



SWOS APPLIED INSTRUCTION BUILDING (P-416)
NAVAL STATION
NEWPORT, RHODE ISLAND
CONSTRUCTION CONTRACT NO. N62472-01-C-0002

DESIGN BUILD

SITE INVESTIGATION REPORT

DRAFT SOLICITATION DOCUMENT SUBMISSION

July 9, 2001

Prepared by
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Site Investigation Report
Draft Solicitation Document Submission
SWOS Applied Instruction Building (P-416)
Naval Station, Newport, Rhode Island
Construction Contract No. N62472-01-C-0002
A/E Contract No.: N62472-00-D-1404
July 9, 2001

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INTRODUCTION

Phase I Site Assessment has been completed for the area of the proposed building, parking, utilities, and associated site work. No significant sources of contamination are anticipated. Verification of the non-presence of lead asbestos and metals will be verified through soil testing. Soil tests will be performed at a future date based upon the findings and recommendations of the report.



APPENDIX A - PHASE I ENVIRONMENTAL SITE ASSESSMENT



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT**

**SWOS BUILDING SITE
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND**

For

**Oak Point Associates
231 Main Street, Post Office Box K
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Submitted By

**Tetra Tech NUS, Inc.
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July 2001



TETRA TECH NUS, INC.

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REFERENCES

1.0 INTRODUCTION

At the request of Oak Point Associates of Biddeford, Maine, Tetra Tech NUS (TtNUS) conducted a Phase I Environmental Site Assessment (Phase I ESA) of the new Surface Water Officers School (SWOS) Building site at Naval Station Newport, Newport, Rhode Island (NAVSTA Newport) in June 2001. The purpose of this Phase I ESA was to evaluate environmental conditions at the site, specifically the presence or potential presence of oil or hazardous materials, as stated in the Design/Build contract for the construction of an Applied Instruction Building and parking lots on this property.

Environmental conditions were identified through a review of Rhode Island Department of Environmental Management (RIDEM) and Naval records pertaining to the SWOS Building site and surrounding areas. The information gathered will be used to determine the scope of work for the subsequent Phase II collection and analysis of soil and groundwater samples from the SWOS site to determine if contaminants are present in soil or groundwater at concentrations that may pose a risk to human health. The Phase II will identify the presence of, and potential for, environmental contamination that may pose a health risk to workers during construction and to occupants after construction is complete.

1.1 Site Description

The SWOS site is located approximately 60 miles southwest of Boston, Massachusetts and 25 miles south of Providence, Rhode Island (Figure 1-1), at the site of the former Brig facility at NAVSTA Newport (Figure 1-2). NAVSTA Newport occupies approximately 1,063 acres, with portions of the facility located in the City of Newport and Towns of Middletown and Portsmouth, Rhode Island. The facility layout is long and narrow, following the western shoreline of Aquidneck Island for nearly 6 miles facing the east passage of Narragansett Bay (Figure 1-2) (TtNUS October, 2000). The Brig facility at NAVSTA Newport was demolished between 1996 and 1997. The SWOS site occupies an area of approximately 90,000 square feet and is located on Coasters Harbor Island at the NAVSTA Newport site.

The entire NAVSTA Newport site was listed on the U.S. Environmental Protection Agency (EPA) National Priorities List (NPL) of abandoned or uncontrolled hazardous waste sites in November 1989. The NPL identifies those sites that pose a significant threat to public health

and the environment. Four sites at NAVSTA Newport are currently being addressed by the Navy under the Department of Defense Installation Restoration Program (IRP). One of these sites, the Old Fire Fighter Training Area (OFFTA) site, is located adjacent to the SWOS site. A fifth site is being addressed by the Navy under RIDEM regulations, rather than under the IRP. Six additional sites at NAVSTA Newport have also been the subject of environmental investigations and will be the subject of additional investigations under the IRP in the future (TtNUS October, 2000). Besides the OFFTA site, none of the other IRP or RIDEM sites are located close enough to the SWOS site to pose any threat of contamination. The SWOS site has not previously been included in any site investigations at the NAVSTA Newport site.

The SWOS site is located at the northern tip of Coasters Harbor Island and was formerly the Brig facility at NAVSTA Newport. From the time the building was constructed in 1951, until its demolition in 1996, the building served only as the Brig facility. When it was in use, the building was listed as Building 149 on NETC Plan No. 31490-311 prepared by Ames and Whitaker Architects (Ames and Whitaker, 1996).

Taylor Drive borders the site to the north. Warfare Road to the west, Knight Road to the east and an asphalt parking lot to the south comprise the remaining three site borders. Several buildings and parking lots line the western, eastern and southern borders of the site, on the opposite sides of the street. Details of the site layout are depicted in Figure 1-3.

1.2 Site Ownership

The Navy has operated in Newport since the mid-1800's. The area was first used by the Navy during the Civil War when the Naval Academy was moved from Annapolis, Maryland to Newport in order to protect the school from Confederate troops. Coasters Harbor Island was purchased from the city of Newport in 1881 (TtNUS October, 2000). The United States Navy has owned and operated this property since that time.

1.3 Aerial Photographs

Aerial photographs dated 1944 and 1953 were reviewed to help determine a chronological history of the land use for the SWOS site and surrounding parcels. The 1944 photographs show the site as a vacant plot, covered with what appears to be grass, with no shrubbery or trees

present. All of the adjacent properties are developed, however the roads do not appear to be paved. Architectural plans show that the facility was built in 1951, and the 1953 aerial photographs show the presence of the Brig facility.

1.4 Present Site Land Use

The SWOS site is currently not in use. After the building was demolished between 1996 and 1997, the debris were cleared. The plot of land was graded and filled, and seeded with grass (NETC No. 31490-311; Ames and Whitaker, 1996). According to site reconnaissance, the site now appears to be a vacant grassy plot of land that is maintained with no visible signs of disturbance.

1.5 Land Use in Surrounding Areas

The SWOS site is bordered to the North by Katie Field, which is part of the area formerly used by the Navy for fire fighter training called the Old Fire Fighter Training Area (OFFTA). The OFFTA site was closed in 1972 and converted into a recreational area. The recreational area had a playground, picnic area with an open pavilion, barbecue grills and a baseball field (Katie Field). The field was used for recreation from 1976 until 1998, when it was closed due to potential environmental and human health concerns. An environmental investigation of Katie Field has detected high concentrations of polycyclic aromatic hydrocarbons (PAH's) and metals, specifically arsenic, in soils and groundwater at the OFFTA site. The arsenic is believed to be naturally occurring (TtNUS October, 2000).

Building 1164 is located along Warfare Road adjacent to the western property boundary, while Buildings 446 and 1268 are located on the southwestern corner of the site. Building 109 along Knight Road comprises the southeastern border, while tennis courts make up the northeastern border (Figure 1-3). Katie Field is located immediately across Taylor Drive, from the northern boundary of the site, in the inferred downgradient direction. Although a remedial investigation of the OFFTA site has identified soil and groundwater contamination, Katie Field has been determined to be the least contaminated area within the OFFTA site (TtNUS October, 2000).

Building 1164, the western property boundary, is the Propulsion Plant Trainer as part of the Surface Warfare Officer's School Command (SWOSCOLCOM). Buildings 446 and 1268,

located on the southwestern corner of the site, are also part of SWOSCOLCOM, and are used as the SWOS Command and Arleigh Burke Hall, respectively. Building 109 is used as a recreational gym (Base Map 2001).

2.0 ENVIRONMENTAL SETTING

This section of the report presents information on the environmental setting of the SWOS site including regional and site-specific geology and regional and site specific hydrogeology. The geological information used in this report is based on various investigations conducted at the NAVSTA Newport site since 1990.

2.1 Surficial Geology and Hydrogeology

The geology of the site and surrounding area consists of glacially derived unconsolidated deposits overlying Pennsylvanian age sedimentary bedrock (USDA 1981; Hermes et. al. 1994). These glacial materials include till and sorted sand, silt, and gravel (USDA 1981; EEI 1983). NAVSTA Newport is located on the Narragansett till plain. This glacial till deposit may have been derived from sedimentary and meta-sedimentary rock (USDA 1981). The predominant overburden material in the area is comprised of fine to medium sand, silt, and gravel with varying amounts of rock and seashell fragments.

Borings conducted in 1951 prior to the construction of the Brig facility show the site's surficial geology to consist of stratified layers of sand and gravel fill, hard sand and gravel, hard cemented sand, and gravel and shale. These borings indicate that the depth of surficial materials on the SWOS site range from 6 to 25 feet. The deepest boring was 25.5 feet deep, whereas the shallowest was 6.0 feet before refusal was encountered (Cull and Robinson, 1951, NETC No. 11169-118).

Groundwater on Aquidneck Island is obtained from the unconsolidated glacial deposits of till and outwash and from the underlying Pennsylvanian bedrock. Throughout the area, depth to groundwater ranges from less than one foot to about 30 feet, depending upon the topographic location, time of year, and character of subsurface deposits (Schiner 1964). Five pre-construction borings taken in 1951 at various locations at the former Brig site show that the depth to groundwater ranges from 4.0 to 5.5 feet (NETC No. 11169-118, Cull and Robinson,

1951). Based on groundwater information contained in the logs for these borings, the inferred groundwater flow is northerly, toward Katie Field.

RIDEM has classified groundwater in Rhode Island in order to protect and restore the quality of the state's groundwater resources for use as drinking water and other beneficial uses, and to assure protection of the public health and welfare, and the environment. The groundwater beneath the SWOS Building site has been classified by RIDEM as "GB". GB-classified groundwater resources are not suitable for public or private drinking water use. These types of resources may be found beneath highly urbanized areas with dense concentrations of industrial and commercial activity, or in the vicinity of permanent waste disposal sites for solid waste, hazardous waste or sewage sludge (RIDEM 1995).

2.2 Bedrock Geology

The rocks within the Narragansett Basin chiefly consist of conglomerates, sandstones, shales, anthracite and meta anthracite. Total thickness of the strata in the basin has been estimated at approximately 12,000 feet. The bedrock of the Narragansett Basin has been divided into six units including the Purgatory Conglomerate and the Rhode Island Formation, which underlie the SWOS site (Hermes et. al. 1994). The contact between the two units has been mapped crossing the eastern portion of the site in a north-south direction. Based on the Cull and Robinson (1951) plans, (NETC No. 11169-118), depth to bedrock on the SWOS site ranges from 6 to 25 feet below ground surface.

The Purgatory Conglomerate is a buff to pale-gray conglomerate that consists of pebbles, cobbles, and boulders comprised of quartzite (Hermes et. al. 1994). The Rhode Island Formation is the most extensive and thickest of the Pennsylvanian formations in Rhode Island. In the southern portion of the Narragansett basin, including the vicinity of NAVSTA Newport, Rhode Island Formation has been metamorphosed. Metasedimentary rocks, including metaconglomerates and metasandstones, as well as schist, carbonaceous schist, phyllites, and graphite are present within the formation (Hermes et. al. 1994).

2.3 Surface Water

Site reconnaissance revealed that there is no surface water at the SWOS site. The nearest surface water body is Narragansett Bay, which is approximately 400 feet north of the site. The surface waters surrounding Coaster Harbor Island are classified as SB by RIDEM (RIDEM 1997). According to the RIDEM Water Quality Classification Descriptions, waters classified as SB, "are designated for primary and secondary contact recreational activities; shellfish harvesting for controlled relay and depuration; and fish and wildlife habitats. They shall be suitable for aquacultural uses, navigation and industrial cooling. These waters shall have good aesthetic value" (RIDEM 1997).

3.0 NAVAL RESEARCH

TtNUS reviewed files that are maintained by the United States Navy regarding recognized environmental conditions at the SWOS site and abutting properties. Because this site is owned and operated by the Navy, these were the most up to date and comprehensive files available about the SWOS site at NAVSTA Newport. Details of the Naval file reviews are summarized in this section.

3.1 Naval Records

Research conducted at NAVSTA Newport on June 20, 2001, found several maps and drawings of the Brig Facility that was previously located on the SWOS site. These maps were dated 1951 and 1996. Three of the maps are pilot plans for the construction of the Brig facility. The other eight are demolition plans and repair and alterations plans for the Brig facility. One demolition plan (Demolition of Brig- Building 149: Coasters Harbor Island, Hazardous Materials Abatement, NETC Drawing No. 31491-311 1996 Ames and Whitaker, 1996) clearly demarcates all locations of asbestos-containing materials at the Brig facility and also describes the process for their removal. This same map describes the process for light fixture removal, including the methodology for removing and properly disposing of PCB-containing light ballasts. A second 1996 map describes the removal of the utilities from the former Brig site (Ames and Whitaker, 1996). No underground storage tanks are shown on these plans.

Older maps dated 1951 are labeled as Plot and Location Plans, as well as Floor Plans (Cull and Robinson, 1951). These maps were created prior to the construction of the Brig facility. The maps retrieved from the NAVSTA Newport site do not indicate the presence of any underground storage tanks on the former Brig facility property. A heating plant was located at a remote location from the Brig facility. A steam trench that was filled during the demolition of the building provided steam from the remote heating plant to the facility for heating the building.

3.2 Site Drainage

NAVSTA Newport is located within the Narragansett Bay drainage basin. The basin covers an area of approximately 1,850 square miles, of which, 850 square miles are in Rhode Island (USDA 1981). All surface water drainage from the Narragansett Bay drainage basin empties into Narragansett Bay. At NAVSTA Newport, precipitation evaporates, infiltrates into the soil, or flows overland toward catch basins or several small streams and ponds. The primary stream flow direction is to the northwest, toward Coasters Harbor (USGS 1975). Surface runoff is controlled by storm water collection systems (i.e. culverts and catch basins) that discharge directly into Coasters Harbor (TtNUS October, 2000).

Storm drains run beneath the former Brig facility along the western side of the property. There are several catch basins along the storm drain (NETC No. 31490-311; Ames and Whitaker, 1996). Along the northern edge of the SWOS Building site is a curbed road (Taylor Drive). Storm drains along this road direct runoff from the site beneath OFFTA through a 24-inch reinforced concrete pipe. The runoff discharges into Coasters Harbor approximately 30 feet north of the northern shoreline (TtNUS October, 2000).

3.3 Utilities

Overhead wires run along Taylor Drive on the northern border of the site. According to the Brig Demolition Plan, the sanitary sewer line running from a manhole, located between the building entrance and Taylor Drive, to the building was to be plugged, with all other sewer lines remaining open. In addition, all disconnected or abandoned water and salt water lines at the site were removed. The steam and condensate, telephone, fire alarm, and conduit wiring beneath the Brig facility was removed prior to demolition (NETC No. 31490-311; Ames and Whitaker, 1996).

3.4 Possible Sources of Contamination

To date, there has been no groundwater or soil sampling carried out at the SWOS site. Past activities and materials used at the site could possibly contribute to groundwater, soil or surface water contamination. These possible sources of contamination are described in this section.

A District Public Works Office Map dated December 1951, and titled "Pilot Plan and Location Plan: 75 Man Brig" (NETC No. 11169-118; Cull and Robinson, 1951), shows two potential sources of contamination in the vicinity of the Brig facility. One source is an area labeled "fuel tanks" that is located approximately 400 feet directly west of the south corner of the Brig Building, behind Building 138. The second possible source is a Transformer vault, labeled Building 84, approximately 800 feet southwest and hydrologically upgradient of the building. Transformers have historically been known to be sources of polychlorinated biphenyl (PCB) contamination. Later maps do not show either of these areas, so it is possible that they have been closed and no longer exist (NETC No. 31491-311; Ames and Whitaker, 1996). Taking into consideration the hydrologic relationship and distance between both of these areas and the SWOS site, these potential contamination sources do not seem to represent a threat of contamination to the SWOS site.

3.4.1 **OHM Storage Vessels, Septic Waste Disposal, and Solid Waste Material**

A former steam trench located in the southeastern corner of the site indicates that the steam for heating the former Brig facility was supplied from a remote heating plant. This further supports the absence of underground storage tanks (UST's) noted on plans of the site. There were formerly UST's on Coasters Harbor Island in the vicinity of the SWOS site. One location identified as Structure 74 has been identified as a historical contamination source (RAD 1999). This structure is located adjacent to Boiler House 86, approximately 1,000 feet south of the SWOS Building site, along the western coast of Coasters Harbor Island. Structure 74 was a double chamber tank located on the Island. There is currently a pump and treat system in place at the structure, and both the building and the structure are scheduled for removal in 2002 (RAD 1999). The hydrologic relationship between Structure 74 and the SWOS site would make it unlikely that any contaminated groundwater from Structure 74 would migrate to the SWOS site. Additionally, this tank has been cleaned and filled with foam, and the contamination is being

treated, therefore it does not appear to present a threat of environmental impairment to the SWOS site.

There are no records indicating that UST's were present at the former Brig facility. There is also no evidence of OHM storage at the facility. The former Brig facility was connected to the station sewer system. Because the SWOS site is a small part of a much larger Naval Station the solid waste material disposal areas are most likely elsewhere at the Station.

3.4.2 Suspect PCB-Containing Sources

Building 84 was formerly used as a transformer facility (NETC No. 11169-118; Cull and Robinson, 1951). Such facilities are possible PCB contamination sources. However, the location of this building in relation to the SWOS Building site indicates that it is not a likely source of environmental impairment to the SWOS site. Building 84 is located 800 feet southwest of the former Brig facility, very close to the western shore of the island. This location, in relation to the location of the SWOS site makes contaminant migration toward the SWOS Building site unlikely, since groundwater from Building 84 most likely flows into Narragansett Bay.

A second possible PCB source is the old light fixtures used in the Brig building. According to the 1996 Light Fixture Removal Plan, there were 258 light fixtures in the old Brig building. Of these, there were 50 light ballasts that contained PCB's. In accordance with the removal plan, these ballasts were to be removed and placed in a barrel labeling them as containing PCB's and turned over to the Navy for disposal (NETC No. 31491-311; Ames and Whitaker, 1996). Proper disposal of these light fixtures would eliminate them as a possible source of contamination.

A second demolition plan map shows an existing transformer that was to be left intact during the demolition of the Brig building. This transformer is located at the far northwestern corner of the site, close to Taylor Drive. As of 1996, this transformer was in place and has the potential to be a source of PCB contamination if it begins leaking (NETC No. 31490-311; Ames and Whitaker, 1996). However, site investigations and research did not reveal any reported leaks.

3.4.3 Suspect Asbestos-Containing Material

A majority of the old Brig facility contained asbestos-containing materials, including vinyl floor tiles and mastic, pipe and fitting insulation, glaze and frame caulk and duct flex (NETC No. 31491-311; Ames and Whitaker, 1996). There was also an identified asbestos insulated pipe in the steam trench running from the south end of the Brig building to an adjacent manhole. An asbestos abatement of the Brig facility was completed before the building was demolished. In accordance with the Asbestos Removal Plan, the water in the steam trench was to be pumped out and filtered and all dirt and debris were to be removed and disposed of as asbestos-contaminated waste (NETC No. 31491-311; Ames and Whitaker, 1996).

3.4.4 Suspect Metal Contamination

All of the interior and exterior paint on the Brig facility was lead-containing (NETC No. 31490-311; Ames and Whitaker, 1996). According to the 1996 demolition plans, the lead paint was to be removed prior to demolition and disposed of as a hazardous waste.

A second metal of concern at the SWOS site is arsenic. At the OFFTA site, 76 surface soil samples were taken and analyzed for metals. The results of soil sample analysis showed 18 metals present in surface soils, however only three of these metals, including arsenic, were found to be above background surface soil metal concentrations established for NAVSTA Newport. Detected concentrations of metals were compared to RIDEM Residential Direct Exposure Criteria (RDEC) for soils (TtNUS October, 2000). Arsenic concentrations exceeded the RIDEM criteria in 73 of the 76 samples analyzed. Subsurface soil samples also contained elevated concentrations of arsenic. As with surface soils, subsurface soil arsenic concentrations exceeded the RIDEM criteria in 48 of the 50 samples analyzed. The frequency with which arsenic exceeds the criteria is high when compared to beryllium and lead, which exceeded RIDEM criteria for surface and subsurface soils with considerably less frequency than did arsenic. Beryllium concentrations exceeded the RDEC in 18 of 76 surface samples, while lead exceeded RDEC in 2 of 76 surface samples (TtNUS October, 2000).

The widespread presence of elevated arsenic concentrations indicates that elevated concentrations of this metal may be naturally occurring in the site's soils. A Background Soil Investigation conducted for the OFFTA site by TtNUS states that the calculated background

concentrations of arsenic at Coasters Harbor Island are believed to be attributable to the composition of the local and regional bedrock formations and the shallow depth to bedrock in the area (TtNUS August, 2000). Since the TtNUS investigation indicates that the elevated arsenic concentrations in the OFFTA site area may be due to natural background characteristics, it is possible that the soils at the nearby SWOS site would also contain elevated arsenic concentrations. The presence of elevated arsenic in the surface and subsurface soils at the SWOS site would likely be due to natural background conditions since there has been no history of releases involving arsenic.

4.0 SITE RECONNAISSANCE

TtNUS conducted an inspection of the property on June 20, 2001, to aid in identifying potential areas of environmental concern at the SWOS site. The following paragraphs summarize the observations made during the site reconnaissance.

4.1 Site Observations

The SWOS Building site is roughly 90,000 square feet in size and has no designated use at this time. Elevations at NAVSTA Newport range from near mean sea level (MSL) to approximately 170 feet above MSL in the Melville North area (USGS 1975). Elevations at the SWOS Building site vary from 9 to 11 feet above sea level. Elevation gradually increases from west to east. Site observations reveal that the area is free of debris and appears as a grassed vacant lot. There is no stressed vegetation or stained soil present at the SWOS site.

5.0 CONCLUSIONS

The Environmental Site Assessment included a computer database search, site reconnaissance, and a review of naval records. This research was done to help evaluate environmental conditions at the SWOS site, specifically to determine the potential presence of oil or hazardous materials.

No releases of oil or hazardous materials have been reported at the SWOS site. In addition, there are no identified USTs, OHM storage vessels, septic waste disposal or hazardous material disposal areas on the property. On-site, the asbestos abatement and lead and light fixture

removal were scheduled to be carried out prior to building demolition. There are several areas of possible concern off-site including PCB, lead and asbestos waste. These include existing transformers; former transformer sites upgradient of the site, and any area in which lead, PCB or asbestos removal was not carried out properly. Additionally, the widespread presence of elevated arsenic concentrations at the OFFTA site indicate that elevated concentrations of this metal may be naturally occurring in the site's soils, and is likely to be present at the SWOS site.

6.0 RECOMMENDATIONS

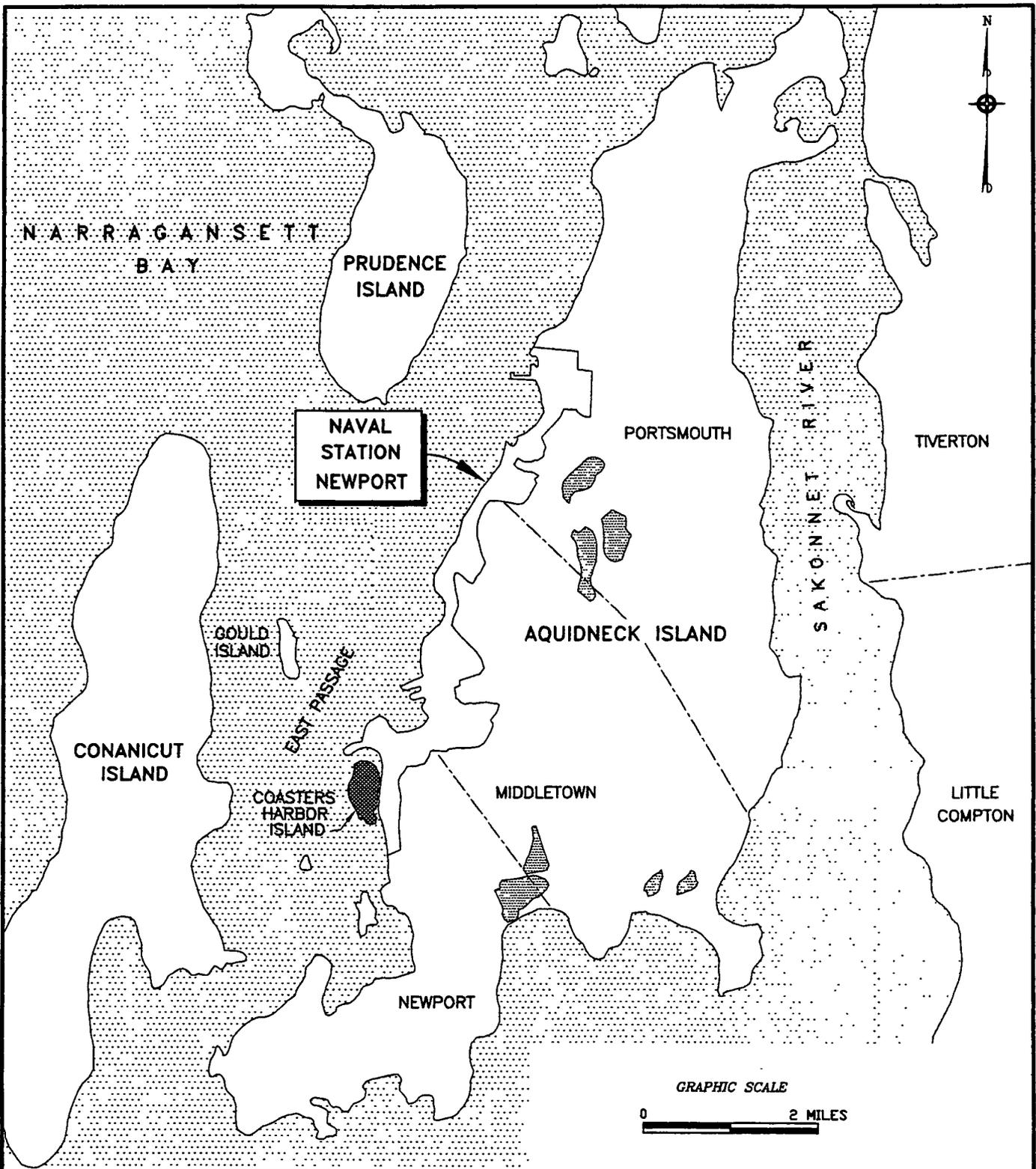
Overall, there is no visual indication or available records of environmental contamination at the SWOS site. To date, there has been no groundwater or soil sampling carried out at the SWOS Building site. Past activities and materials used at the site could possibly contribute to groundwater, soil or surface water contamination, although there is no apparent threat from the potential off site sources of contamination. None of the identified potential contamination sources appear to pose an immediate threat to anyone working at the SWOS Building site. Elevated background concentrations of arsenic that exceed RIDEM RDEC were found at the OFFTA site and indicate that similar conditions may be present at the nearby SWOS site. It is highly unlikely that any arsenic detected in SWOS site soils or groundwater is due to a release of contamination since there is no history of releases involving arsenic at the site.

If asbestos, lead paint, and contaminated building materials and fixtures abatement and removal activities were carried out properly, there is no apparent threat of contamination at the SWOS site from these materials. However, during site records review, no record confirming the outcome of these abatement and removal activities was found. Therefore, it is recommended that in order to ensure the safety of workers and building occupants, a limited soil investigation should be carried out to evaluate the area and confirm that these materials were removed from the site. The soil should be tested for asbestos, 13 priority pollutant metals, including arsenic, pesticides, and PCB's.

It is also recommended that at least three groundwater monitoring wells be installed and groundwater samples be collected to confirm conclusions made regarding the absence of groundwater contamination from the adjacent OFFTA site. Groundwater samples should be analyzed for volatile organic compounds (VOC's), 13 priority pollutant metals (including arsenic) and petroleum. Detection of significant contamination in either groundwater or soil would

warrant further action to define the extent of contamination and evaluate human health risks during construction and operation of the SWOS Site.

FIGURES



SITE LOCUS

FIGURE 1-1

SWOS BUILDING SITE
 PHASE I ENVIRONMENTAL SITE ASSESSMENT

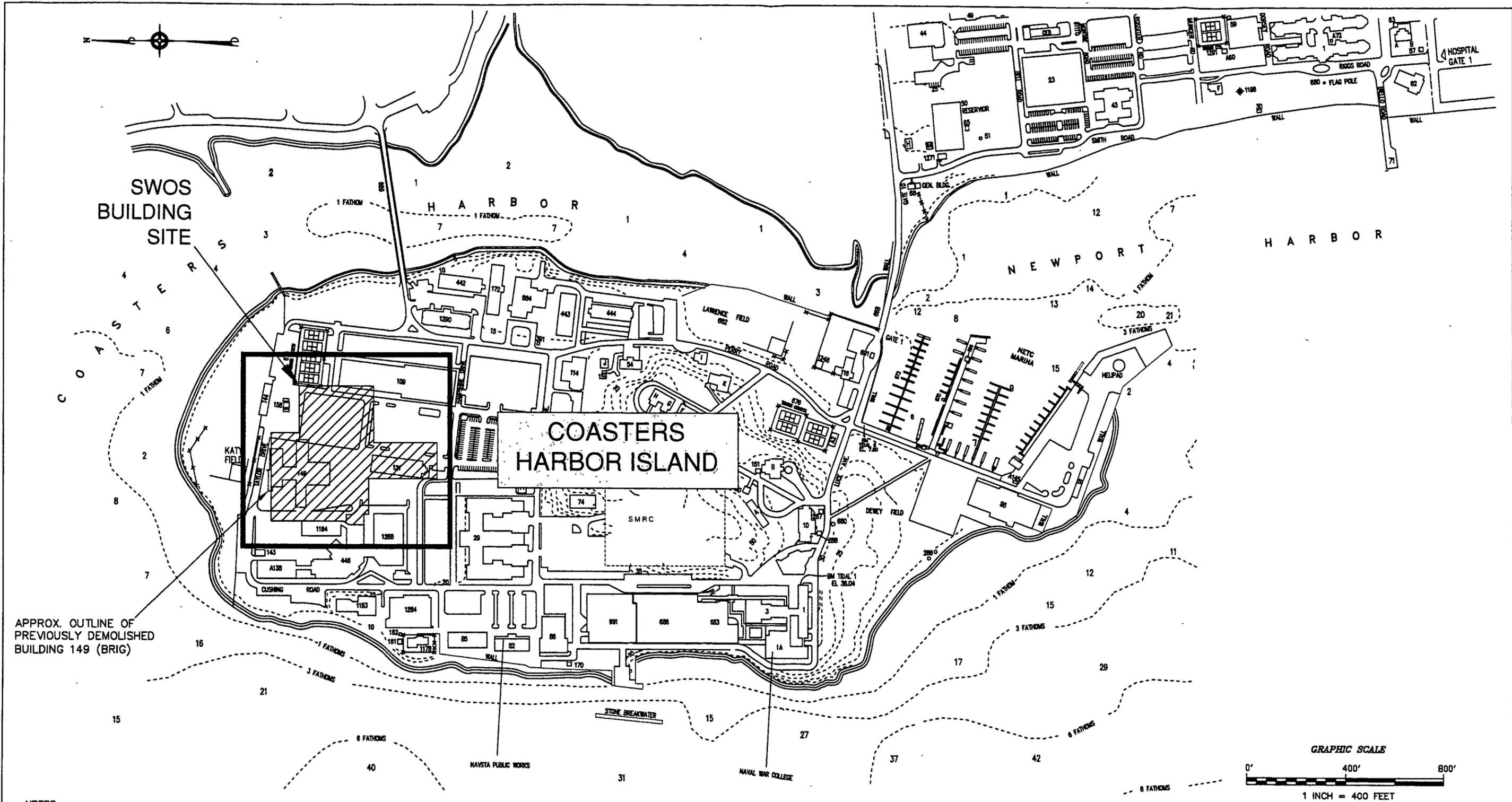
NAVSTA NEWPORT - NEWPORT, RHODE ISLAND

DRAWN BY:	D. W. MACDOUGALL	REV.:	0
CHECKED BY:	J. MEYER	DATE:	JULY 3, 2001
SCALE:	AS NOTED	ACAD NAME:	DWG\4058\0300\FIG_1-1.DWG



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NOTES:
 BASE MAP FROM PLAN BY DEPT. OF NAVY, "COASTERS HARBOR ISLAND AND NAVAL HOSPITAL EXISTING CONDITIONS MAP", DATED: 9/88, NETC DWG NO.: 31058-307, CODE ID NO.: 80091, SCALE: 1"=200'.

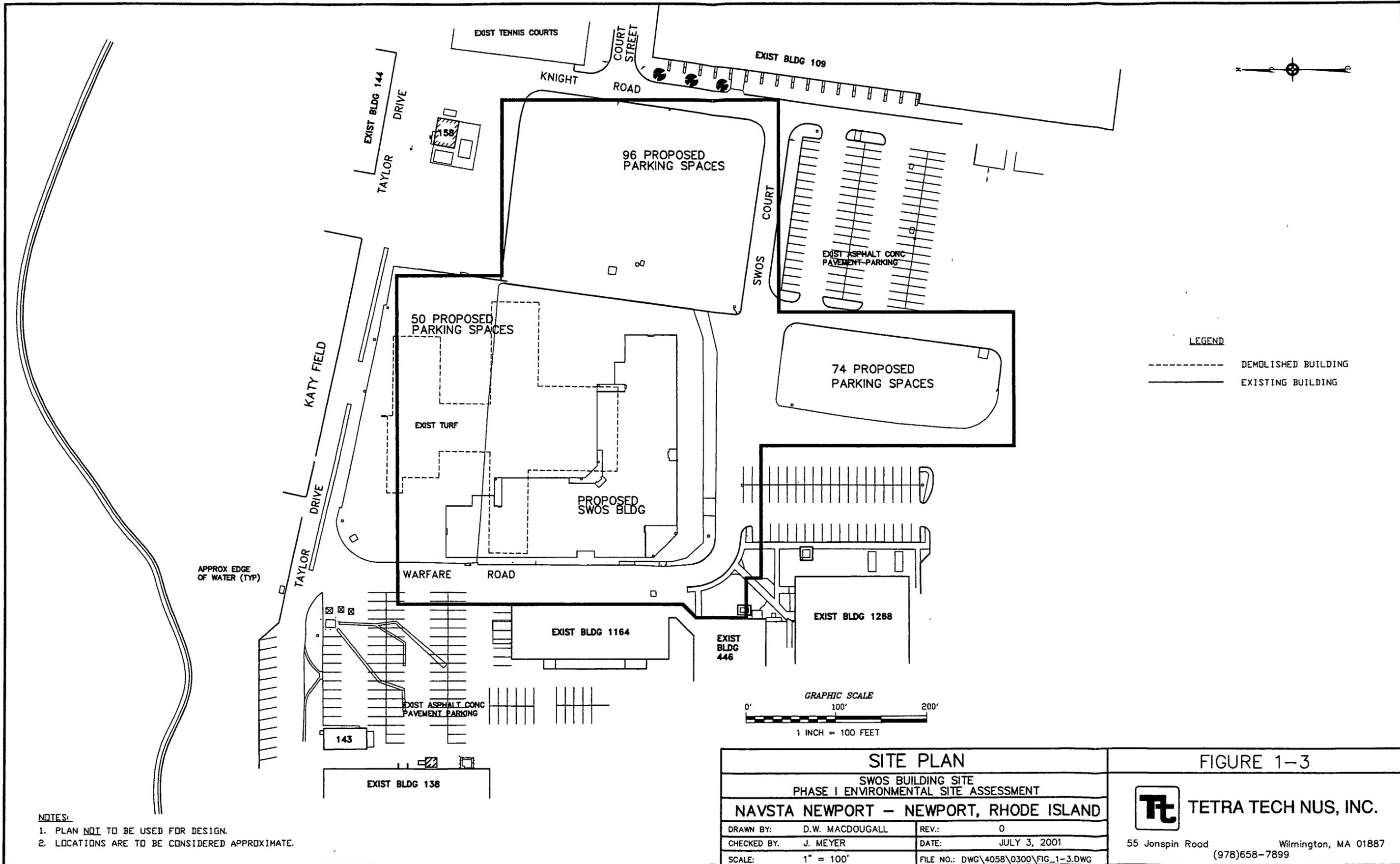
SITE LOCATION MAP	
SWOS BUILDING SITE LOCATION PHASE I ENVIRONMENTAL SITE ASSESSMENT	
NAVSTA NEWPORT - NEWPORT, RHODE ISLAND	
DRAWN BY: D.W. MACDOUGALL	REV.: 0
CHECKED BY: J. MEYER	DATE: JULY 3, 2001
SCALE: 1" = 400'	FILE NO.: DWG\4058\0300\FIG_1-2.DWG

FIGURE 1-2

Tt TETRA TECH NUS, INC.

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NARRAGANSETT BAY



LEGEND

- DEMOLISHED BUILDING
- EXISTING BUILDING

- NOTES:**
1. PLAN NOT TO BE USED FOR DESIGN.
 2. LOCATIONS ARE TO BE CONSIDERED APPROXIMATE.

SITE PLAN		
SWOS BUILDING SITE PHASE I ENVIRONMENTAL SITE ASSESSMENT		
NAVSTA NEWPORT – NEWPORT, RHODE ISLAND		
DRAWN BY:	D.W. MACDOUGALL	REV.: 0
CHECKED BY:	J. MEYER	DATE: JULY 3, 2001
SCALE:	1" = 100'	FILE NO.: DWG\4058\0300\FIG_1-3.DWG

FIGURE 1-3

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