

U.S. DEPARTMENT OF THE NAVY
INSTALLATION RESTORATION PROGRAM

COMMUNITY RELATIONS
PLAN

NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION
TRENTON, NEW JERSEY

DECEMBER, 1993

TABLE OF CONTENTS
NAWCAD TRENTON - DRAFT COMMUNITY RELATIONS PLAN

<u>SECTION</u>	<u>PAGE</u>
List of Acronyms	3
Introduction	4
Community Relations Plan Overview	4
For More Information	6
The RI/FS Program	8
NAWCAD Trenton Background Information	10
General Facility Description	10
NAWCAD Trenton History	11
Environmental Setting	12
Previous Environmental Investigations and Site Identification	13
Description of Sites and IR History	14
Community Background Information	21
Community Background	21
Economic Profile	21
Political Profile	21
General Concerns and Interests	21
Chronology of Past Community Involvement	22
Key Community Concerns	24
Objectives of the Community Relations Plan	26
Community Relations Activities	28
Required Activities	28
Suggested Activities	31
Future Activities	31

TABLE OF CONTENTS
NAWCAD TRENTON - DRAFT COMMUNITY RELATIONS PLAN

<u>TABLES</u>		<u>PAGE</u>
Table 1	The RI/FS Process	34
Table 2	Summary of Sites	37
 <u>FIGURES</u>		
Figure 1	NAWCAD Trenton Location Plan	39
Figure 2	NAWCAD Trenton Site Plan	40
 <u>APPENDICES</u>		
Appendix A	Site Plans-NAWCAD RI/FS Sites and Study Areas	A-1
Appendix B	Technical Review Committee Participants . . .	B-1
Appendix C	Community Interview Questionnaire	C-1
Appendix D	Interview Participants	D-1
Appendix E	Meeting Locations and Information Repository	
	Document Index	E-1
Appendix F	Mailing List	F-1

LIST OF ACRONYMS

BCP BRAC Clean-up Plan

BRAC Base Realignment and Closure Act of 1988 & 1990

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CRP Community Relations Plan

DERA Defense Environmental Restoration Account

DERP Defense Environmental Restoration Program

EBS Environmental Baseline Survey

EPA Environmental Protection Agency

IRP Installation Restoration Program

NPL National Priorities List

OU Operational Unit

PA Preliminary Assessment

RA Remedial Action

RCRA Resource Conservation and Recovery Act

RD Remedial Design

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

UST Underground Storage Tank

INTRODUCTION

COMMUNITY RELATIONS PLAN OVERVIEW

The objective of this Community Relations Plan (CRP) is to establish procedures to guide the flow of information from the U.S. Navy to federal, state, and local government officials, interested groups, and nearby residents relative to environmental investigation and clean-up activities at the Naval Air Warfare Center Aircraft Division Trenton (NAWCADTRENTON), Ewing Township, New Jersey.

The community relations program outlined in this document is intended to keep local government officials and residents informed of environmental investigations at NAWCAD Trenton and provide opportunities for involvement in the environmental investigation and clean-up process. Most local government officials and interested citizens express an interest in being updated on the findings of the environmental investigations. Therefore, this CRP has been developed to assist the Navy in implementing a community relations program that is tailored to the concerns and needs of these interested parties.

In general, local community interest in environmental activities at NAWCAD Trenton has been variable. While the majority of local residents remain interested in NAWCAD Trenton environmental activities, this interest has not manifested itself in widespread community participation. However, select groups continue to maintain a generally high level of interest in base reuse and associated environmental activities at NAWCAD Trenton. The Community Relations Plan will be amended to include interviews conducted with local and state officials and interested residents of Ewing Township and West Trenton.

This CRP presents a summary of past and current community concerns with regard to areas of known or potential environmental contamination at NAWCAD Trenton. A list of required and suggested community relations activities is provided on the basis of these concerns.

The following information is included in this Community Relations Plan:

- * Description of the RI/FS Process;
- * NAWCAD Trenton Background Information;
- * Community Background Information;
- * Development of Community Relations Plan; and
- * Future Community Relations Activities.

FOR MORE INFORMATION

Four key contacts for the Navy, the U.S. Environmental Protection Agency (EPA) Region II, and the New Jersey Department of Environmental Protection and Energy (NJDEPE) are listed below and may be contacted for further information regarding this plan or other environmental activities at NAWCAD Trenton.

U.S. Department of the Navy

LT Scott Bernotas
Environmental Officer
Naval Air Warfare Center Aircraft Division
1440 Parkway Avenue
P.O. Box 7176
Trenton, New Jersey 08628-0176
(609) 538-6986

Mr. Barry Barclay
Base Transition Coordinator
Naval Air Warfare Center Aircraft Division
1440 Parkway Avenue
P.O. Box 7176
Trenton, New Jersey 08628-0176
(609) 538-6744

U.S. Environmental Protection Agency

Mr. Joseph Bergstein
Base Clean-up Team Member
U.S. EPA Region II
Environmental Impacts Branch
26 Federal Plaza
Room 1108
New York, New York 10278
(212) 264-6677

New Jersey Department of Environmental Protection & Energy

Ms. Donna Gaffigan
Base Clean-up Team Member
New Jersey Dept. of Environmental Protection and Energy
Bureau of Federal Case Management
401 East State Street
Trenton, New Jersey 08625
(609) 633-1455

THE RI/FS PROGRAM

Activities conducted at NAWCAD Trenton in the past have involved the use and storage of hazardous materials. As such, there have been a number of potential areas of environmental contamination identified throughout NAWCAD Trenton property.

The United States Navy is conducting an investigation to address environmental issues at NAWCAD Trenton. This investigation, called a Remedial Investigation/Feasibility Study (RI/FS), is being conducted as part of the Navy's Installation Restoration (IR) Program. The purpose of the IR Program is to identify, assess, clean-up, or control contamination from past disposal operations and spills on Navy properties.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) established a series of programs to do the type of work described above. One of these programs is called the Defense Environmental Restoration Program (DERP). The Navy IR Program is one of the elements of DERP. It should be emphasized that the IR Program and other programs which fall under CERCLA are intended to address past operations and disposal practices. Current practices are governed by a different set of laws.

The RI/FS is funded and managed by the Northern Division of the Naval Facilities Engineering Command (NORTHNAVFAC) located in Philadelphia, Pennsylvania. Field work and consulting services are contracted by NORTHNAVFAC to International Technology Inc., located in Edison, New Jersey. During the RI/FS, Navy and contractor personnel will be installing monitoring wells, taking environmental samples, and digging exploratory trenches. Results of the sampling and analysis will be used to generate a number of reports. Ultimately, these reports will be used in the decision making process that will determine the final clean-up strategy for the NAWCAD Trenton facility.

The first step in the RI/FS process is typically completion of a Preliminary Assessment and/or a Site Inspection report. These investigations are conducted to determine if a suspected area of contamination is serious enough (e.g. poses potential risk) to warrant further action and/or investigation. The Preliminary Assessment/Site Inspection step (PA/SI) conducted at NAWCAD Trenton consisted of an Initial Assessment Study (IAS) completed at the request of the Navy in 1986, and a Site Inspection completed in 1990 .

The next step in the RI/FS process is completion of field investigations followed by preparation of both Remedial Investigation (RI) and Feasibility Study (FS) reports. The Remedial Investigation report describes the nature and extent of site contamination and potential risks associated with current site use. The Feasibility Study report examines and evaluates various technologies and methods for performing a site clean-up, if it is determined that clean-up is required.

Following completion of the RI/FS reports, a Proposed Plan is developed. The Proposed Plan summarizes the key results of the environmental studies, describes the choices being considered for clean-up or remediation of the site, and identifies the Navy's preferred alternative(s) to resolve the environmental concern. The Proposed Plan is submitted to the public for thirty (30) days for public review/comment.

After the 30 day public comment period, a Record of Decision (ROD) is developed. The ROD addresses all comments received during the public comment period, identifies the selected remedial action method, and documents the rationale used in selecting the method.

Once a ROD has been developed and approved, the Remedial Design can be completed. The actual clean-up, or Remedial Action, can begin as soon as the Remedial Design has been completed.

The above RI/FS processes are summarized, along with other elements of the IRP, in Table 1.

NAWCAD TRENTON BACKGROUND INFORMATION

GENERAL FACILITY DESCRIPTION

The NAWCAD Trenton facility is located on a 67-acre in Ewing Township, in the west-central portion of Mercer County, New Jersey. The center is situated approximately five miles northwest of the center of Trenton. The Delaware River is located approximately two miles to the south-southwest. The communities of Ewingville and West Trenton are within a one mile radius of the facility. Other nearby communities include Somerset, Scudders Falls, Wilburtha, and Fernwood (See Figure 1).

Locally, the Mercer County Airport borders the northern half of the NAWCAD Trenton property. A Conrail right-of-way borders the site on the east and separates the administration building and storage hangar from the rest of the facility. Both commercial and agricultural properties adjoin NAWCAD Trenton to the north and east. The southeastern area of the property is bordered by Parkway Avenue. Located across Parkway Avenue is the General Motors Corporation, Inland Fisher Guide Division, Trenton Plant, which manufactures light-weight metal parts. Predominantly residential and light industrial areas are located southwest of NAWCAD Trenton, and a large portion of the land between the Delaware River and these areas is owned by the State of New Jersey. Also located in the NAWCAD Trenton vicinity are a state police headquarters, a school for the deaf, a hospital, several parks, and a golf course.

Today, NAWCAD Trenton remains an active site of the Naval Air Systems Command and employs a work force of mostly civilian employees and several Naval officers. The facility contains three operating departments which include: Operations and Plant Engineering, Measurement and Information Systems, and Propulsion Technology/Project Engineering. Figure 2 is a map of the NAWCAD Trenton facility.

NAWCAD TRENTON HISTORY

The NAWCAD Trenton facility evolved from the Aeronautical Engine Laboratory (AEL), which was created in 1915. The AEL was originally located at the Washington Navy Yard, and conducted testing and experimentation on aircraft power plants. Several changes concerning the facility occurred over the next several years, and are summarized below.

- 1915:** Aeronautical Engine Laboratory (AEL) created at Washington Navy Yard.
- 1924:** AEL moved to Philadelphia and became part of Naval Aircraft Factory (NAF).
- 1943:** NAF Mercer Field, Trenton, created to build military aircraft.
- 1946:** NAF Mercer was declared surplus; facility retained to use as Aeronautical Turbine Laboratory (ATL).
- 1949:** Land in Trenton obtained by Navy from General Motors.
- 1951:** Naval Air Turbine Test Station (NATTS) commissioned on Navy-owned property at Mercer Field and old General Motors land.
- 1967:** ATL at NATTS and AEL in Philadelphia initiate merger to become Naval Air Propulsion Test Center.
- 1975:** Merger is completed, pulling the two activities under one command.
- 1977:** Facility is designated Naval Air Propulsion Center Trenton (NAPC Trenton).
- 1992:** Under Department of Defense restructuring, Activity is designated Naval Air Warfare Center, Aircraft Division.
- 1993:** NAWCAD Trenton is designated for closure under the Base Realignment and Closure (BRAC) Act of 1993.

NAWCAD Trenton depends heavily on ethylene glycol and trichloroethylene (TCE) as heat exchange mediums for air and fuel used for engine testing. The facility has a 25,000 gallon TCE piping system with associated valves, pumps, and heat exchangers. The identification of TCE as a potential health hazard in the late 1970s prompted studies by in-house personnel and by contract consultants to identify a substitute for TCE, but no suitable substitute was found.

ENVIRONMENTAL SETTING

ADJACENT LAND USES

NAWCAD Trenton lies in Mercer County, just five (5) miles from the center of the city of Trenton. The Mercer County Airport borders the northern half of the activity. North of the airport is a U.S. Naval Reserve unit. A Conrail right-of-way borders NAWCAD Trenton on the east and separates the administration building and storage hangar from the rest of the activity. Commercial and agricultural uses adjoin NAWCAD Trenton to the north and east.

Land on the southeastern side of NAWCAD Trenton is occupied by a General Motors Corporation plant which manufactures light-weight metal components. Light industrial and residential uses predominate farther southwest. Much of the land between these areas and the Delaware River (about 1/2 mile south and west of NAWCAD Trenton) is state-owned. New Jersey State Police Headquarters, a State farm, a State school for the deaf, and a State hospital are in the vicinity.

ADJACENT WATER BODIES AND RIVERS

The major water body within the NAWCAD Trenton study area is Gold Run. Gold Run is a non-tidal tributary of the Delaware River. The head of tide for the River is approximately four (4) miles downstream from the confluence of Gold Run and the Delaware River in the City of Trenton. Average flow of Gold Run is 2.0 square feet per second. Average depth is 3.5 inches, and average channel width is 10 feet.

Gold Run passes beneath the Delaware and Raritan Canal just prior to emptying into the Delaware River. Other waterbodies in the vicinity of the NAWCAD Trenton study area are the Delaware River, West Branch of the Shabakunk Creek, Ewing Creek, Jacobs Creek, and Reeders Creek. None are within the study area.

PREVIOUS ENVIRONMENTAL INVESTIGATIONS AND SITE IDENTIFICATIONS

A chronological summary of significant events and activities under the Navy IR Program at the Naval Air Warfare Center, Trenton Division is as follows:

September 1980 - U.S. Navy implemented the Navy Assessment and Control of Installation Pollutants (NACIP) Program through OPNAVNOTE 6240 Ser 45/733503. The purpose of the program was to identify, assess, and control contamination of the environment resulting from past hazardous materials and management operations.

May 1983 - U.S. Navy authorized the current IRP which conforms to the scope and purpose of CERCLA and National Oil and Hazardous Substances Pollution Contingency Plan. The Defense Environmental Restoration Account (DERA) was established by Congress to directly fund the IRP.

July 1985 - NACIP program was implemented at NAPC with the Initial Assessment Study (IAS) at NAPC Trenton.

May 1986 - IAS was completed recommending seven sites for further evaluation.

June 1986 - NJDEPE commented on IAS and requested further evaluation of the Barometric Well and Sludge Drying Beds.

August 1986 - Barometric Well and Sludge Drying Beds are included in the Confirmation Study for further evaluation as Sites 8 and 9 respectfully.

July 1986 - February 1990 - IRP Site Inspection (SI) was conducted at NAPC by IT Corp. for the U.S. Navy. All nine sites were recommended for further study.

August 1988 - USEPA informed by their contractor, Versar, Inc. that NAPC's Hazard Ranking Score was 30.46. A score of greater than 28.5 qualifies for inclusion on the National Priorities List (NPL).

February 1989 - Ethylene Glycol spill in the area of Site 4. Approximately 3,000 gallons are spilled. A POA was prepared by IT Corp. and included as part of current RI/FS.

May 1989 - NJDEPE informed by USEPA that NAPC would not be listed on the NPL. Original score was lowered after being Quality-checked by EPA contractor, MITRE.

February 1991 - Remedial Investigation initiated at NAWC with the preparation of the Plan of Action.

June 1991 - USEPA informs the Navy the IAS and SI had been reviewed and determined insufficient information existed to adequately rescore the site by HRS-II for inclusion on the NPL.

June 1991 - U.S. Navy established a Technical Review Committee (TRC).

August 12, 1991 - TRC meeting #1 convened.

September 1991 - The Navy provides USEPA with additional information so that the Site can be scored using the revised HRS2 scoring system.

April 1992 - RI fieldwork and community relations activities begin.

DESCRIPTION OF SITES AND HISTORY OF IR ACTIVITIES

Initial Assessment Study

The first phase of The IR Program is called the Preliminary Assessment or PA. The PA, formerly known as Initial Assessment Study (IAS), was conducted to identify any areas of environmental concern at the activity. No sampling was conducted in this study. The results of this study were released in May 1986 in a report entitled, "Initial Assessment Study of Naval Air Propulsion Center, Trenton, New Jersey." The study identified seven areas of potential concern which were recommended for further investigation. A description of each of the seven sites is provided in Chapter 3 of this plan. As with all reports generated under this program, a copy of the IAS is available at the information repository.

Site Inspection Study

The second phase of the IR Program is known as a Site Inspection or SI. The SI Study, was conducted by IT Corporation from October 1988 to April 1989, and the results were presented in a report entitled "Final Site Inspection Report for Naval Air Propulsion Center, Trenton, New Jersey." The purpose of this investigation was to confirm the presence or absence of contamination in soils and groundwater at the seven areas of

concern. At the request of The New Jersey Department of Environmental Protection, two additional areas of concern were added to the seven areas identified in the PA. The SI report was submitted to both the NJDEP and USEPA for review and comment. Both agencies approved the SI Report.

During the SI, a total of twenty-five (25) soil borings, six (6) hand auger borings, and twenty-seven (27) wells were completed. The sampling results are included in the Site Inspection report. All of the sites were recommended for further study except Site 2, the Fire Fighting Area. Site 2 was not considered for additional study due to the low levels of contaminant concentrations detected in soil samples obtained from this site.

Results of the Phase I Remedial Investigation

Low levels of Volatile organic Compounds were known to exist in the shallow part of the aquifer (groundwater). Preliminary results from sampling done during the summer of 1992 show that volatile organic compounds are also found in the deeper parts of the aquifer. The concentrations were much higher than found in the shallower parts of the aquifer. Because the compounds tend to sink in groundwater, it became apparent that the contaminants could exist at greater depth. Therefore, a second phase was added to the Navy investigation (hereafter referred to as Phase II RI). Fieldwork for this phase of the investigation began in the summer of 1993. During this phase, the Navy will install deeper monitoring wells and collect additional groundwater samples. Of particular interest, the Navy decided to take a proactive position and sampled nearby domestic wells as a precautionary measure in December 1992 (see page 24). No domestic wells were affected by the source area on Navy property. The results can be found in the "Installation Restoration Program, Final Report, Off-Site Well Sampling and Analysis," (January 1993); IT Corp.) a copy of which is located in the information repository.

Description of Sites

The following sections describe the past and present uses of the nine (9) sites under investigation. Findings from the IAS and SI are discussed, as well as the proposed activities for the Remedial Investigation. These sites are summarized in Table 2.

Site 1: Brine Handling Area and West End Drainage Ditch

The brine handling area refers to an area used to handle and store Trichloroethylene (TCE). It is rectangular in shape and measures approximately 150 feet by 300 feet (see Appendix A).

Since 1955, an estimated 500 gallons of TCE and 10,000 gallons of Ethylene Glycol have leaked from piping that runs throughout this site. These chemicals are used for heat exchange and coolant mediums in the Propulsion System Test Facility. During the past several years, each individual fitting in these systems have been overhauled or replaced resulting in a virtual elimination of leakage from this source.

The analytical results of the Site Inspection indicate low levels of Volatile Organic Compounds (VOC's) still exist in the unsaturated soil zone; however, in all cases the detected concentrations were far below the NJDEPE action limits.

The shallow groundwater table in Site 1 contains elevated levels of chlorinated organics which exceeded the combined NJDEPE action and Safe Drinking Water Act (SDWA) criteria. The sources of groundwater contamination in this area are not only spills and discharges which occurred in Site 1, but spills/discharges that occurred at Site 4 which lies just upgradient of Site 1.

Groundwater investigation of this site during the RI will focus on the bedrock system. Additional soil borings will also be placed to confirm soil results from the SI.

This site also includes the West End Drainage System which consists of the outfall area of the West End Drainage Pipe which connects to the Trenton City storm sewer under Parkway Avenue. The surface run-off from the Brine Handling Area (Site 1) and from the northern side of Building #41 (Site 4) flows into the West End Drainage Ditch which then discharges its sediment/water load to the Parkway Avenue storm sewer.

Site 2: Fire Fighting Area

Site 2 is located at the northwest corner of the NAWCAD Trenton baseball field and the southwest corner of the Drum Storage Area (see Appendix A). This is the former location of a containment ring which was periodically filled with flammable material and used to train personnel in fire fighting. The exercises which occurred in this area a number of years ago have had only a minor impact on existing soils based on the soil sample results from

the SI. Groundwater was not encountered in the overburden well installed during the SI. However, a bedrock well will be installed as part of the RI.

The soils below the area where the oil containment ring was located contain low-level metal and volatile organic compounds. The analytical results did not indicate any PCBs and Base Neutral Acids (BNAs) contamination. Metals concentrations are, for the most part, below the NJDEPE action levels. The metals detected are most likely residues from the waste oils which were burned in the ring or which splashed over the sides of the ring. The possibility also exists that the metals concentrations may be representative of naturally-occurring metals in the soils of this area. Since a background soil sample was not obtained during the site inspection, a comparison to background conditions was not made. During the upcoming RI, several background samples are planned throughout the activity. Statistical methods will also be used to make comparisons to background.

Site 3: Sludge Disposal Area

Site 3 is located at the present site of the NAWC baseball fields (see Appendix A). The area covers up to 20,000 feet and was used as a disposal area for sludges from the Industrial Wastewater Treatment Plant (IWTP). Two different types of sludge disposal activities occur at this site. The first was a deposition of an aqueous sludge behind a bermed area (sludge drying). In the second case, dry (or dewatered) sludge was buried in trenches. The previous site investigation focused on two objectives: (1) to locate the suspected buried sludge trenches; and, (2) to assess the extent of contamination (if any) from sludge disposal operations.

Suspected Trench Area

The soils in this area have been impacted down to the groundwater table, two (2) to seven (7) feet below grade. Metals are the only contaminants of concern and are believed to have been contained in the sludge residue that was disposed of in this area. The concentrations of antimony, arsenic, beryllium, cadmium, chromium, copper, mercury, silver, vanadium, and zinc in the soil are higher than the NJDEPE action levels. The metals concentrations detected in the near-surface sample warrants further assessment, as discussed above, to determine if they are typical of area soils (background) or the result of contamination from outside sources.

The groundwater below and downgradient of the suspected locations of the sludge disposal trenches has been impacted. Metals and chlorinated organic concentrations exceed both NJDEPE action levels.

Sludge Drying Area

The sludge drying operations may have left low concentrations of residual metals in the soils and the shallow groundwater table. The concentrations of metals in the soil samples from this area were fairly consistent; and, in most cases, were below the NJDEPE action limits.

Those metals which exceeded limits may be naturally occurring; therefore, as with Site 2, a statistical comparison to background concentrations will be accomplished here. This same approach will be used for groundwater during this RI.

Site 4: Building #41 Fuel Lines

This site is immediately north of Building #41 (see Appendix A). The soils and groundwater have been slightly impacted by leaks from overhead fuel lines in this area. Volatile organics were the only compounds analyzed for at this location during the SI, and the levels detected in soils were far below the NJDEPE action level, while the groundwater concentrations were above action criteria. The concentrations of volatiles in the soil may represent either volatilization from the shallow groundwater table, which has higher concentrations of volatiles, or residual product from the surface spill. The VOC levels indicate that additional soil sampling to locate "hot spots" is unnecessary.

Spills of ethylene glycol (EG) have also occurred in Site 4 during the operation and filling of the EG system located between Buildings #41 and #43. Analysis of soil and groundwater samples for EG was included in the Site Investigations Study; however, no EG was detected. A separate plan of action was prepared to address the spills. The scope of work presented in the plan has been included in the RI sampling effort.

Site 5: Building #42 Fuel Lines

Site 5 is located immediately east of Building #42 (see Appendix A). An undetermined amount of Jet Fuel spilled here sometime in 1965. A conservative estimate puts the upper limit of the volume of the spill at 900 gallons. At the time of the spill, the area was not paved.

The groundwater contamination in this area has been inconsistent. The only contaminants detected in the groundwater at Site 5 are volatile organics. The groundwater sample from monitoring well MW-17S, located downgradient of the fuel lines, contained volatile organics in concentrations above the NJDEPE action criteria during the first round of sampling of the SI. These contaminants were absent in the subsequent second sampling round. During the RI, an additional bedrock monitoring well will be placed at this location to further assess the soils and groundwater here.

Site 6: Oil Contamination

Site 6 is located approximately forty (40) feet northwest of Building #60 (see Appendix A). The site was discovered accidentally by a private contractor in 1985. An exploratory soil boring revealed a layer of oil contamination on top of the groundwater at a depth of 18 feet. The suspected source is two underground storage tanks that have since been removed. Low concentrations of metals were found in the soil and groundwater samples during the SI; other contaminants were found to be either nondetectable or significantly below the action criteria. As with Site 3, contaminant concentrations will be compared to uncontaminated background concentrations during the RI.

Site 7: MOGAS Area

This is the current site of three underground storage tanks. The tanks are no longer in service but had been used until 1978 to store motor oil and gasoline (hence the term MOGAS). Results of the SI indicated that the soil has not been impacted by the tanks. Additionally, these tanks have already been removed under the Navy's Underground Storage Tank (UST) Program (separate from the IR Program). It is expected that once removal and clean-up has occurred under the UST Program, this site will be dropped from the IR Program. Nevertheless, the Navy will install a shallow bedrock well and collect soil samples at this site during the RI. The data obtained will confirm the SI findings, as well as serve to assess overall site conditions.

Site 8: Barometric Well

The barometric well is not actually a well. It is a twelve (12) foot inner diameter sump that was constructed in 1958 to collect and control discharges from floor drains, cooling water return flow, utility drains, and the engine test cells. From the barometric sump, the water is pumped to the industrial wastewater treatment plant.

The barometric well was not identified as a potential source during the IAS; it was identified by the NJDEPE as a potential area-of-concern because of the possible outflow of contaminated water which drains into the well. During the SI, bedrock well BRP-1 was constructed near this site to obtain information on groundwater quality in the bedrock. Results showed concentrations of volatile organics which exceeded the applicable groundwater quality criteria.

It is unlikely that contents of the well (sump) could leak into the groundwater because the water level in the barometric well is always lower than the water table; if anything, water from the aquifer would tend to leak into the barometric sump. It is more likely that the contamination seen in here is due to contaminants migrating through the overburden from another area or, perhaps from underground piping leading to the barometric well that may have leaked. During the RI, two additional bedrock wells will be installed in this area to get a better understanding of the site.

Site 9: Former Sludge Drying Beds

The natural soils located below the former sludge beds were lightly impacted by metals and volatile organics possibly from leachate from the overlying sludges. The analytical results for the soil samples indicate that select metals such as cadmium, antimony, and beryllium slightly exceeded the NJDEPE action levels.

The volatile organics which probably were in the sludges at the time of their deposition have volatilized. The presence of the metals does not represent a significant health risk due to a combination of low migration potential, existing concentration levels, and virtually zero exposure to the public. It is likely that much of the remaining metals are bound to the silt and clay particles which reduce their mobility.

Groundwater results indicate leachate from the sludge drying operations has impacted local groundwater quality. Select metals such as cadmium, chromium, and lead were found in concentrations above the NJDEPE action criteria.

COMMUNITY BACKGROUND INFORMATION

ECONOMIC BACKGROUND

The area surrounding the Naval Air Warfare Center Aircraft Division, Trenton, Ewing Township is dominated by single-family dwellings and small businesses. Located within the 15.1 square mile township, and on the immediate boundaries of NAWCAD Trenton, are the General Motors Corporation, Inland Fisher Guide Plant to the southeast and the Mercer County Airport to the north. Population of Ewing Township at the 1990 census was estimated to be 34,185. A large majority of homes and businesses within an one-mile radius of the facility are supplied with public water. Through a comprehensive well survey, done in 1992, eighty-one (81) private wells were identified.

ECONOMIC PROFILE

The average annual income of Ewing Township residents is \$18,102. As of 1993, the General Motors Corporation, Inland Fisher Guide Plant has been slated for closure. This action will affect 2,500-plus jobs. In addition, NAWCAD Trenton was designated for closure which will mean the loss of approximately 680 jobs within Ewing Township.

POLITICAL PROFILE

The Ewing Township government structure is headed by an elected mayor supported by council members. The township has a manager who handles the day-to-day business of the community.

GENERAL CONCERNS AND INTERESTS

The area of greatest concern at present in Ewing Township is the impending dispersement of Naval property at NAWCAD Trenton. This interest has manifested itself in the development of a local Base Reuse Committee. While many local officials and nearby residents express an interest and concern in environmental affairs at NAWCAD Trenton, these concerns are generally superseded by the greater desire to participate in the formulation of a plan for reuse of the land and buildings present at NAWCAD Trenton.

Regarding the contamination found at NAWCAD Trenton, the greatest concern of the nearby residents is whether the contamination is migrating off-base. The Navy has sampled wells in the local community and has found no evidence that the contaminants found at NAWCAD Trenton have migrated into nearby, off-base, residential wells. Further off-site sampling is scheduled for the future.

CHRONOLOGY OF PAST COMMUNITY INVOLVEMENT

Public Notification of the RI/FS

The NAWCAD Trenton Public Affairs office placed a newspaper advertisement in the Trenton Times on 8 April 1992. The advertisement briefly described the Navy IR Program and provided a point of contact for questions.

Establishment of the Information Repository

An information repository has been created as part of the Navy community relations efforts. The repository contains documents related to the technical and managerial activities under the Navy IR Program. The repository is located at the Ewing Township branch of the Mercer County Library at 61 Scotch Road.

In order to allow maximum availability to the public, documents are "For Reference only" and cannot be removed from the library. Photocopying of documents is permitted.

The Technical Review Committee

The Technical Review Committee (TRC) is a group consisting of state, local, and federal officials and; often, personnel retained from private engineering consulting firms. See Appendix B. It may also include other interested parties as determined by the NAWCAD Trenton Commanding officer. The committee was established to facilitate communication and coordination among the members concerning activities conducted at NAWCAD Trenton. The members review and comment on proposed activities with respect to the Navy's Installation Restoration Program (IRP) at NAWCAD Trenton. The members will coordinate technical review procedures and schedules to be followed by the Navy during the IRP at NAWCAD Trenton.

The members shall identify and review in a timely manner any federal and promulgated state standards, requirements, criteria, or limitations that are legally applicable or relevant and appropriate under the circumstances of the release or threatened release of a hazardous substance, pollutant, or contaminant.

Function of the TRC

The primary function of the TRC is to obtain coordinated direction for the IRP actions at NAWCAD Trenton through consultation with EPA, state, and local authorities and community representatives to resolve questions that arise from actual field activities or submitted documents. They shall recommend necessary changes based on continuing review of IRP actions at NAWCAD Trenton. All responses recommending changes or objecting to IRP actions or proposals must cite specific laws, standards, etc., and must propose viable alternatives. Individual committee members are responsible for ensuring that their input reflects the position of their respective parent organization.

Navy technical data, site inspection reports, remedial investigation reports, feasibility study reports, work plans, and other documents relating to Navy response actions shall be sent to committee members as they become available. Members will submit written reviews within forty-five (45) calendar days following receipt.

The Navy will respond to committee members within forty-five (45) days of receipt of their reviews, indicating its response to all comments.

The members of the Technical Review Committee are shown in Appendix A.

Well Search and Fact Sheet Distribution

As part of this RI, NJDEPE has requested that the Navy conduct a well search within an one-mile radius of NAWCAD Trenton. While some information concerning location of wells is available through computerized databases, the Navy has supplemented the available data with firsthand information.

On 1 and 2 July 1992, Navy representatives conducted a door-to-door survey. As part of the survey, a well search form with a prepaid mailer was distributed. Accompanying the form was a fact sheet that summarizes the Navy environmental program at NAWCAD Trenton.

In September 1993, during a TRC presentation, the results of the initial round of groundwater sampling was reported. During the same TRC meeting, concern was expressed regarding the safety of residential wells in the nearby community. As a result of this concern, a plan to sample the nearby community wells was formalized at a 8 October 1993 meeting. Newspaper articles and hand-delivered fact sheets were used to notify residents of the Navy's intent to sample residential wells in the area. Sampling of the wells occurred in December of 1993. None of the contaminants of concern were detected in the residential wells sampled. The results were hand-delivered to each residence where a well was sampled and again presented in a public meeting on 21 January 1993.

KEY COMMUNITY CONCERNS

Based on the impending dispersement of NAWCAD Trenton land and building resources, most local residents will be interested in base reuse issues and concerns. Previous experience has indicated that local government officials and interested citizens wish to be kept informed of key environmental activities.

During the development of the Community Relations Plan, consideration was given to the community's need for information, and it's interest and willingness to participate in the remedial process. The intent of this plan is to provide a means to keep the local communities informed of major environmental developments at NAWCAD Trenton, as well as to make them aware of the opportunities for involvement in the Superfund process. The overall goal of the Community Relations Plan is to establish procedures to guide the flow of information from the U.S. Navy to federal, state, and local government officials, interested groups and nearby residents relative to environmental investigation and clean-up activities at NAWCAD Trenton. It is anticipated that interest may rise and fall depending on the type and nature of information released by NAWCAD Trenton.

Specific issues which should be addressed by future community relations activities include the following:

- o Maintain a generally high level of participation in local community organizations which relate to base reuse issues. Since many persons interested in local base reuse issues are also concerned about environmental activities, attendance at reuse meetings serves both functions well. In the absence of the base

reuse group, a potential avenue of information dissemination to the local community would be participation in periodic "Town Meetings."

- o General Motors (GM) Corporation has conducted a number of environmental investigations at their facility due to past operation of two oil-skimming tanks located at their on-site wastewater treatment plant, four (4) solid waste management units along the eastern portion of the site, and a leaking Underground Storage Tank.

GM was issued a Discharge to Groundwater permit by the New Jersey Department of Environmental Protection in 1986; and, in compliance with the permit, installed a number of monitoring wells. Quarterly groundwater monitoring results in May 1988 indicated the presence of volatile organic compounds (most notably trichloroethylene (TCE) and vinyl chloride), and metals in exceedence of the permit limits. Additionally, surface water sampling was conducted in the drainage ditch under Parkway Avenue. Results also indicated the presence of TCE and vinyl chloride.

GM has installed additional monitoring wells and prepared several reports. One of these reports, entitled "Groundwater Impact Study," dated May 1991, implicated NAWCAD Trenton as being the source of TCE contamination on the GM site. While GM does not dispute being a contributor to groundwater contamination in the area, their latest reports implicate NAWCAD Trenton as being the sole contributor to TCE contamination. GM has filed a Federal Tort Claim against NAWCAD Trenton for the estimated cost of removing the TCE contamination.

- o The public must be made aware that the Navy is committed to investigating and cleaning up contaminated areas at NAWCAD Trenton. The Navy assumes full responsibility for investigating and remediating the contaminated areas of concern on its property. The public needs reassurance that the Navy will have adequate funding to complete environmental activities at NAWCAD Trenton.

OBJECTIVES OF THE COMMUNITY RELATIONS PLAN

Discussions with local officials and residents revealed that there is significant interest in NAWCAD Trenton base closure issues and moderate interest in environmental activities at NAWCAD Trenton. However, there is a great desire to be kept informed of site activities. The community relations program will be gauged according to the community's need for information, and its interest and willingness to participate in the remedial process. The community relations program will provide a means to keep the entire community informed of major developments at the site and aware of the opportunities for involvement in the Superfund process. The overall goal of the community relations program is to maintain an open line of communication between the Navy and affected community members.

The community relations program for NAWCAD Trenton has the following objectives:

- o ***To provide the public with accurate and timely information regarding site activities.*** It is important that the community be kept informed of the progress and major milestones of environmental activities at NAWCAD Trenton. The community relations program has been prepared to establish and promote regular communication between residents, town officials, and the Navy. Information given to the public should be accurate, up-to-date, and easily understandable in order to maximize the credibility of the Navy and other agencies involved in the program.

- o ***To inform community members about the IRP process and the roles of the Navy, EPA, NJDEPE, and the public.*** Efforts will be made to describe the steps involved in the remedial investigation and the criteria used to determine if, and how, a given site should be remediated. The Navy will encourage public comment throughout the RI/FS process. Additionally, information relative to the roles of the U.S. Navy, the EPA, and NJDEPE should be provided.

- o ***To support the interpretation of technical information.*** To support the interpretation of technical information. Concise and easily-understood information regarding the schedule of technical activities, their purpose, and

their outcome will be available to interested residents and officials.

- o ***To identify opportunities for public involvement.***
Explanations of how, when, and where the public may have input into the investigation and clean-up processes.

The above-stated objectives are consistent with Navy policy to:

- A. Be open, cooperative, and forthright with the public concerning environmental clean-up activities and make information on program activities available in a timely manner.
- B. Provide opportunities for and encourage public comment on documents and proposed activities and be responsive to comments.
- C. Establish a Restoration Advisory Board (RAB) at closing and realigning bases where property will be available for transfer to the community. Through this forum, the public may review progress and participate in the decision making process.

COMMUNITY RELATIONS ACTIVITIES

REQUIRED ACTIVITIES

To address requirements of the Navy Installation Restoration Program, as well as potential community concerns, the Navy encourages public involvement in environmental activities at NAWCAD Trenton. Activities which support public involvement include:

- o **Maintenance of an Information Repository:** The NAWCAD Trenton Information Repository is located in the reference area of the public library in Ewing Township, New Jersey. Information within the Information Repository is available for review during normal library hours (see Appendix E). Information within the Information Repository (including draft reports) is generally updated on a periodic basis by NAWCAD Trenton which maintains an inventory of all available documentation. Such an inventory is provided in Appendix E. The Information Repository will be maintained at the library for the duration of remedial activities at the base.

- o **Maintenance of an Administrative Record:** The NAWCAD Trenton Administrative Record is located in Building #34 at NAWCAD Trenton. Information within the Administrative Record is available for review during normal business hours, by appointment with the NAWCAD Trenton Public Affairs officer. Appendix E lists the contents of the Administrative Record.

- o **Public Notices:** To publicize community relations activities at NAWCAD Trenton, a notice will be placed within the local newspapers (Trenton Times, Trentonian) in advance of any public meetings (including Restoration Advisory Board Meetings). Public notices are required to announce the release of a Proposed Plan, the signing of a Record of Decision, and the availability of the Administrative Record file.

- o **Public Comment Period:** The public comment period is a defined period of time (typically thirty (30) days) within which public input is sought from interested persons on a Proposed Plan.

- o **The Proposed Plan:** Following completion of the RI and FS and after consultation with the EPA and NJDEPE, the Navy shall prepare a proposed plan for public review and comment. The proposed plan will present the preferred alternative(s) required to resolve the environmental concerns at any and all sites. More than one proposed plan will likely be presented and each need not be presented at the same time. The proposed plan is a significant public document; a formal announcement of its availability will be made by the Navy.

- o **Public Meeting and Public Comment Period:** The issuance of the proposed plan marks the beginning of a public comment period of at least thirty (30) days in duration. Approximately one week after issuing the plan, the Navy will hold a formal public meeting to discuss the preferred alternative(s). Advance notice of the meeting will be given by the Navy either through the local media, a public mailing, or both. The public is encouraged to review and comment on the proposed plan at the public meeting and throughout the public comment period. Please note that the public comment period begins on the day the plan is issued, and not on the day of the public meeting.

Following public comment, the Navy, NJDEPE, and EPA will confer as to the need for modification of proposed plan and on the response to public comment. Responses to each public comment will be documented in what is known as the responsiveness summary. Changes to the proposed plan, if required, will be completed by the Navy and approved by NJDEPE and the EPA.

- o **Revisions to the Community Relations Plan:** The Community Relations Plan is a dynamic document that is designed to meet the informational needs of the communities surrounding the Naval Air Warfare Center Aircraft Division, Trenton. Revisions will be made as the Installation Restoration process changes. Inputs from community members and the Technical Review Committee will play a part in any changes made to the plan.

- o **Additional Community Interviews:** Community interviews will be conducted to assess the needs of residents for additional information. Appendix C is a sample format for a community survey/interview. It is anticipated

that if any phase of the IR Program would impact the community, additional community comments would be solicited.

- o **Press Releases:** When major actions and meetings are anticipated, press releases will be made to local media.
- o **The Record of Decision:** A Record of Decision (ROD) is legally binding document that requires the Navy to implement the selected remedies described in the final proposed plan. Based on comments received from EPA, NJDEPE, and the public, the Navy will draft and submit to EPA and NJDEPE a draft ROD. In addition to the selected remedies, the draft ROD will include the responsiveness summary mentioned in the "Public Meeting and Public Comment Period" section. The parties will have thirty (30) days to formally select the remedy. If the parties agree on the draft ROD, EPA and NJDEPE shall co-sign the draft ROD and it shall be adopted by EPA, NJDEPE, and the Navy. Within ten (10) days of the receipt of the ROD with EPA's and NJDEPE's signatures, the Navy shall publish and issue the ROD to the public. The ROD must then be implemented.
- o **Responsiveness Summary:** The Responsiveness Summary is a written document that the Navy prepares at the conclusion of a public comment period. This document records the comments, both oral and written, received during the comment period and responds to each comment. It is included as an integral part of the Record of Decision for a given site or operable unit.
- o **Establishment and Maintenance of a Restoration Advisory Board:** The Department of Defense has directed that all bases slated for closure shall establish and maintain a Restoration Advisory Board (RAB). The directive further requires that where a Technical Review Committee (TRC) is already established, that TRC shall be converted into a RAB. The RAB's duties shall include review and evaluation of clean-up documents, identification of project requirements, identification of clean-up priorities, and act as a forum between government agencies and the public for discussion and exchange of clean-up information. The RAB shall consist of Navy, state, and USEPA representatives as

well as public representatives who reflect the diverse interests within the community. The RAB shall conduct regularly scheduled meetings, open to the public, at convenient times.

SUGGESTED ACTIVITIES

In order to inform the public of environmental activities at NAWCAD Trenton, several community relations actions may be taken as needed. These actions include:

- o ***Establish Points of Contact with Interested Groups/Organizations:*** The local government officials listed in Appendix F may be able to provide specific points of contact with any interested groups and/or organizations which are becoming interested in environmental affairs at NAWCAD Trenton. Cultivation of a single point-of-contact with such organizations provides a means with which to establish a consistent open line of communication.

- o ***Prepare and Distribute Fact Sheets/Updates.*** Development of relatively short, concise fact sheets allows rapid dissemination of information to interested individuals. This approach would allow distribution of needed information without being too lengthy or technical. Additionally, this method allows regular updates to be distributed in an efficient manner while fostering the sense that the Navy is "taking care of business."

FUTURE COMMUNITY RELATIONS ACTIVITIES

As previously mentioned, the community relations activities described in the "Chronology of Past Community Involvement" section have already taken place. Additional activities are required under the IR Program. The following sections describe the future community relations activities that will be implemented at NAWCAD Trenton.

Establishment of a Mailing List

A mailing list will be developed and maintained for use in distributing information to interested citizens and groups. The mailing list includes those households and businesses contacted during the well search (one mile radius), as well as other

interested parties in the local community. This mailing list will be attached as Appendix F to this plan upon completion of the list.

Periodic Fact Sheets

Fact sheets such as those distributed during the well search will be prepared periodically throughout the course of the IR Program. The fact sheets will be distributed via the mailing list and will summarize significant program milestones. Significant milestones will be considered, as a minimum, the following:

- (a) Completion of the Remedial Investigation,
- (b) Issuance of the RI report,
- (c) Completion of the Feasibility Study,
- (d) Issuance of the proposed plan,
- (e) Response to the public comment period,
- (f) Announcement of the Record of Decision,
- (g) Announcement of construction plans.

Public Meetings

In addition to the formal public meeting that coincide with the issuance of the proposed plan, the Navy intends to hold "workshop" type meetings in a less formal setting. These meetings are expected to occur both prior to and after the formal public meeting. Although no formal plans or date have been set as of this writing, it is expected that the workshop will differ from the traditional public meeting. In particular, workshops may be held on weekends. Also, formal presentations will be kept to a bare minimum. Instead, the focus will be to encourage communication between the general public and those persons familiar with the project and issues.

The Navy understands that there may be a downside to having a meeting which is too unstructured; however, the Navy intends to take an innovative approach with respect to its community relations efforts. Final decisions as to the format of any community meetings would be made by the NAWCAD Trenton Commanding officer with input from the Public Affairs officer and other support personnel. Additional community involvement activities will be initiated by the Navy based on the needs of the public.

Community Interviews and Surveys

The Navy will conduct interviews and surveys of selected community officials and residents in the local area. Those selected will represent, as best as possible, the diverse interests within the local community. Appendix D will list individual and groups that will be interviewed.

TABLE 1

The RI/FS Process

STEP	DESCRIPTION
Preliminary Assessment/ Site Investigation (PA/SI)	The RI/FS process begins with investigations which determine if a suspected area of environmental contamination poses enough potential risk to warrant further investigation. The PA/SI step conducted at NAWCAD Trenton consisted of an Initial Assessment Study (IAS) and Site Investigation (SI) of selected areas.
Remedial Investigation/Feasibility Study (RI/FS)	If a potential threat to human health and/or the environment is indicated by the PA/SI, a more detailed investigation - a Remedial Investigation (RI) - is conducted to assess the extent and nature of the contamination and the potential risks involved. In conjunction with the RI, a Feasibility Study (FS) report is prepared to examine and evaluate various techniques and methods for performing a site clean-up.

TABLE 1

The RI/FS Process

Proposed Plan (PP)	<p>The Proposed Plan summarizes the key results of the RI/FS, describes the remedial alternatives considered for the site, and identifies the Navy's preferred remedial alternative along with the rationale for this preference. The Proposed Plan is presented to the public to inform them of the Navy's preferred remedy and to solicit public comments. The public is encouraged to submit comments on the Proposed Plan during a 30-day comment period. During this comment period, the Navy is available to the public to answer questions concerning the PP and holds a public hearing to solicit verbal and written comments. Information which supports the Navy's rationale for selection of its preferred remedy is organized into an Administrative Record. Key documents within the Administrative Record are available for public review at Information Repositories (e.g., library, etc.) near the site.</p>
Record of Decision (ROD)	<p>The ROD is the formal document which presents all the remedial actions considered for the site and the selected remedy which will be implemented at the site. The ROD includes a responsiveness summary which presents public comments and community concerns on the PP and the Navy's responses to these comments.</p>
Remedial Design (RD)	<p>The remedial design phase of the RI/FS process includes preparation of engineering plans and specifications in sufficient detail so that a construction contractor may build or implement the chosen remedial action.</p>

TABLE 1

The RI/FS Process

Remedial Action (RA)	The remedial action is the method by which contamination is reduced, eliminated, or contained at the subject site.
----------------------	--------------------------------------------------------------------------------------------------------------------

TABLE 2
SUMMARY OF SITES

SITE	NAME	SIZE OF SITE	PRIMARY SUSPECTED CONTAMINANTS	REMARKS
1	Brine handling Area and West End Drainage Ditch	Brine Handling Area 150' x 300' (approx.) West End Ditch 25' x 400'	Trichloroethylene and its' breakdown products	Results from the Site Inspection indicate the presence of volatile organic compounds in the soil but they are below the NJDEPE action levels. The results from the overburden groundwater at Site 1 contains elevated levels of some metals and volatile organic compounds (VOC's).
2	Fire Fighting Area	Circular with a 50' diameter	Fuel Residues	Results from the SI indicate that the fire training exercises had only a minor impact on the soils in the area. Contaminant groups detected were volatile organics, base neutrals, and metals. All organic compounds detected were below NJDEPE action levels. Three metals were detected above action levels and the site is being further evaluated to determine if these levels are significantly above the background levels in the area.
3	Sludge Disposal Area	1000 sf (approx.)	Trace Metals	The SI results indicate soil contamination is limited to residual metals from the sludge and that the groundwater has been impacted by both metals and volatile organics.
4	Bldg. 41 Overhead Fuel Lines Leakage Area	50' x 50' (approx.)	Contaminants from fuel spills	The groundwater assessment at this site did indicate the presence of VOC's. It is thought that some of the contamination at Site 4 has migrated from Site 1 as well as from the actual fuel spillage at Site 4.
5	Bldg. 42 Overhead Fuel Lines Leakage Area	30' x 60' (approx.)	Contaminants from fuel spills	The soil investigation in the SI indicated impact on the soil in this area has resulted from the spills. The groundwater at the site indicated the presence of VOC's with the primary constituents being TCE and dichloroethylene.

TABLE 2
SUMMARY OF SITES

SITE	NAME	SIZE OF SITE	PRIMARY SUSPECTED CONTAMINANTS	REMARKS
6	Oil Contamination near Bldg. 34	150' x 100' (approx.)	Contaminants from Petroleum Leaks	SI results indicate metals above action levels in both the soil and groundwater in this area.
7	Former MOGAS Area	15' x 20' (approx.)	Volatile Organics and Trace Metals	Soil samples from three borings taken in the area indicated no evidence of contamination. Wells proposed in the area could not be installed since water was not encountered in the overburden.
8	Barometric Well	Circular with a 50' diameter (approx.)	Trichloroethylene and its' breakdown products	Groundwater samples from a bedrock well adjacent to the Barometric Well indicated the presence of VOC's. This indicated there may be an alternate source of contamination in this area that has not been identified or the contaminants are migrating from one of the other sites into this area.
9	Former Sludge Drying Beds	50' x 50' (approx.)	Trace Metals	Results of the SI sampling indicated only beryllium was detected above action levels in the soil. This could be naturally occurring or an indication of contamination from the sludge beds. Groundwater at the site revealed several metals above action levels. This could once again indicate contamination or background levels since the samples analyzed were unfiltered.

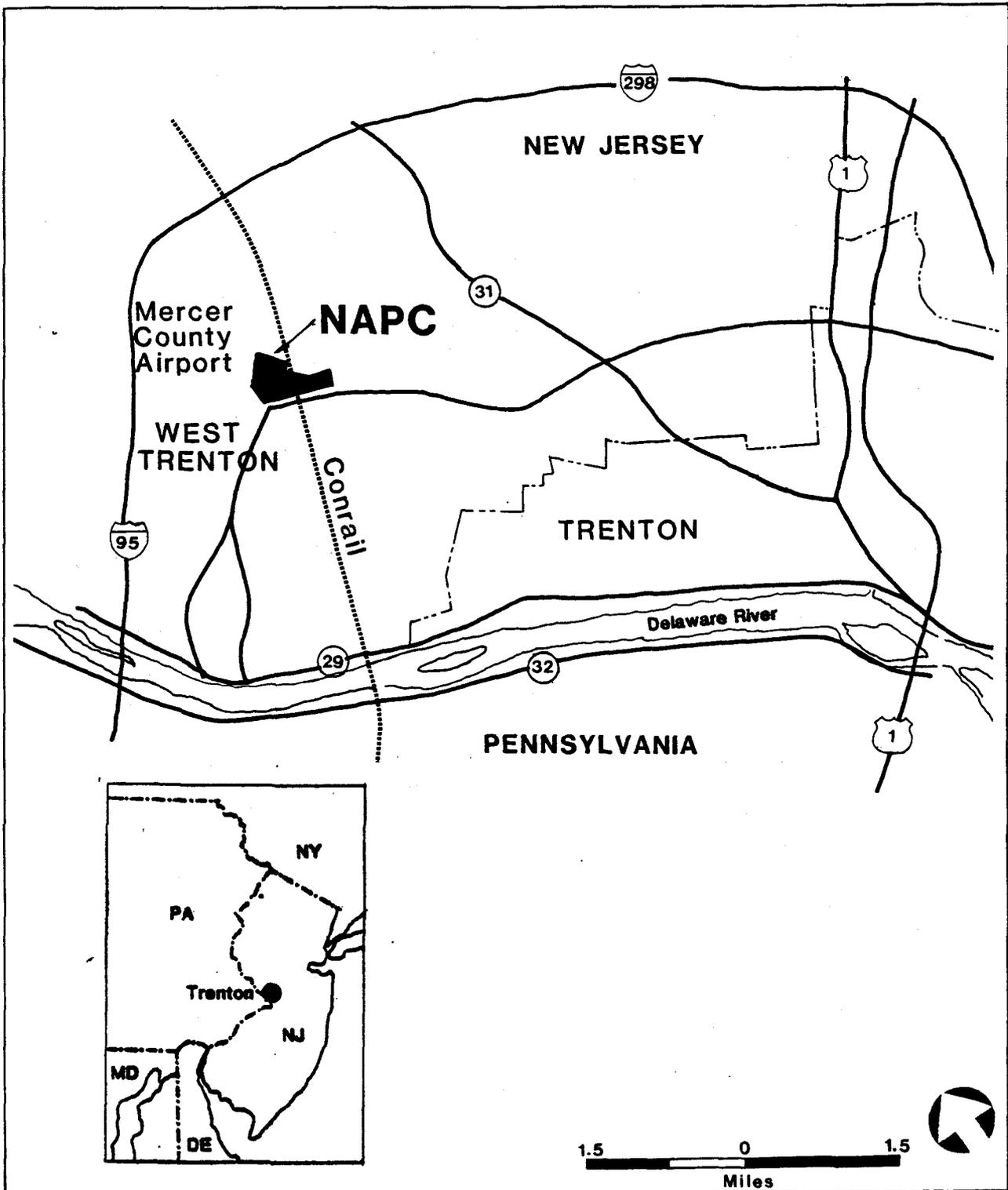
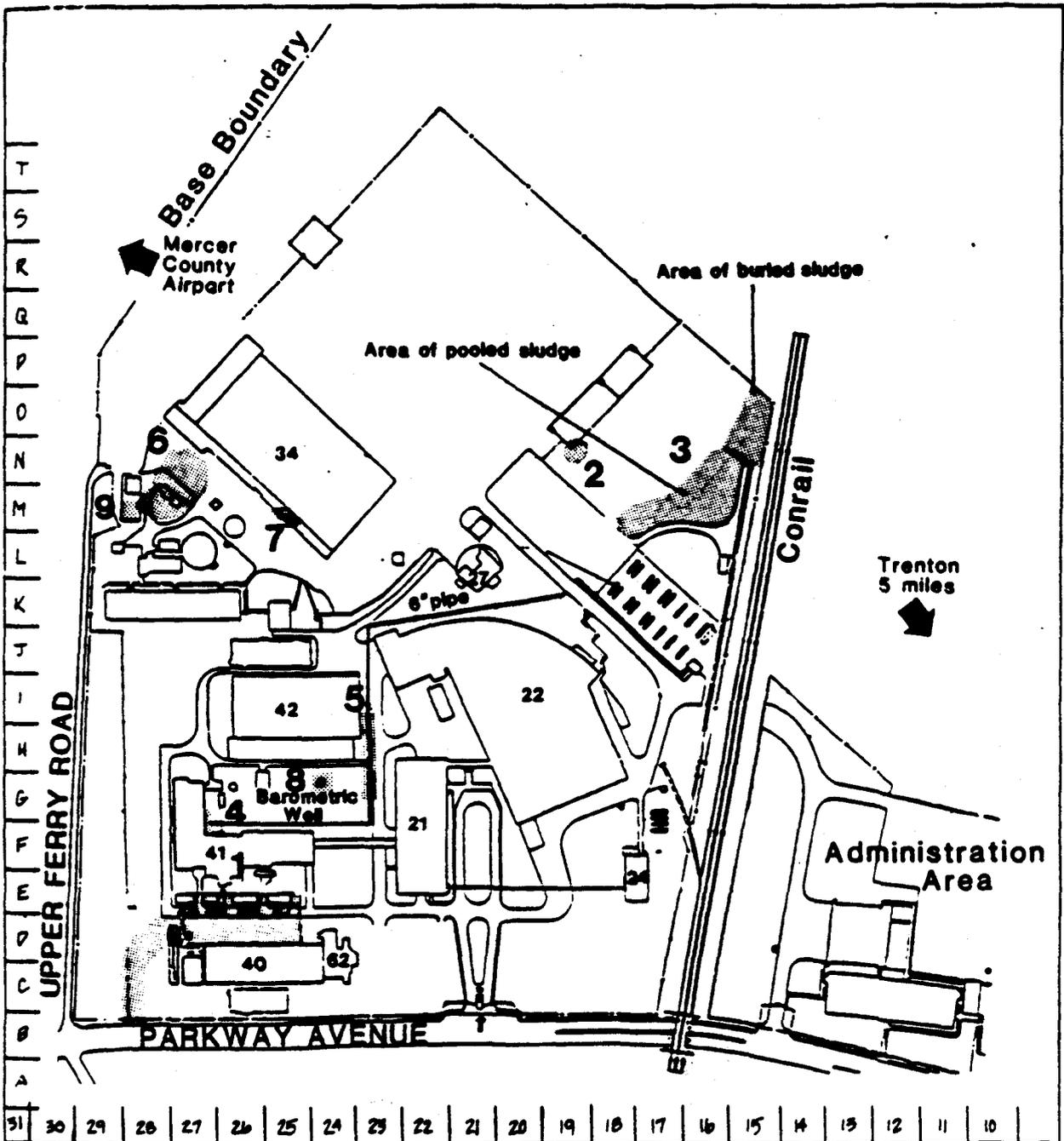


Figure 1-1
 Location Map,
 NAPC Trenton



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey





LEGEND

Site Location

MODIFIED FROM: INITIAL ASSESSMENT STUDY

FIGURE 2
INDIVIDUAL SITE LOCATION MAP
 PREPARED FOR
 NAVAL AIR PROPULSION CENTER
 CONFIRMATION STUDY
 TRENTON, NEW JERSEY
 PROJECT #628766

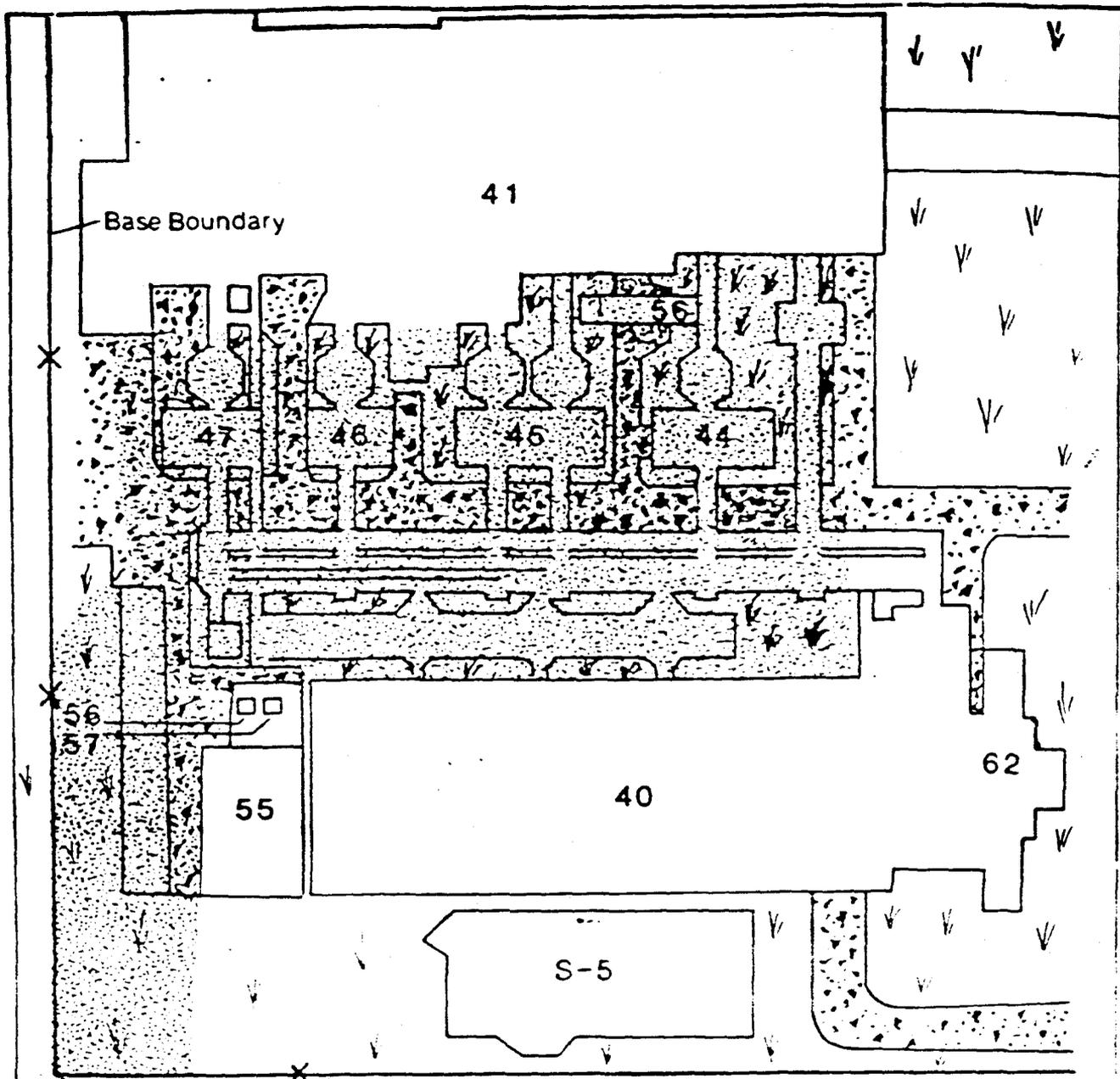


Figure 2

APPENDIX A

Site Plans - NAWCAD Trenton RI/FS Sites and Study Areas

- Site 1 - Brine Handling Area and West End Drainage Ditch
- Site 2 - Fire Fighting Area
- Site 3 - Sludge Disposal Area
- Site 4 - Building #41 Fuel Lines
- Site 5 - Building #42 Fuel Lines
- Site 6 - Oil Contamination
- Site 7 - MOGAS Area
- Site 8 - Barometric Well
- Site 9 - Former Sludge Drying Beds



LEGEND

-  Potential Spill Area
-  Pavement
-  Grass

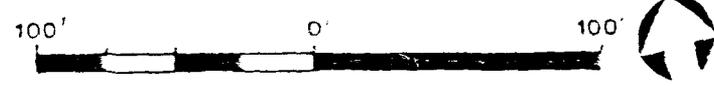


Figure 2-3
 Site 1, Brinn Building Area
 Potential Spill Areas

Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey

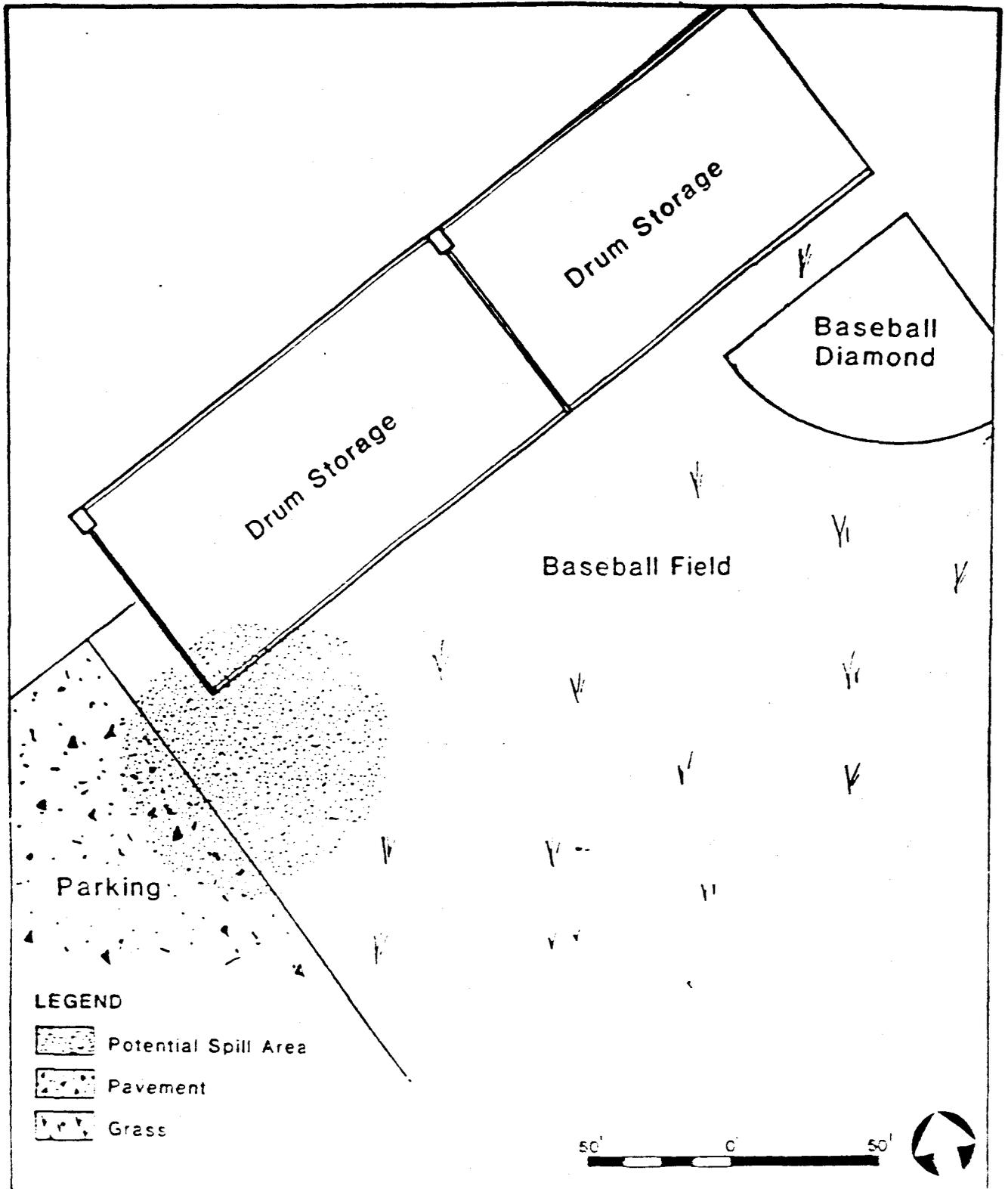
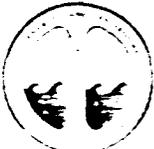


Figure 2-4
 Site 2, Fire Fighting
 Area



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey

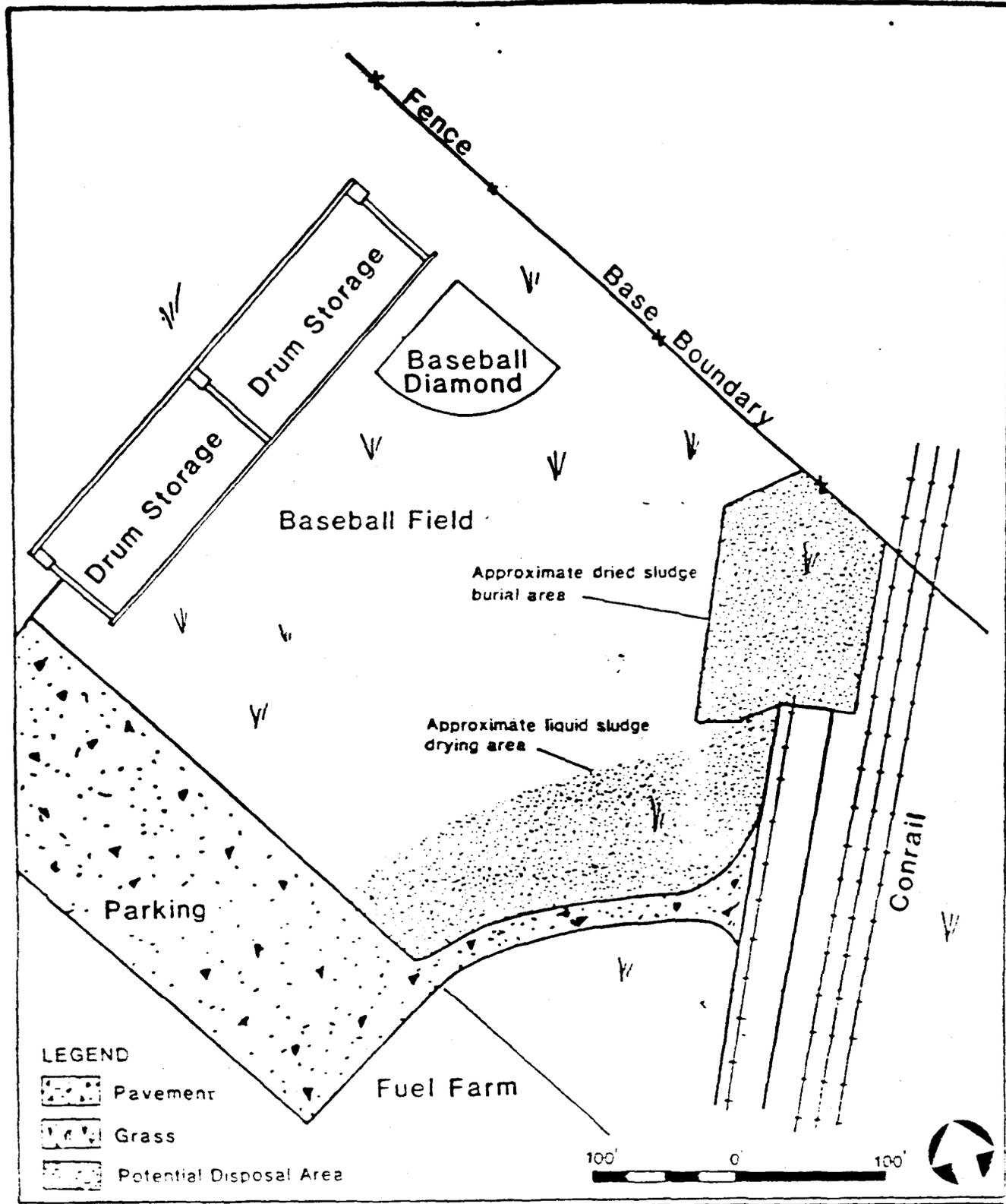
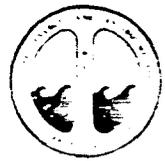
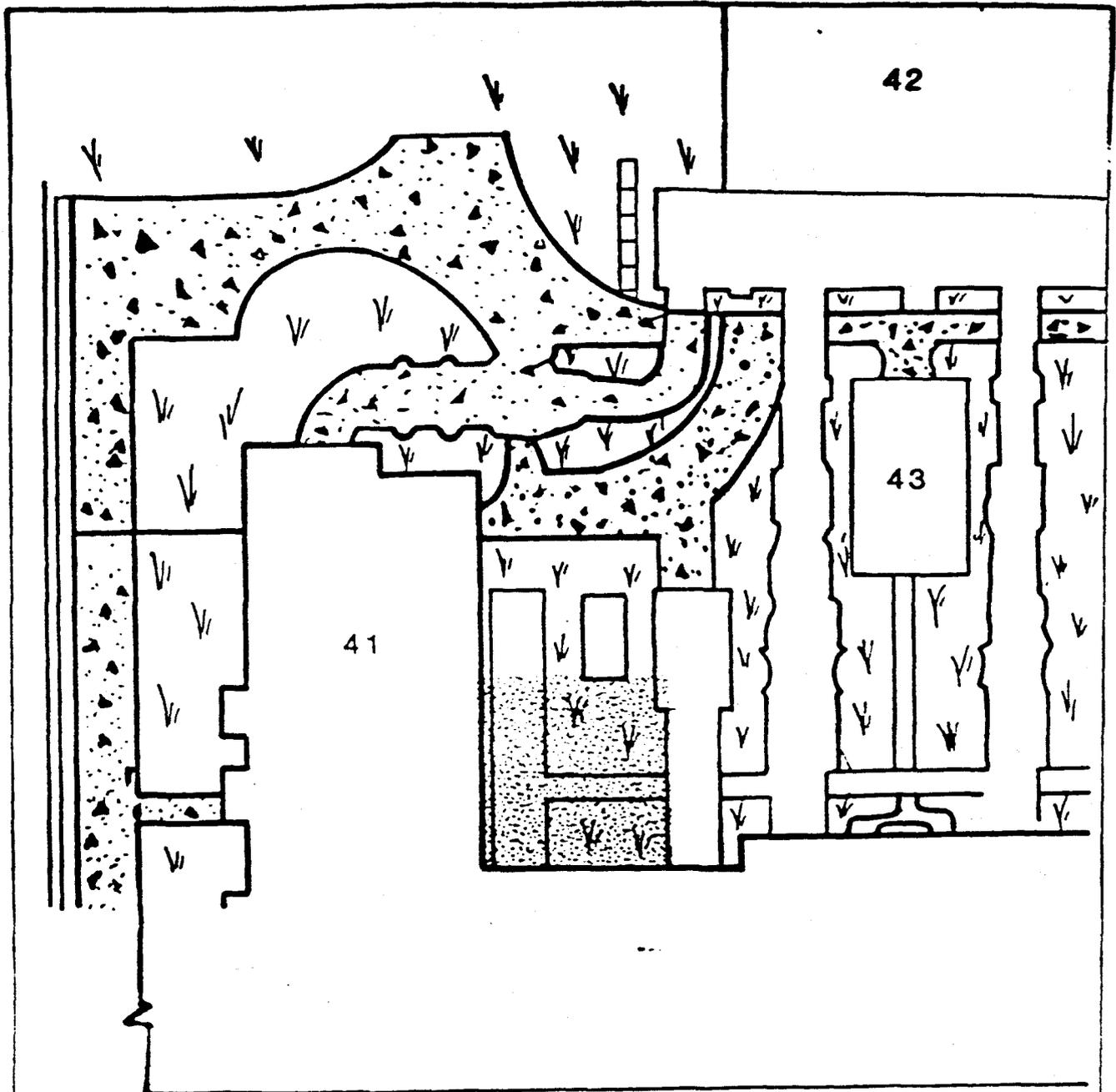


Figure 2-5

Site 3, Sludge Disposal Area



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey



LEGEND

-  Potential Spill Area
-  Pavement
-  Grass

50' 0' 50'



Figure 2-6

Site 4, Building 41
Overhead Fuel Lines
Spill Area



Initial Assessment Study
Naval Air Propulsion Center
Trenton, New Jersey

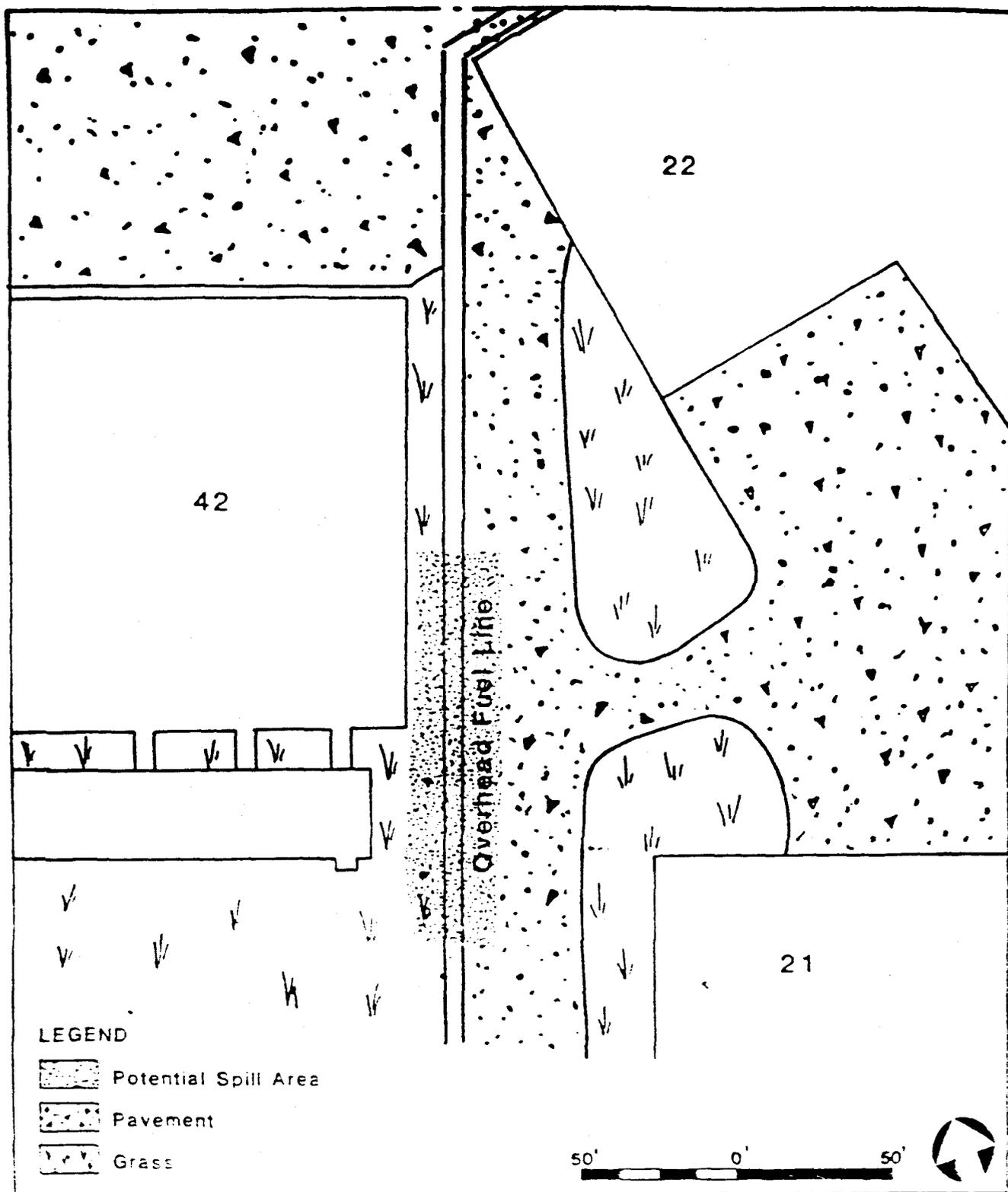


Figure 2-7
 Site 5, Building 42
 Overhead Fuel Lines
 Leachage Area

 **Initial Assessment Study**
 Naval Air Propulsion Center
 Trenton, New Jersey

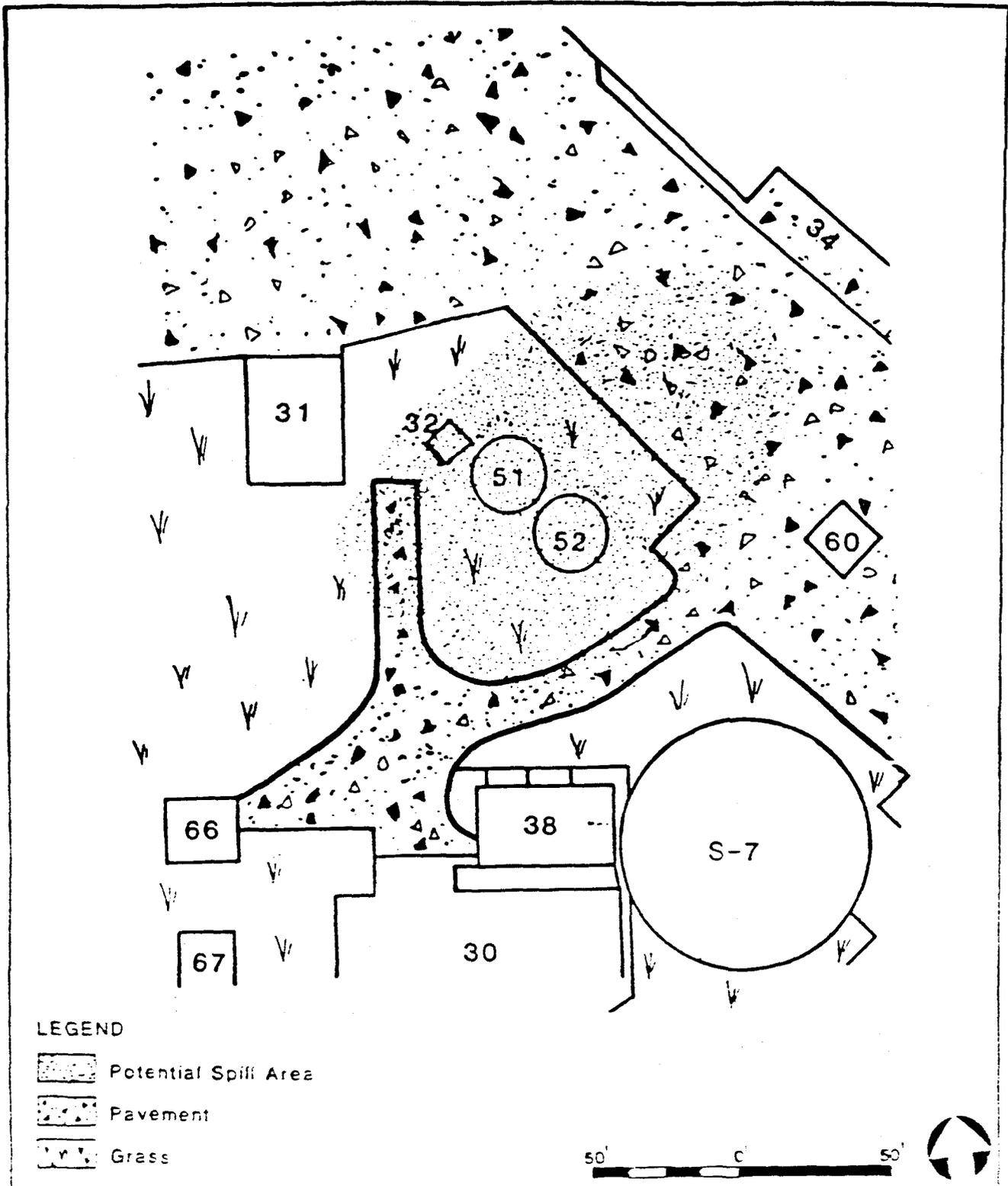


Figure 2-8
 Site 6, Oil Contamination
 Near Building S-7



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey

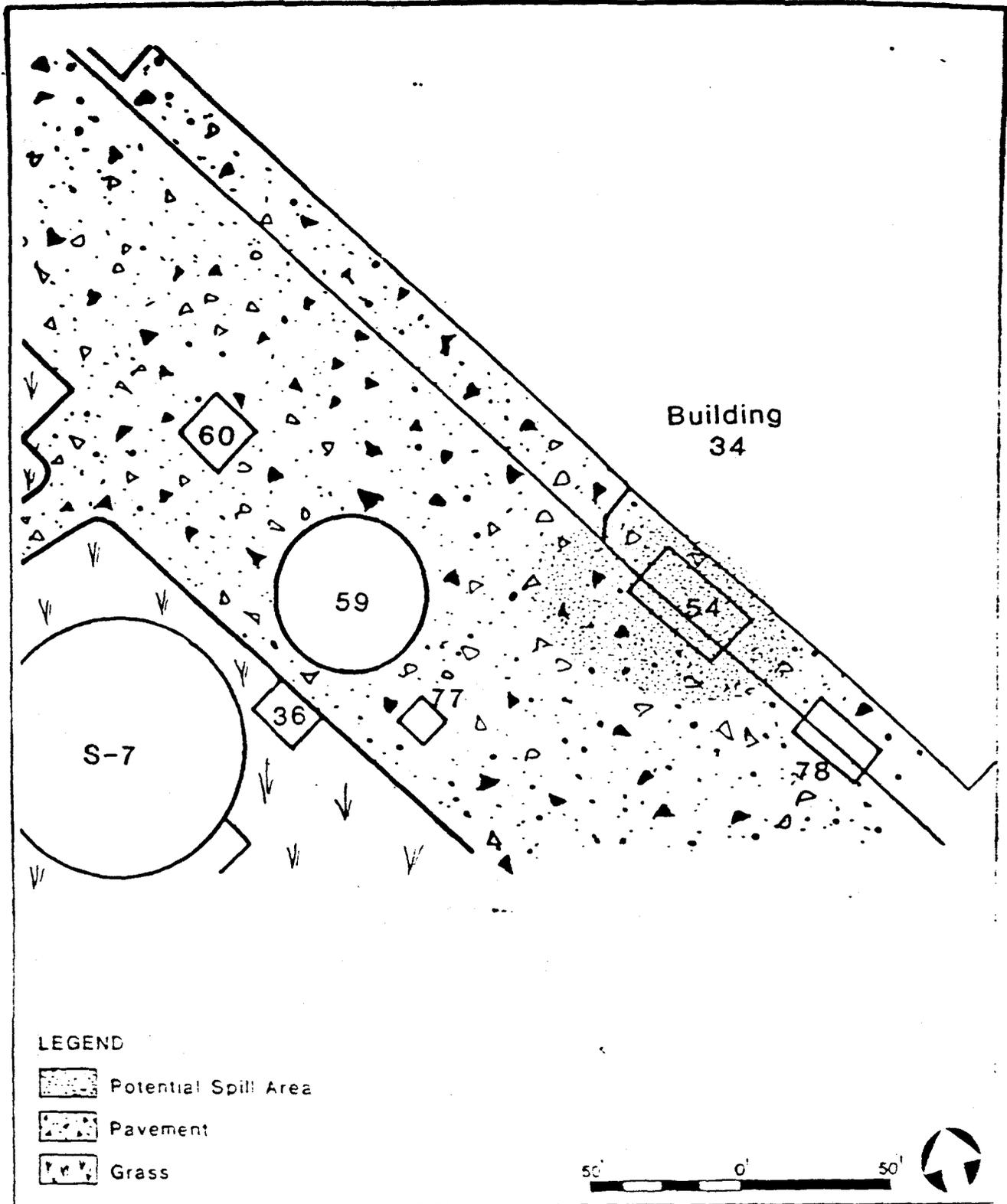
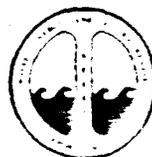


Figure 2-9
 Site 7, Former MORGAS
 Tank Leak



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey

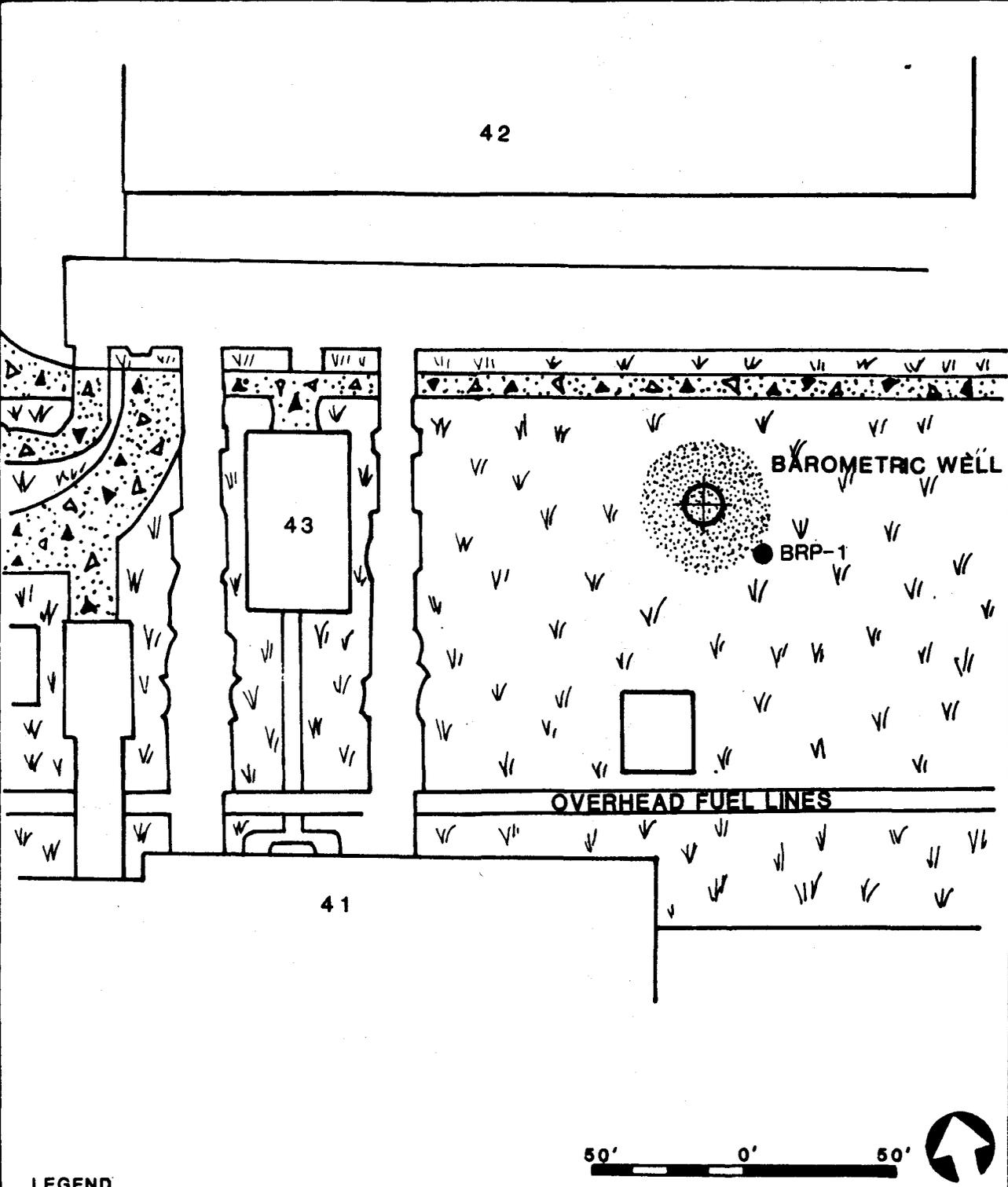
DRAWING NUMBER 528765

3-29-87 T.W.W.

CHECKED BY T.W.W. APPROVED BY

K.K.E. 3-25-87

DRAWN BY



LEGEND

-  BRP-1 Bedrock Piezometer
-  Approx. Site Location
-  Pavement
-  Grass

FIGURE 10
 SITE 8 - SITE LOCATION
 PREPARED FOR
 NAVAL AIR PROPULSION CENTER
 CONFIRMATION STUDY
 TRENTON, NEW JERSEY
 PROJECT #528765



MODIFIED FROM INITIAL ASSESSMENT STUDY

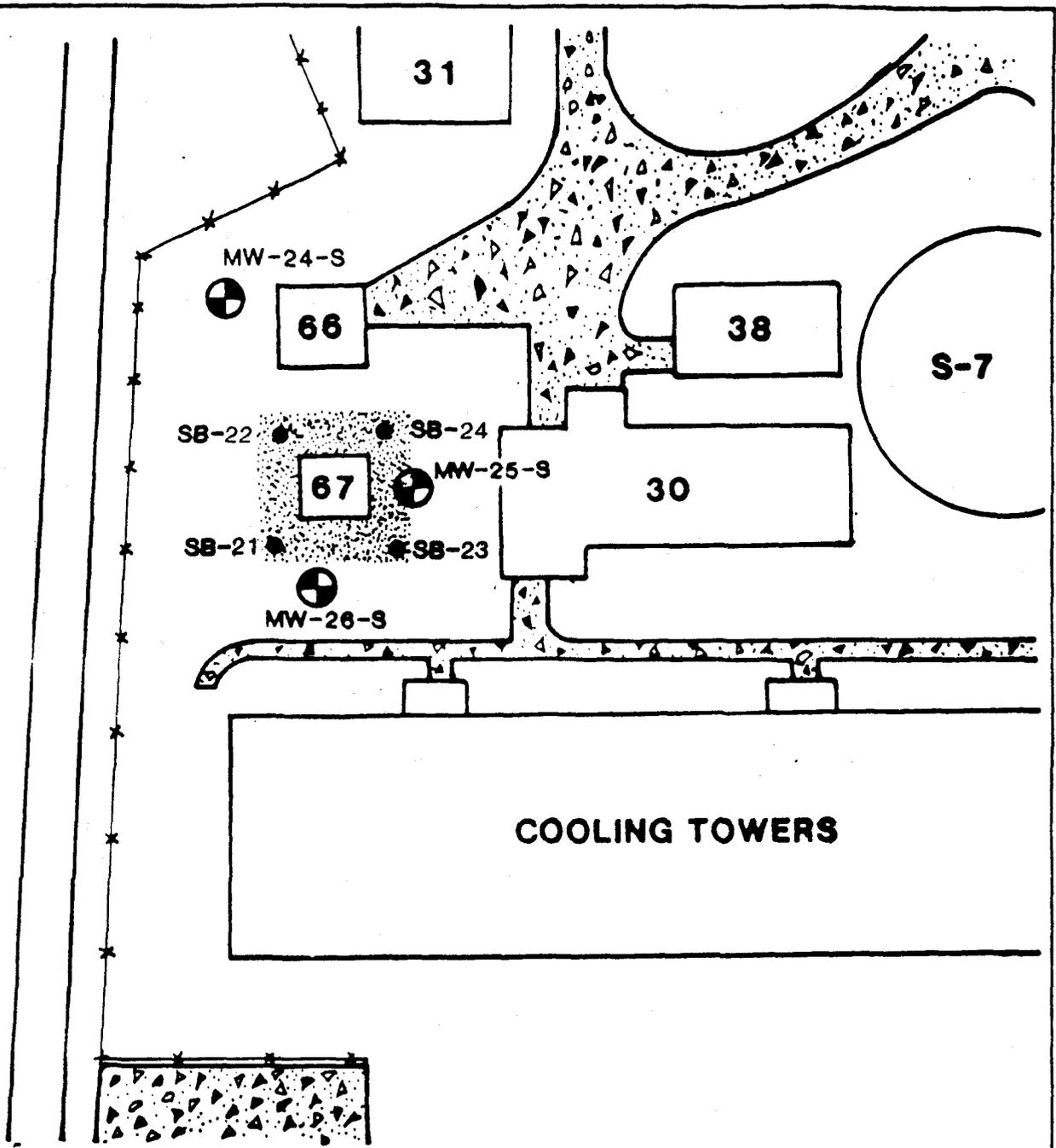


DRAWING NUMBER 528765

CHECKED BY *RKE* 3-28-88

APPROVED BY *[Signature]* 5-28-88

DRAWN BY *[Signature]*



LEGEND

- Soil Boring Location
- ⊕ Monitor Well Location
- ▨ Approx Site Location
- ▨ Pavement
- ▨ Grass

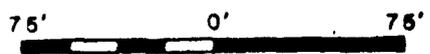


FIGURE 11
SITE 9-SAMPLE LOCATION MAP
 PREPARED FOR
 NAVAL AIR PROPULSION CENTER
 CONFIRMATION STUDY
 TRENTON, NEW JERSEY
 PROJECT #528765



MODIFIED FROM: INITIAL ASSESSMENT STUDY



APPENDIX B

Technical Review Committee Participants

NAWCAD Trenton
CAPT D.C. Offerdahl
Commanding Officer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6602

NAWCAD Trenton
CDR T. Burtis
Executive Officer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6603

NAWCAD Trenton
LCDR T. Smith
Public Works Officer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6667

NAWCAD Trenton
Ken Smith
Environmental Engineer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6677

NAWCAD Trenton
Jeff Dale
Environmental Engineer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6677

Northern Division, Naval Facilities Engineering Command
John Kolicius
Remedial Project Manager - Code 1823
10 Industrial Highway - Mail Stop 82
Lester, PA 19113-2090
215-595-0567

Northern Division, Naval Facilities Engineering Command
Jack Dunleavy
Remedial Technical Manager - Code 1822
10 Industrial Highway - Mail Stop 82
Lester, PA 19113-2090
215-595-0567

International Technologies Corporation

Barbara Vogel
Project Manager
165 Fieldcrest Avenue
Edison, NJ 08837
908-225-2000

New Jersey Department of Environmental Protection

Donna Gaffigan
Bureau of Federal Case Management
401 East State Street (CN028)
Trenton, NJ 08625
609-633-1455

City of Trenton Health Office

Richard Salter
319 East State Street
City Hall Annex, 2nd Floor
Trenton, NJ 08608

Township of Ewing Health Office

Albert Leff
2 Municipal Drive
Ewing Township, NJ 08628
609-883-2900

Ewing-Lawrence Sewerage Authority

William Carmichael
600 Whitehead Road
Lawrenceville, NJ 08648
609-587-4061

Delaware River Basin Commission

David Everett/Page Fielding
PO Box 7360
West Trenton, NJ 08628
609-883-9500

General Motors Corporation, Inland Fisher Guide Division

Joseph Keller
1445 Parkway Avenue
Trenton, NJ 08650-1019
609-771-6276

APPENDIX C

COMMUNITY INTERVIEW QUESTIONNAIRE

**NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
TRENTON, NEW JERSEY**

1. Are you aware of the environmental investigation/study underway at NAWCAD Trenton?
If yes, how did you learn of this?
2. Are you aware that clean-up of contaminated areas is planned at NAWCAD Trenton?
If yes, how did you learn of this?
3. How important are NAWCAD Trenton clean-up activities compared to other waste disposal/landfill/environmental issues which may be of concern to you?
4. Do you think the environmental clean-up at NAWCAD Trenton will affect you?
5. Have you experienced any problems that you think may be related to waste disposal or contamination at NAWCAD Trenton? (e.g. health problems, property values, lifestyle, etc.)
6. How long have you lived or worked near NAWCAD Trenton?
7. What do you know about the history of waste disposal at NAWCAD Trenton? Are you aware of any specific waste disposal activities which may have occurred at NAWCAD Trenton?
8. Have you had any contact with NAWCAD Trenton, or federal (EPA), or state (NJDEPE) agencies regarding contamination at NAWCAD Trenton?
9. Do you know of anyone else interested in environmental clean-up activities at NAWCAD Trenton? Do you know anybody who might know about past disposal practices at NAWCAD Trenton?
10. Do you think that NAWCAD Trenton, state, and federal agencies have been responsive in cleaning up contamination at NAWCAD Trenton? Have they been responsive to local concerns/problems?

COMMUNITY INTERVIEW QUESTIONNAIRE

Page 2 of 2

11. Have you ever received a fact sheet about environmental activities at NAWCAD Trenton?
If yes, what do you think of them? Are they too technical? Not technical enough? How could we make them better?
If no, do you want to be added to a mailing list to receive them in the future?

12. What is the best method of informing interested community members about environmental clean-up activities at NAWCAD Trenton? (newspaper articles, cable TV announcements, mailing fact sheets, periodic meetings, etc.)

APPENDIX D

NAWCAD Trenton Community Relations Plan

December 1993

List of Persons Interviewed

(to be completed)

APPENDIX E

MEETING LOCATIONS

Bi-Monthly RAB Meetings and Public Meetings

Ewing Municipal Building
2 Municipal Drive
Ewing Township, NJ 08628
609-883-2900

INFORMATION REPOSITORY

Mercer County Library
61 Scotch Road
Ewing Township, NJ 08618
609-882-3130

Hours:

Monday - Thursday	9:00 - 9:00
Friday	9:00 - 5:30
Saturday	10:00 - 5:00

The repository consists of the following documents:

1. The Navy Installation Restoration (IR) manual,
2. Initial Assessment Study,
3. Site Inspection Report, Final Site Investigation (Vol. 1 & 2),
4. Underground Storage Tank Study,
5. Ethylene Glycol Spill Plan of Action,
6. Remedial Investigation Work Plan (Vol. 1 & 2),
7. Final PA and SI Scoresheets (EPA documents).



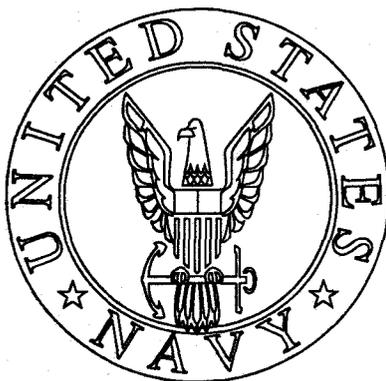
CONTENTS OF ADMINISTRATIVE RECORD
FOR THE INSTALLATION RESTORATION PROGRAM
AT NAWCAD TRENTON

- 19 NOV 85; CSR WORKSHEETS, COST ESTIMATE WORKSHEETS; Rodgers, Golden, & Halpern.
- MAY 86; INITIAL ASSESSMENT STUDY; Rodgers, Golden, & Halpern
- APR 88; PLAN OF ACTION REPORT FOR SITE INVESTIGATION STUDY; I.T. Corp..
- NOV 89; FINAL SITE INVESTIGATION REPORT, VOL. 1 & 2; I.T. Corp..
- MAR 91; UNDERGROUND STORAGE TANK INVESTIGATION, VOL. 1; I.T. Corp..
- MAR 91; UNDERGROUND STORAGE TANK INVESTIGATION, VOL. 2, APPENDIX D, Parts 1 through 6; I.T. Corp..
- DEC 91; FINAL REMEDIAL INVESTIGATION WORKPLAN; I.T. Corp..
- DEC 91; FINAL REMEDIAL INVESTIGATION QUALITY ASSURANCE PROJECT PLAN; I.T. Corp..
- DEC 91; REMEDIAL INVESTIGATION HEALTH AND SAFETY PLAN; I.T. Corp..
- JAN 92; FINAL SITE INVESTIGATION FOR PA SCORE; I.T. Corp..
- JAN 92; FINAL PA SCORESHEETS; I.T. Corp..
- 22 SEP 92; REMEDIAL INVESTIGATION GROUNDWATER AND STORMWATER SYSTEM SAMPLING, REPORT NO. 1; I.T. Corp..
- 08 OCT 92; WELL SEARCH CONDUCTED IN A ONE-MILE RADIUS OF THE NAWCAD TRENTON, N.J.; I.T. Corp..
- 12 JAN 93; FINAL GROUNDWATER SAMPLING REPORT NO. 2; I.T. Corp..
- JAN 93; INSTALLATION RESTORATION PROGRAM FINAL REPORT, OFF-SITE WELL SAMPLING AND ANALYSIS; I.T. Corp..
- 02 MAR 93; INTERIM SOIL DATA SUMMARY PACKAGE; I.T. Corp..
- 15 JUN 93; TANK CLOSURE REPORT; Gold Seal Corp..
- 13 OCT 93; INSTALLATION RESTORATION PROGRAM FINAL WORKPLAN ADDENDUM PHASE II, REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY; I.T. Corp..

APPENDIX F

Mailing List

(to be completed)



U.S. DEPARTMENT OF THE NAVY
INSTALLATION RESTORATION PROGRAM

COMMUNITY RELATIONS
PLAN

NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION
TRENTON, NEW JERSEY

DECEMBER 1993

DRAFT

TABLE OF CONTENTS
NAWCAD TRENTON - DRAFT COMMUNITY RELATIONS PLAN

<u>SECTION</u>	<u>PAGE</u>
List of Acronyms	3
Introduction	4
Community Relations Plan Overview	4
For More Information	6
The RI/FS Program	8
NAWCAD Trenton Background Information	10
General Facility Description	10
NAWCAD Trenton History	11
Environmental Setting	12
Previous Environmental Investigations and Site	
Identification	13
Description of Sites and IR History	14
Community Background Information	21
Community Background	21
Economic Profile	21
Political Profile	21
General Concerns and Interests	21
Chronology of Past Community Involvement	22
Key Community Concerns	24
Objectives of the Community Relations Plan	26
Community Relations Activities	28
Required Activities	28
Suggested Activities	31
Future Activities	31

TABLE OF CONTENTS
NAWCAD TRENTON - DRAFT COMMUNITY RELATIONS PLAN

<u>TABLES</u>		<u>PAGE</u>
Table 1	The RI/FS Process	34
Table 2	Summary of Sites	37
 <u>FIGURES</u>		
Figure 1	NAWCAD Trenton Location Plan	39
Figure 2	NAWCAD Trenton Site Plan	40
 <u>APPENDICES</u>		
Appendix A	Site Plans-NAWCAD RI/FS Sites and Study Areas	A-1
Appendix B	Technical Review Committee Participants . . .	B-1
Appendix C	Community Interview Questionnaire	C-1
Appendix D	Interview Participants	D-1
Appendix E	Meeting Locations and Information Repository Document Index	E-1
Appendix F	Mailing List	F-1

LIST OF ACRONYMS

BCP BRAC Clean-up Plan

BRAC Base Realignment and Closure Act of 1988 & 1990

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CRP Community Relations Plan

DERA Defense Environmental Restoration Account

DERP Defense Environmental Restoration Program

EBS Environmental Baseline Survey

EPA Environmental Protection Agency

IRP Installation Restoration Program

NPL National Priorities List

OU Operational Unit

PA Preliminary Assessment

RA Remedial Action

RCRA Resource Conservation and Recovery Act

RD Remedial Design

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

UST Underground Storage Tank

INTRODUCTION

COMMUNITY RELATIONS PLAN OVERVIEW

The objective of this Community Relations Plan (CRP) is to establish procedures to guide the flow of information from the U.S. Navy to federal, state, and local government officials, interested groups, and nearby residents relative to environmental investigation and clean-up activities at the Naval Air Warfare Center Aircraft Division Trenton (NAWCADTRENTON), Ewing Township, New Jersey.

The community relations program outlined in this document is intended to keep local government officials and residents informed of environmental investigations at NAWCAD Trenton and provide opportunities for involvement in the environmental investigation and clean-up process. Most local government officials and interested citizens express an interest in being updated on the findings of the environmental investigations. Therefore, this CRP has been developed to assist the Navy in implementing a community relations program that is tailored to the concerns and needs of these interested parties.

In general, local community interest in environmental activities at NAWCAD Trenton has been variable. While the majority of local residents remain interested in NAWCAD Trenton environmental activities, this interest has not manifested itself in widespread community participation. However, select groups continue to maintain a generally high level of interest in base reuse and associated environmental activities at NAWCAD Trenton. The Community Relations Plan will be amended to include interviews conducted with local and state officials and interested residents of Ewing Township and West Trenton.

This CRP presents a summary of past and current community concerns with regard to areas of known or potential environmental contamination at NAWCAD Trenton. A list of required and suggested community relations activities is provided on the basis of these concerns.

The following information is included in this Community Relations Plan:

- * Description of the RI/FS Process;**
- * NAWCAD Trenton Background Information;**
- * Community Background Information;**
- * Development of Community Relations Plan; and**
- * Future Community Relations Activities.**

FOR MORE INFORMATION

Four key contacts for the Navy, the U.S. Environmental Protection Agency (EPA) Region II, and the New Jersey Department of Environmental Protection and Energy (NJDEPE) are listed below and may be contacted for further information regarding this plan or other environmental activities at NAWCAD Trenton.

U.S. Department of the Navy

LT Scott Bernotas
Environmental Officer
Naval Air Warfare Center Aircraft Division
1440 Parkway Avenue
P.O. Box 7176
Trenton, New Jersey 08628-0176
(609) 538-6986

Mr. Barry Barclay
Base Transition Coordinator
Naval Air Warfare Center Aircraft Division
1440 Parkway Avenue
P.O. Box 7176
Trenton, New Jersey 08628-0176
(609) 538-6744

U.S. Environmental Protection Agency

Mr. Joseph Bergstein
Base Clean-up Team Member
U.S. EPA Region II
Environmental Impacts Branch
26 Federal Plaza
Room 1108
New York, New York 10278
(212) 264-6677

New Jersey Department of Environmental Protection & Energy

**Ms. Donna Gaffigan
Base Clean-up Team Member
New Jersey Dept. of Environmental Protection and Energy
Bureau of Federal Case Management
401 East State Street
Trenton, New Jersey 08625
(609) 633-1455**

THE RI/FS PROGRAM

Activities conducted at NAWCAD Trenton in the past have involved the use and storage of hazardous materials. As such, there have been a number of potential areas of environmental contamination identified throughout NAWCAD Trenton property.

The United States Navy is conducting an investigation to address environmental issues at NAWCAD Trenton. This investigation, called a Remedial Investigation/Feasibility Study (RI/FS), is being conducted as part of the Navy's Installation Restoration (IR) Program. The purpose of the IR Program is to identify, assess, clean-up, or control contamination from past disposal operations and spills on Navy properties.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) established a series of programs to do the type of work described above. One of these programs is called the Defense Environmental Restoration Program (DERP). The Navy IR Program is one of the elements of DERP. It should be emphasized that the IR Program and other programs which fall under CERCLA are intended to address past operations and disposal practices. Current practices are governed by a different set of laws.

The RI/FS is funded and managed by the Northern Division of the Naval Facilities Engineering Command (NORTHNAVFAC) located in Philadelphia, Pennsylvania. Field work and consulting services are contracted by NORTHNAVFAC to International Technology Inc., located in Edison, New Jersey. During the RI/FS, Navy and contractor personnel will be installing monitoring wells, taking environmental samples, and digging exploratory trenches. Results of the sampling and analysis will be used to generate a number of reports. Ultimately, these reports will be used in the decision making process that will determine the final clean-up strategy for the NAWCAD Trenton facility.

The first step in the RI/FS process is typically completion of a Preliminary Assessment and/or a Site Inspection report. These investigations are conducted to determine if a suspected area of contamination is serious enough (e.g. poses potential risk) to warrant further action and/or investigation. The Preliminary Assessment/Site Inspection step (PA/SI) conducted at NAWCAD Trenton consisted of an Initial Assessment Study (IAS) completed at the request of the Navy in 1986, and a Site Inspection completed in 1990 .

The next step in the RI/FS process is completion of field investigations followed by preparation of both Remedial Investigation (RI) and Feasibility Study (FS) reports. The Remedial Investigation report describes the nature and extent of site contamination and potential risks associated with current site use. The Feasibility Study report examines and evaluates various technologies and methods for performing a site clean-up, if it is determined that clean-up is required.

Following completion of the RI/FS reports, a Proposed Plan is developed. The Proposed Plan summarizes the key results of the environmental studies, describes the choices being considered for clean-up or remediation of the site, and identifies the Navy's preferred alternative(s) to resolve the environmental concern. The Proposed Plan is submitted to the public for thirty (30) days for public review/comment.

After the 30 day public comment period, a Record of Decision (ROD) is developed. The ROD addresses all comments received during the public comment period, identifies the selected remedial action method, and documents the rationale used in selecting the method.

Once a ROD has been developed and approved, the Remedial Design can be completed. The actual clean-up, or Remedial Action, can begin as soon as the Remedial Design has been completed.

The above RI/FS processes are summarized, along with other elements of the IRP, in Table 1.

NAWCAD TRENTON BACKGROUND INFORMATION

GENERAL FACILITY DESCRIPTION

The NAWCAD Trenton facility is located on a 67-acre in Ewing Township, in the west-central portion of Mercer County, New Jersey. The center is situated approximately five miles northwest of the center of Trenton. The Delaware River is located approximately two miles to the south-southwest. The communities of Ewingville and West Trenton are within a one mile radius of the facility. other nearby communities include Somerset, Scudders Falls, Wilburtha, and Fernwood (See Figure 1).

Locally, the Mercer County Airport borders the northern half of the NAWCAD Trenton property. A Conrail right-of-way borders the site on the east and separates the administration building and storage hangar from the rest of the facility. Both commercial and agricultural properties adjoin NAWCAD Trenton to the north and east. The southeastern area of the property is bordered by Parkway Avenue. Located across Parkway Avenue is the General Motors Corporation, Inland Fisher Guide Division, Trenton Plant, which manufactures light-weight metal parts. Predominantly residential and light industrial areas are located southwest of NAWCAD Trenton, and a large portion of the land between the Delaware River and these areas is owned by the State of New Jersey. Also located in the NAWCAD Trenton vicinity are a state police headquarters, a school for the deaf, a hospital, several parks, and a golf course.

Today, NAWCAD Trenton remains an active site of the Naval Air Systems Command and employs a work force of mostly civilian employees and several Naval officers. The facility contains three operating departments which include: Operations and Plant Engineering, Measurement and Information Systems, and Propulsion Technology/Project Engineering. Figure 2 is a map of the NAWCAD Trenton facility.

NAWCAD TRENTON HISTORY

The NAWCAD Trenton facility evolved from the Aeronautical Engine Laboratory (AEL), which was created in 1915. The AEL was originally located at the Washington Navy Yard, and conducted testing and experimentation on aircraft power plants. Several changes concerning the facility occurred over the next several years, and are summarized below.

- 1915:** Aeronautical Engine Laboratory (AEL) created at Washington Navy Yard.
- 1924:** AEL moved to Philadelphia and became part of Naval Aircraft Factory (NAF).
- 1943:** NAF Mercer Field, Trenton, created to build military aircraft.
- 1946:** NAF Mercer was declared surplus; facility retained to use as Aeronautical Turbine Laboratory (ATL).
- 1949:** Land in Trenton obtained by Navy from General Motors.
- 1951:** Naval Air Turbine Test Station (NATTS) commissioned on Navy-owned property at Mercer Field and old General Motors land.
- 1967:** ATL at NATTS and AEL in Philadelphia initiate merger to become Naval Air Propulsion Test Center.
- 1975:** Merger is completed, pulling the two activities under one command.
- 1977:** Facility is designated Naval Air Propulsion Center Trenton (NAPC Trenton).
- 1992:** Under Department of Defense restructuring, Activity is designated Naval Air Warfare Center, Aircraft Division.
- 1993:** NAWCAD Trenton is designated for closure under the Base Realignment and Closure (BRAC) Act of 1993.

NAWCAD Trenton depends heavily on ethylene glycol and trichloroethylene (TCE) as heat exchange mediums for air and fuel used for engine testing. The facility has a 25,000 gallon TCE piping system with associated valves, pumps, and heat exchangers. The identification of TCE as a potential health hazard in the late 1970s prompted studies by in-house personnel and by contract consultants to identify a substitute for TCE, but no suitable substitute was found.

ENVIRONMENTAL SETTING

ADJACENT LAND USES

NAWCAD Trenton lies in Mercer County, just five (5) miles from the center of the city of Trenton. The Mercer County Airport borders the northern half of the activity. North of the airport is a U.S. Naval Reserve unit. A Conrail right-of-way borders NAWCAD Trenton on the east and separates the administration building and storage hangar from the rest of the activity. Commercial and agricultural uses adjoin NAWCAD Trenton to the north and east.

Land on the southeastern side of NAWCAD Trenton is occupied by a General Motors Corporation plant which manufactures light-weight metal components. Light industrial and residential uses predominate farther southwest. Much of the land between these areas and the Delaware River (about 1/2 mile south and west of NAWCAD Trenton) is state-owned. New Jersey State Police Headquarters, a State farm, a State school for the deaf, and a State hospital are in the vicinity.

ADJACENT WATER BODIES AND RIVERS

The major water body within the NAWCAD Trenton study area is Gold Run. Gold Run is a non-tidal tributary of the Delaware River. The head of tide for the River is approximately four (4) miles downstream from the confluence of Gold Run and the Delaware River in the City of Trenton. Average flow of Gold Run is 2.0 square feet per second. Average depth is 3.5 inches, and average channel width is 10 feet.

Gold Run passes beneath the Delaware and Raritan Canal just prior to emptying into the Delaware River. Other waterbodies in the vicinity of the NAWCAD Trenton study area are the Delaware River, West Branch of the Shabakunk Creek, Ewing Creek, Jacobs Creek, and Reeders Creek. None are within the study area.

PREVIOUS ENVIRONMENTAL INVESTIGATIONS AND SITE IDENTIFICATIONS

A chronological summary of significant events and activities under the Navy IR Program at the Naval Air Warfare Center, Trenton Division is as follows:

September 1980 - U.S. Navy implemented the Navy Assessment and Control of Installation Pollutants (NACIP) Program through OPNAVNOTE 6240 Ser 45/733503. The purpose of the program was to identify, assess, and control contamination of the environment resulting from past hazardous materials and management operations.

May 1983 - U.S. Navy authorized the current IRP which conforms to the scope and purpose of CERCLA and National Oil and Hazardous Substances Pollution Contingency Plan. The Defense Environmental Restoration Account (DERA) was established by Congress to directly fund the IRP.

July 1985 - NACIP program was implemented at NACP with the Initial Assessment Study (IAS) at NACP Trenton.

May 1986 - IAS was completed recommending seven sites for further evaluation.

June 1986 - NJDEPE commented on IAS and requested further evaluation of the Barometric Well and Sludge Drying Beds.

August 1986 - Barometric Well and Sludge Drying Beds are included in the Confirmation Study for further evaluation as Sites 8 and 9 respectfully.

July 1986 - February 1990 - IRP Site Inspection (SI) was conducted at NACP by IT Corp. for the U.S. Navy. All nine sites were recommended for further study.

August 1988 - USEPA informed by their contractor, Versar, Inc. that NACP's Hazard Ranking Score was 30.46. A score of greater than 28.5 qualifies for inclusion on the National Priorities List (NPL).

February 1989 - Ethylene Glycol spill in the area of Site 4. Approximately 3,000 gallons are spilled. A POA was prepared by IT Corp. and included as part of current RI/FS.

May 1989 - NJDEPE informed by USEPA that NAPC would not be listed on the NPL. Original score was lowered after being Quality-checked by EPA contractor, MITRE.

February 1991 - Remedial Investigation initiated at NAWC with the preparation of the Plan of Action.

June 1991 - USEPA informs the Navy the IAS and SI had been reviewed and determined insufficient information existed to adequately rescore the site by HRS-II for inclusion on the NPL.

June 1991 - U.S. Navy established a Technical Review Committee (TRC).

August 12, 1991 - TRC meeting #1 convened.

September 1991 - The Navy provides USEPA with additional information so that the Site can be scored using the revised HRS2 scoring system.

April 1992 - RI fieldwork and community relations activities begin.

DESCRIPTION OF SITES AND HISTORY OF IR ACTIVITIES

Initial Assessment Study

The first phase of The IR Program is called the Preliminary Assessment or PA. The PA, formerly known as Initial Assessment Study (IAS), was conducted to identify any areas of environmental concern at the activity. No sampling was conducted in this study. The results of this study were released in May 1986 in a report entitled, "Initial Assessment Study of Naval Air Propulsion Center, Trenton, New Jersey." The study identified seven areas of potential concern which were recommended for further investigation. A description of each of the seven sites is provided in Chapter 3 of this plan. As with all reports generated under this program, a copy of the IAS is available at the information repository.

Site Inspection Study

The second phase of the IR Program is known as a Site Inspection or SI. The SI Study, was conducted by IT Corporation from October 1988 to April 1989, and the results were presented in a report entitled "Final Site Inspection Report for Naval Air Propulsion Center, Trenton, New Jersey." The purpose of this investigation was to confirm the presence or absence of contamination in soils and groundwater at the seven areas of

concern. At the request of The New Jersey Department of Environmental Protection, two additional areas of concern were added to the seven areas identified in the PA. The SI report was submitted to both the NJDEP and USEPA for review and comment. Both agencies approved the SI Report.

During the SI, a total of twenty-five (25) soil borings, six (6) hand auger borings, and twenty-seven (27) wells were completed. The sampling results are included in the Site Inspection report. All of the sites were recommended for further study except Site 2, the Fire Fighting Area. Site 2 was not considered for additional study due to the low levels of contaminant concentrations detected in soil samples obtained from this site.

Results of the Phase I Remedial Investigation

Low levels of Volatile organic Compounds were known to exist in the shallow part of the aquifer (groundwater). Preliminary results from sampling done during the summer of 1992 show that volatile organic compounds are also found in the deeper parts of the aquifer. The concentrations were much higher than found in the shallower parts of the aquifer. Because the compounds tend to sink in groundwater, it became apparent that the contaminants could exist at greater depth. Therefore, a second phase was added to the Navy investigation (hereafter referred to as Phase II RI). Fieldwork for this phase of the investigation began in the summer of 1993. During this phase, the Navy will install deeper monitoring wells and collect additional groundwater samples. Of particular interest, the Navy decided to take a proactive position and sampled nearby domestic wells as a precautionary measure in December 1992 (see page 24). No domestic wells were affected by the source area on Navy property. The results can be found in the "Installation Restoration Program, Final Report, Off-Site Well Sampling and Analysis," (January 1993); IT Corp.) a copy of which is located in the information repository.

Description of Sites

The following sections describe the past and present uses of the nine (9) sites under investigation. Findings from the IAS and SI are discussed, as well as the proposed activities for the Remedial Investigation. These sites are summarized in Table 2.

Site 1: Brine Handling Area and West End Drainage Ditch

The brine handling area refers to an area used to handle and store Trichloroethylene (TCE). It is rectangular in shape and measures approximately 150 feet by 300 feet (see Appendix A).

Since 1955, an estimated 500 gallons of TCE and 10,000 gallons of Ethylene Glycol have leaked from piping that runs throughout this site. These chemicals are used for heat exchange and coolant mediums in the Propulsion System Test Facility. During the past several years, each individual fitting in these systems have been overhauled or replaced resulting in a virtual elimination of leakage from this source.

The analytical results of the Site Inspection indicate low levels of Volatile Organic Compounds (VOC's) still exist in the unsaturated soil zone; however, in all cases the detected concentrations were far below the NJDEPE action limits.

The shallow groundwater table in Site 1 contains elevated levels of chlorinated organics which exceeded the combined NJDEPE action and Safe Drinking Water Act (SDWA) criteria. The sources of groundwater contamination in this area are not only spills and discharges which occurred in Site 1, but spills/discharges that occurred at Site 4 which lies just upgradient of Site 1.

Groundwater investigation of this site during the RI will focus on the bedrock system. Additional soil borings will also be placed to confirm soil results from the SI.

This site also includes the West End Drainage System which consists of the outfall area of the West End Drainage Pipe which connects to the Trenton City storm sewer under Parkway Avenue. The surface run-off from the Brine Handling Area (Site 1) and from the northern side of Building #41 (Site 4) flows into the West End Drainage Ditch which then discharges its sediment/water load to the Parkway Avenue storm sewer.

Site 2: Fire Fighting Area

Site 2 is located at the northwest corner of the NAWCAD Trenton baseball field and the southwest corner of the Drum Storage Area (see Appendix A). This is the former location of a containment ring which was periodically filled with flammable material and used to train personnel in fire fighting. The exercises which occurred in this area a number of years ago have had only a minor impact on existing soils based on the soil sample results from

the SI. Groundwater was not encountered in the overburden well installed during the SI. However, a bedrock well will be installed as part of the RI.

The soils below the area where the oil containment ring was located contain low-level metal and volatile organic compounds. The analytical results did not indicate any PCBs and Base Neutral Acids (BNAs) contamination. Metals concentrations are, for the most part, below the NJDEPE action levels. The metals detected are most likely residues from the waste oils which were burned in the ring or which splashed over the sides of the ring. The possibility also exists that the metals concentrations may be representative of naturally-occurring metals in the soils of this area. Since a background soil sample was not obtained during the site inspection, a comparison to background conditions was not made. During the upcoming RI, several background samples are planned throughout the activity. Statistical methods will also be used to make comparisons to background.

Site 3: Sludge Disposal Area

Site 3 is located at the present site of the NAWC baseball fields (see Appendix A). The area covers up to 20,000 feet and was used as a disposal area for sludges from the Industrial Wastewater Treatment Plant (IWTP). Two different types of sludge disposal activities occur at this site. The first was a deposition of an aqueous sludge behind a bermed area (sludge drying). In the second case, dry (or dewatered) sludge was buried in trenches. The previous site investigation focused on two objectives: (1) to locate the suspected buried sludge trenches; and, (2) to assess the extent of contamination (if any) from sludge disposal operations.

Suspected Trench Area

The soils in this area have been impacted down to the groundwater table, two (2) to seven (7) feet below grade. Metals are the only contaminants of concern and are believed to have been contained in the sludge residue that was disposed of in this area. The concentrations of antimony, arsenic, beryllium, cadmium, chromium, copper, mercury, silver, vanadium, and zinc in the soil are higher than the NJDEPE action levels. The metals concentrations detected in the near-surface sample warrants further assessment, as discussed above, to determine if they are typical of area soils (background) or the result of contamination from outside sources.

The groundwater below and downgradient of the suspected locations of the sludge disposal trenches has been impacted. Metals and chlorinated organic concentrations exceed both NJDEPE action levels.

Sludge Drying Area

The sludge drying operations may have left low concentrations of residual metals in the soils and the shallow groundwater table. The concentrations of metals in the soil samples from this area were fairly consistent; and, in most cases, were below the NJDEPE action limits.

Those metals which exceeded limits may be naturally occurring; therefore, as with Site 2, a statistical comparison to background concentrations will be accomplished here. This same approach will be used for groundwater during this RI.

Site 4: Building #41 Fuel Lines

This site is immediately north of Building #41 (see Appendix A). The soils and groundwater have been slightly impacted by leaks from overhead fuel lines in this area. Volatile organics were the only compounds analyzed for at this location during the SI, and the levels detected in soils were far below the NJDEPE action level, while the groundwater concentrations were above action criteria. The concentrations of volatiles in the soil may represent either volatilization from the shallow groundwater table, which has higher concentrations of volatiles, or residual product from the surface spill. The VOC levels indicate that additional soil sampling to locate "hot spots" is unnecessary.

Spills of ethylene glycol (EG) have also occurred in Site 4 during the operation and filling of the EG system located between Buildings #41 and #43. Analysis of soil and groundwater samples for EG was included in the Site Investigations Study; however, no EG was detected. A separate plan of action was prepared to address the spills. The scope of work presented in the plan has been included in the RI sampling effort.

Site 5: Building #42 Fuel Lines

Site 5 is located immediately east of Building #42 (see Appendix A). An undetermined amount of Jet Fuel spilled here sometime in 1965. A conservative estimate puts the upper limit of the volume of the spill at 900 gallons. At the time of the spill, the area was not paved.

The groundwater contamination in this area has been inconsistent. The only contaminants detected in the groundwater at Site 5 are volatile organics. The groundwater sample from monitoring well MW-17S, located downgradient of the fuel lines, contained volatile organics in concentrations above the NJDEPE action criteria during the first round of sampling of the SI. These contaminants were absent in the subsequent second sampling round. During the RI, an additional bedrock monitoring well will be placed at this location to further assess the soils and groundwater here.

Site 6: Oil Contamination

Site 6 is located approximately forty (40) feet northwest of Building #60 (see Appendix A). The site was discovered accidentally by a private contractor in 1985. An exploratory soil boring revealed a layer of oil contamination on top of the groundwater at a depth of 18 feet. The suspected source is two underground storage tanks that have since been removed. Low concentrations of metals were found in the soil and groundwater samples during the SI; other contaminants were found to be either nondetectable or significantly below the action criteria. As with Site 3, contaminant concentrations will be compared to uncontaminated background concentrations during the RI.

Site 7: MOGAS Area

This is the current site of three underground storage tanks. The tanks are no longer in service but had been used until 1978 to store motor oil and gasoline (hence the term MOGAS). Results of the SI indicated that the soil has not been impacted by the tanks. Additionally, these tanks have already been removed under the Navy's Underground Storage Tank (UST) Program (separate from the IR Program). It is expected that once removal and clean-up has occurred under the UST Program, this site will be dropped from the IR Program. Nevertheless, the Navy will install a shallow bedrock well and collect soil samples at this site during the RI. The data obtained will confirm the SI findings, as well as serve to assess overall site conditions.

Site 8: Barometric Well

The barometric well is not actually a well. It is a twelve (12) foot inner diameter sump that was constructed in 1958 to collect and control discharges from floor drains, cooling water return flow, utility drains, and the engine test cells. From the barometric sump, the water is pumped to the industrial wastewater treatment plant.

The barometric well was not identified as a potential source during the IAS; it was identified by the NJDEPE as a potential area-of-concern because of the possible outflow of contaminated water which drains into the well. During the SI, bedrock well BRP-1 was constructed near this site to obtain information on groundwater quality in the bedrock. Results showed concentrations of volatile organics which exceeded the applicable groundwater quality criteria.

It is unlikely that contents of the well (sump) could leak into the groundwater because the water level in the barometric well is always lower than the water table; if anything, water from the aquifer would tend to leak into the barometric sump. It is more likely that the contamination seen in here is due to contaminants migrating through the overburden from another area or, perhaps from underground piping leading to the barometric well that may have leaked. During the RI, two additional bedrock wells will be installed in this area to get a better understanding of the site.

Site 9: Former Sludge Drying Beds

The natural soils located below the former sludge beds were lightly impacted by metals and volatile organics possibly from leachate from the overlying sludges. The analytical results for the soil samples indicate that select metals such as cadmium, antimony, and beryllium slightly exceeded the NJDEPE action levels.

The volatile organics which probably were in the sludges at the time of their deposition have volatilized. The presence of the metals does not represent a significant health risk due to a combination of low migration potential, existing concentration levels, and virtually zero exposure to the public. It is likely that much of the remaining metals are bound to the silt and clay particles which reduce their mobility.

Groundwater results indicate leachate from the sludge drying operations has impacted local groundwater quality. Select metals such as cadmium, chromium, and lead were found in concentrations above the NJDEPE action criteria.

COMMUNITY BACKGROUND INFORMATION

ECONOMIC BACKGROUND

The area surrounding the Naval Air Warfare Center Aircraft Division, Trenton, Ewing Township is dominated by single-family dwellings and small businesses. Located within the 15.1 square mile township, and on the immediate boundaries of NAWCAD Trenton, are the General Motors Corporation, Inland Fisher Guide Plant to the southeast and the Mercer County Airport to the north. Population of Ewing Township at the 1990 census was estimated to be 34,185. A large majority of homes and businesses within an one-mile radius of the facility are supplied with public water. Through a comprehensive well survey, done in 1992, eighty-one (81) private wells were identified.

ECONOMIC PROFILE

The average annual income of Ewing Township residents is \$18,102. As of 1993, the General Motors Corporation, Inland Fisher Guide Plant has been slated for closure. This action will affect 2,500-plus jobs. In addition, NAWCAD Trenton was designated for closure which will mean the loss of approximately 680 jobs within Ewing Township.

POLITICAL PROFILE

The Ewing Township government structure is headed by an elected mayor supported by council members. The township has a manager who handles the day-to-day business of the community.

GENERAL CONCERNS AND INTERESTS

The area of greatest concern at present in Ewing Township is the impending dispersment of Naval property at NAWCAD Trenton. This interest has manifested itself in the development of a local Base Reuse Committee. While many local officials and nearby residents express an interest and concern in environmental affairs at NAWCAD Trenton, these concerns are generally superseded by the greater desire to participate in the formulation of a plan for reuse of the land and buildings present at NAWCAD Trenton.

Regarding the contamination found at NAWCAD Trenton, the greatest concern of the nearby residents is whether the contamination is migrating off-base. The Navy has sampled wells in the local community and has found no evidence that the contaminants found at NAWCAD Trenton have migrated into nearby, off-base, residential wells. Further off-site sampling is scheduled for the future.

CHRONOLOGY OF PAST COMMUNITY INVOLVEMENT

Public Notification of the RI/FS

The NAWCAD Trenton Public Affairs office placed a newspaper advertisement in the Trenton Times on 8 April 1992. The advertisement briefly described the Navy IR Program and provided a point of contact for questions.

Establishment of the Information Repository

An information repository has been created as part of the Navy community relations efforts. The repository contains documents related to the technical and managerial activities under the Navy IR Program. The repository is located at the Ewing Township branch of the Mercer County Library at 61 Scotch Road.

In order to allow maximum availability to the public, documents are "For Reference only" and cannot be removed from the library. Photocopying of documents is permitted.

The Technical Review Committee

The Technical Review Committee (TRC) is a group consisting of state, local, and federal officials and; often, personnel retained from private engineering consulting firms. See Appendix B. It may also include other interested parties as determined by the NAWCAD Trenton Commanding officer. The committee was established to facilitate communication and coordination among the members concerning activities conducted at NAWCAD Trenton. The members review and comment on proposed activities with respect to the Navy's Installation Restoration Program (IRP) at NAWCAD Trenton. The members will coordinate technical review procedures and schedules to be followed by the Navy during the IRP at NAWCAD Trenton.

The members shall identify and review in a timely manner any federal and promulgated state standards, requirements, criteria, or limitations that are legally applicable or relevant and appropriate under the circumstances of the release or threatened release of a hazardous substance, pollutant, or contaminant.

Function of the TRC

The primary function of the TRC is to obtain coordinated direction for the IRP actions at NAWCAD Trenton through consultation with EPA, state, and local authorities and community representatives to resolve questions that arise from actual field activities or submitted documents. They shall recommend necessary changes based on continuing review of IRP actions at NAWCAD Trenton. All responses recommending changes or objecting to IRP actions or proposals must cite specific laws, standards, etc., and must propose viable alternatives. Individual committee members are responsible for ensuring that their input reflects the position of their respective parent organization.

Navy technical data, site inspection reports, remedial investigation reports, feasibility study reports, work plans, and other documents relating to Navy response actions shall be sent to committee members as they become available. Members will submit written reviews within forty-five (45) calendar days following receipt.

The Navy will respond to committee members within forty-five (45) days of receipt of their reviews, indicating its response to all comments.

The members of the Technical Review Committee are shown in Appendix A.

Well Search and Fact Sheet Distribution

As part of this RI, NJDEPE has requested that the Navy conduct a well search within an one-mile radius of NAWCAD Trenton. While some information concerning location of wells is available through computerized databases, the Navy has supplemented the available data with firsthand information.

On 1 and 2 July 1992, Navy representatives conducted a door-to-door survey. As part of the survey, a well search form with a prepaid mailer was distributed. Accompanying the form was a fact sheet that summarizes the Navy environmental program at NAWCAD Trenton.

In September 1993, during a TRC presentation, the results of the initial round of groundwater sampling was reported. During the same TRC meeting, concern was expressed regarding the safety of residential wells in the nearby community. As a result of this concern, a plan to sample the nearby community wells was formalized at a 8 October 1993 meeting. Newspaper articles and hand-delivered fact sheets were used to notify residents of the Navy's intent to sample residential wells in the area. Sampling of the wells occurred in December of 1993. None of the contaminants of concern were detected in the residential wells sampled. The results were hand-delivered to each residence where a well was sampled and again presented in a public meeting on 21 January 1993.

KEY COMMUNITY CONCERNS

Based on the impending dispersement of NAWCAD Trenton land and building resources, most local residents will be interested in base reuse issues and concerns. Previous experience has indicated that local government officials and interested citizens wish to be kept informed of key environmental activities.

During the development of the Community Relations Plan, consideration was given to the community's need for information, and it's interest and willingness to participate in the remedial process. The intent of this plan is to provide a means to keep the local communities informed of major environmental developments at NAWCAD Trenton, as well as to make them aware of the opportunities for involvement in the Superfund process. The overall goal of the Community Relations Plan is to establish procedures to guide the flow of information from the U.S. Navy to federal, state, and local government officials, interested groups and nearby residents relative to environmental investigation and clean-up activities at NAWCAD Trenton. It is anticipated that interest may rise and fall depending on the type and nature of information released by NAWCAD Trenton.

Specific issues which should be addressed by future community relations activities include the following:

- o Maintain a generally high level of participation in local community organizations which relate to base reuse issues. Since many persons interested in local base reuse issues are also concerned about environmental activities, attendance at reuse meetings serves both functions well. In the absence of the base

reuse group, a potential avenue of information dissemination to the local community would be participation in periodic "Town Meetings."

- o General Motors (GM) Corporation has conducted a number of environmental investigations at their facility due to past operation of two oil-skimming tanks located at their on-site wastewater treatment plant, four (4) solid waste management units along the eastern portion of the site, and a leaking Underground Storage Tank.

GM was issued a Discharge to Groundwater permit by the New Jersey Department of Environmental Protection in 1986; and, in compliance with the permit, installed a number of monitoring wells. Quarterly groundwater monitoring results in May 1988 indicated the presence of volatile organic compounds (most notably trichloroethylene (TCE) and vinyl chloride), and metals in exceedence of the permit limits. Additionally, surface water sampling was conducted in the drainage ditch under Parkway Avenue. Results also indicated the presence of TCE and vinyl chloride.

GM has installed additional monitoring wells and prepared several reports. One of these reports, entitled "Groundwater Impact Study," dated May 1991, implicated NAWCAD Trenton as being the source of TCE contamination on the GM site. While GM does not dispute being a contributor to groundwater contamination in the area, their latest reports implicate NAWCAD Trenton as being the sole contributor to TCE contamination. GM has filed a Federal Tort Claim against NAWCAD Trenton for the estimated cost of removing the TCE contamination.

- o The public must be made aware that the Navy is committed to investigating and cleaning up contaminated areas at NAWCAD Trenton. The Navy assumes full responsibility for investigating and remediating the contaminated areas of concern on its property. The public needs reassurance that the Navy will have adequate funding to complete environmental activities at NAWCAD Trenton.

OBJECTIVES OF THE COMMUNITY RELATIONS PLAN

Discussions with local officials and residents revealed that there is significant interest in NAWCAD Trenton base closure issues and moderate interest in environmental activities at NAWCAD Trenton. However, there is a great desire to be kept informed of site activities. The community relations program will be gauged according to the community's need for information, and its interest and willingness to participate in the remedial process. The community relations program will provide a means to keep the entire community informed of major developments at the site and aware of the opportunities for involvement in the Superfund process. The overall goal of the community relations program is to maintain an open line of communication between the Navy and affected community members.

The community relations program for NAWCAD Trenton has the following objectives:

- o **To provide the public with accurate and timely information regarding site activities.** It is important that the community be kept informed of the progress and major milestones of environmental activities at NAWCAD Trenton. The community relations program has been prepared to establish and promote regular communication between residents, town officials, and the Navy. Information given to the public should be accurate, up-to-date, and easily understandable in order to maximize the credibility of the Navy and other agencies involved in the program.
- o **To inform community members about the IRP process and the roles of the Navy, EPA, NJDEPE, and the public.** Efforts will be made to describe the steps involved in the remedial investigation and the criteria used to determine if, and how, a given site should be remediated. The Navy will encourage public comment throughout the RI/FS process. Additionally, information relative to the roles of the U.S. Navy, the EPA, and NJDEPE should be provided.
- o **To support the interpretation of technical information.** To support the interpretation of technical information. Concise and easily-understood information regarding the schedule of technical activities, their purpose, and

their outcome will be available to interested residents and officials.

- o **To identify opportunities for public involvement.**
Explanations of how, when, and where the public may have input into the investigation and clean-up processes.

The above-stated objectives are consistent with Navy policy to:

- A. Be open, cooperative, and forthright with the public concerning environmental clean-up activities and make information on program activities available in a timely manner.
- B. Provide opportunities for and encourage public comment on documents and proposed activities and be responsive to comments.
- C. Establish a Restoration Advisory Board (RAB) at closing and realigning bases where property will be available for transfer to the community. Through this forum, the public may review progress and participate in the decision making process.

COMMUNITY RELATIONS ACTIVITIES

REQUIRED ACTIVITIES

To address requirements of the Navy Installation Restoration Program, as well as potential community concerns, the Navy encourages public involvement in environmental activities at NAWCAD Trenton. Activities which support public involvement include:

- o **Maintenance of an Information Repository:** The NAWCAD Trenton Information Repository is located in the reference area of the public library in Ewing Township, New Jersey. Information within the Information Repository is available for review during normal library hours (see Appendix E). Information within the Information Repository (including draft reports) is generally updated on a periodic basis by NAWCAD Trenton which maintains an inventory of all available documentation. Such an inventory is provided in Appendix E. The Information Repository will be maintained at the library for the duration of remedial activities at the base.
- o **Maintenance of an Administrative Record:** The NAWCAD Trenton Administrative Record is located in Building #34 at NAWCAD Trenton. Information within the Administrative Record is available for review during normal business hours, by appointment with the NAWCAD Trenton Public Affairs officer. Appendix E lists the contents of the Administrative Record.
- o **Public Notices:** To publicize community relations activities at NAWCAD Trenton, a notice will be placed within the local newspapers (Trenton Times, Trentonian) in advance of any public meetings (including Restoration Advisory Board Meetings). Public notices are required to announce the release of a Proposed Plan, the signing of a Record of Decision, and the availability of the Administrative Record file.
- o **Public Comment Period:** The public comment period is a defined period of time (typically thirty (30) days) within which public input is sought from interested persons on a Proposed Plan.

- o **The Proposed Plan:** Following completion of the RI and FS and after consultation with the EPA and NJDEPE, the Navy shall prepare a proposed plan for public review and comment. The proposed plan will present the preferred alternative(s) required to resolve the environmental concerns at any and all sites. More than one proposed plan will likely be presented and each need not be presented at the same time. The proposed plan is a significant public document; a formal announcement of its availability will be made by the Navy.

- o **Public Meeting and Public Comment Period:** The issuance of the proposed plan marks the beginning of a public comment period of at least thirty (30) days in duration. Approximately one week after issuing the plan, the Navy will hold a formal public meeting to discuss the preferred alternative(s). Advance notice of the meeting will be given by the Navy either through the local media, a public mailing, or both. The public is encouraged to review and comment on the proposed plan at the public meeting and throughout the public comment period. Please note that the public comment period begins on the day the plan is issued, and not on the day of the public meeting.

Following public comment, the Navy, NJDEPE, and EPA will confer as to the need for modification of proposed plan and on the response to public comment. Responses to each public comment will be documented in what is known as the responsiveness summary. Changes to the proposed plan, if required, will be completed by the Navy and approved by NJDEPE and the EPA.

- o **Revisions to the Community Relations Plan:** The Community Relations Plan is a dynamic document that is designed to meet the informational needs of the communities surrounding the Naval Air Warfare Center Aircraft Division, Trenton. Revisions will be made as the Installation Restoration process changes. Inputs from community members and the Technical Review Committee will play a part in any changes made to the plan.

- o **Additional Community Interviews:** Community interviews will be conducted to assess the needs of residents for additional information. Appendix C is a sample format for a community survey/interview. It is anticipated

that if any phase of the IR Program would impact the community, additional community comments would be solicited.

- o **Press Releases:** When major actions and meetings are anticipated, press releases will be made to local media.
- o **The Record of Decision:** A Record of Decision (ROD) is legally binding document that requires the Navy to implement the selected remedies described in the final proposed plan. Based on comments received from EPA, NJDEPE, and the public, the Navy will draft and submit to EPA and NJDEPE a draft ROD. In addition to the selected remedies, the draft ROD will include the responsiveness summary mentioned in the "Public Meeting and Public Comment Period" section. The parties will have thirty (30) days to formally select the remedy. If the parties agree on the draft ROD, EPA and NJDEPE shall co-sign the draft ROD and it shall be adopted by EPA, NJDEPE, and the Navy. Within ten (10) days of the receipt of the ROD with EPA's and NJDEPE's signatures, the Navy shall publish and issue the ROD to the public. The ROD must then be implemented.
- o **Responsiveness Summary:** The Responsiveness Summary is a written document that the Navy prepares at the conclusion of a public comment period. This document records the comments, both oral and written, received during the comment period and responds to each comment. It is included as an integral part of the Record of Decision for a given site or operable unit.
- o **Establishment and Maintenance of a Restoration Advisory Board:** The Department of Defense has directed that all bases slated for closure shall establish and maintain a Restoration Advisory Board (RAB). The directive further requires that where a Technical Review Committee (TRC) is already established, that TRC shall be converted into a RAB. The RAB's duties shall include review and evaluation of clean-up documents, identification of project requirements, identification of clean-up priorities, and act as a forum between government agencies and the public for discussion and exchange of clean-up information. The RAB shall consist of Navy, state, and USEPA representatives as

well as public representatives who reflect the diverse interests within the community. The RAB shall conduct regularly scheduled meetings, open to the public, at convenient times.

SUGGESTED ACTIVITIES

In order to inform the public of environmental activities at NAWCAD Trenton, several community relations actions may be taken as needed. These actions include:

- o **Establish Points of Contact with Interested Groups/Organizations:** The local government officials listed in Appendix F may be able to provide specific points of contact with any interested groups and/or organizations which are becoming interested in environmental affairs at NAWCAD Trenton. Cultivation of a single point-of-contact with such organizations provides a means with which to establish a consistent open line of communication.

- o **Prepare and Distribute Fact Sheets/Updates.** Development of relatively short, concise fact sheets allows rapid dissemination of information to interested individuals. This approach would allow distribution of needed information without being too lengthy or technical. Additionally, this method allows regular updates to be distributed in an efficient manner while fostering the sense that the Navy is "taking care of business."

FUTURE COMMUNITY RELATIONS ACTIVITIES

As previously mentioned, the community relations activities described in the "Chronology of Past Community Involvement" section have already taken place. Additional activities are required under the IR Program. The following sections describe the future community relations activities that will be implemented at NAWCAD Trenton.

Establishment of a Mailing List

A mailing list will be developed and maintained for use in distributing information to interested citizens and groups. The mailing list includes those households and businesses contacted during the well search (one mile radius), as well as other

interested parties in the local community. This mailing list will be attached as Appendix F to this plan upon completion of the list.

Periodic Fact Sheets

Fact sheets such as those distributed during the well search will be prepared periodically throughout the course of the IR Program. The fact sheets will be distributed via the mailing list and will summarize significant program milestones. Significant milestones will be considered, as a minimum, the following:

- (a) Completion of the Remedial Investigation,
- (b) Issuance of the RI report,
- (c) Completion of the Feasibility Study,
- (d) Issuance of the proposed plan,
- (e) Response to the public comment period,
- (f) Announcement of the Record of Decision,
- (g) Announcement of construction plans.

Public Meetings

In addition to the formal public meeting that coincide with the issuance of the proposed plan, the Navy intends to hold "workshop" type meetings in a less formal setting. These meetings are expected to occur both prior to and after the formal public meeting. Although no formal plans or date have been set as of this writing, it is expected that the workshop will differ from the traditional public meeting. In particular, workshops may be held on weekends. Also, formal presentations will be kept to a bare minimum. Instead, the focus will be to encourage communication between the general public and those persons familiar with the project and issues.

The Navy understands that there may be a downside to having a meeting which is too unstructured; however, the Navy intends to take an innovative approach with respect to its community relations efforts. Final decisions as to the format of any community meetings would be made by the NAWCAD Trenton Commanding officer with input from the Public Affairs officer and other support personnel. Additional community involvement activities will be initiated by the Navy based on the needs of the public.

Community Interviews and Surveys

The Navy will conduct interviews and surveys of selected community officials and residents in the local area. Those selected will represent, as best as possible, the diverse interests within the local community. Appendix D will list individual and groups that will be interviewed.

TABLE 1

The RI/FS Process

STEP	DESCRIPTION
<p>Preliminary Assessment/ Site Investigation (PA/SI)</p>	<p>The RI/FS process begins with investigations which determine if a suspected area of environmental contamination poses enough potential risk to warrant further investigation. The PA/SI step conducted at NAWCAD Trenton consisted of an Initial Assessment Study (IAS) and Site Investigation (SI) of selected areas.</p>
<p>Remedial Investigation/Feasibility Study (RI/FS)</p>	<p>If a potential threat to human health and/or the environment is indicated by the PA/SI, a more detailed investigation - a Remedial Investigation (RI) - is conducted to assess the extent and nature of the contamination and the potential risks involved. In conjunction with the RI, a Feasibility Study (FS) report is prepared to examine and evaluate various techniques and methods for performing a site clean-up.</p>

TABLE 1

The RI/FS Process

Proposed Plan (PP)	<p>The Proposed Plan summarizes the key results of the RI/FS, describes the remedial alternatives considered for the site, and identifies the Navy's preferred remedial alternative along with the rationale for this preference. The Proposed Plan is presented to the public to inform them of the Navy's preferred remedy and to solicit public comments. The public is encouraged to submit comments on the Proposed Plan during a 30-day comment period. During this comment period, the Navy is available to the public to answer questions concerning the PP and holds a public hearing to solicit verbal and written comments. Information which supports the Navy's rationale for selection of its preferred remedy is organized into an Administrative Record. Key documents within the Administrative Record are available for public review at Information Repositories (e.g., library, etc.) near the site.</p>
Record of Decision (ROD)	<p>The ROD is the formal document which presents all the remedial actions considered for the site and the selected remedy which will be implemented at the site. The ROD includes a responsiveness summary which presents public comments and community concerns on the PP and the Navy's responses to these comments.</p>
Remedial Design (RD)	<p>The remedial design phase of the RI/FS process includes preparation of engineering plans and specifications in sufficient detail so that a construction contractor may build or implement the chosen remedial action.</p>

TABLE 1

The RI/FS Process

Remedial Action (RA)	The remedial action is the method by which contamination is reduced, eliminated, or contained at the subject site.
-----------------------------	---------------------------------------------------------------------------------------------------------------------------

TABLE 2
SUMMARY OF SITES

SITE	NAME	SIZE OF SITE	PRIMARY SUSPECTED CONTAMINANTS	REMARKS
1	Brine handling Area and West End Drainage Ditch	Brine Handling Area 150' x 300' (approx.) West End Ditch 25' x 400'	Trichloroethylene and its' breakdown products	Results from the Site Inspection indicate the presence of volatile organic compounds in the soil but they are below the NJDEPE action levels. The results from the overburden groundwater at Site 1 contains elevated levels of some metals and volatile organic compounds (VOC's).
2	Fire Fighting Area	Circular with a 50' diameter	Fuel Residues	Results from the SI indicate that the fire training exercises had only a minor impact on the soils in the area. Contaminant groups detected were volatile organics, base neutrals, and metals. All organic compounds detected were below NJDEPE action levels. Three metals were detected above action levels and the site is being further evaluated to determine if these levels are significantly above the background levels in the area.
3	Sludge Disposal Area	1000 sf (approx.)	Trace Metals	The SI results indicate soil contamination is limited to residual metals from the sludge and that the groundwater has been impacted by both metals and volatile organics.
4	Bldg. 41 Overhead Fuel Lines Leakage Area	50' x 50' (approx.)	Contaminants from fuel spills	The groundwater assessment at this site did indicate the presence of VOC's. It is thought that some of the contamination at Site 4 has migrated from Site 1 as well as from the actual fuel spillage at Site 4.
5	Bldg. 42 Overhead Fuel Lines Leakage Area	30' x 60' (approx.)	Contaminants from fuel spills	The soil investigation in the SI indicated impact on the soil in this area has resulted from the spills. The groundwater at the site indicated the presence of VOC's with the primary constituents being TCE and dichloroethylene.

TABLE 2
SUMMARY OF SI

SITE	NAME	SIZE OF SITE	PRIMARY SUSPECTED CONTAMINANTS	REMARKS
6	Oil Contamination near Bldg. 34	150' x 100' (approx.)	Contaminants from Petroleum Leaks	SI results indicate metals above action levels in both the soil and groundwater in this area.
7	Former MOGAS Area	15' x 20' (approx.)	Volatile Organics and Trace Metals	Soil samples from three borings taken in the area indicated no evidence of contamination. Wells proposed in the area could not be installed since water was not encountered in the overburden.
8	Barometric Well	Circular with a 50' diameter (approx.)	Trichloroethylene and its' breakdown products	Groundwater samples from a bedrock well adjacent to the Barometric Well indicated the presence of VOC's. This indicated there may be an alternate source of contamination in this area that has not been identified or the contaminants are migrating from one of the other sites into this area.
9	Former Sludge Drying Beds	50' x 50' (approx.)	Trace Metals	Results of the SI sampling indicated only beryllium was detected above action levels in the soil. This could be naturally occurring or an indication of contamination from the sludge beds. Groundwater at the site revealed several metals above action levels. This could once again indicate contamination or background levels since the samples analyzed were unfiltered.

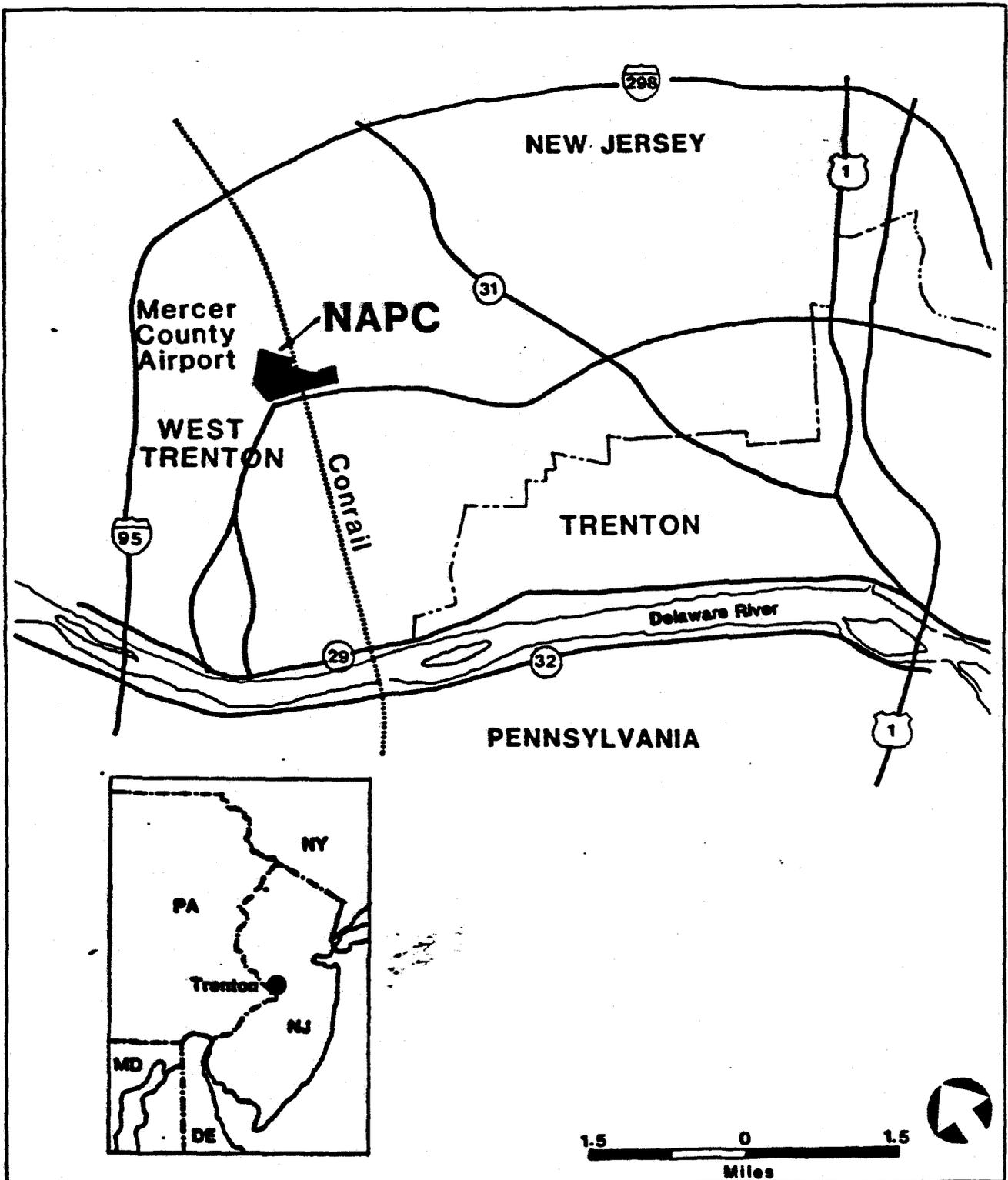
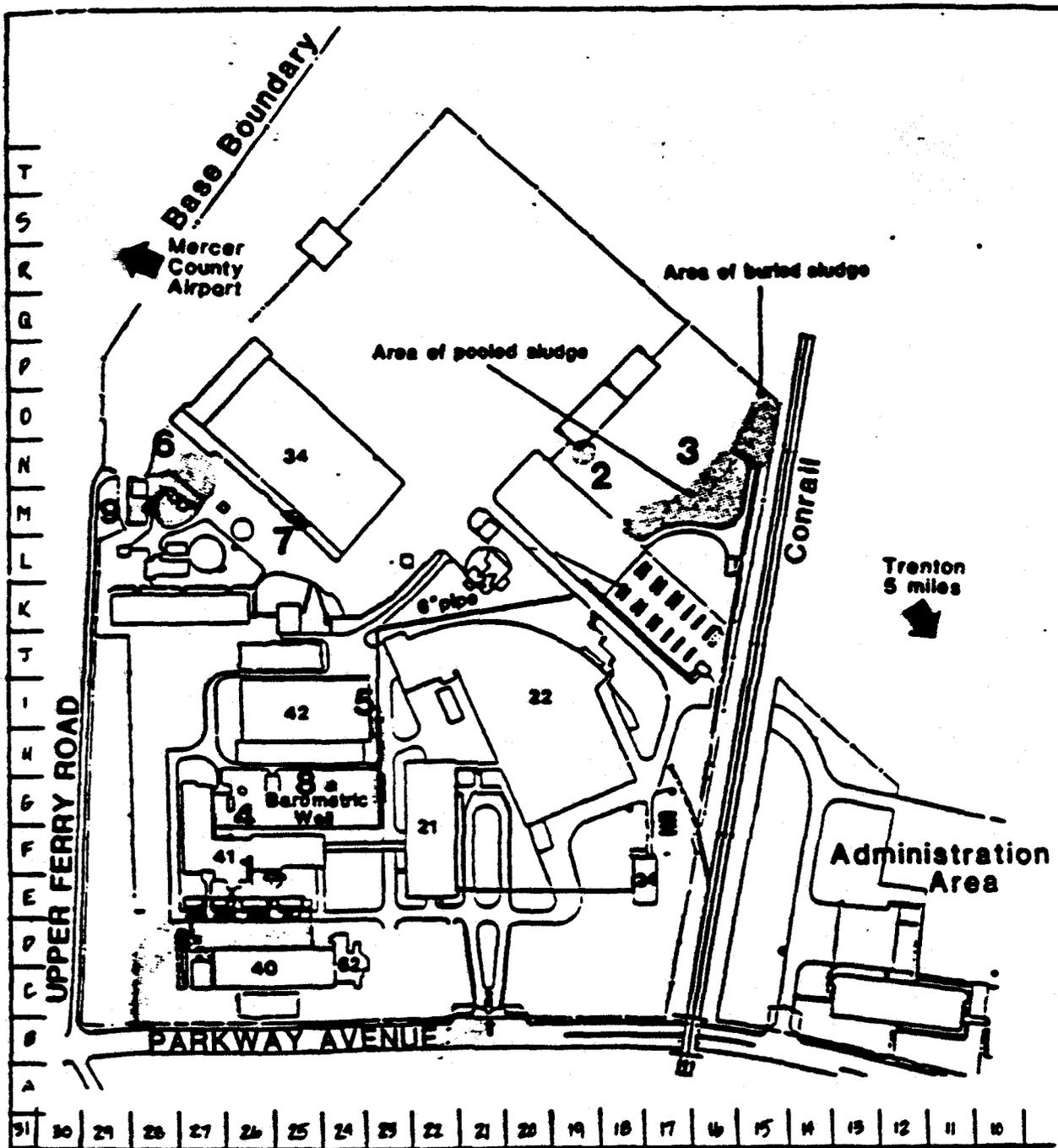


Figure 1-1
Location Map,
NAPC Trenton



Initial Assessment Study
Naval Air Propulsion Center
Trenton, New Jersey





LEGEND

 Site Location

MODIFIED FROM: INITIAL ASSESSMENT STUDY

FIGURE 2
INDIVIDUAL SITE LOCATION MAP
 PREPARED FOR
 NAVAL AIR PROPULSION CENTER
 CONFIRMATION STUDY
 TRENTON, NEW JERSEY
 PROJECT #628788

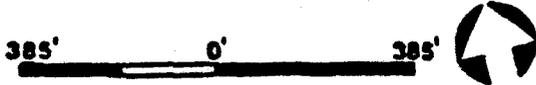
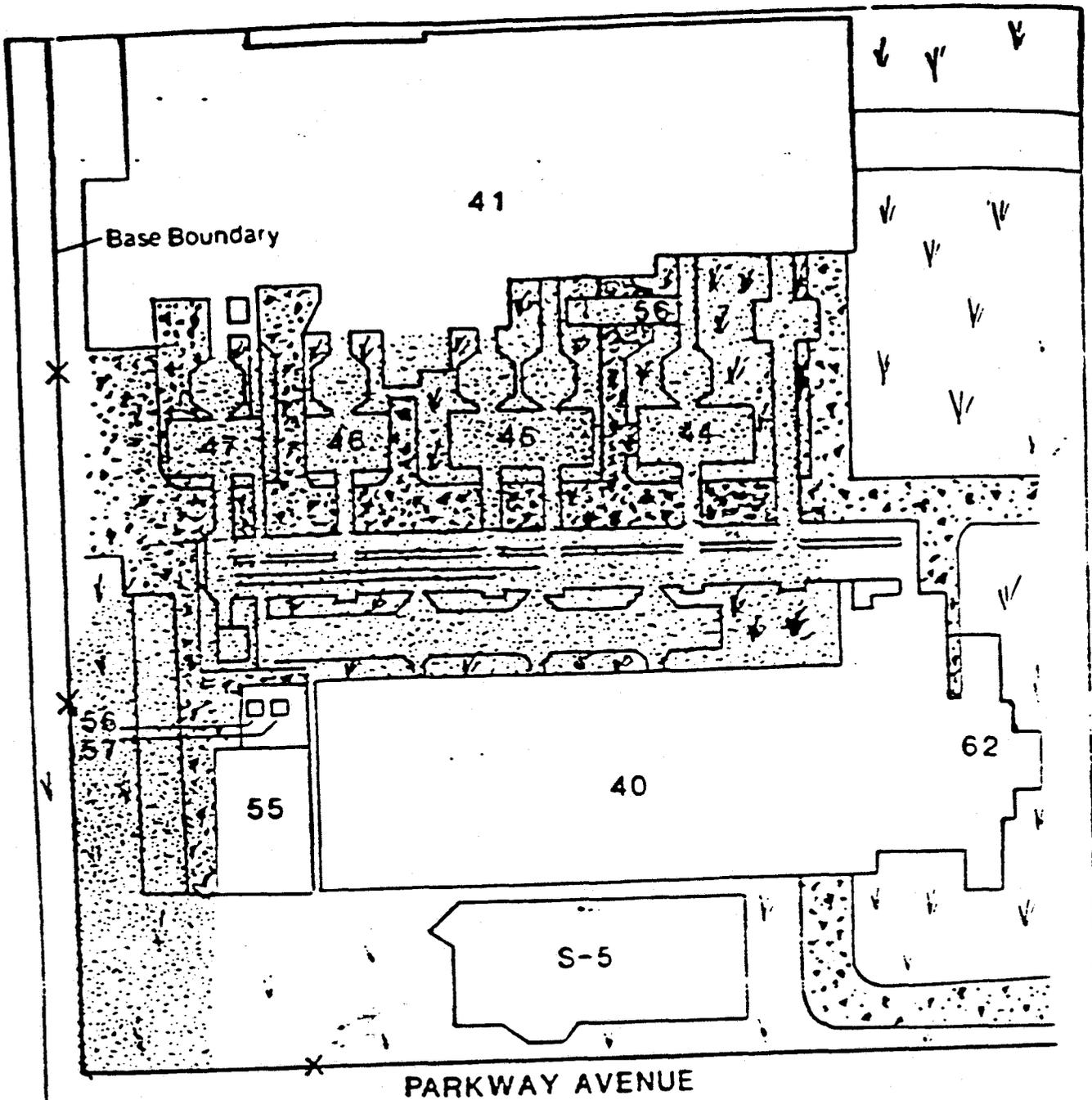


Figure 2

APPENDIX A

Site Plans - NAWCAD Trenton RI/FS Sites and Study Areas

- **Site 1 - Brine Handling Area and West End Drainage Ditch**
- **Site 2 - Fire Fighting Area**
- **Site 3 - Sludge Disposal Area**
- **Site 4 - Building #41 Fuel Lines**
- **Site 5 - Building #42 Fuel Lines**
- **Site 6 - Oil Contamination**
- **Site 7 - MOGAS Area**
- **Site 8 - Barometric Well**
- **Site 9 - Former Sludge Drying Beds**



LEGEND

-  Potential Spill Area
-  Pavement
-  Grass

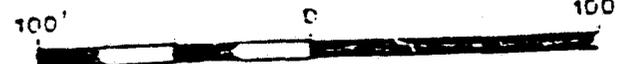


Figure C-2
Site C, Essex
County, New Jersey



Initial Assessment Study
Naval Air Propulsion Center
Trenton, New Jersey

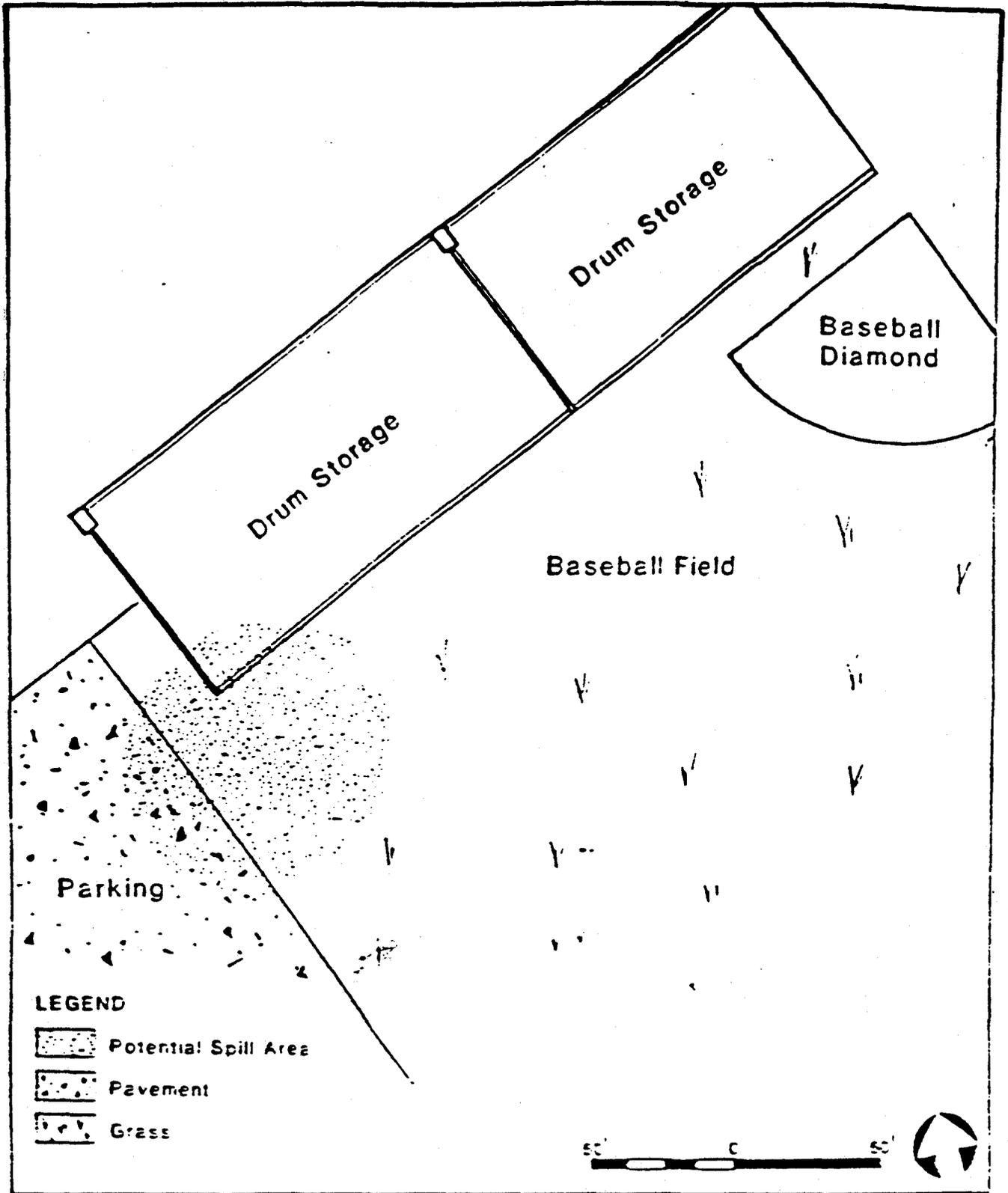
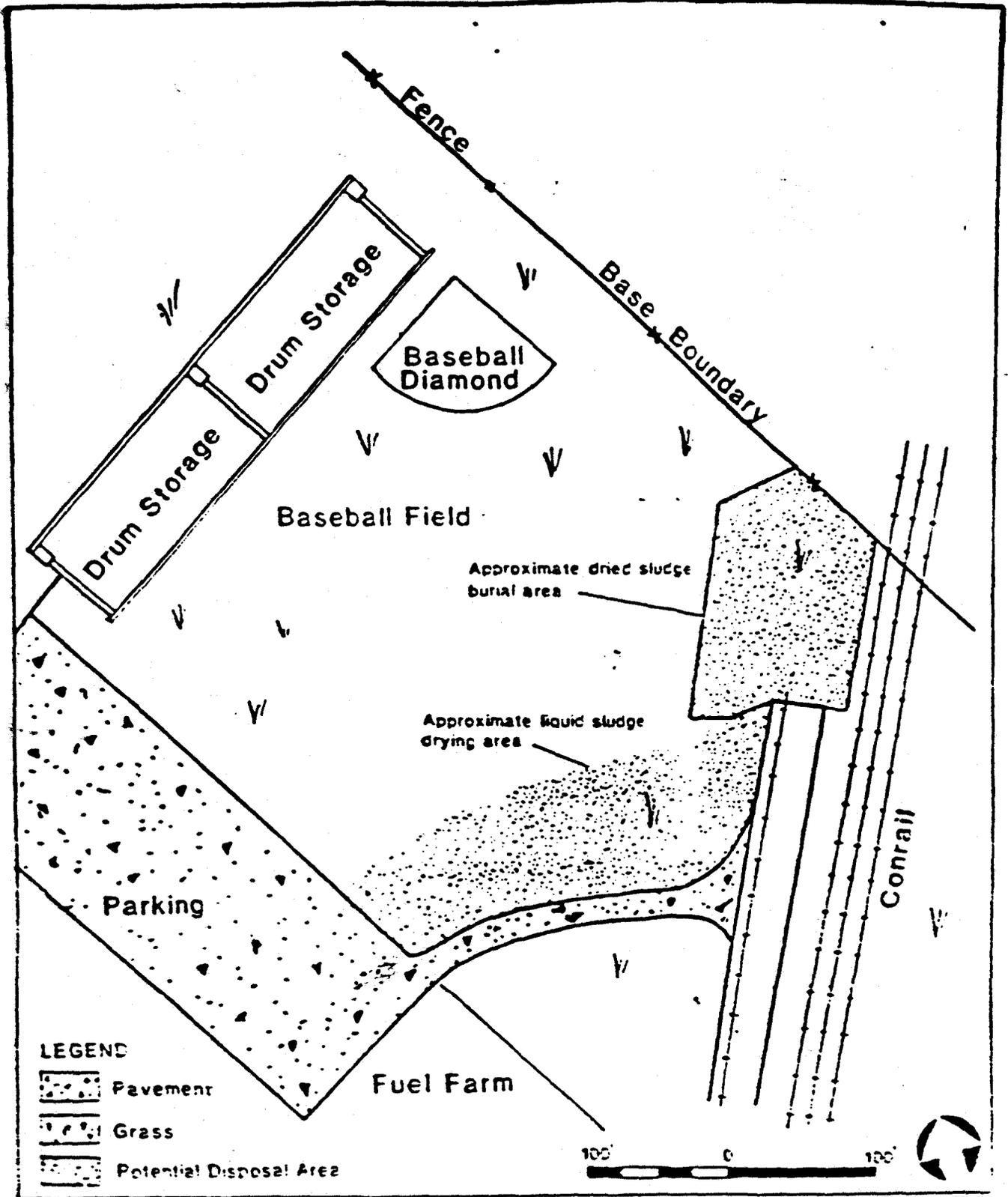


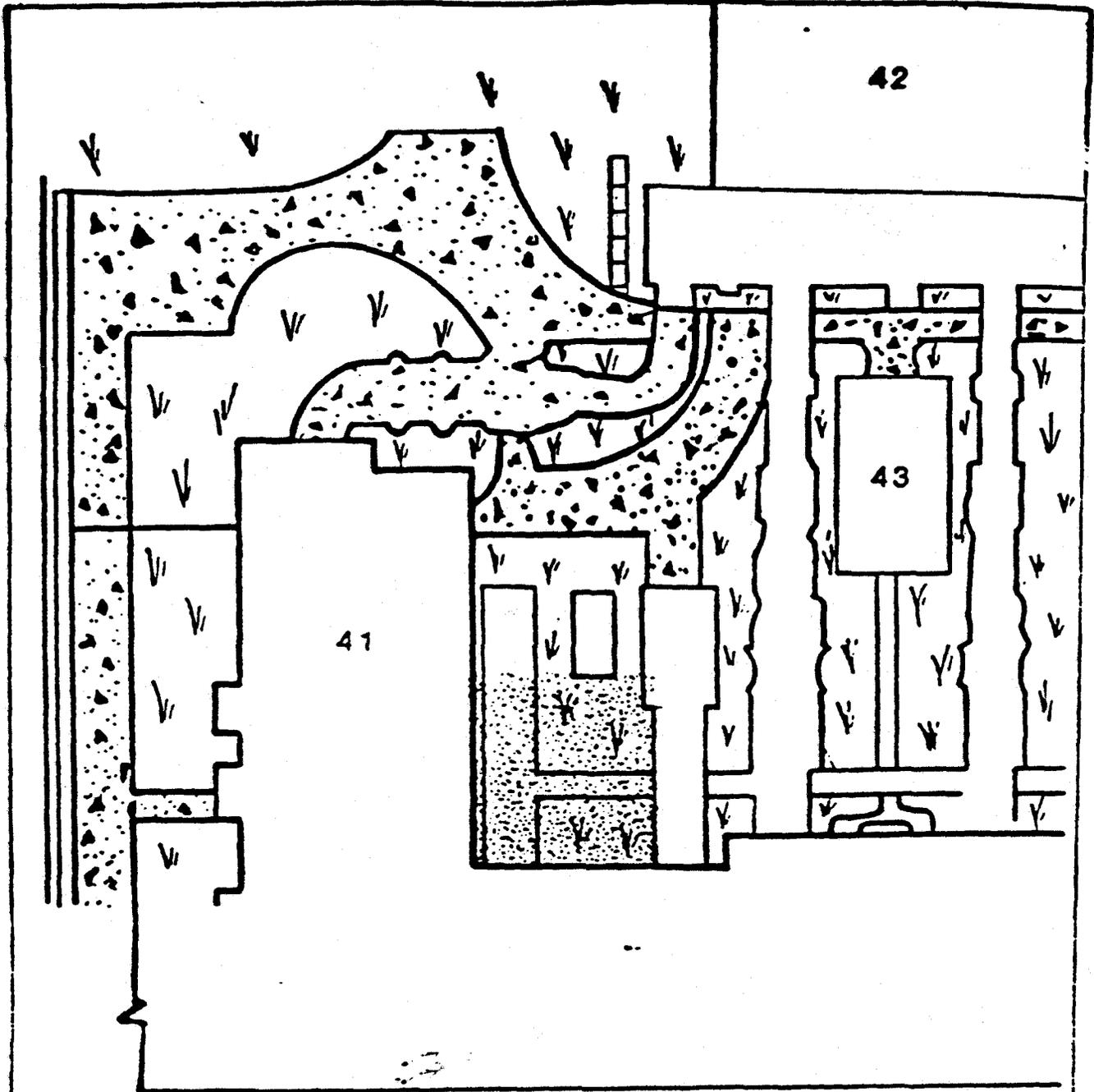
Figure 2-4

Site C, Fire Extinguisher Area



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey





LEGEND

-  Potential Spill Area
-  Pavement
-  Grass

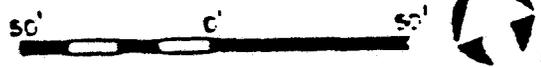


Figure 2-6

Site 4, Buildings 41
Overhead Fuel Lines
Potential Spill



Initial Assessment Study
Naval Air Propulsion Center
Trenton, New Jersey

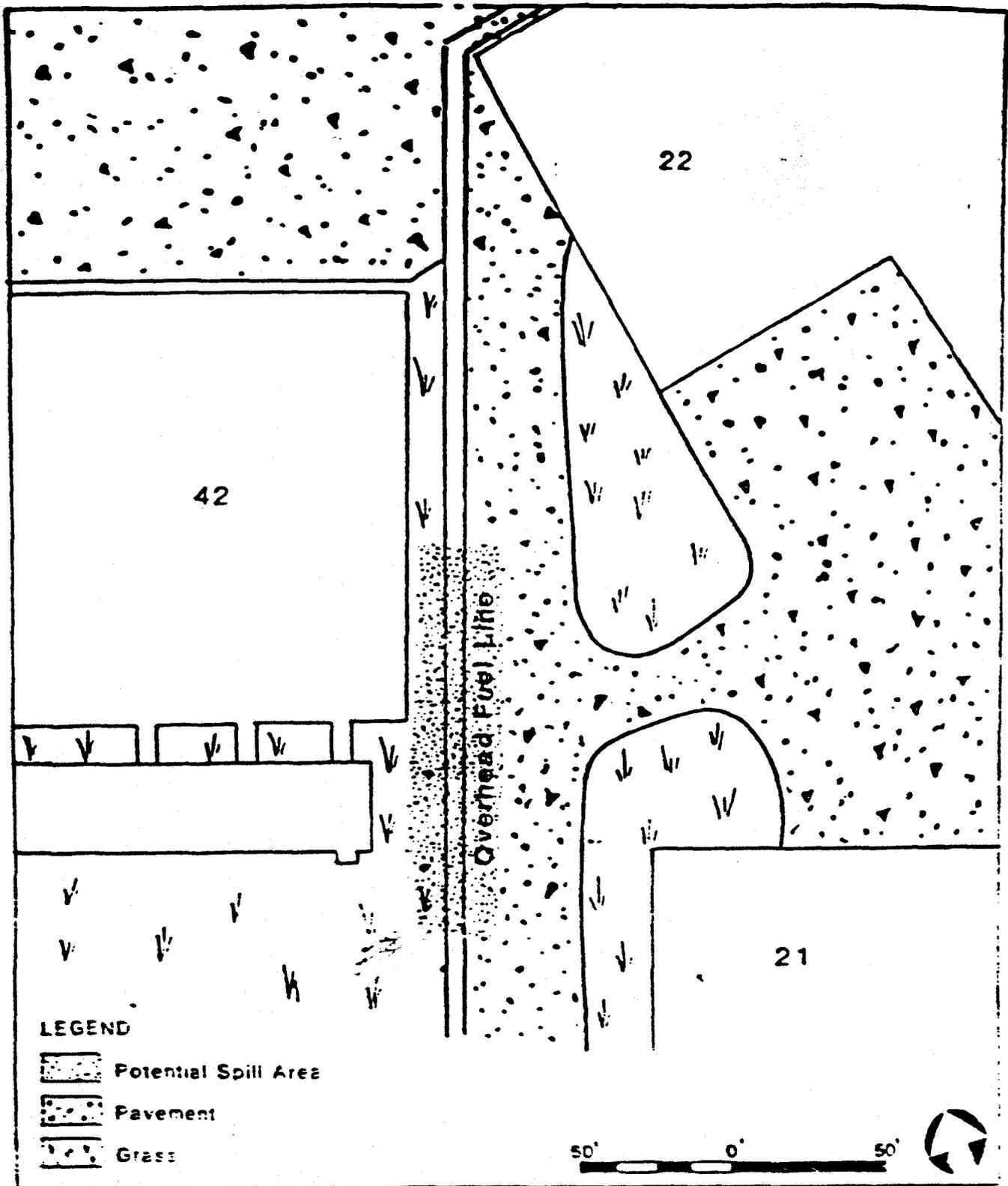
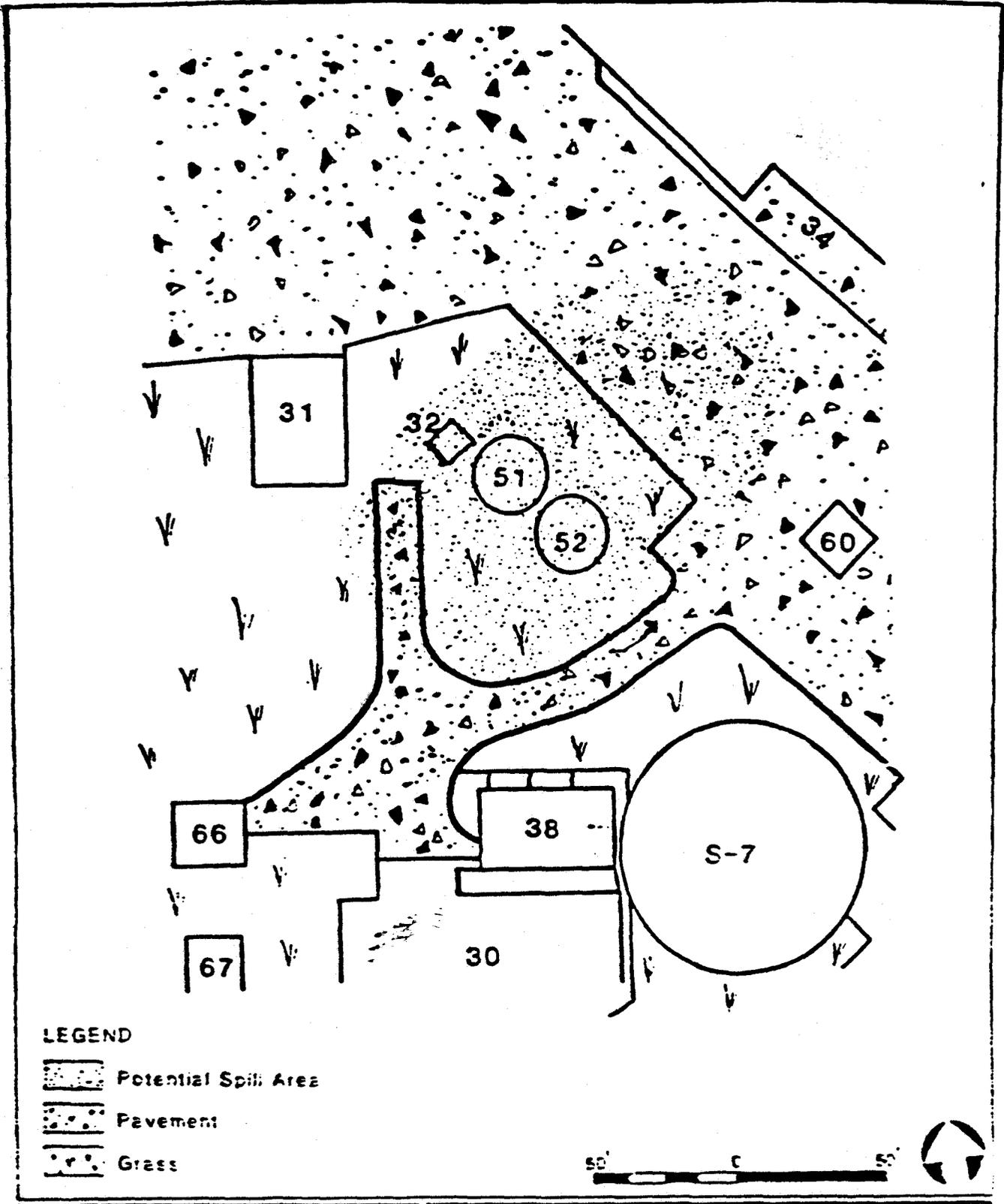


Figure 2-7
 Site 5, Building 40
 Overhead Fuel Lines
 Storage Area

Initial Assessment Study
 Naval Air Provisions Center
 Trenton, New Jersey



LEGEND

-  Potential Spill Area
-  Pavement
-  Grass

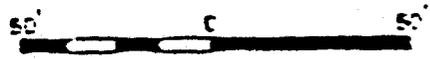


Figure 2-8
 Site 6, CIB Contamination
 Near Building 30

Initial Assessment Study
 Naval Air Engineering Center
 Tuckerton, New Jersey

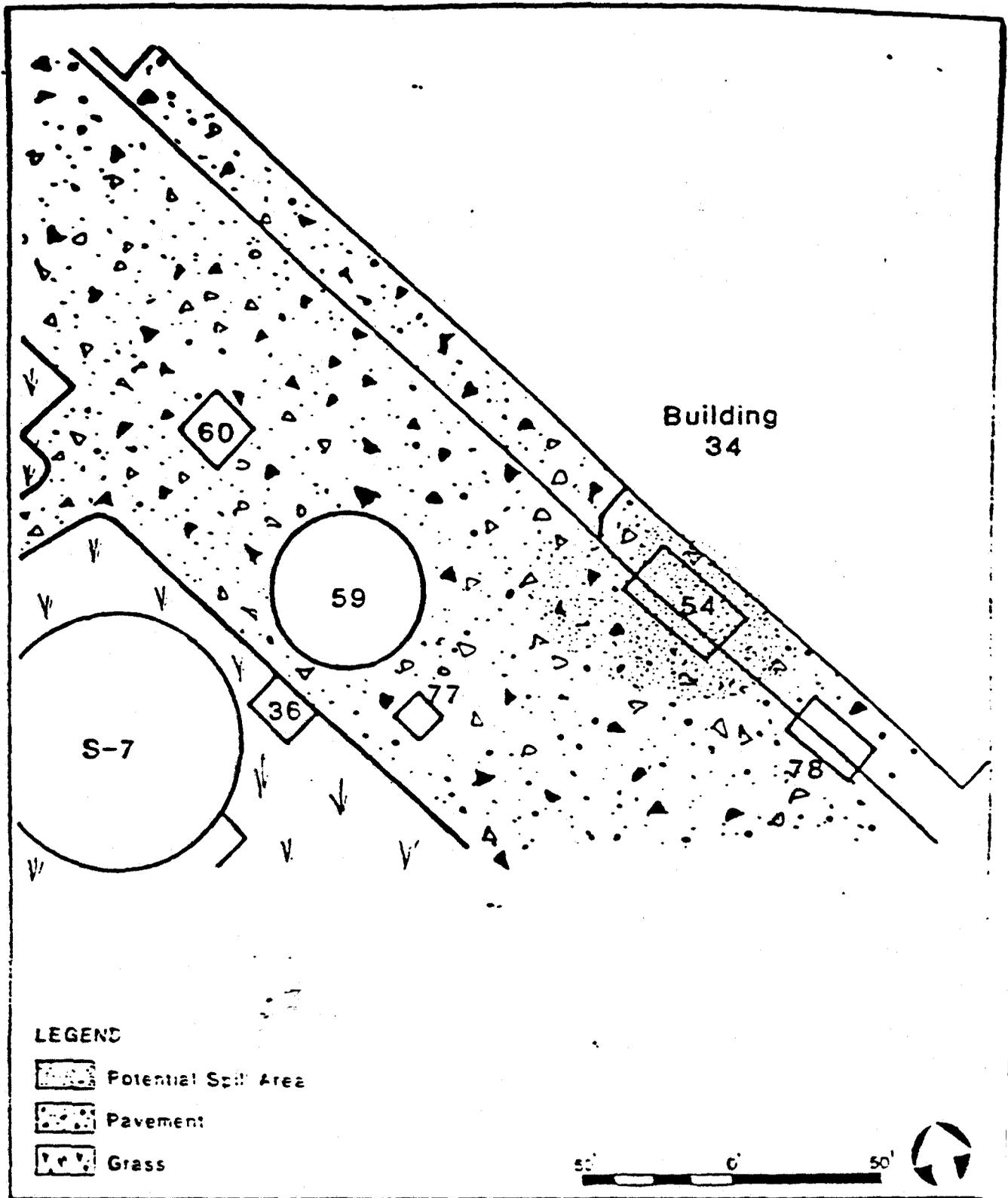


Figure 2-9
 Site 7, Former MCGAS
 Task 2-2-1



Initial Assessment Study
 Naval Air Propulsion Center
 Trenton, New Jersey

DRAWING NUMBER 528765

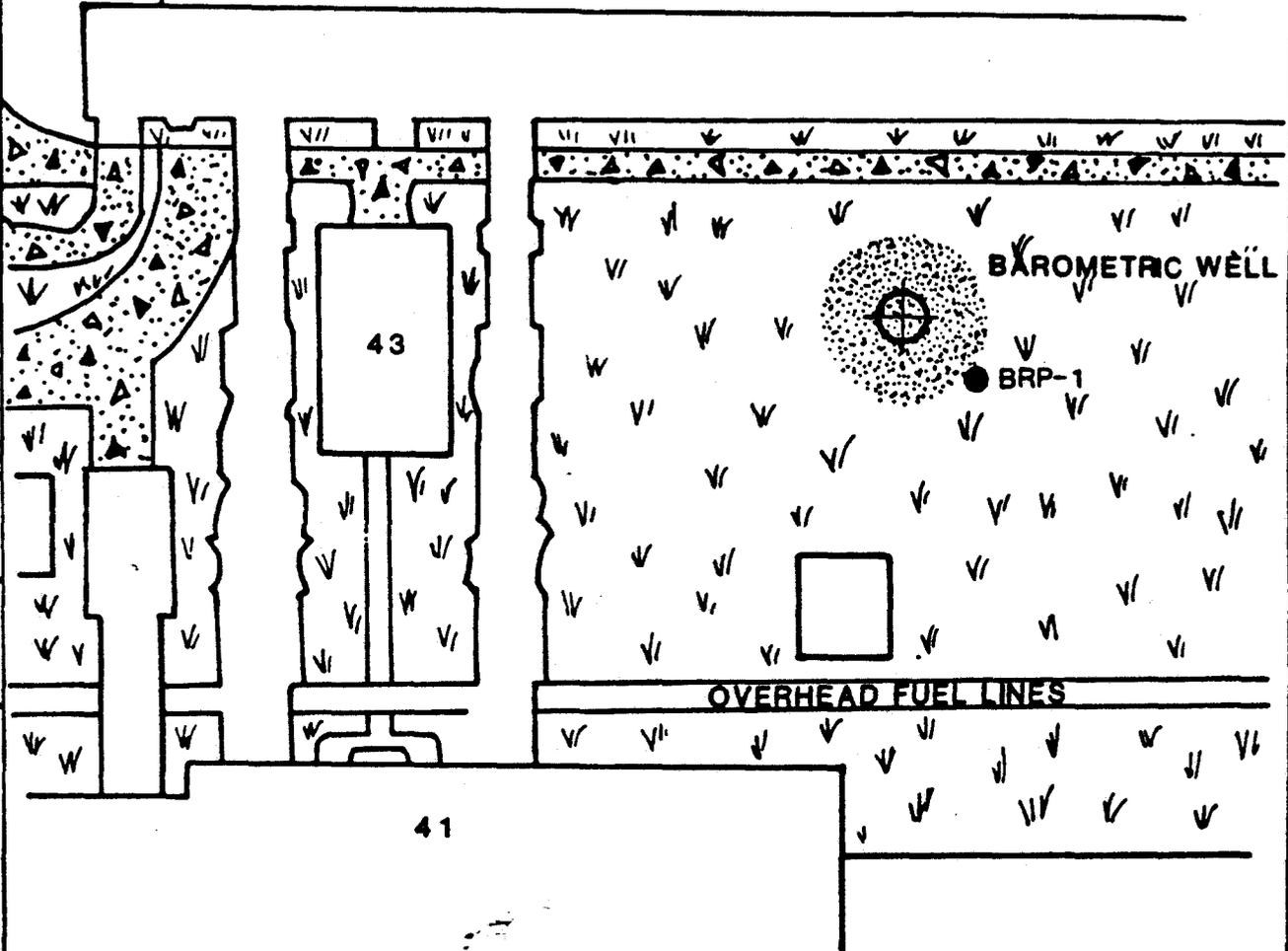
3-79-77 T.W.W.

CHECKED BY APPROVED BY

5-28-68

DRAWN BY

42



LEGEND

-  BRP-1 Bedrock Piezometer
-  Approx. Site Location
-  Pavement
-  Grass

50' 0' 50'



FIGURE 10
 SITE 8 - SITE LOCATION
 PREPARED FOR
 NAVAL AIR PROPULSION CENTER
 CONFIRMATION STUDY
 TRENTON, NEW JERSEY
 PROJECT #528765



MODIFIED FROM INITIAL ASSESSMENT STUDY



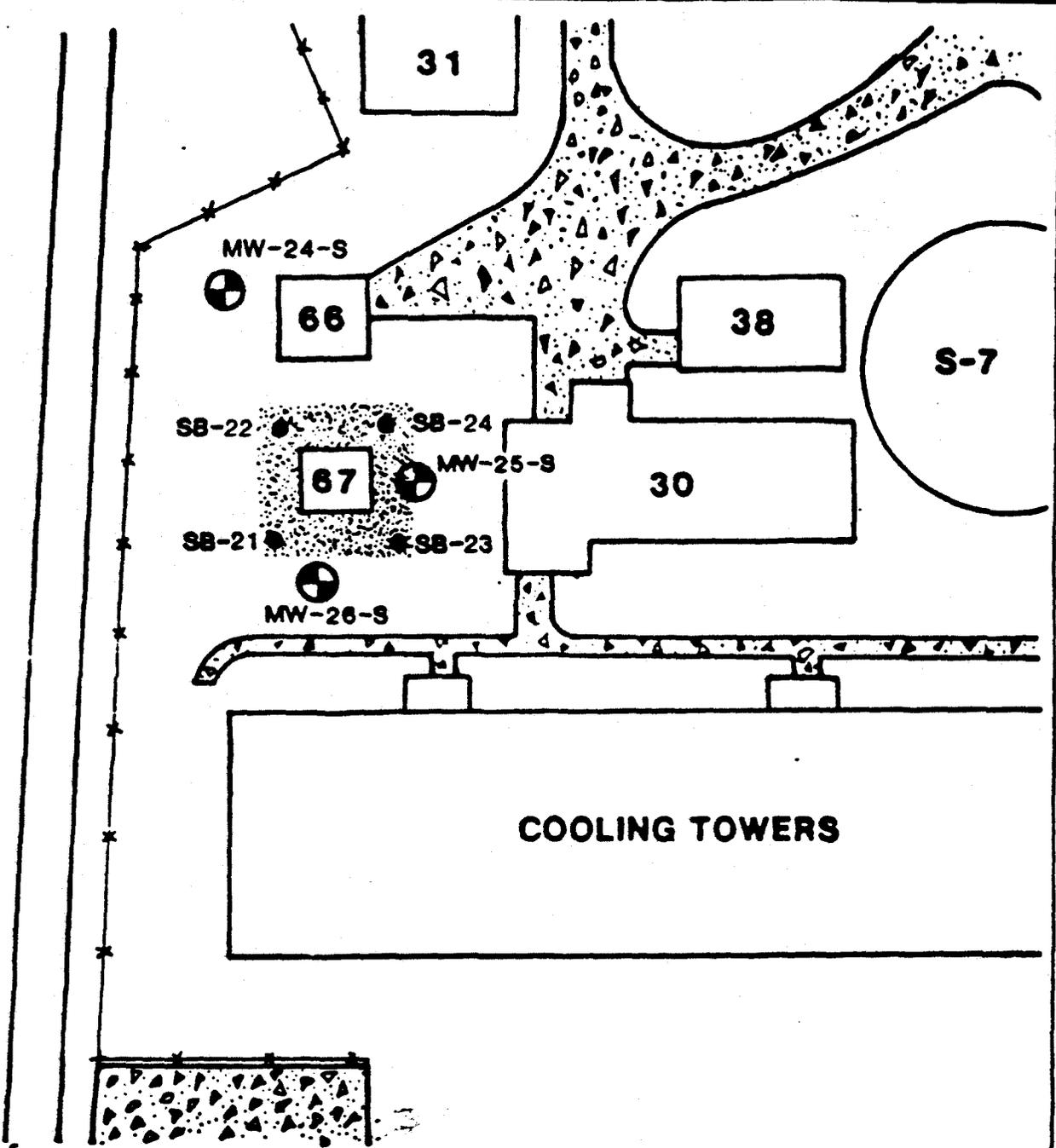
DRAWING NUMBER 528765

CHECKED BY J.L.W. 3.18.88

APPROVED BY

SCALE 5/8" = 1'-0"

DRAWN BY



LEGEND

- Soil Spring Location
- ⊕ Monitor Well Location
- [Hatched Box] Approx Site Location
- [Dotted Box] Pavement
- [Grass Box] Grass

75' 0' 75'



FIGURE 11
SITE 9-SAMPLE LOCATION MAP
 PREPARED FOR
 NAVAL AIR PROPULSION CENTER
 CONFIRMATION STUDY
 TRENTON, NEW JERSEY
 PROJECT #528765



MODIFIED FROM: INITIAL ASSESSMENT STUDY



APPENDIX B

Technical Review Committee Participants

NAWCAD Trenton
CAPT D.C. Offerdahl
Commanding Officer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6602

NAWCAD Trenton
CDR T. Burtis
Executive Officer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6603

NAWCAD Trenton
LCDR T. Smith
Public Works Officer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6667

NAWCAD Trenton
Ken Smith
Environmental Engineer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6677

NAWCAD Trenton
Jeff Dale
Environmental Engineer
NAWCAD Trenton, PO Box 7176
Trenton, NJ 08628-0176
609-538-6677

Northern Division, Naval Facilities Engineering Command
John Koliccius
Remedial Project Manager - Code 1823
10 Industrial Highway - Mail Stop 82
Lester, PA 19113-2090
215-595-0567

Northern Division, Naval Facilities Engineering Command
Jack Dunleavy
Remedial Technical Manager - Code 1822
10 Industrial Highway - Mail Stop 82
Lester, PA 19113-2090
215-595-0567

International Technologies Corporation
Barbara Vogel
Project Manager
165 Fieldcrest Avenue
Edison, NJ 08837
908-225-2000

New Jersey Department of Environmental Protection
Donna Gaffigan
Bureau of Federal Case Management
401 East State Street (CN028)
Trenton, NJ 08625
609-633-1455

City of Trenton Health Office
Richard Salter
319 East State Street
City Hall Annex, 2nd Floor
Trenton, NJ 08608

Township of Ewing Health Office
Albert Leff
2 Municipal Drive
Ewing Township, NJ 08628
609-883-2900

Ewing-Lawrence Sewerage Authority
William Carmichael
600 Whitehead Road
Lawrenceville, NJ 08648
609-587-4061

Delaware River Basin Commission
David Everett/Page Fielding
PO Box 7360
West Trenton, NJ 08628
609-883-9500

General Motors Corporation, Inland Fisher Guide Division
Joseph Keller
1445 Parkway Avenue
Trenton, NJ 08650-1019
609-771-6276

APPENDIX C

COMMUNITY INTERVIEW QUESTIONNAIRE

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
TRENTON, NEW JERSEY

1. Are you aware of the environmental investigation/study underway at NAWCAD Trenton?
If yes, how did you learn of this?
2. Are you aware that clean-up of contaminated areas is planned at NAWCAD Trenton?
If yes, how did you learn of this?
3. How important are NAWCAD Trenton clean-up activities compared to other waste disposal/landfill/environmental issues which may be of concern to you?
4. Do you think the environmental clean-up at NAWCAD Trenton will affect you?
5. Have you experienced any problems that you think may be related to waste disposal or contamination at NAWCAD Trenton? (e.g. health problems, property values, lifestyle, etc.)
6. How long have you lived or worked near NAWCAD Trenton?
7. What do you know about the history of waste disposal at NAWCAD Trenton? Are you aware of any specific waste disposal activities which may have occurred at NAWCAD Trenton?
8. Have you had any contact with NAWCAD Trenton, or federal (EPA), or state (NJDEPE) agencies regarding contamination at NAWCAD Trenton?
9. Do you know of anyone else interested in environmental clean-up activities at NAWCAD Trenton? Do you know anybody who might know about past disposal practices at NAWCAD Trenton?
10. Do you think that NAWCAD Trenton, state, and federal agencies have been responsive in cleaning up contamination at NAWCAD Trenton? Have they been responsive to local concerns/problems?

COMMUNITY INTERVIEW QUESTIONNAIRE

Page 2 of 2

11. Have you ever received a fact sheet about environmental activities at NAWCAD Trenton?
If yes, what do you think of them? Are they too technical? Not technical enough? How could we make them better?
If no, do you want to be added to a mailing list to receive them in the future?

12. What is the best method of informing interested community members about environmental clean-up activities at NAWCAD Trenton? (newspaper articles, cable TV announcements, mailing fact sheets, periodic meetings, etc.)

APPENDIX D

NAWCAD Trenton Community Relations Plan

December 1993

List of Persons Interviewed

(to be completed)

APPENDIX E

MEETING LOCATIONS

Bi-Monthly RAB Meetings and Public Meetings

Ewing Municipal Building
2 Municipal Drive
Ewing Township, NJ 08628
609-883-2900

INFORMATION REPOSITORY

Mercer County Library
61 Scotch Road
Ewing Township, NJ 08618
609-882-3130

Hours:

Monday - Thursday	9:00 - 9:00
Friday	9:00 - 5:30
Saturday	10:00 - 5:00

The repository consists of the following documents:

1. The Navy Installation Restoration (IR) manual,
2. Initial Assessment Study,
3. Site Inspection Report, Final Site Investigation (Vol. 1 & 2),
4. Underground Storage Tank Study,
5. Ethylene Glycol Spill Plan of Action,
6. Remedial Investigation Work Plan (Vol. 1 & 2),
7. Final PA and SI Scoresheets (EPA documents).



**CONTENTS OF ADMINISTRATIVE RECORD
FOR THE INSTALLATION RESTORATION PROGRAM
AT NAWCAD TRENTON**

- 19 NOV 85; CSR WORKSHEETS, COST ESTIMATE WORKSHEETS; Rodgers, Golden, & Halpern.
- MAY 86; INITIAL ASSESSMENT STUDY; Rodgers, Golden, & Halpern
- APR 88; PLAN OF ACTION REPORT FOR SITE INVESTIGATION STUDY; I.T. Corp..
- NOV 89; FINAL SITE INVESTIGATION REPORT, VOL. 1 & 2; I.T. Corp..
- MAR 91; UNDERGROUND STORAGE TANK INVESTIGATION, VOL. 1; I.T. Corp..
- MAR 91; UNDERGROUND STORAGE TANK INVESTIGATION, VOL. 2, APPENDIX D, Parts 1 through 6; I.T. Corp..
- DEC 91; FINAL REMEDIAL INVESTIGATION WORKPLAN; I.T. Corp..
- DEC 91; FINAL REMEDIAL INVESTIGATION QUALITY ASSURANCE PROJECT PLAN; I.T. Corp..
- DEC 91; REMEDIAL INVESTIGATION HEALTH AND SAFETY PLAN; I.T. Corp..
- JAN 92; FINAL SITE INVESTIGATION FOR PA SCORE; I.T. Corp..
- JAN 92; FINAL PA SCORESHEETS; I.T. Corp..
- 22 SEP 92; REMEDIAL INVESTIGATION GROUNDWATER AND STORMWATER SYSTEM SAMPLING, REPORT NO. 1; I.T. Corp..
- 08 OCT 92; WELL SEARCH CONDUCTED IN A ONE-MILE RADIUS OF THE NAWCAD TRENTON, N.J.; I.T. Corp..
- 12 JAN 93; FINAL GROUNDWATER SAMPLING REPORT NO. 2; I.T. Corp..
- JAN 93; INSTALLATION RESTORATION PROGRAM FINAL REPORT, OFF-SITE WELL SAMPLING AND ANALYSIS; I.T. Corp..
- 02 MAR 93; INTERIM SOIL DATA SUMMARY PACKAGE; I.T. Corp..
- 15 JUN 93; TANK CLOSURE REPORT; Gold Seal Corp..
- 13 OCT 93; INSTALLATION RESTORATION PROGRAM FINAL WORKPLAN ADDENDUM PHASE II, REMEDIAL INVESTIGATION AND FOCUSED FEASIBILITY STUDY; I.T. Corp..

APPENDIX F

Mailing List

(to be completed)