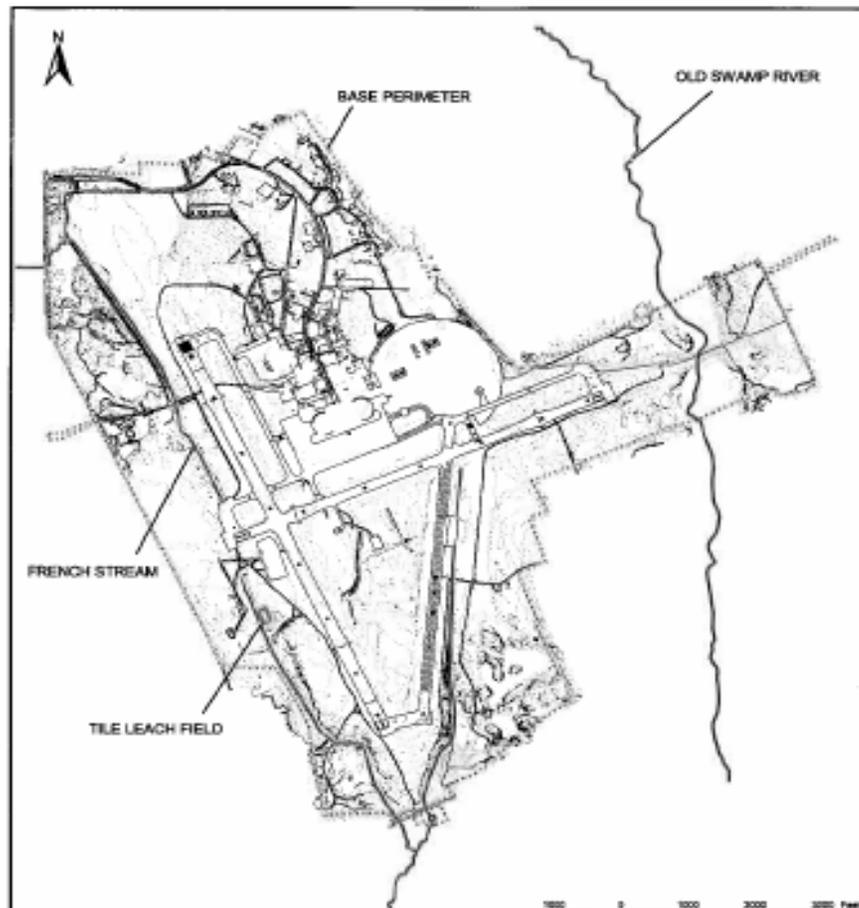
Mark Leipert, PG
EBS Project Manager
Engineering Field Activity North East
June 9, 2005
Restoration Advisory Board

Base Map Showing Tile Leach Field



Tile Leach Field (OU-5)

- Approximately 0.3 acres
- South of former Hangar 2 (RIA-111) in the town of Abington adjacent to French Stream.
- Used for disposal of sanitary wastes pumped underground from the former Hangar 2 (RIA-111) between 1945 and 1953.
- Hangar 2 (RIA-111) was demolished in 1953.



SOURCE: NAVY GIS VERSION 4.0 NORTHERN DIVISION FEBRUARY 1999

SITE LOCUS WITHIN NAS SOUTH WEYMOUTH

FIGURE 2-1

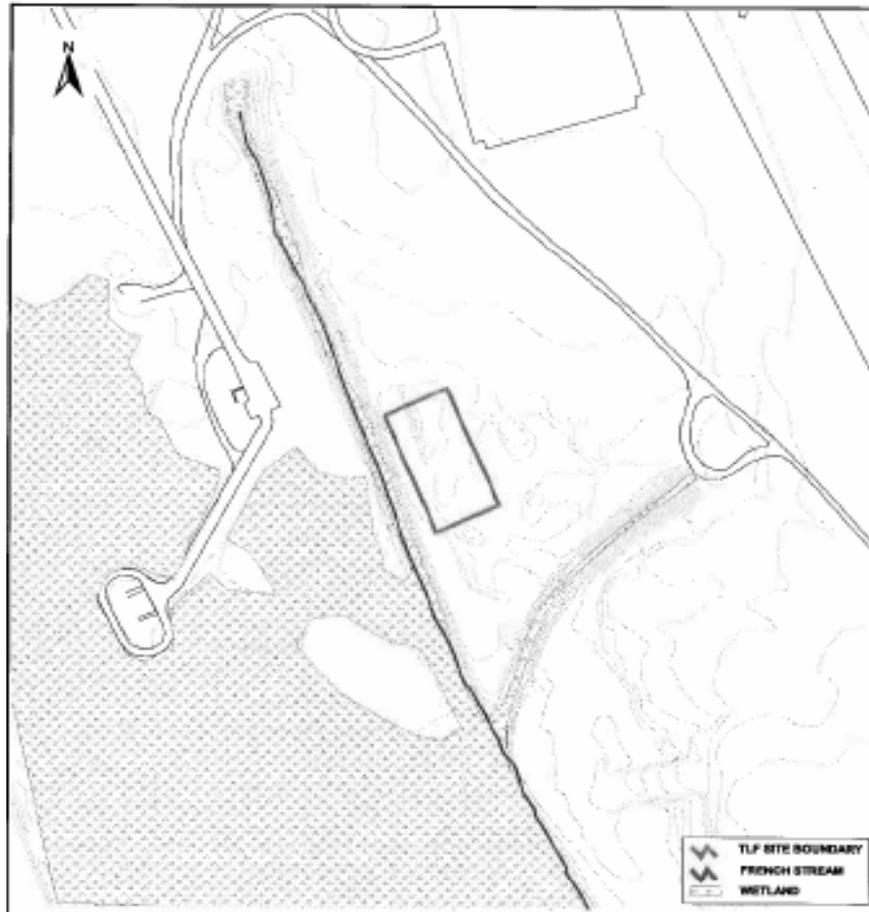
GROUNDWATER SAMPLING PLAN
SITE 6, TILE LEACH FIELD

NAS SOUTH WEYMOUTH - WEYMOUTH, MASSACHUSETTS



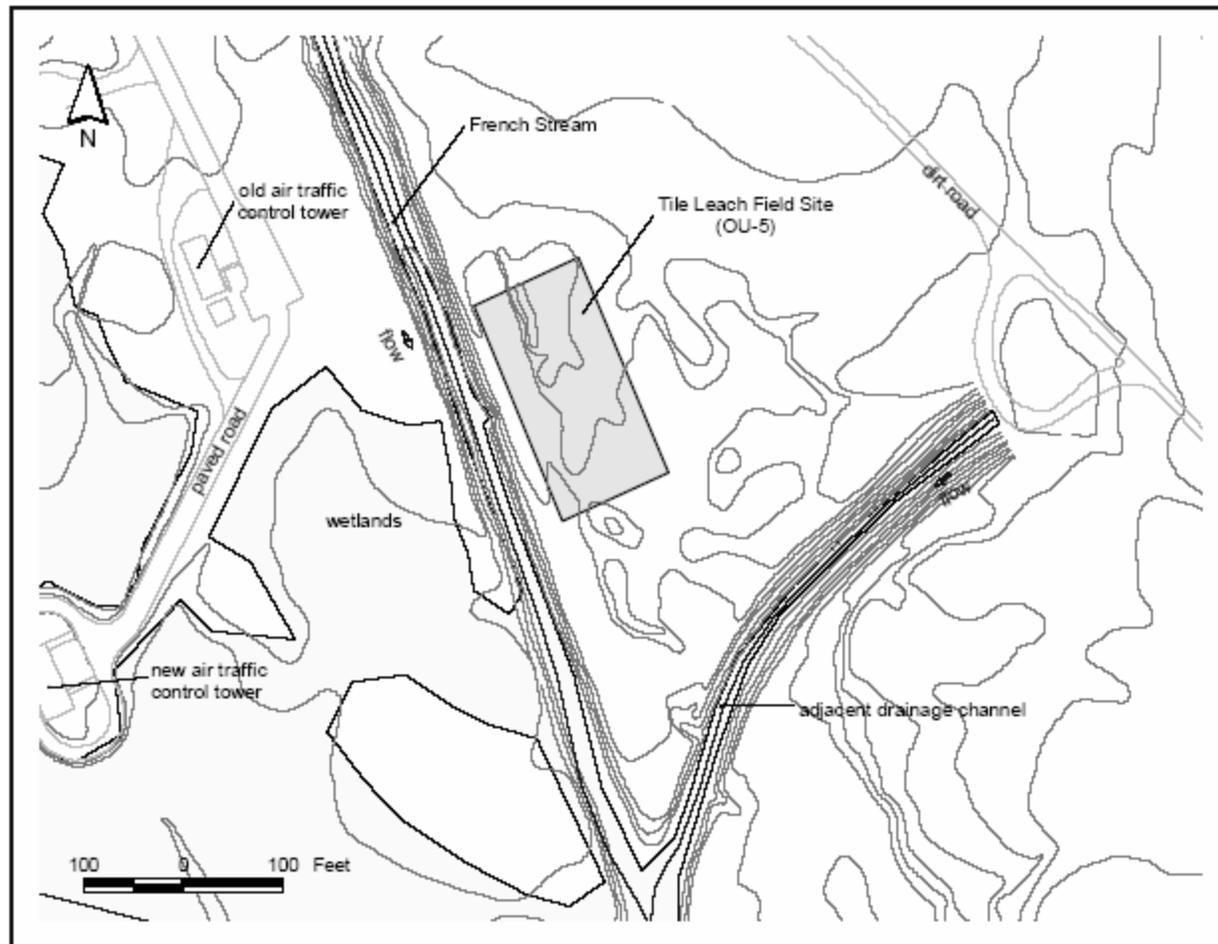
DRAWN BY: L. SEYDEWITZ	DATE: APRIL 14, 2005
CHECKED BY: P. CALL	FILE: G:_WEYMOUTH\CT084-SITES.APR

85 JOHNSON ROAD WILMINGTON, MA 01897
(978) 650-7000



SOURCE: NAVY GIS VERSION 4.1.1 NORTHERN DIVISION FEBRUARY 1999		100 0 100 200 500 Feet	
SITE MAP		FIGURE 2-2	
GROUNDWATER SAMPLING PLAN SITE 5, TILE LEACH FIELD			
NAS SOUTH WEYMOUTH - WEYMOUTH, MASSACHUSETTS			
DRAWN BY: L. SEYDEWITZ	DATE: APRIL 14, 2005	 TETRA TECH NUS, INC. 55 JONAS HIGHWAY WILMINGTON, MA 01897 (508) 658-7899	
CHECKED BY: P. CALL	FILE: 05_01WEYMOUTHACT060-SITESAPR		
WE206337F	4	CTO 834	

Map Showing Area Around Tile Leach Field



Investigation (History)

- Site Investigation (SI) – 1991
 - 3 wells installed
- Remedial Investigation (RI) – Phase I-1996
 - 4 piezometers, 8 test pits, 1 well installed
- Remedial Investigation (RI) – Phase II – 2000
 - Installed 2 overburden and 1 bedrock well
- Supplemental Ground Water Investigation – April 2005
 - Installed 1 temporary well

RIA 111 (former Hangar 2)

Maintenance Action

- Video survey of floor drain system and storm drains as well as any sanitary waste lines.
- Mapped entire drainage system related to the former Hangar 2 (RIA-111).
- (2004) Confirmed the connection from the sanitary system in the Hangar to a lift station and then to the Tile Leach Field.

Summary of Tile Leach Field Findings

- Sampled ground water for TCL(VOCs, SVOCs, Pesticides & PCBs)/TAL metals.
- Analyzed for the above parameters in both Phase I and II RI.
- Risk Assessment – No risk
- Also included MTBE and 1,4 Dioxane.
- 1,4 Dioxane was used as a stabilizer in solvents (degreasers).
- After going through the validation process the data for 1,4 Dioxane was rejected for all the TLF wells except for MW-15, in which it was present below regulatory levels.
- Identified this as a data gap and was the rationale for sampling 1,4 Dioxane and VOCs in April 2005.

Supplemental Ground Water Sampling April 2005

- Work Plan (April 2005) – Approved by EPA and DEP.
- Began field effort – late April 2005
 - Re-developed 9 existing wells.
 - Installed 1 temporary well approximately 100 ft upgradient of TLF-MW-15.
 - Sampled **all** 10 wells.
 - All wells for 1,4 Dioxane
 - Sampled TLF-MW-15 and new well for 1,4 Dioxane & VOCs.
 - Measured ground water levels.

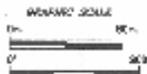
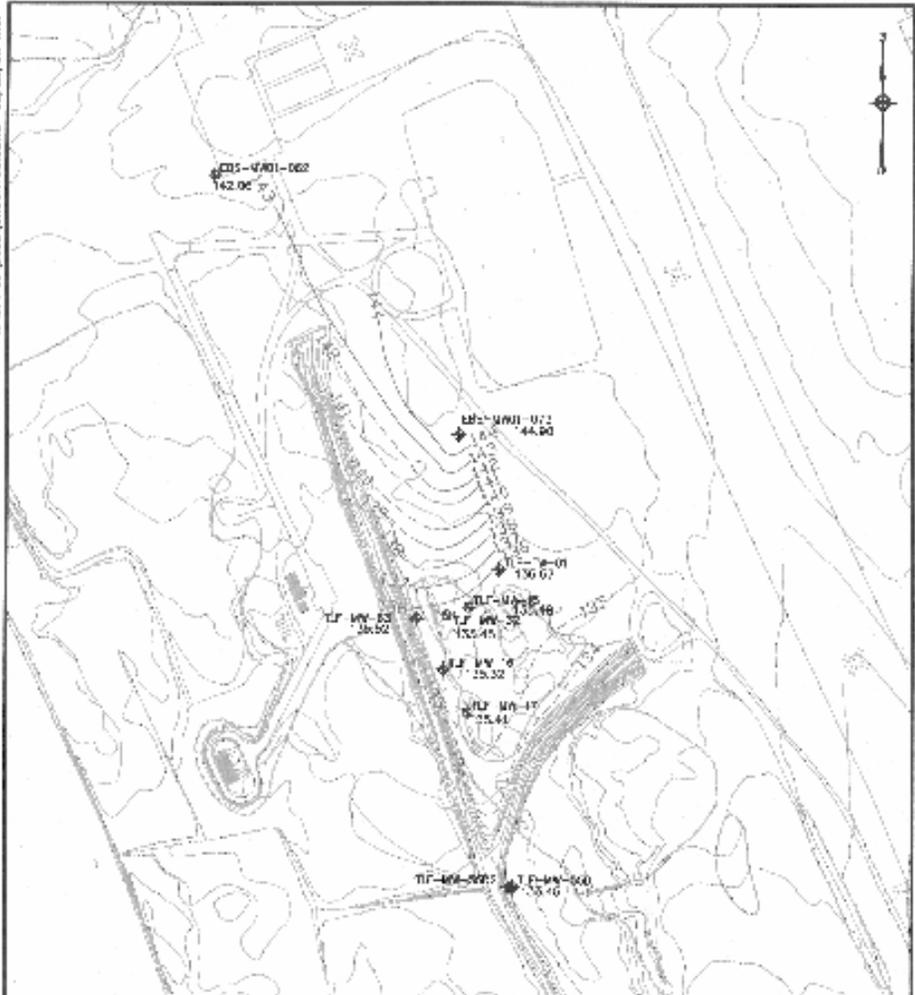
Ground Water Sampling at MW-15



Ground Water Sampling at EBS-MW01-062



46-00: 01/25/2006: 06/21/05: RTR

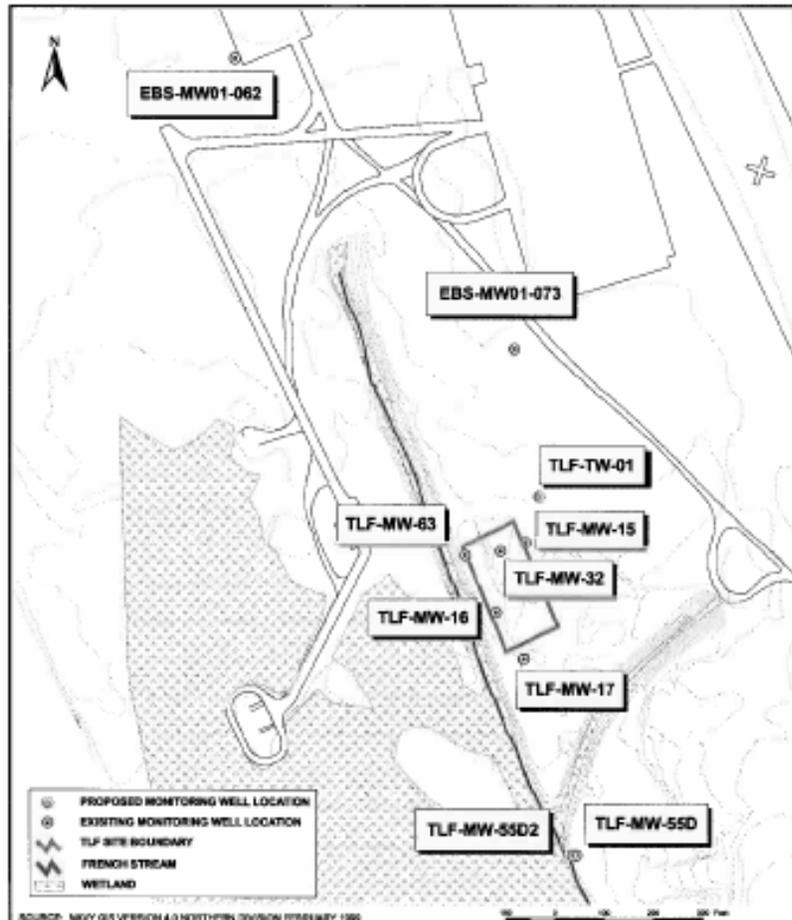


LEGEND
 TL-W-03 MONITORING WELL WITH
 (SEE SHEET AND ELEVATION
 (1988 TOB PT.)

MONITORING WELL WITH
 CONTROL POINT ELEVATION
 (SHOWN WHERE APPLICABLE)

NOTES
 1. DRAWING COORDINATES IN UTM 18Q UTM METERS FROM 0+000000 NORTH AND 0+000000
 EASTWARD MEASURED BY OTHER SURVEYORS IN 1988/1989.
 2. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE. PLAN AND FOR DESIGN.

 TETRA TECHNUS, INC.	OVERBURDEN GROUNDWATER ELEVATIONS SITE 6, TILE LEACH FIELD HAS SOUTH WEYMOUTH, WEYMOUTH MASSACHUSETTS	SCALE AS NOTED
		FILE 460-000-000-000-000-000
		REV DATE 0 05/24/05
		FIGURE NUMBER 1



MONITORING WELL SAMPLE LOCATIONS		FIGURE 3-1	
GROUNDWATER SAMPLING PLAN SITE 6, TILE LEACH FIELD			
NAS SOUTH WEYMOUTH - WEYMOUTH, MASSACHUSETTS			
DRAWN BY: L. BEYDEWITZ	DATE: APRIL 14, 2006	 TETRA TECH NUS, INC. <small>55 JOSEPH ROAD WILMINGTON, MA 01827 375 455-7500</small>	
CHECKED BY: P. CALL	FILE: 61. WEYMOUTHCT099-SITELAPR		

WS205337P

3.

CTO 834

Results from April 2005

- Confirmed ground water flow direction
 - South-southwest ground water flow direction
- VOCs and 1, 4 Dioxane were not detected in any of the wells at the TLF.

Conclusion

- There were no exceedences of VOCs and 1, 4 Dioxane in any of the ground water monitoring wells.
- Risk Assessment indicate no risk.
- Navy is planning to proceed with a No Action Proposed Plan (PRAP) and then a No Action Record of Decision (ROD).
- Regulators have not yet seen the data yet.
- Field report will be available for review at the information repositories by the end of June.

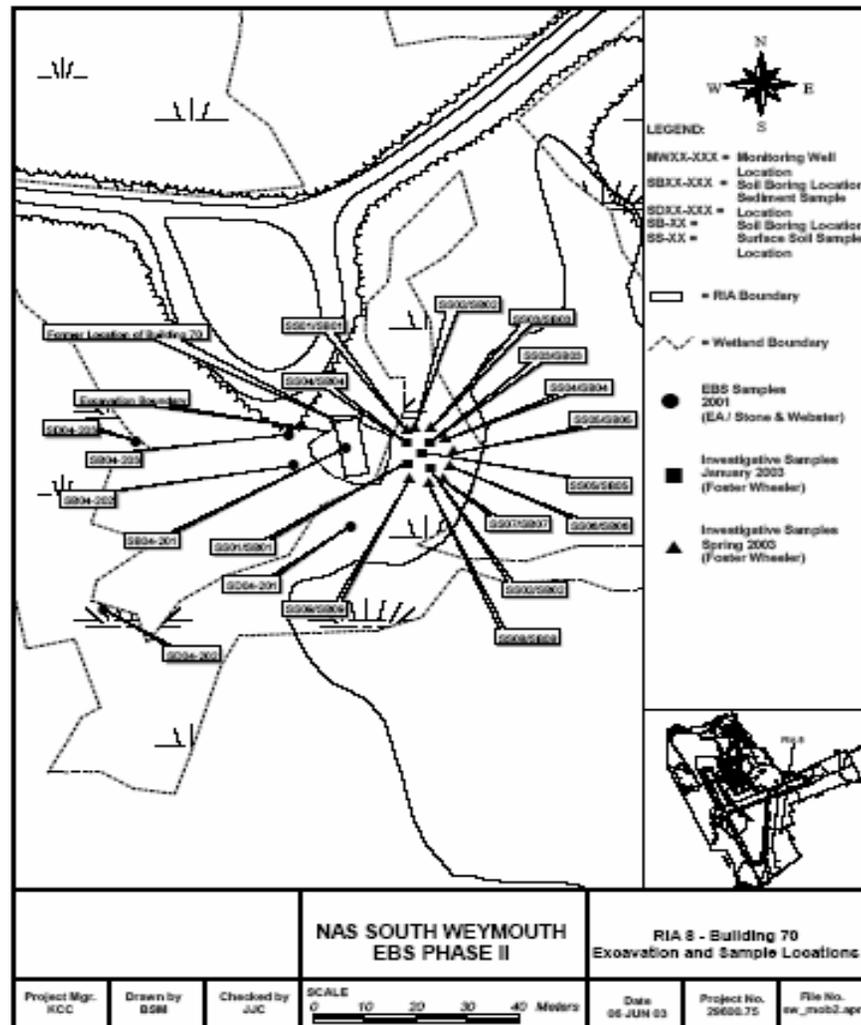
AOC- 8 Former Radio Receiver Bldg. 70

- Used during the 1940's and 1950's.
- Contained electrical equipment to support antenna field activities.
- Building was burned as fire training exercise.
- Electrical equipment not removed prior to burning.
- Equipment and structure buried on site.

EBS Sampling History

- **EBS Phase II (1998-1999) - Samples were not taken at the correct location.**
- **Photographs indicated alignment of the road does not coincide with its alignment in the 1940's.**
- **Needed to postpone MOB 1 sampling event due to turtle activity. (May/June 2001)**
Need area surveyed for turtles.
- **August/September 2001 - Collected additional samples.**
 - **3 Surface soil and 3 subsurface soil samples.**
 - **3 Sediment samples.**
 - **No wells installed- refusal <9ft.**
- **Found elevated levels of PCBs (21ppm) in soil.**

EBS Sampling Locations



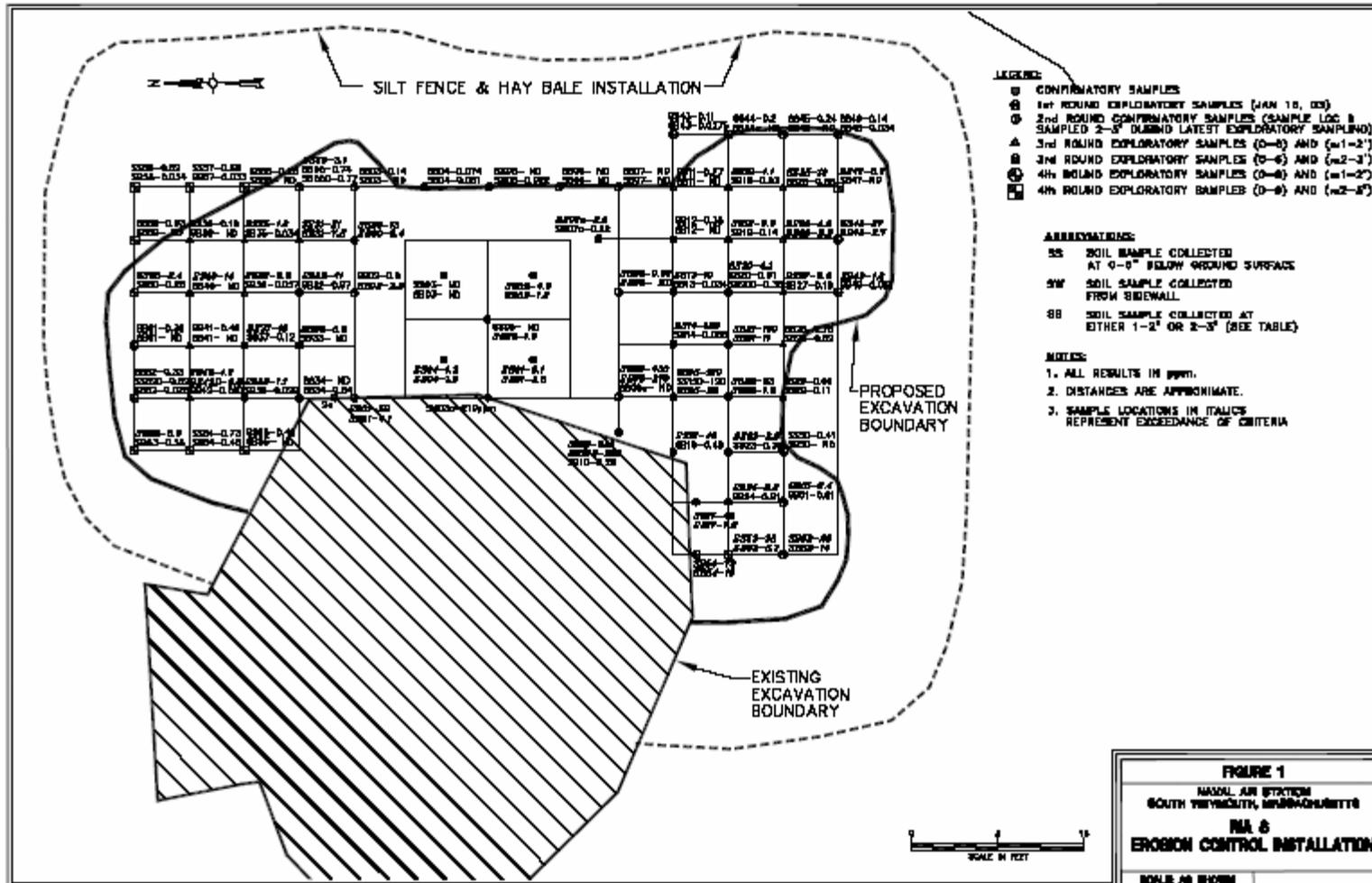
Removal Action Begins

- Initially intended to do “hot spot” removal along with solid waste removal.
- Concentrations:
 - Round 1 - PCBs ranging from 2 to 15 ppm.
 - Round 2 - PCBs ranging from 8 to 35 ppm.
 - Round 3 - PCBs at SS-3a at 210 ppm. A 4th round of exploratory samples was taken indicating we now knew the extent of contaminated soil. PCBs ranging from non-detect to 430 ppm.

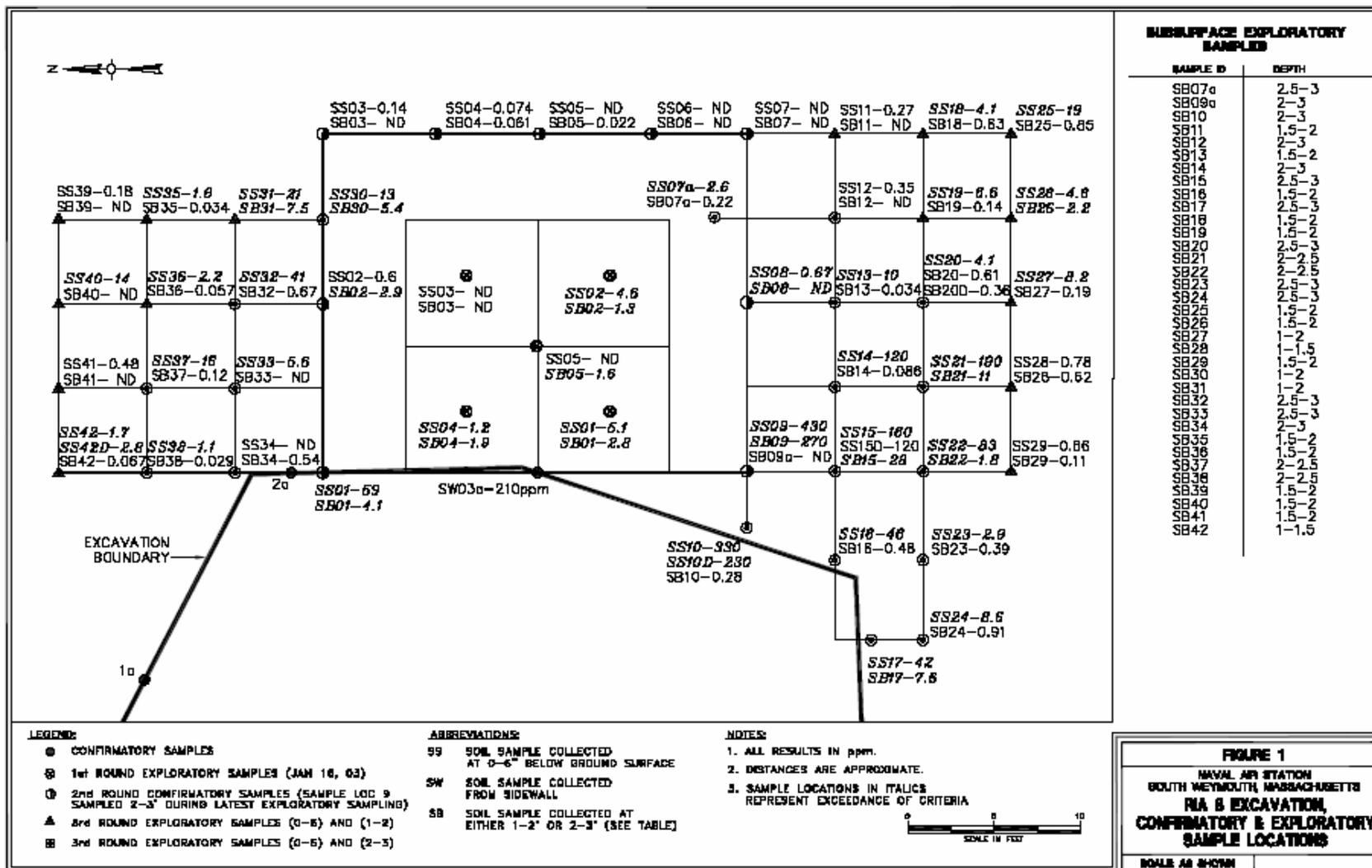
Removal Action Continues

- Exploratory sampling to determine extent of PCB contamination.
- Approximately 120 additional samples were taken to confirm extent of excavation.
- Cleanup goal is 1 ppm. A total of 38 confirmatory samples were taken; 24 from the sidewalls and 14 from the base of excavation.
- Disposed of off-site at TSCA (PCB) approved landfill. (Wayne Disposal in Belleville, Michigan).
- 53 roll-offs totaling 1230 tons. 18,000 gallons of surface water/ground water treated on-site. 38 tons of concrete foundation debris removed.

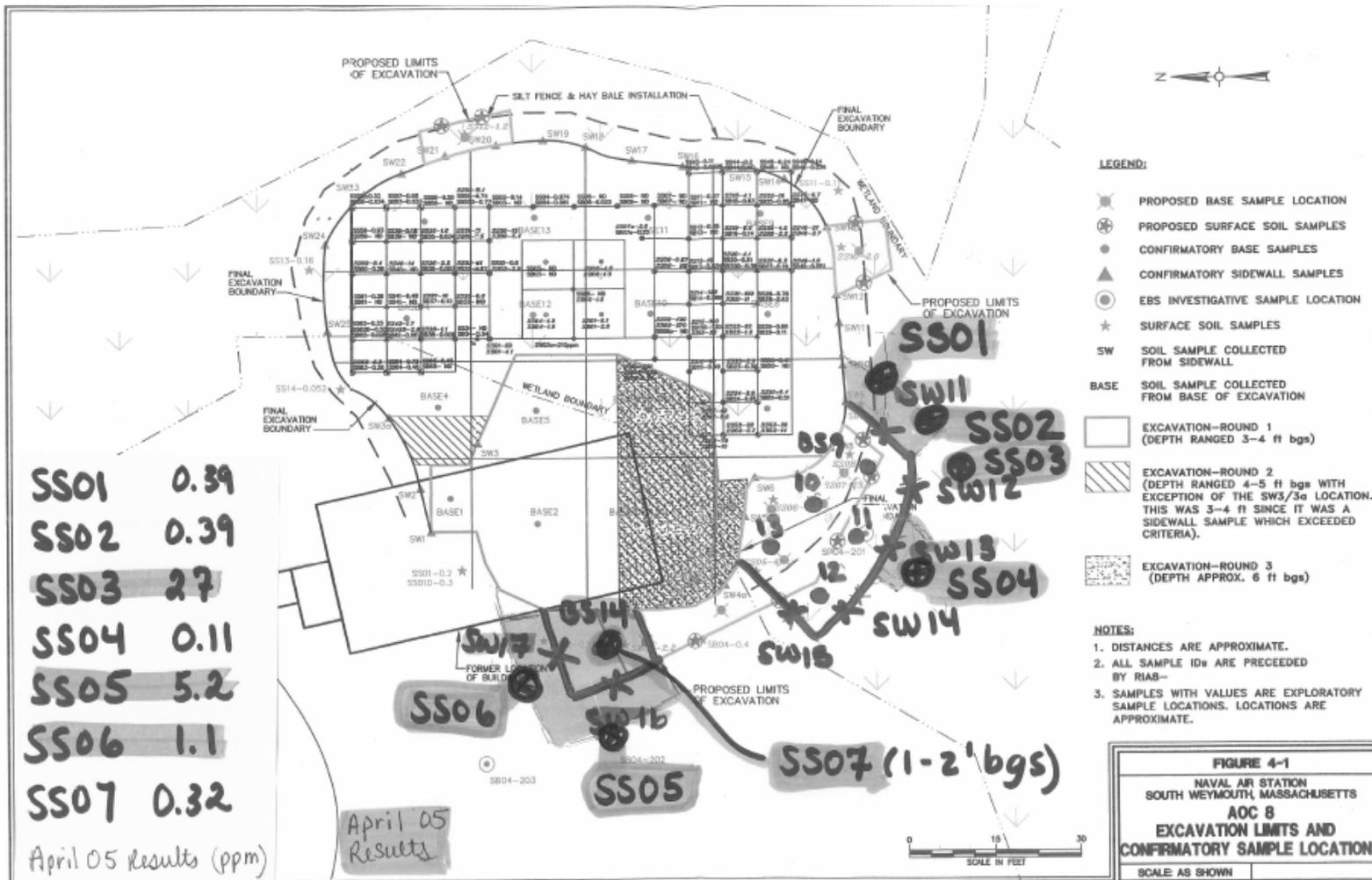
Confirmation Sample Locations



Confirmation Sample Locations



April 2005 Exploratory Sample Results



Totals Quantities Disposed of at Permitted Offsite Facility

- Soil/Sediment –
 - TSCA – 1,170.21 Tons
 - Non-TSCA - 170.06 Tons
- Water from Excavation –
 - 18,000 gallons

Future Work

- Survey area for turtles before any further soil/sediment removal continues.
- Take additional exploratory and confirmatory samples.
- Approximately 100 tons of soil/sediment to be removed.
- Restore wetlands area.



















Radio-tracking box turtles at Site 8.

Site 8 Excavation

Silt Control and Turtle Migration Barrier



Eastern Box Turtle with Transmitter.







