

Phase I  
Environmental Site Assessment

of

Former Remington Rand Facility  
180 Johnson Street  
Middletown, CT

April 6, 1993

**Prepared By:**

Scott D. Stevens, Soil Scientist/Environmental Site Assessor  
SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.  
104 Elm Street  
Cheshire, CT 06410  
(203-272-7837, Fax 272-6698)

SS & ES, INC. Job No. HW-93-6-MDT-1

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## 1.0 INTRODUCTION

In accordance with your request, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. conducted a Phase I Environmental Site Assessment of the former Remington Rand facility located at 180 Johnson Street in Middletown, CT. The purpose of this investigation was to identify possible environmental hazards associated with this site or neighboring properties which could impose potential liabilities on current and future owners of the real estate. The Phase I Environmental Site Assessment was performed as part of the feasibility study for the Middletown North End Industrial Area Redevelopment Project and also to fulfill lending institution requirements for the possible future purchase of the property. The Phase I Environmental Assessment included a site inspection, historical research, an overview of the sites environmental setting, personal interviews and a review of available information on file at the Connecticut Department of Environmental Protection (DEP) in Hartford, CT.

In addition, a Federal Data Base Report was obtained through AP Environmental Data Company of Austin, Texas. This report is a compilation of information from key federal Environmental Protection Agency (EPA) environmental regulatory databases which are updated regularly. The following key federal EPA environmental regulatory databases were searched: National Priorities List (NPL); Comprehensive Environmental Response, Compensation, and Liability Index System (CERCLIS); Civil Enforcement Docket (DOCKET); Emergency Response Notification System (ERNS); Facility Index System (FINDS); Resource Conservation and Recovery Information System (RCRIS); RCRA Violator and Enforcement Case Information (RCVIOL) and Toxic Release Inventory (TRI): for the years 1987, 1988 & 1989.

This report was performed to satisfy the lending institution requirements for a Phase I Transfer Act Site Assessment. The assessment was completed in accordance with the Transfer Act Site Assessment (TASA) procedures outlined by the Connecticut Department of Environmental Protection, dated June, 1989. The purpose of our investigation was to identify and evaluate possible environmental liabilities or

hazards, such as the release of hazardous substances or oil and chemical spills. This Phase I Environmental Site Assessment report should not be construed as a regulatory compliance audit. This assessment does not define the extent of contamination if present, nor does it identify the source of contamination. However, it does provide a valuable overall evaluation of potential environmental risks associated with the property.

The conclusions are based upon information obtained through a review of present and past land uses acquired from local and state records, a visual site inspection, interviews with current/past owners and neighbors, and an examination of the Middletown Health Department files, DEP records, EPA database files and aerial photos. The information compiled during interviews and through record searches has been assumed to be correct and complete to date. SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. does not assume responsibility for the discovery and elimination of any contamination or future contamination found at 180 Johnson Street in Middletown, CT. In the event of an error or omission in our assessment, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. can only be held liable for damages amounting to the fee for our services.

## **2.0 SITE LOCATION AND ZONING**

The study site is located on the northern end of Johnson Street and east of the intersection of North Main Street with Johnson Street in Middletown, CT. The study site is bounded by the Middletown Landfill to the north, undeveloped wetlands and the Mattabesset River to the east, the NY, NH & H RR and several commercial businesses including Standard Motor Products (EIS) to the south, and the Hubert E. Butler Construction Company and the Coginchaug River further to the west. The study site is shown in Figure 1, Locus Map, a portion of the Connecticut Light & Power, the Hartford Electric Light and the Southern New England Telephone Company maps dated May 1976. The subject parcel is located within an area of Middletown that is zoned Industrial Redevelopment Area.

### 3.0 SITE DESCRIPTION

The Middletown Tax Assessors Office lists the study site as being located on North Main Street (Map No. 20, Block 12-2, Lot 13) and consisting of approximately 455,539 Square Feet or 10.458 acres of land. A roughly 175,000 square foot building complex with four outbuildings presently exist on the property. The main building complex consists of approximately eleven attached building structures made of wood, metal and brick. An 11,550 sq. ft. brick Boiler Building, a 2,400 sq. ft. metal Quonset Building and a few sheds or storage buildings also exist on the property. See Figure 2, Site Map. A brief description of each building follows:

#### Building

1 - Factory, two story, built 1897,

First floor utilized for manufacturing and as a machine shop

Second floor utilized for woodworking, body making, trimming,  
painting, raw stock storage, assembling, pattern and carpentry,  
and experimental department

2 - Mill, Storage, Grinding and Hardening, Black Smith Shop & Case Hardening, one story, built prior to 1900.

3 - Storage, Dinette, Assembling, Press Department, Brazing Room, one story, built prior to 1900. Also has a one story Machine Shop addition.

4 - Nickel Plating, Storage, one story, built prior to 1900.

5 - Ink Manufacturing, Japan Room, Foundry, one story, built prior to 1900.

6 - Plumbing, Mill, Old Balance Room, two story, built 1897.

First floor utilized as Engine Room and General Storage

Second floor utilized as Engine/Dynamo Room, and Carpenter Shop

7 - Boiler House, one story, built 1897.

8 - Manufacturing and Shipping/Receiving, two story, built 1926.

9 - Office and Maintenance, two story, built 1935.

Office located on second floor.

10- Carbon Coating, one story , built 1926.

11- Use of this building is unknown, one story, built 1934.

The remainder of the study site consists of primarily paved driveways and parking areas, except for a dirt path around the southeastern part of the building and grassed areas between some of the buildings. The office area or northwestern portion of the building complex is heated by natural gas and the remainder of the building is presently unheated. The building was formerly heated by two oil fired steam furnaces located in the boiler room building which is situated on the eastern side of the property. Apparently the boilers utilized coal and then later fuel oil to heat the main building complex. One underground storage tank is known to exist at the study site and three former underground storage tank locations have also been identified on the property. In addition, two above ground storage tanks are located southeast of the Boiler Room Building (Building 7). City water, sanitary sewer, natural gas, telephone and electric utilities are available to the study site. However, portions of the facilities sewage disposal and/or floor drainage systems may still be connected to on-site disposal systems. Dye tests would have to be conducted in order to determine the discharge locations of the floor drains and sewage disposal systems.

#### **4.0 ENVIRONMENTAL SETTING**

This section of the report describes the general environmental condition in the area

of the study site. This information is necessary in order to evaluate the possible effects of current and historical land uses on the environment.

#### 4.1 Site Topography

The study site is located at an elevation of approximately 15 to 25 feet above mean sea level. The surface topography of the study site gently slopes down in a northeasterly direction. Slopes on the site range from approximately 0 to 3 percent. A topographic map of the site is shown in Figure 3, Topography Map, taken from the USGS Topographic Map of the Middletown, CT Quadrangle, dated 1984.

#### 4.2 Site Hydrology

The study site is located in both the Mattabesset River Drainage Basin (4600) and the Coginchaug River Drainage Basin (4607), both of which are subbasins of the Connecticut River Major Basin. Reviews of the DEP Atlas of the Public Water Supply Sources and Drainage Basins of Connecticut, dated 1982, and the DEP's Water Quality Classifications Map for the South Central Coast Basin, dated August 1983, revealed no public water supply wells or reservoirs located in either the Mattabesset River Drainage Basin or the Coginchaug River Drainage Basin within one mile of the study site.

The direction of groundwater flow can be controlled by topography, bedrock geology, surface water and development impacts. We assume the groundwater flow direction to coincide with the bedrock topography of the site, which generally slopes downward from southwest to northeast. However, hydrology in the general area of the study site may be greatly impacted from the Middletown Municipal Landfill which is located in adjacent to the study. The exact groundwater flow direction can only be determined after surveying the elevations of the groundwater in at least three or more locations on the study site. See Bedrock Contour Map, Figure 4, taken from the Bedrock Contour Map of the Bedrock Surface for the Middletown, CT Quadrangle, dated 1976.

### 4.3 Soil Types

According to the Soil Conservation Service's Soil Survey of Middlesex County, Connecticut, the soils on the study site have been identified as primarily Urban Land (Ur) and also some Podunk fine sandy loam (Ps), Rumney fine sandy loam (Ru) and Udorthents, smoothed (UD) soils on the easterly side of the property. Urban land consists of areas where urban structures such as buildings, roads and parking lots, cover more than 85 percent of the surface. Podunk fine sandy loam is a moderately well drained, moderately coarse over coarse textured, friable over loose alluvial soil developed on floodplains. In 1979, the Podunk soil series was reclassified in CT to Pootatuck fine sandy loam. Rumney fine sandy loam is a poorly drained, moderately coarse over coarse textured, friable over loose alluvial soil developed on floodplains. In 1979, the Rumney soil series was reclassified in CT to Rippowam fine sandy loam. Udorthents, smoothed is a well to moderately well drained disturbed soil that has had two (2) feet or more of its original soil surface excavated or filled. For further information about soil properties, refer to the USDA Soil Conservation Service Report, Soil Survey of Middlesex County, CT. (See Figure 5, Soil Survey Map)

### 4.4 Surficial Geology

According to the DEP Water Resources (Bulletin 31) Geohydrologic Map of the Lower Connecticut River Basin, the study site is situated within an area composed of fine-grained stratified drift. These are sorted sediments deposited by or in glacial meltwaters. Materials range principally from clay to very fine sand. In the Middletown-Berlin area material is predominantly glacial-lake clay. This unit is generally unproductive except in restricted areas where lenses of fine to medium sand occur. In such areas, yields to screened wells range from 20 to 200 gallons per minute. The Water Resources Geohydrologic Map indicates that the saturated thickness of the stratified drift beneath the study site is approximately 10 to 40 feet thick.

#### 4.5 Bedrock Geology

According to the USGS/DEP Bedrock Geology Map of Connecticut, dated 1985, the bedrock which underlies the study site has been mapped as reddish-brown Portland Arkose (Jp). Arkose is a red to brown, medium to coarse grained, sandstone-like, sedimentary rock containing quartz, feldspar, and rock fragments. It is the most common sedimentary rock of the Central Lowlands; locally known as brownstone. Brownstone was quarried for use as building stone.

#### 4.6 Sensitive Areas

The Mattabeset River and its associated wetlands to the northeast of the study site are considered sensitive areas of environmental concern. Wetlands are considered sensitive areas of environmental concern since they provide habitat for many species of flora and fauna, filter pollutants from surface waters and provide stormwater retention to help prevent flooding. Watercourses not only provide habitat for many species of plants and animals but they also provide base flow for downstream waterbodies, recharge water resource aquifer areas and offer some recreational potential. Thus the Mattabeset River and its associated wetlands should be considered sensitive areas of environmental concern associated with the study site. Care should be taken to prevent any discharges of contaminants into the watercourse and associated wetlands which might negatively impact sensitive aquatic systems located downstream of the study site.

### 5.0 HISTORIC USES OF THE STUDY SITE AND ADJACENT PROPERTIES

Historical information pertaining to the study site was compiled from a review of the following sources: 1) information obtained from the Middletown Town Hall which included tax records, deeds and permits; 2) City Directories found on file at the State Library in Hartford, CT; 3) Sanborn Fire Insurance Maps found also found on file at the State Library in Hartford, CT.

## 5.1 Town Hall Records

According to the Land Records in the Middletown Town Hall Assessors Office, 180 Johnson Street is currently owned by Depot Distributors, Inc. (Vol.944, Pg.249). Depot Distributors purchased the study site in December of 1990. However, people familiar with the study site speculate that the property has just recently been forced into involuntary bankruptcy (early March). Apparently Fleet Bank currently holds the mortgage for the property.

## 5.2 City Directory's and Sanborn Fire Insurance Maps

The building which presently exists at the study site was built in 1897 for the Keating Wheel and Automobile Company which manufactured bicycles and then automobiles at the study site until 1900. Apparently the Keating Wheel Company produced the first motor bicycle in the country and was the only automobile manufacturer in the City of Middletown. Between 1900 and 1908 the Eisenhuth Horseless Vehicle Company also manufactured automobiles at the study site. Starting in 1909 Noiseless Typewriter Company, Inc. began manufacturing typewriters at the study site. The Middletown city directory's indicated that the Noiseless Typewriter Company's office was located at 701 High Street in Middletown, CT. In the mid 1920's the name of the typewriter manufacturing company was changed to Remington Noiseless Typewriter Corporation and in the late 1920's the name was changed again to Remington Rand Incorporated. According to the RFP, apparently there was a bitter labor dispute in the 1930's which ultimately led to the demise of the typewriter manufacturing industry in Middletown. For approximately five years during the mid 1940's a company named Andover Kent Aviation Corporation manufactured metal goods at the study site.

Around 1951 Remington Rand Office Machines began producing office supplies such as plaster plates, typewriter ribbon, carbon paper, uniac ribbon and microfilm at the study site until around 1970. According to a letter which was found on file at the DEP Hazardous Waste Unit, dated December 29, 1983, Remington Office Machines moved their operation to Blue Bell, Pennsylvania between 1970 to 1971.

Apparently Forest City Realty Company then purchased the property and leased building space to E.I.S. Automotive Company for storage. Also, first floor space in Building #9 was leased to a Schwartz family for storage of their car collection. In 1978, Parker Hannifin Corporation who was the parent company of the E.I.S. Brake Parts Division purchased the property from Forest City Realty.

In May of 1984, Anthony J. Sessa purchased the property from Parker-Hannifin Foundation (E.I.S.). In September of 1984, Ronald R. Johnston purchased the property from Anthony J. Sessa. Mr. Johnson apparently rented space to Depot Distributors of New England and Newtown Manufacturing & Building Supply Corporation in 1987 and 1988 respectively. Depot Distributors was a wholesale manufacturer of kitchen cabinets and New Town Manufacturing was in the window business. In December of 1990 Depot Distributors, Inc. purchased the property but has since reportedly gone into bankruptcy. Both Depot Distributors (346-5222) and New Town Manufacturing (344-1350) no longer occupy the building complex.

The Sanborn Fire Insurance Maps indicated that three former underground storage tanks were located on the study site. One gasoline tank was located northwest of Building 1 and another gasoline tank was located northeast of Building 8. A former crude oil tank was located northeast of Building 4. In addition, electrical transformers were formerly located northeast of Building 4. Other historical areas of concern identified on the Sanborn Maps include an Oil House which was reportedly located southeast of Building 1, an Oil Reclaiming Building which was situated north of Building 8 and a former Cleaning Castings Building which was located northeast of Building 10. It is likely that these buildings could have had oils or chemicals stored or handled within them. Detailed investigations around these buildings should be conducted in order to identify any possible areas of subsurface contamination. See Figure 2, Site Map, for the approximate locations of these former structures.

### **5.3 Middletown Health Department Files**

On April 1, 1993, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. interviewed Leon F. Vinci who is the Director of Health with the Middletown Health Department. According to Mr. Monopoli, no environmental problems have been reported at the study site for the last 20 years in which he has worked for the town.

On April 7, 1993, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. conducted a telephone interview James Monopoli who is a Public Health Sanitarian with the Middletown Health Department. Mr. Monopoli stated that approximately 200 bags of asbestos pipe insulation and floor tiles are located in the Boiler Room Building (Building 7) at the study site. Apparently Depot Distributors obtained both a permit from the State Health Department for asbestos abatement and a permit from the DEP for asbestos disposal associated with the removal of asbestos from the buildings at the study site. Mr. Monopoli claimed that the asbestos abatement stopped when Depot Distributors ran into financial problems.

### **5.4 Middletown Fire Department**

On March 29, 1993, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. conducted a telephone interview with Jim Chubbuck who is the Deputy Fire Marshall with Middletown Fire Department. Mr. Chubbuck stated that no fire or tank failure incidents have been reported to the best of his knowledge for the past ten to twenty years since he has been working with that department.

### **5.5 History and Land Uses of Adjacent Properties**

The study site is located within a mixed residential, commercial and industrial area of Middletown. The current land uses of properties located adjacent to the study site include the Middletown Landfill to the north, undeveloped wetlands and the Mattabeset River to the east, the NY, NH & H RR and several commercial businesses including Standard Motor Products (E.I.S.) to the south, and the Hubert

E. Butler Construction Company and the Coginchaug River further to the west.

The Middletown Municipal Landfill consists of approximately 21 acres of land where mixed wastes have been deposited since the early 1950's. Three groundwater wells exist at the landfill and several soil and groundwater contaminants have been detected on the property. Prior to the landfill the property was once part of the Noiseless Typewriter Company's property and consisted mostly of wetlands. The area where the entrance road to the landfill is located was at one time a baseball field.

The EIS division of Standard Motor Products manufactures automobile brakes and wheel cylinders. They operate three shifts and employ approximately 200 people. They are presently moving their operation to their Berlin facility. Historically, their Middletown plant has been at 695 High Street since the early 1930's. The oldest part of the EIS building was built in 1926, with several additions added to the main building.

The Hubert E. Butler Construction Company has existed at 175 Johnson Street since 1965. Prior to 1965 CT Valley Welding Company, Gasket Materials Corp. and the Connecticut Company have occupied this site.

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. does not perform legal title searches and, if additional information is required, a thorough title search should be performed by an Attorney or other qualified person. Historical information was obtained through the Price & Lee and Johnson City Directories on file at the State Library in Hartford, CT, Sanborn Fire Insurance Maps and records in the Middletown Town Hall.

## 6.0 SITE INSPECTION

On March 22 and 26, 1993, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. performed site inspections of the former Remington Rand Facility located at 180

Johnson Street in Middletown, CT. The current tenants of the building complex include: Stone Container Corporation (346-7567), All American Moving & Storage, Inc. (347-2450), David A. Lenz Landscape Service (347-5929) and Ronald E. Foose Company (346-9617) which is a painting/wallpapering contractor who operates his business in the boiler room building. The majority of the first floor of the main building complex is utilized by Stone Container Corporation to store corrugated cardboard box containers. Stone manufactures its corrugated cardboard containers in its Portland facility located on 74 Pickering Street. Building 9 is presently utilized by All American Moving & Storage, Inc. for office space and storage of furniture. David A. Lenz Landscape Service occupies the metal Quonset Building (Y-2) located northwest of Building 8. Ronald E. Foose Company occupies Building 6.

A visual inspection of the interior of the main building complex revealed possible lead paint and asbestos throughout most of the building. Floor drains were observed in Building 5 and the addition between Building 8 and Building 1. Trenches were also observed in the addition between Building 8 and Building 1 and in Building 10. The trenches contained a black liquid substance. A concrete settling vault was also observed in Building 10. Two carts holding asbestos were observed on the first floor in Building 8 at the time of our site inspection. A strong odor was noticed during the inspection of Building 5. Fill pipes were observed in Buildings 4 and 8. Florescent light fixture ballasts, transformers, hydraulic fluid in the elevator and an underground tank possibly located near a concrete structure in Building 8 may all possibly contain polychlorinated biphenyls (PCB's). Dust present in Buildings 4, 5 and 10 may contain heavy metals from nickel plating, metal casting and carbon coating operations which were conducted in those buildings.

A visual inspection of the exterior of the building complex revealed a 20,000 gallon above ground storage tank located southeast of the Boiler Room Building. According to Ray Ledger of Stone Container Corp., "the 20,000 gallon above ground fuel oil tank which has not been utilized for a while is approximately half full of oil. Mr. Ledger also stated that the 20,000 gallon above ground storage tank has a lot of water in it". A 1,000 gallon above ground storage tank is located on the

southeastern side of Building 7. A strong odor was observed in a storm drain located in the driveway on the northwestern side of the building. The odor was believed to be possibly originating from leachate associated with the Middletown Municipal Landfill which is situated just north of the former Remington Rand building. A floor drain was observed in the Quonset Building where David A. Lenz Landscape Service is located. The floor drain in the Quonset Building should be investigated for possible contamination associated with fertilizers, pesticides and herbicides which might have been spilled or discharged into the subsurface. Vent and fill pipes to a underground storage tank were observed on the northeastern side of Building 8. Cement saddles to a former above ground storage tank were observed near the fence located south of Building 5. Stained soils and distressed vegetation were observed on both sides of the metal passageway building located southeast of Building 5. Improperly stored oils/chemicals exist in the cinder block building located southeast of Building 5. Oils/chemicals identified in the cinder block building include: one 5 gallon bottle of HCL Acid and several drums and pails of grease and other unknown/unmarked oils and/or chemicals. Four or five large transformers were observed on the property at the time of our site inspection. These old transformers may contain PCB cooling oils.

Finally, drums and other metal storage containers were observed in a fill or dump area located in the general vicinity of the Right of Way which is situated northeast of the Boiler Room Building. An area with dark stained soils was discovered just north of the boiler building. An employee of David Lenz Landscape Service, indicated that the DEP had investigated the stained soil area approximately two years ago but didn't issue any orders for clean-up. SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. was unable to obtain any further information to confirm or deny if the DEP had investigated this potentially contaminated area.

## **7.0 DEP AND EPA RECORD SEARCH**

The DEP's Water Quality Classifications Map for the Connecticut River Basin, dated August 1983, was reviewed. The DEP has designated the groundwater in the area

of the study site as Class GB. The DEP Water Compliance Unit describes GB as "Ground waters within highly urbanized areas or areas of intense industrial activity and where public water supply service is available. This groundwater may not be suitable for direct human consumption due to waste discharges, spills or leaks of chemicals or land use impacts. The state's immediate goal is to prevent further degradation of the groundwater quality by preventing any additional discharges which would cause irreversible contamination." The DEP has designated the surface water quality of the Coginchaug River as Class Bc and the surface water quality of the Mattabeset River as Class C/B. The "Bc" classification indicates that the Coginchaug River is suitable for its intended purpose, which is a cold water fishery. The "C/B" surface water quality classification of the Mattabeset River indicates that this surface water is "Presently not meeting water quality criteria or one or more designated uses due to pollution. The surface water quality goal for the Mattabeset River is Class B. See Figure 6, DEP Water Quality Map.

The DEP's Leachate and Wastewater Discharge Sources Map for the Connecticut River Basin, dated February 1987, was reviewed. The Leachate and Wastewater Discharge Sources Map revealed two leachate sources in both the Mattabeset River Drainage Basin (4600) and the Coginchaug River Drainage Basin (4607), within one half mile of the study site. The listed leachate sources are the City of Middletown mixed waste landfill and the former Armetta bulky waste landfill. Due to the Armetta Landfill's distance from the study site, topographic position and separation from the study site by the Coginchaug River which acts as hydrologic barrier, it is unlikely that the former Armetta bulky waste landfill could impact the study site. However, there is a likelihood that the study site is being impacted by the Middletown Municipal Landfill due to its close proximity and topographic position relative to the study site. (See Figure 7, DEP Leachate & Wastewater Discharge Map)

A review of the CT DEP Inventory of Hazardous Waste Sites in Connecticut, dated January, 1987, a review of the CT DEP superfund dynamic inventory addendum, dated February 4, 1993, a review of the EPA's Superfund Program "CERCLIS", dated

April 1, 1993, and a review of the EPA's National Priority List for Connecticut, dated April 6, 1993, revealed two listed hazardous waste/superfund sites in the Mattabeset River (4600) and the Coginchaug River Drainage Basins (4607), within one mile of the study site. The listed sites are the Middletown Municipal Landfill and J.J. Vinci Coal Company.

The Middletown Municipal Landfill is situated adjacent to the study site at the north end of Johnson Street in Middletown, CT. The property is also referred to as the North End Landfill and the Middletown Landfill. A record search conducted at the DEP Hazardous Waste Unit revealed a NUS Corporation Preliminary Assessment (PA) report, dated April 1983, and a Final Screening Site Inspection (SI) report, dated October 1991, which were found in the Superfund Files. According to these federal reports the landfill occupies 21 acres of land in the center of a 26-acre parcel located at the confluence of the Coginchaug and Mattabeset Rivers. The landfill was added to CERCLIS on June 9, 1981, following notification to EPA by Pratt & Whitney Aircraft Group, Manufacturing Division that the Middletown Municipal Landfill accepted metal hydroxide waste generated by that company from 1966 to 1976.

According to NUS Corporation, the Middletown Municipal Landfill was established on undeveloped land owned by the City of Middletown in the mid-1950's. Apparently, the landfill accepted mixed municipal sewage treatment plant sludge and mixed municipal and industrial waste from as early as 1966 until 1987. The following industrial wastes have been disposed of at the Middletown Municipal Landfill: asbestos (reportedly double-bagged and buried at the base of the day's fill), treated metal hydroxide sludge (also referred to as rolling and tumbling sludge), medical incinerator ash, and cutting and soluble oils. According to NUS Corporation, DEP personnel have inspected the Middletown Landfill regularly. Apparently from November 27, 1984 to June 3, 1986, the City of Middletown was found to be in violation of state regulations and permit conditions on at least nine separate occasions. Violations involved: leachate generation, insufficient daily cover, blowing litter, and inadequate facilities for on-site employees. The landfill facility closed on January 1, 1991, but is currently used by the City of Middletown as a

municipal bulky waste landfill and as a recyclable materials transfer station.

In 1983, the Middletown Public Works Department (PWD) installed three groundwater monitoring wells on the northeast, southeast, and west sides of the landfill. According to NUS Corporation's SI Report, the wells were installed in accordance with the provisions set forth in a 1983 DEP Permit to vertically expand the municipal solid waste disposal area at the Middletown Landfill. Apparently the PWD installed three overburden groundwater monitoring wells constructed of 6-inch diameter polyvinyl chloride (PVC) pipe (if screened, interval unknown) which were inserted into excavated holes and backfilled with stone. The wells were set at 6 to 8 feet below the ground surface. Apparently, the wells are not capped or locked, and two of the three well pipes are broken off at the surface.

Groundwater, surface water and soil samples have been collected at the Middletown Municipal Landfill by PWD and NUS Corporation. Analysis of groundwater samples collected by the PWD from 1983 to 1990 revealed several volatile organic compounds (VOC's), including benzene (up to 24 parts per billion (ppb)), chlorobenzene (up to 63 ppb), chloroethane (up to 128 ppb), and toluene (up to 48 ppb). Analysis of groundwater, surface water and soil samples by NUS Corporation on April 16, 1991, revealed several VOC's and inorganic elements in the groundwater, including benzene (up to approx. 15 ppb), chlorobenzene (up to 33 ppb), chloroethane (22 ppb), barium (up to 650 ppb) and chromium (approx. 4 ppb). Surface water samples contained VOC's, cyanide (12.9 ppb), and inorganic elements, including: arsenic (up to approx. 3.1 ppb) and barium (376 ppb). Analysis of soil samples collected around the landfill revealed several VOC's including chlorobenzene (up to 130 ppb) and ethylbenzene (up to 61 ppb). Several polynuclear aromatic hydrocarbons were also detected in the soil samples at concentrations ranging from approximately 160 ppb to 43,000 ppb. In addition, inorganic elements detected in soil samples collected by NUS Corporation included lead (up to 70.7 ppm) and zinc (up to 117 ppm). Furthermore, the NUS Corporation observed blowing litter and numerous leachate outbreaks with associated stained soils on the west, south and east sides of the landfill during their site investigation of the property in 1991. Based on the compounds and elements

detected at the landfill, the number of groundwater users within 4 miles of the property, and the proximity of the Coginchaug River and Mattabesset Rivers, NUS Corporation concluded that continued investigative work under CERCLA is recommended at the Middletown Municipal Landfill.

The other listed CERCLIS or hazardous waste disposal site which is located within one mile of the study site is the J.J. Vinci Coal Company. However, due to this company's distance from the study site, topographic position and separation from the study site by the Coginchaug River which acts as hydrologic barrier, it is unlikely that any possible contaminants associated with this company could have impacted the study site.

A Federal Data Base Report was obtained through AP Environmental Data Company of Austin, Texas. This report is a compilation of information from key federal Environmental Protection Agency (EPA) environmental regulatory databases which are updated regularly. The following federal EPA databases were searched for zip code 06457: National Priorities List (NPL); Comprehensive Environmental Response, Compensation, and Liability Index System (CERCLIS); Civil Enforcement Docket (DOCKET); Emergency Response Notification System (ERNS); Facility Index System (FINDS); Resource Conservation and Recovery Information System (RCRIS); RCRA Violator and Enforcement Case Information (RCVIOL) and Toxic Release Inventory (TRI): for the years 1987, 1988 & 1989. Information obtained from these sources are discussed below.

#### National Priorities List

This is a list (often called the Superfund list) of uncontrolled or abandoned hazardous waste disposal sites most in need of cleanup; the list is updated annually by the United States Environmental Protection Agency, based primarily on how a site scores using the Hazard Ranking System. A review of the April 6, 1993, National Priorities List revealed no Superfund sites located within the stated area.

### Comprehensive Environmental Response, Compensation, and Liability Index System

This is a list of sites which EPA has investigated or is currently investigating as having the potential for releasing hazardous substances into the environment. This computerized system contains the basic information about and current status of a site being cleaned up under the National Contingency Plan. A review of the April 1, 1993, CERCLIS Database revealed one site located in the Mattabesset River (4600) and the Coginchaug River Drainage Basins (4607), within one mile of the study site. The listed site is the Middletown Municipal Landfill located off North Main Street in Middletown, CT. This site is located just north of the study site and appears to present a potential environmental liability.

### Civil Enforcement Docket

The Civil Enforcement Docket is the EPA's system for tracking civil judicial cases filed on the Agency's behalf by the Department of Justice. This Docket contains information on civil cases filed from 1972 to the present. No DOCKET site listings were reported in the Mattabesset River (4600) and the Coginchaug River Drainage Basins (4607), within one mile of the study site.

### Emergency Response Notification System

The EPA Emergency Response Notification System serves to store information on releases of oil and hazardous substances. Releases are recorded in the ERNS when they are initially reported to the federal government by any party. ERNS combines data from the National Response Center and the EPA. A review of the EPA's October 19, 1992 ERNS Database revealed two listings of incidents of oil released near the Arrigoni or Portland Bridge. No reported quantities were listed for either of the two incidents.

### Facility Index System

The EPA Facility Index System acts as an inventory of facilities regulated by the EPA. Information extracted from the EPA FINDS Database on 11/19/92, revealed the following listed facilities within the Middletown North-end Industrial Park Area:

		<u>Source</u>
Auburn Manufacturing	Pease Ave/Stack St	RCRIS
Bridgeside Pontiac	16 Stack Street	RCRIS
Middletown Mfg Co	27 Stack St	RCRIS
Middletown Muni Ldfl	North Main St	CERCLIS
Parker Hannifin Corp EIS Div	695 High St	RCRIS,AIRS,NCDB

### Resource Conservation and Recovery Information System

The EPA Resource Conservation and Recovery Information System serves to track the status of registrations, permits, reports, inspections, enforcement activities, and financial data of those regulated under the Resource Conservation and Recovery Act (RCRA). This 1976 statute, which was amended in 1980 and in 1984, provides for the comprehensive management of nonhazardous and hazardous solid wastes. The US EPA sets minimum standards for all waste disposal facilities and regulates reporting facilities that generate, store, transport, treat or dispose of hazardous waste. Information extracted from the EPA RCRIS Database on 08/12/92, revealed the following listed facilities within the Middletown North-end Industrial Park Area:

<u>EPA ID #</u>	<u>COMPANY NAME</u>	<u>ADDRESS</u>	<u>GENERATOR STATUS</u>
CTD001146976	Auburn Mfg. Co.	Pease Av/Stack St	Lg. Quantity
CTD103966289	Bridgeside Pontiac	16 Stack St	Lg. Quantity
CTD980913537	EIS Brake Parts	695 High St	Lg. Quantity
CTD018715078	Longworth Carlson	55 N Main St	Cond. Exempt
CTD001153584	Middletown Mfg Co	27 Stack St	Small Quantity

█ Indicates facility has violation investigation records in the HWDMS database.

### RCRA Violator and Enforcement Case Information

RCRA Violator and Enforcement Case Information is taken from the EPA's Hazardous Waste Data Management System (HWDMS) Database which served to track the status of registrations, permits, enforcement activities, and financial data of those regulated under RCRA. This system has been replaced by RCRIS. However, the HWDMS violation history is more complete than RCRIS and thus has been included with the RCRIS violation and enforcement reports. Information extracted from this database on 03/15/91, revealed the following listed facilities within the Middletown North-end Industrial Park Area:

EIS Brake Parts div. of Standard Motor Products  
Middletown Manufacturing Co.

### Toxic Release Inventory

The EPA Toxic Release Inventory database contains emissions data for those companies having to report their emissions according to SARA Title III Section 302 requirements. No sites located within the Middletown North-end Industrial Park Area were listed on the 1987, 1988 or 1989 Toxic Release Inventories.

On March 16, 1993, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. conducted record searches at the DEP in Hartford, CT. Record searches were performed at the DEP's Oil and Chemical Spills Unit, Water Compliance Unit, Underground Storage Tank Unit, PCB Unit, Air Compliance Unit and Hazardous Waste Unit for 180 Johnson Street and surrounding properties. No reports were found on file at the DEP indicating oil or chemical spills or registered underground storage tanks at the study site. However, a letter found on file at the DEP Water Compliance Unit which was written by DEP Environmental Analyst T.R. Botti Jr., dated February 26, 1992, indicated that Remington Rand discharged an untreated industrial waste to the Mattabesset River around the 1960's. Mr. Botti

recommended in his letter that the Remington Rand site be assessed for any residual contamination resulting from this reported discharge. According to a P-5 form found on file at the DEP Hazardous Waste Unit Remington Office Machines discharged ink, carbon, wax, oil, detergent, acetone, dye, clay and pigment to the Sebethe River (Mattabesset). Two orders which were issued to Remington Office Machines were found on file at the DEP Water Compliance Unit. In 1969, the DEP Water Resources Commission ordered Remington Office Machines to "Discharge all waterborne industrial wastes to the Middletown Municipal (Sewer) System following adequate pretreatment ... or in lieu thereof, construct a waste treatment facility for adequately treating all waterborne industrial wastes and discharge the treated effluent to an acceptable water course."

A record search at the DEP for other properties located in the general vicinity of the study site revealed several oil chemical spill reports, underground storage tank removals and other sensitive environmental issues within the Middletown North End Industrial Park Area. This information is presented in a Preliminary Environmental Review of the Middletown North End Industrial Park Area, dated April 8, 1993, which was prepared by our firm. However, the possible impacts from these reported incidents appear relatively minor compared to the environmental concerns identified on the study site and possible impacts to the study site from the Middletown Municipal Landfill.

## 8.0 CONCLUSIONS

In conclusion, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. performed a site inspection, reviewed historical records, conducted personal interviews and researched the Connecticut Department of Environmental Protection records and the Federal Environmental Protection Agency records on file for the former Remington Rand facility located at 180 Johnson Street along with surrounding properties in Middletown, CT. Our preliminary site assessment revealed that the study site is located within an industrial area of Middletown which is situated just south of the Middletown Municipal Landfill.

Since the late 1800's, the study site has been utilized by several different manufacturing firms producing bicycles, motor bicycles, automobiles, typewriters, metal goods and typewriter supplies. Between the 1951 and 1971 Remington Office Machines occupied the study site and produced plaster plates, typewriter ribbon, carbon paper, uniac ribbon and microfilm. During this time they discharged untreated industrial wastes to the Mattabeset River. The industrial wastes apparently contained ink, carbon, wax, oil, detergent, acetone, dye, clay and pigment. Apparently these wastes were generated during ink manufacturing, machining, nickel plating, metal casting, carbon coating, case hardening and other manufacturing operations. In 1969, the DEP Water Resources Commission ordered Remington Office Machines to "Discharge all waterborne industrial wastes to the Middletown Municipal (Sewer) System following adequate pretreatment ... or in lieu thereof, construct a waste treatment facility for adequately treating all waterborne industrial wastes and discharge the treated effluent to an acceptable water course." Between 1970 and 1971, Remington Office Machines moved their operation to Blue Bell, Pennsylvania. No other information regarding the study site was found on file at the DEP or listed in any of the EPA environmental regulatory databases. Various companies including EIS Brake Parts, Depot Distributors Wholesale Kitchen Cabinets and Stone Corrugated Containers have occupied the study site since Remington Office Machines vacated the property.

A site inspection of the former Remington Rand Facility revealed possible asbestos containing materials; peeling paint which may contain lead; possible PCB's in transformers, light ballasts and hydraulic fluids; improperly stored oils/chemicals; floor drains/trenches (two of which contained an unknown black liquid substance); several locations of former or present underground and aboveground storage tanks. Two separate areas with dark stained soils and distressed vegetation indicative of possible soil contamination were observed around the metal building located towards the southeastern side of the property. Drums and other metal storage containers were observed in a fairly large fill or dump area located in the general vicinity of the Right of Way which is situated northeast of the Boiler Room Building. Furthermore, a strong methane odor indicative of landfill leachate was observed in a storm drain located near the northern corner of Building 11 which is on the

northwestern side of the property.

Neighboring properties include the Middletown Municipal Landfill to the north which is an EPA listed CERCLIS or hazardous waste disposal site, the Mattabeset River and its associated wetlands to the east which are considered sensitive areas of environmental concern, the NY, NH & H RR and several commercial businesses including Standard Motor Products (EIS) to the south which is listed with the EPA as a Large Quantity Generator of Hazardous Waste, and the Hubert E. Butler Construction Company and the Coginchaug River to the west. Further to the south and southeast of the study site are several more commercial and industrial properties located within the Middletown North End Industrial Area.

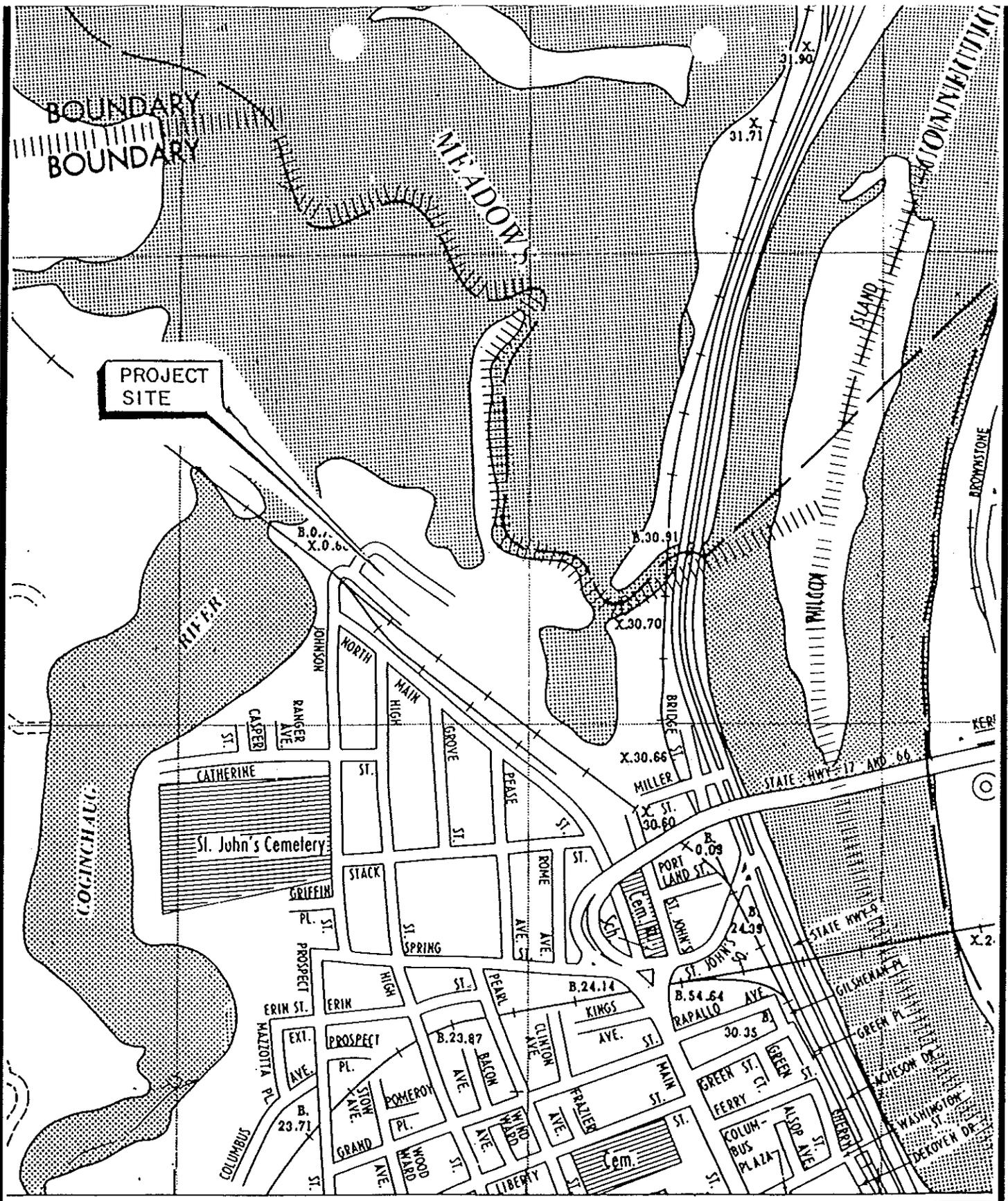
## **9.0 RECOMMENDATIONS**

Based on the information obtained in our Phase I Environmental Site Assessment, SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. recommends a Phase II Environmental Site Assessment be conducted in order to determine the nature and extent of possible subsurface soil and groundwater contamination at the study site. Environmental liabilities may exist at the study site as a result of historical on-site land uses and possible impacts from the Middletown Municipal Landfill which borders the northern side of the study site.

## **10.0 LIMITATIONS**

This assessment has been prepared for the exclusive use of the City of Middletown as part of the feasibility study for the Middletown North End Industrial Area Redevelopment Project. The conclusions and recommendations provided by SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. are based solely on information referenced in this report. Possible plumbing, electrical, structural integrity, asbestos, lead paint and radon gas problems were not investigated in this assessment. No subsurface soil or groundwater testing was conducted to confirm our findings. If

any additional information becomes available concerning this site it should be provided to SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC. so that the conclusions and recommendations in this report may be reviewed and revised accordingly. No other warranty, expressed or implied, is made.

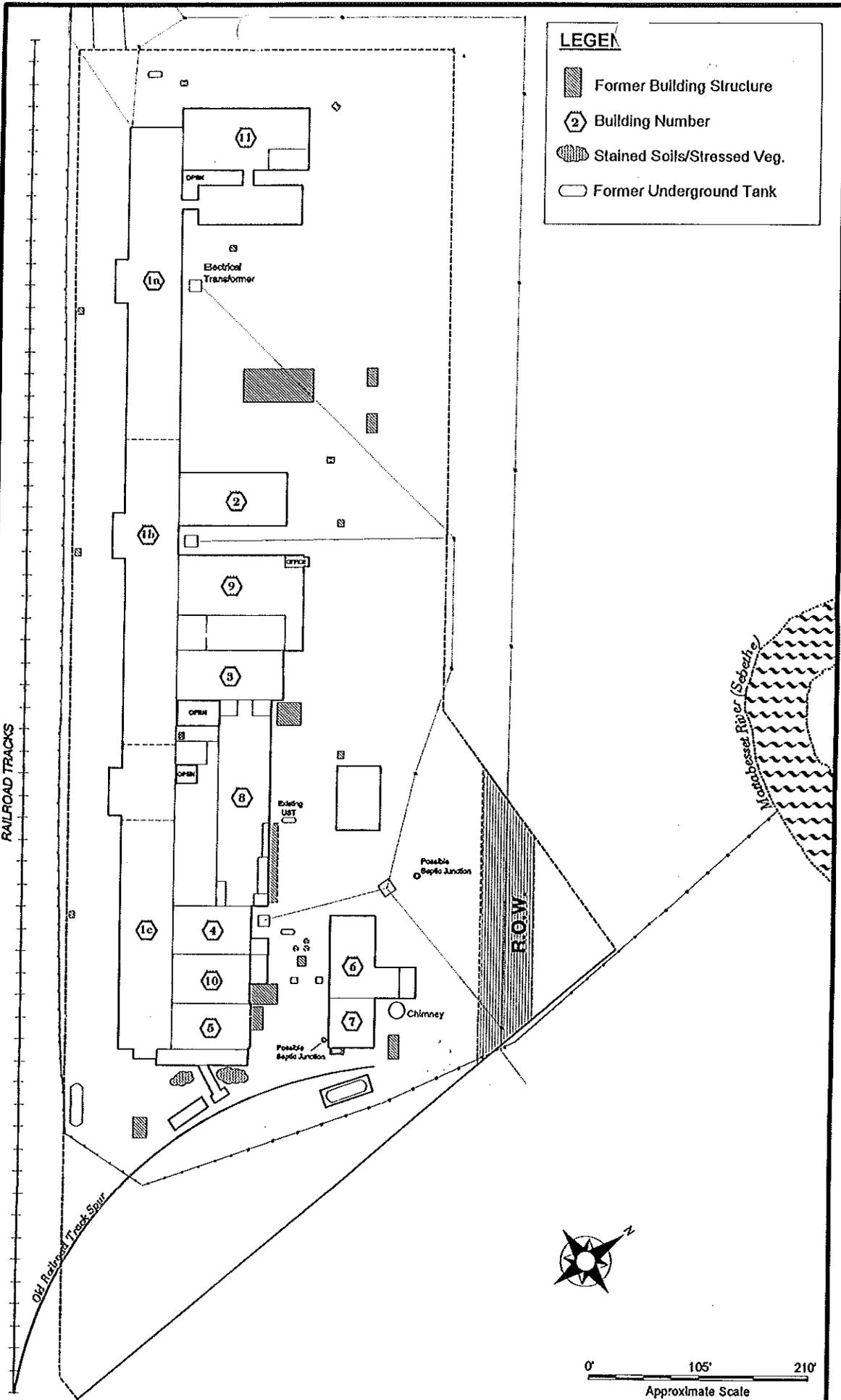


**SOIL SCIENCE &  
ENVIRONMENTAL  
SERVICES, INC.**

Locus Map  
Former Remington Rand Facility  
Middletown, Connecticut.

Date: 4/6/93

Figure 1



**LEGEND**

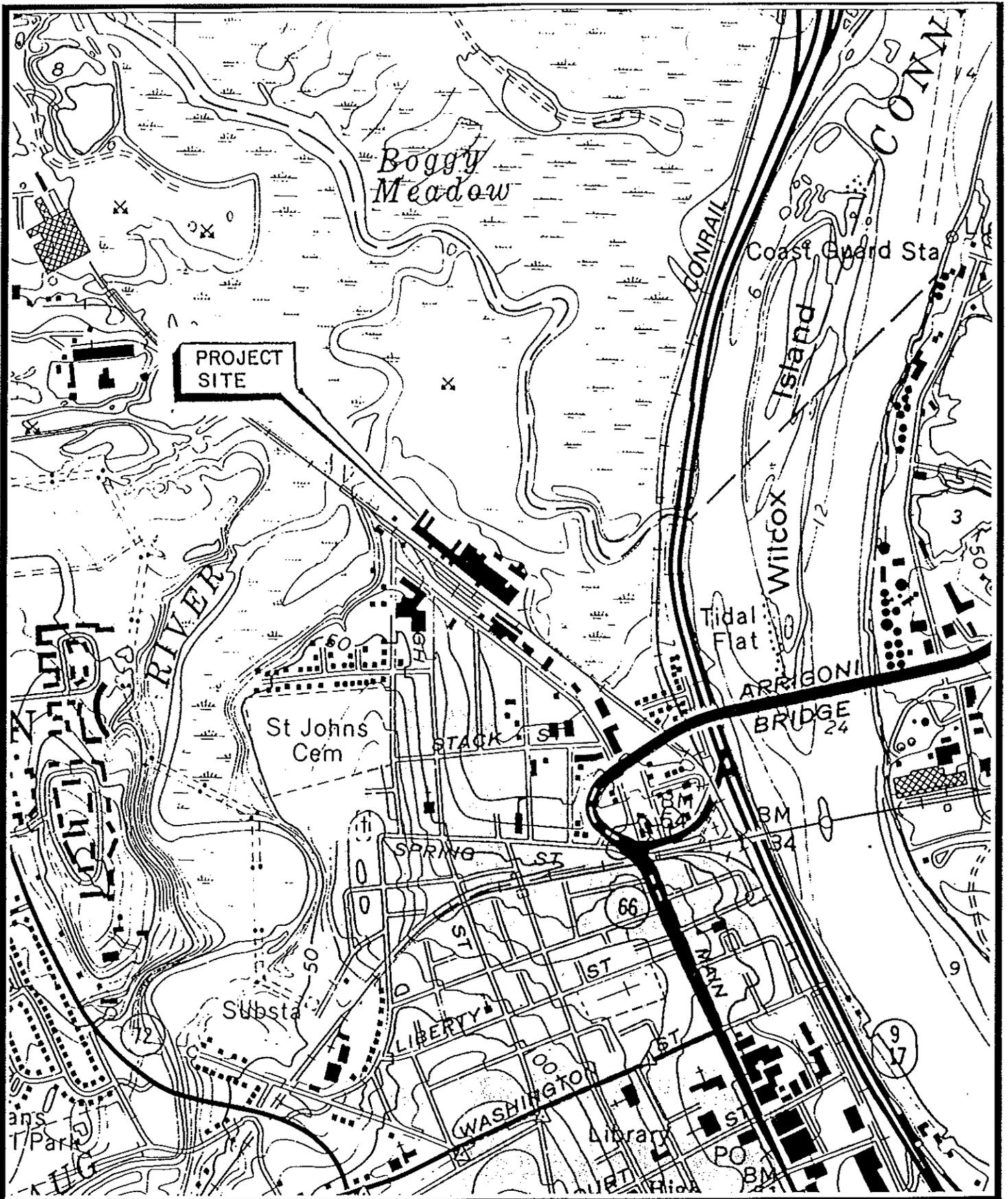
-  Former Building Structure
-  Building Number
-  Stained Soils/Stressed Veg.
-  Former Underground Tank

**SOIL SCIENCE &  
ENVIRONMENTAL  
SERVICES INC.**

Site Map  
Former Remington Rand Facility  
Middletown, Connecticut

DATE: 4/6/93

Figure 2

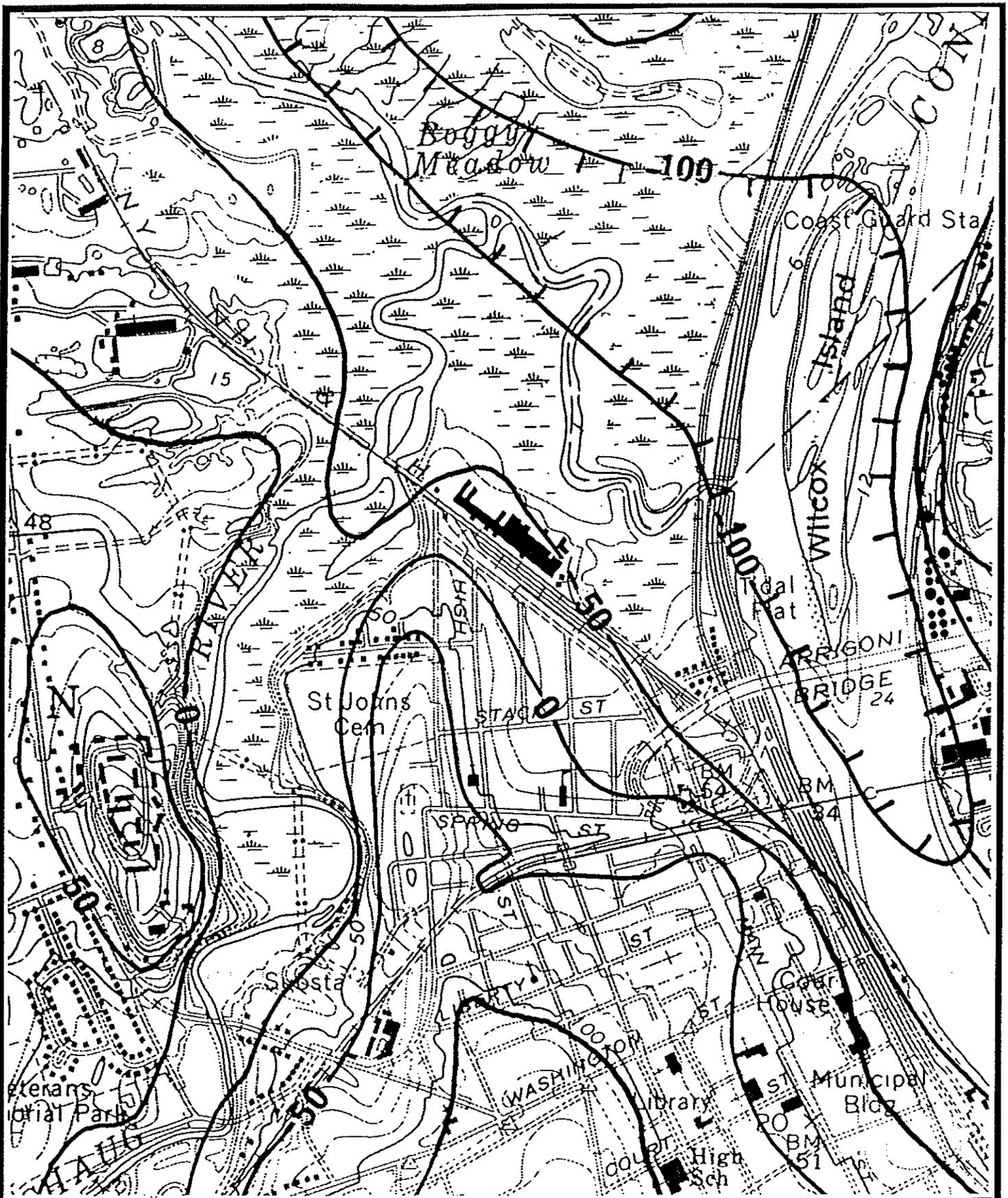


**SOIL SCIENCE &  
ENVIRONMENTAL  
SERVICES, INC.**

Topography Map  
Former Remington Rand Facility  
Middletown, Connecticut.

Date: 4/6/93

**Figure 3**

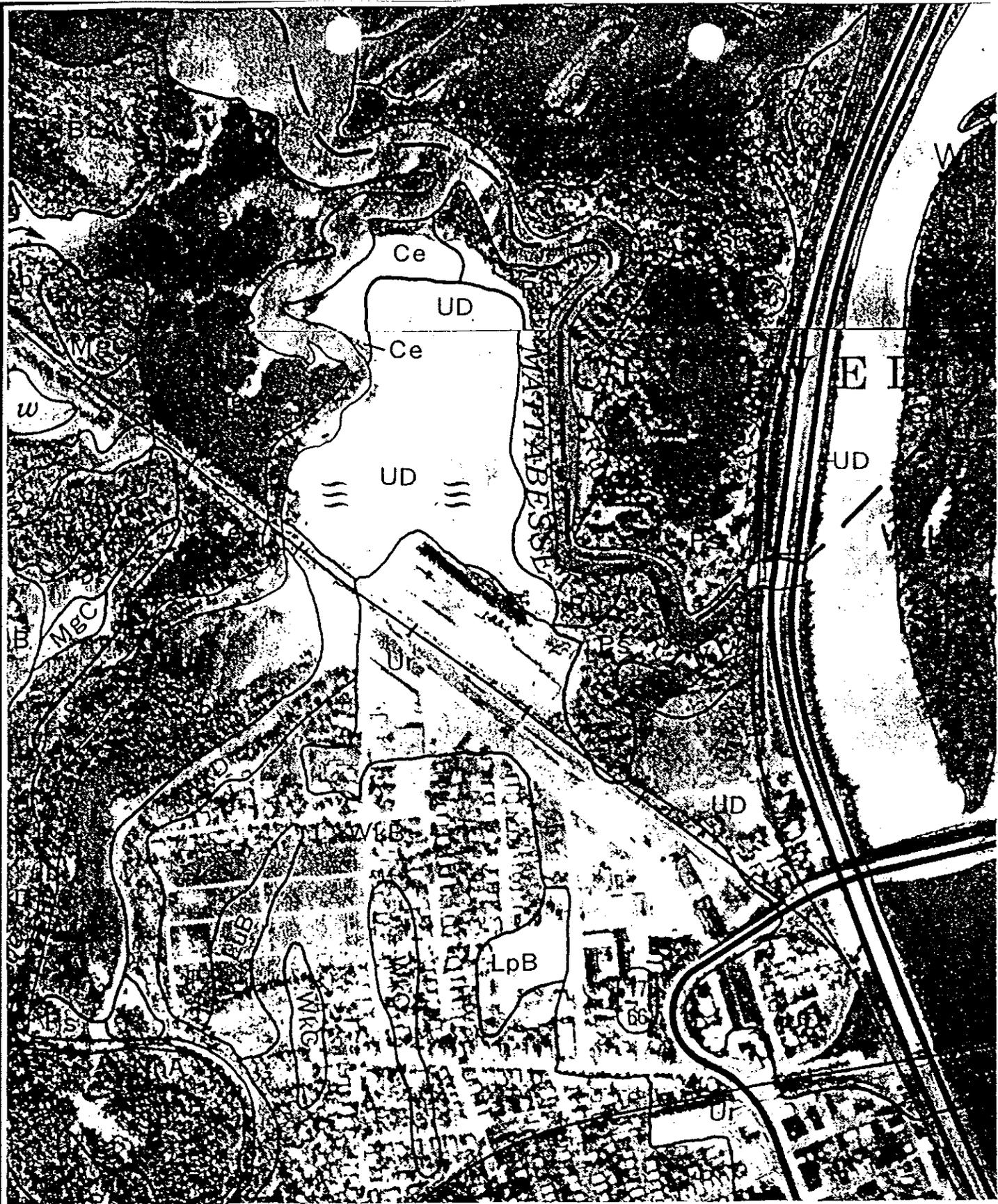


SOIL SCIENCE &  
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SERVICES, INC.

Bedrock Contour Map  
Former Remington Rand Facility  
Middletown, Connecticut.

Date: 4/6/93

Figure 4



SOIL SCIENCE &  
 ENVIRONMENTAL  
 SERVICES, INC.

Soil Survey Map  
 Former Remington Rand Facility  
 Middletown, Connecticut.

Date: 4/6/93

Figure 5

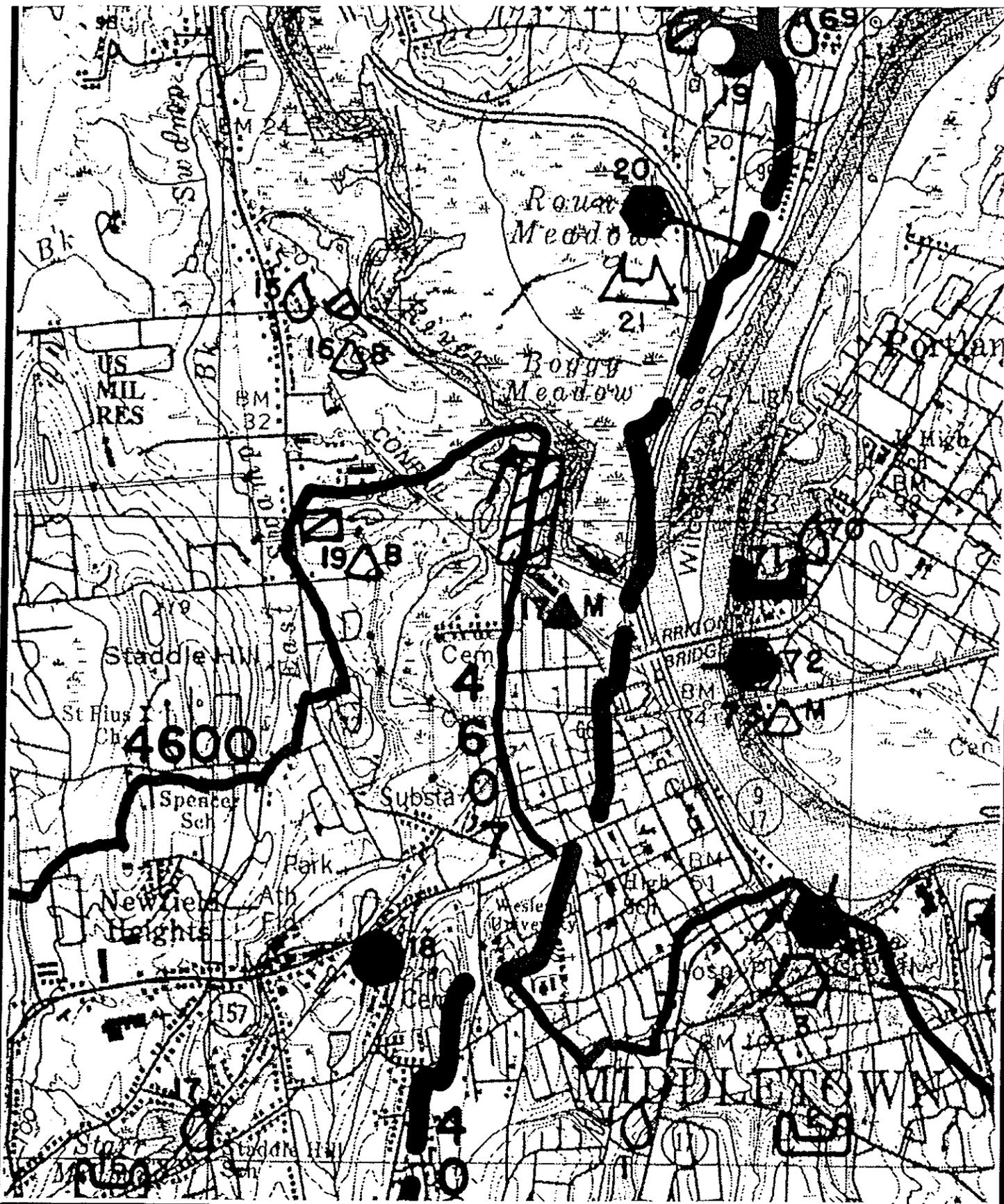


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SERVICES, INC.

DEP Water Quality Map  
Former Remington Rand Facility  
Middletown, Connecticut.

Date: 4/6/93

Figure 6



SOIL SCIENCE &  
 ENVIRONMENTAL  
 SERVICES, INC.

DEP Leachate and Wastewater  
 Discharge Map  
 Former Remington Rand Facility  
 Middletown, Connecticut.

Date: 4/6/93

Figure 7