FINAL

ENVIRONMENTAL CONDITION OF PROPERTY REPORT

MIDDLETOWN
U.S. ARMY RESERVE CENTER (CT005)
499 MILE LANE
MIDDLETOWN, CT 06457

Prepared For:

U.S. Army Corps of Engineers – Louisville District
Engineering Division – Environmental Engineering Branch
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202-2232

MARCH 2007

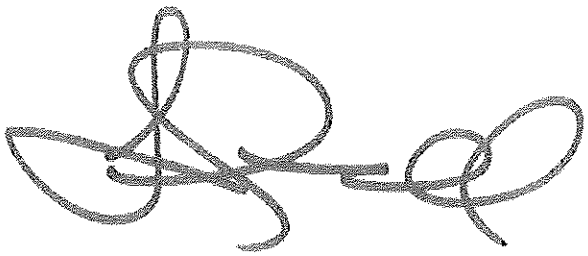
CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the property. This ECP Report is in general accordance with the U.S. Department of Defense (DoD) requirements for completion of an Environmental Condition of Property (ECP) Report.

24 July 07

GARY PURYEAR **DATE**
Environmental Division ARIM
Chief Environmental Division
94th Regional Readiness Command

The undersigned certifies the contents of this report are in general accordance with DoD policies for the completion of an ECP report.



04/04/07

LENARD GUNNELL, P.G. **DATE**
Project Geologist
U.S. Army Corps of Engineers

Executive Summary

CH2M HILL, under contract to the U.S. Army Corps of Engineers (USACE) Louisville District, prepared this Environmental Condition of Property (ECP) report for the Middletown U.S. Army Reserve (USAR) Center (Facility ID CT005), hereafter referred to as the "Property" or "USAR Center." The Property is located at 499 Mile Lane, Middlesex County, Middletown, Connecticut, 06457, and encompasses approximately 23.7 acres. This ECP Report was conducted in conformance with the Department of Defense's Base Redevelopment and Realignment Manual (BRRM), DoD 4165.77-M, Army Regulation 200-1, and the American Society for Testing and Materials (ASTM) Designation D6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys.*

This ECP Report details the history of the property, including the USAR and any prior tenant uses of the Property and the resulting environmental condition of the Property.

The USAR Center is on 23.7 acres of land and has one permanent structure (the Reserve Center building), one parking lot, and remnants of Nike missile operations, which include the foundations of the former Warhead Building, former Missile Testing and Assembly Building, and former barracks. A fenced area contains three closed, underground missile silos. As of September 2006 the Property is not occupied. Based on a review of aerial photographs and U.S. Geological Survey topographical maps, the area immediately surrounding the Property is and has been undeveloped, with the exception of a housing development located east of the Property. The facility originally was constructed between 1956 and 1958 as a Nike Missile Launch facility. The current Reserve Center building was constructed in 1987, and the original Nike Missile facility structures on the Property were demolished in the late 1990s.

Areas of potential environmental concern were reviewed and CH2M HILL identified the following related to the environmental condition of the Property: historic fuel oil releases from underground storage tanks; reported onsite disposal of "potentially polluting materials"; a reported fuel oil spill from a transfer line; potential historical releases from an oil/water separator; the presence of volatile organic compounds (VOCs) and petroleum hydrocarbons in the groundwater; historical application of chlordane to building foundations; possible use of petroleum products as dust control; and potential releases from a former septic system/drain tile field.

In accordance with Department of Defense policy defining the classifications (see Sherri Goodman Memorandum dated 21 October 1996), the Property has been classified as Type 7. This classification does not include categorizing the property based on *de minimis* conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

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Abbreviations and Acronyms

ACM	asbestos-containing material
AMSA	Area Maintenance Support Activity
amsl	above mean sea level
AOC	area of concern
AR	army regulation
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
bgs	below ground surface
BRAC	Base Realignment and Closure
BRRM	Base Redevelopment and Realignment Manual
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CFR	Code of Federal Regulations
CORRACTS	Corrective Action Report
CTDEP	Connecticut Department of Environmental Protection
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	cis-1,2-dichloroethene
DEC	Direct Exposure Criteria
DEP	Department of Environmental Protection
DoD	Department of Defense
DTC	Diversified Technology Consultants
EBS	Environmental Baseline Study
ECP	environmental condition of property
EDR	Environmental Data Resources, Inc.
EPH	extractable petroleum hydrocarbon
ERNS	Emergency Response Notification System
ETPH	extractable total petroleum hydrocarbons

FEMA	Federal Emergency Management Agency
IRFNA	inhibited red-fuming nitric acid
kg	kilogram
LBP	lead-based paint
LUST	leaking underground storage tank
MEC	munitions and explosives of concern
MEP	military equipment parking
msl	mean sea level
NEPA	National Environmental Policy Act
NPL	National Priorities List
OLISP	Office of Long Island Sound Program
OMS	organizational maintenance shop
OWS	oil/water separator
PCB	polychlorinated biphenyl
pCi/L	picoCuries per liter of air
POL	petroleum, oil, and lubricant
PPM	potentially polluting materials
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RCRIS	RCRA Information System
RRC	Regional Readiness Command
RSC	Regional Support Command
RSR	Remediation Standard Regulations
SHWS	State Hazardous Waste Site
SVOCs	semivolatile organic compounds
SWP3	Storm Water Pollution Prevention Plan
TCA	1,1,1-trichloroethane
TCE	trichloroethylene
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbons
TSD	treatment, storage, or disposal

UDMH	unsymmetrical dimethylhydrazine
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VOCs	volatile organic compounds
VPH	volatile petroleum hydrocarbon

1 Introduction

CH2M HILL, under contract to the U.S. Army Corps of Engineers (USACE) Louisville District, was authorized to conduct an Environmental Condition of Property (ECP) report for the Middletown U.S. Army Reserve (USAR) Center (CT005), in response to the Base Realignment and Closure (BRAC) 2005 legislation. The facility is located at 499 Mile Lane, Middlesex County, Middletown, Connecticut, and is hereafter referred to as the Property or USAR Center. CH2M HILL prepared this ECP report under contract number W912QR-04-D-0020, Task Order No. 0018, with the Louisville District USACE.

A visual non-intrusive reconnaissance of the Property was conducted on August 22, 2006, in support of the ECP. The reconnaissance purpose was to obtain visual information indicating the likelihood of recognized environmental conditions associated with the Property or adjacent properties.

In preparing this ECP report, CH2M HILL gathered information from the available records and previous work from others; interviews with individuals purporting to be familiar with the Property; and observations from a site reconnaissance. The accuracy of the information obtained from these sources was not verified by CH2M HILL. As such, CH2M HILL will make no warranty, expressed or implied, relative to the accuracy, completeness, or reliability of the information used to create the records and reports prepared by others.

1.1 Purpose of Environmental Condition of Property

The Military Department with real property accountability shall assess, determine, and document the environmental condition of all transferable property in an ECP Report. This ECP Report is based on readily available information. Pursuant to the Department of Defense's (DoD) policy, set forth in the Base Redevelopment and Realignment Manual (BRRM) (DoD 4165.66-M, March 1, 2006) Section C8.3, the primary purposes of the ECP Report include the following:

- Provide the Army with information it may use to make disposal decisions.
- Provide the public with information relative to the environmental condition of the Property.
- Assist in community planning for the reuse of BRAC property.
- Assist federal agencies during the property screening process.
- Provide information for prospective buyers.
- Assist prospective new owners in meeting the requirements under U.S. Environmental Protection Agency's (USEPA) "All Appropriate Inquiry" regulations.
- Provide information about completed remedial and corrective actions at the property.

- Assist in determining appropriate responsibilities, asset valuation, and liabilities with other parties to a transaction.

The ECP Report contains the information required to comply with the provisions of 40 Code of Federal Regulations (CFR) Part 373, which require that a notice accompany contracts for the sale of, and deeds entered into, for the transfer of federal property on which any hazardous substance was stored, released, or disposed of. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for 1 year or more—specifically, quantities exceeding 1,000 kilograms (kg) or the reportable quantity, whichever is greater, of the substances specified in 40 CFR 302.4 or 1 kg of acutely hazardous waste as defined in 40 CFR 261.30. A notice is also required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the reportable quantity. Army Regulation (AR) 200-1 requires that the ECP Report address asbestos, lead-based paint (LBP), radon, and other substances potentially hazardous to human health.

This ECP Report used the American Society for Testing and Materials (ASTM) Designation D6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys*, the BRRM, CERCLA § 120, and AR 200-1.

1.2 Scope of Services

This ECP report covers the 23.7-acre USAR Center located at 499 Mile Lane, Middletown, Connecticut. The Property is located in a rural area and is surrounded by undeveloped property. All site maps, figures, and aerial photographs referenced herein are provided in Appendix A, while Appendix B contains the photographs taken during the August 22, 2006, site reconnaissance. Appendix C contains the Property chain of title information. Relevant historical environmental documents and reports are provided in Appendix D, while Appendix E contains the Environmental Data Resources, Inc. (EDR) radius search reports commissioned for this effort.

This ECP report classifies the property into one of seven DoD Environmental ECP categories in accordance with DoD policy defining the classifications (see Sherri Goodman Memorandum dated 21 October 1996).. The property classification categories are as follows:

- ECP Area Type 1—An area or parcel of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties).
- ECP Area Type 2—An area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred.
- ECP Area Type 3—An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- ECP Area Type 4—An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and all

remedial actions necessary to protect human health and the environment have been taken.

- ECP Area Type 5—An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are underway, but all required actions have not yet been taken.
- ECP Area Type 6—An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- ECP Area Type 7—An area or parcel of real property that is unevaluated or requires additional evaluation.

2 Site Location and Physical Description

2.1 Site Location

The USAR Center is located at 499 Mile Lane, Middletown, Connecticut. The 23.7-acre Property is located in a rural area and is surrounded by undeveloped property. A housing development is located east of the Property on the south side of Mile Lane.

2.2 Asset Information

Facility Name and Address:	Middletown U.S. Army Reserve Center 499 Mile Lane Middletown, Connecticut
Property Owner:	U.S. Government
Date of Ownership:	September 22, 1955
Current Occupants:	Property vacated as of September 15, 2006
Zoning:	Residential
County, State:	Middlesex, Connecticut
U.S. Geological Survey (USGS) Quadrangle(s):	Middletown
Latitude/longitude:	41° 34′ 54.8″N; 72° 41′ 33.4″W

Legal Description:

The deed for this property specifies the Property as "Volume 269, Page 132, Tract No. A-106, Volume 269, Page 133, Tract No. A-106B, and Volume 269, Page 134, Tract No. A-107."

2.3 Physical Description

The USAR Center is located on a 23.7-acre parcel in the Middletown, Connecticut, and contains one permanent structure (the Reserve Center), one paved parking lot, and the foundations of three demolished buildings. These were foundations of buildings associated with a Nike missile battery previously located on the Property, including a former barracks, the Warhead Building (later used as a storage garage), and the Missile Test and Assembly Building (later used as a maintenance shop). There were formerly 2 additional buildings on the property that served as sentry stations/guardhouses, as well as 3 underground missile silos. These buildings were demolished sometime after 1998. Additional paved parking areas historically occurred on the property, just behind the current Reserve Center and just north of the former barracks building. Military vehicles also were parked historically in an

unpaved area near the former Nike missile silos. A location map is included as Figure 1 in Appendix A. A site layout plan is included as Figure 2 in Appendix A.

Construction of the current Reserve Center was completed in 1987. The building is an irregular-shaped, multiple-level structure, with a two-story drill hall. The building's interior is two levels in certain areas and consists of office space, classrooms, storage, a drill hall, and a kitchen area, which has not been in use for years. The main entrance is located on the north side of the facility and the entrance is secured.

The southern part of the property currently is wooded heavily. On the northern edge of the woods, near the rear of the Reserve Center, are two building foundations from the former Nike Warhead and Nike Missile and Test Assembly buildings. There is a wash rack with an oil/water separator (OWS), located approximately 25 feet north of the former Missile Test and Assembly building.

On the southeast corner of the facility is a fenced area that has sparse ground covering. The fenced area was the former location of the launch pads and silos for the Nike missile operations at the Property. The silos were reportedly pumped dry and filled with a sand slurry and debris from the walls of the silos in 1988.

The third foundation, formerly the barracks for personnel that supported the Nike missile operations, is located centrally on the property, just north of the Reserve Center. The building was converted for use as a Reserve Center until the current building was constructed in 1987. An undated aerial photo (Figure 3, Appendix A) found at the Property shows the Nike missile site when it was in operation.

On the northern portion of the property, approximately 300 feet of railroad track was built as part of reserve unit training. There are a several stacks of creosote-treated rail timbers on the facility and some scattered in the wooded area on the south side of the property.

Also on the north side of the property, remnants of the old septic system and leach bed are still in place underground, according to site interviews. The location and condition of the system is unknown.

Fourteen groundwater-monitoring wells are located on the Property, installed as part of various environmental site investigations described in the remainder of this report.

Topographically, the Property has an elevation difference of approximately 100 feet, and has been separated into four distinct step-like terraces. The lowest terrace borders Mile Lane and contains the section of railroad used for training and the abandoned leach bed/septic system. The second terrace contains the foundation of the former barracks building/Reserve Center. The third terrace is the Property of the current Reserve Center and the parking area. The highest terrace contains the foundations of the former Missile and Test Assembly (also known as the maintenance shop) and Warhead (also known as the garage) buildings, along with the former launch pad area/missile silos.

2.4 Site Hydrology and Geology

The USAR Center lies within the Connecticut Valley Lowland region of the New England physiographic province. The USAR Center lies within the South Central Lowlands

Ecoregion. The present topography observed in the vicinity of the Property is the direct result of glacial deposition and erosion related to the distribution of underlying bedrock masses and changing water levels of glacial Lake Hitchcock (CT Facilities Date Unknown). Topographic maps indicate that the Property has a total relief of approximately 100 feet. The Property lies between approximately 50 and 150 feet above mean sea level (amsl).

The bedrock formation underlying the Property has been described as belonging to the Portland Arkose Formation of Triassic age. This formation has been described to consist of gray-red to red-brown and pale brown, coarse to fine, arkose with interbedded arkose conglomerate, red and gray shale, mudstone, and gray-green feldspathic sandstone underlying the Portland Arkose dense gray to gray-green Hampden basalt. The surficial geology is composed of thin till in the southern portion of the Property and fine deposits at the north-northeastern portion of the Property. The till deposits are generally less than 10 to 15 feet thick and are loose to moderately compact, generally sandy and commonly stony. The fine deposits are composed of well-sorted, thing layers of alternating silt and clay, or thicker layers of very fine sand and silt (U.S. Army Environmental Hygiene Agency, 1992; Kemron, 2006).

2.4.1 Surface Water Characteristics

Figure 4 in Appendix A provides a portion of the 1965 Middletown, Connecticut, USGS topographic map that includes the Property. As shown, the Property is situated on an elevation that slopes from 150 feet amsl in the south to about 50 feet mean sea level (msl) in the north.

The Property lies within central Connecticut, in the floodplain of the Connecticut River Valley, which is bordered by upland of moderate to rugged relief. The closest surface water features to the Property are two brooks—the West Swamp Brook, located approximately 660 feet to the west of the Property, and the East Swamp Brook, located approximately 0.5 mile to the east of the Property. Both brooks feed into the Mattabesset River (CT Project Facilities, date unknown). An intermittent stream is located near the southeast boundary of the Property and on the adjacent property to the east.

The Stormwater Pollution Prevention Plan (SWP3) prepared for this Property (USGS, 1999) identified six storm drains by which stormwater runoff leaves the Property. Stormwater runoff from the Property also flows directly into grassy areas or riprapped drainage swales. The storm drains direct flow through 1-foot corrugated metal or plastic pipes with flared exit openings, into riprapped dry wells from where the stormwater infiltrates into the ground.

2.4.2 Hydrogeological Characteristics

According to information acquired from the U.S. Department of Agriculture (USDA), soils in the Property area are described as consisting of Udonrthents-Urban Land complex. This soil complex is described as areas that have been disturbed by cutting or filling and have had more than 2 feet of the upper part of the original soil removed or have been covered with more than 2 feet of fill material. These well-drained soils are found on the sides of drumlins and in glacial till uplands 8 to 15 percent on slope.

Groundwater beneath the Property is classified by the Connecticut Department of Environmental Protection (CTDEP) as "GA" quality, meaning that it is within the area of influence of existing private water supply wells or groundwater with potential to provide water to public or private water supply wells, and which is potable without treatment. Depth to groundwater is between 4 and 30 feet below ground surface (bgs). The direction of groundwater flow on the Property can vary. Groundwater in the area of the former Nike missile silos is east-northeast, discharging to West Swamp Brook, while groundwater flow on the southern side of the Property is predominantly to the north-northeast (Clean Harbors Environmental Engineering, 1990; Kemron, 2006).

2.5 Site Utilities

Water Service – The City of Middletown provides potable water service to the Property.

Sanitary Sewer System – The City of Middletown currently provides sanitary sewer service to the Property. The primary source of wastewater that is directed to the city sewer system includes non-process wastewater (bathrooms, sinks, etc.) There is a leach bed/septic system on the property that historically was used to discharge sanitary wastes.

Gas and Electric – Yankee Gas provides natural gas service to the Property, while Northeast Utilities provides electric service to the Property.

2.6 Water Supply Wells and Septic Systems

Interviews with site personnel indicate that a water supply well may have been located on the Property, however, there is currently no evidence of this well and its location is unknown. Site personnel also stated that an old septic system and leach bed are located on the north end of the Property, which historically were used for the disposal of sanitary waste.

3 Site History

3.1 History of Ownership

The U.S. Government purchased the USAR Center Property in September 1955. Two parcels (Tract No. A-106 and Tract No. A-106B) were purchased from Irving Sherman and a third (Tract No. A-107) was purchased from Paul Gilbert. The chain of title information was obtained from the Environmental Baseline Study (EBS), which was prepared by the 94th Regional Support Command (RSC) in November 1998. A copy of the chain of title is provided in Appendix C.

According to a city directory provided by EDR and dated June 24, 2006, the address of the USAR Center was not listed in the research source (Polk's City Directory and Robinson's City Directory). Subsequent city directory searches also do not list the Property. Historical documentation supports the original construction of the Nike missile battery in the late 1950s and the Reserve Center in 1987. The results of the city directory search are included in Appendix E.

3.2 Past Uses and Operations

The facility originally was constructed between 1956 and 1958 as a Nike Missile Launch facility (Nike surface-to-air missile battery HA-48), one of six missile launch sites constructed in the mid-1950s for the Army's Hartford Defense Area. The Middletown Nike battery was one of two Hartford Defense Area sites retained in the early 1960s for the Nike-Hercules missiles, which were armed with tactical nuclear warheads. Both Ajax and Hercules missiles were deployed at Nike missile battery HA-48 (USACE, 2003). The Nike air defense mission was taken over by the Connecticut National Guard in 1964. The Middletown Nike facility was decommissioned in 1968, and the property was transferred to the USAR in 1970. The 1205th transportation railway operating battalion occupied the Property until 2006, using it primarily for administrative purposes. The USAR used the existing Nike barracks and the Administration Building on the Property until 1987, when the new USAR Center was completed. The original structures on the Property were used for storage and office space until they were demolished in the late 1990s.

The Nike Missile Launch Facility consisted of buildings and equipment required to assemble, test, and maintain the Hercules missiles and associated launchers. Structures for the Launch Area included a barracks, a Missile Assembly and Test Building, a Warhead Building (including an acid fueling pad and pit), three missile silos, a septic tank and associated drainage field, and guard houses. The missile silos would have contained four launchers each, with a storage magazine for 30 missiles.

The Warhead Building was used to fuel the missiles and to store and assemble the explosive components of the missiles. The Warhead Building would have contained an acid fueling pad and pit. The USAR used the former Warhead Building as a garage for storage. The Missile Assembly and Test Building was used to conduct initial missile assembly and test

operations. Missiles arrived in major assembly components unassembled and unarmed. The assembly consisted of the installation of the missile fins, ailerons or elevons, and missile body sections and system tests. The USAR converted this building to a maintenance shop. Historical reports indicate that the "maintenance shop" was used to check fluid levels and component operation, and that vehicle maintenance was performed at the organizational maintenance shop (OMS) in West Hartford, Connecticut, or at the Area Maintenance Support Activity (AMSA) shop in Windsor Locks, Connecticut. There is also a wash rack and OWS located approximately 25 feet from the Missile Assembly and Test Building.

Topographic maps (dated 1965, 1972, 1984, and 1992) and historical aerial photographs (date unknown, 1989, and 1995) were a source of information on the past use and operations at the Property. Figures 3-9 in Appendix A provide USGS topographical maps and aerial views of the Property and surrounding areas.

The 1965, 1972, and 1984 USGS topographic maps (4, 5, and 6 of Appendix A) show the establishment of the location of the U.S. Military Reserve in a rural area. The Environmental Baseline Survey (Diversified Technology Consultants [DTC], 1998) states that the Property was farmland prior to development as a Nike Missile site in 1955. These maps indicate that the elevation of the Property and surrounding areas varies significantly, even within the Property. The figures also identify a housing development to the east of the Property. The 1992 topographic map (Figure 7, Appendix A) shows that the area has remained relatively unchanged from the mid-1960s and the notation of the U.S. Military Reserve has been removed.

An undated aerial photograph (Figure 3, Appendix A) shows the development of the Property and the locations of three Nike missile silos and launch pads, the barracks, the Warhead Building, the Missile Testing and Assembly Building, dog kennels, and the guard shacks. The entire property has been cleared of trees and shrubs. The 1989 aerial photo (Figure 8, Appendix A) was of poor quality, but the original structures and the new USAR Center can be seen on the Property along with the residential area to the east. The 1995 aerial photo (Figure 9, Appendix A) shows that the Property remained relatively unchanged from the 1989 photograph.

3.3 Past Use, Storage, Disposal, and Release of Hazardous Substances

3.3.1 Past Use and Storage of Hazardous Substances

Information related to the past use and storage of hazardous substances for USAR activities at the Property was compiled through review of reasonably available records, search of federal and state environmental databases, and interviews with USAR personnel. Prior to its closure in September 2006 janitorial chemicals and building maintenance-related products were stored in the designated storage area within the janitorial closet located in the Reserve Center.

Historical records also indicate that certain types of chemical products used and stored at the Property would have contained hazardous substances pursuant to CERCLA 101(14) (42 U.S. Code [USC] 9601(14)).

A SWP3, prepared in 1999, identifies the disposal of potentially polluting materials (PPM) behind the "control building" (also known as the former Warhead Building or Garage) and potential leaks from military vehicles parked in an unpaved area. PPMs include any hazardous material that could come in contact with precipitation or stormwater runoff. While the report did not include a hazardous material inventory, it did note that a pool of petroleum, oil, and lubricants (POLs) was present within the secondary containment berm of the POL shed and that discarded aerosol paint cans, some quart and gallon size paint cans, and a half-empty 1-gallon can of wood cleaner were present in an unused flammable materials storage cabinet located in the paved area behind the control building.

While no vehicle maintenance was reportedly performed at the Property during the USAR's tenure, three 55-gallon drums of unknown content were observed in a historical photograph taken prior to 1996 from outside of the former Missile Test and Assembly Building (also known as maintenance building). Two of the drums were on secondary containment pallets in the photograph. The drums were not present during a 1996 site visit. Additionally, a flammable materials cabinet, located just west of the northwest corner of the former Warhead Building, contained 3 one-gallon pain cans; 4 quart-sized paint cans; 8 aerosol paint cans; and 2 one-gallon cans of paint thinner. No staining or evidence of a release was observed on the ground near this storage cabinet, and the cans were all in fair to good condition in 1996 (DTC, 1998).

Several historical reports have been prepared to assess the potential environmental concerns associated with Nike Missile sites. Some of these reports were reviewed to assess potential sources of contamination at the Middletown Nike battery. The following general Nike missile operations and list of possible hazardous substances associated with the launch areas were developed from the documents:

Missiles arrived at the Nike batteries unassembled and unarmed. The missiles were assembled in the Missile Assembly and Test Building. Assembly consisted of installing missile fins, ailerons, and missile body sections. Missile systems tests also were performed in this building. Small quantities of solvents, lubricants, and paint and petroleum distillates commonly were used in the missile assembly/disassembly process.

Ajax missiles were fueled at the acid fueling pad with inhibited red-fuming nitric acid (IRFNA) and unsymmetrical dimethylhydrazine (UDMH) on the acid fueling pad. Drums of each compound were stored in the vicinity of the acid fueling pad. Due to the high reactivity of both compounds, strict protocol was followed for the handling of these materials. If a spill of these materials did occur, the IRFNA was neutralized with sodium bicarbonate and the UDMH was neutralized with acetic acid. Due to their high reactivity, IRFNA and UDMH do not typically persist in the environment. Minimal quantities of solvents and lubricants typically were used in the Warhead Building. Hercules used only solid propellant rocket motors (that is, M30 sustainer and M42 booster) for propulsion.

Typically each Nike battery contained three silos. Missiles fueled and ready for firing were stored below ground in the missile silo magazines. The missile silos contained a small rail system used to deliver the missiles to the elevator and launcher. Up to 8 fully loaded missiles could be stored in a silo. The rail system, elevators, and launchers were hydraulically operated. A sump was located in the bottom of each silo to collect hydraulic fluid or other materials used during general maintenance of the hydraulic system and

missiles. Solvents, paints, and hydraulic fluids typically were used and stored within the missile silos. These materials typically were washed into the sump which then discharged to the surface though a drainage tile. Drainage tile fields located on Nike batteries potentially may have accumulated hazardous materials. Floor drains located in operations buildings potentially were connected to the drainage tile system. Historically, drainage tile fields potentially accumulate unauthorized disposal of hazardous materials down floor drains, sinks and other facilities connected to the drainage system (Law Engineering, 1996; USACE, 2003; Law Environmental, Date Unknown).

During the site interviews, facility personnel noted the historical application of chlordane under the foundations of the demolished Nike missile buildings. As such, pesticides and herbicides likely were stored and used at the facility, although more detailed information was not available at the time of this report preparation.

3.3.2 Past Disposal and Release of Hazardous Substances

Information related to past disposal and potential release of hazardous substances at the Property was compiled through review of reasonably available records, search of federal and state environmental databases, and interviews with Army Reserve personnel. According to Army Reserve personnel and site records, onsite disposal of hazardous materials or wastes has not occurred at the Property while the property was used by the USAR.

The EBS indicates that the Property is listed with the State of Connecticut as "being suspect regarding the release of solvents, oils, and polychlorinated biphenyls (e) to the ground." The only spill reported with the State of Connecticut, on the Property, however, was a Number 2 fuel oil spill that was reported 1992 from a transfer line, which impacted groundwater.

As discussed in Sections 3.2 and 3.3.1, historical Nike Missile system reports indicate that hazardous substances were used at Nike missile sites including PCBs, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), POLs, and fuels. While site-specific information regarding the types and quantities of these hazardous substances was not reasonably available for the Property, several site investigations identified hazardous substance and petroleum releases to soil and groundwater, likely as a result of the historical Nike Missile battery operations. Contamination was identified during the following five investigations:

- Letter Report—Limited Subsurface Investigation, USAR Center, Mile Lane, Middletown, Connecticut, by Clean Harbors Environmental Engineering, December 7, 1990
- Technical Report—underground storage tank (UST) closure by ATEC Associates, March 1994
- UST Closure Report—UST removals at USAR Centers in Brocton and Springfield, Massachusetts, and Middletown, Connecticut, by Roy F. Weston, January 30, 1997
- EBS—Middletown USAR Center, by Diversified Technology Consultants, November 1998

- Draft Groundwater Monitoring Report—94th Regional Readiness Command (RRC) USAR Center, Middletown, Connecticut, by Kemron Environmental Services, August 1, 2006

During a limited subsurface investigation conducted of a 2,000-gallon UST by Clean Harbors in 1990, 1,1,1-trichloroethane (TCA), 1,1-dichloroethene (1,1-DCE), and 1,1-dichloroethane (1,1-DCA) were detected in the groundwater. However, it was subsequently determined that this contamination was not associated with the UST. Further investigation, performed during a Geohydrologic Study by the U.S. Army Environmental Hygiene Agency in 1992, detected carbon tetrachloride, trichloroethylene (TCE), and associated degradation products at levels exceeding the Primary Drinking Water Standards in three monitoring wells located near the center of the Property. It was suspected that these products came from a spill near the maintenance shop (also known as former Missile Assembly and Test Building). During the Geohydrologic Study, total petroleum hydrocarbons (TPH) were detected in several of the surface soil samples, but only one exceeded the regulatory limits. The study concludes that petroleum products likely were used to control dust at the Property, and that the TPH detected in surface soil samples did not appear to present a threat to the groundwater.

A third investigation conducted by Kemron in August 2005 and February 2006 reported that metals were detected in groundwater, but at levels below the applicable Remediation Standard Regulations (RSR) criteria. Cis-1,2-dichloroethene (cis-1,2-DCE) and toluene were detected in groundwater at concentrations below the applicable RSR criteria. Carbon tetrachloride, chloroform, and TCE were detected, but only TCE exceeded the applicable RSR criteria. No site-related SVOCs were detected in any of the groundwater samples. TPH was detected in one well, but at a concentration below the applicable RSR criteria.

3.4 Past Presence of Bulk Petroleum Storage Tanks

Based upon a review of reasonably available records, a search of federal and state environmental databases, interviews with USAR personnel, and a site reconnaissance, no aboveground storage tanks (AST) are currently or historically have been located on the Property. Four USTs containing No. 2 heating oil (a 2,000-gallon steel UST, a 550-gallon steel UST, a 550-gallon fiberglass UST, and a 2,500-gallon steel UST) previously were located at this facility, but have been removed.

Clean Harbors Environmental Engineering removed two No. 2 heating oil USTs (a 2,000-gallon steel UST and a 550-gallon steel UST) in 1990. According to the Limited Subsurface Investigation report (Clean Harbors, 1990), "minimal" contamination was encountered and excavated during the removal of the 550-gallon steel UST, however, the 2,000-gallon steel UST had several perforations on the sides and bottom of the tank and petroleum contaminated soils were encountered during the tank removal. One hundred cubic yards of contaminated soil were excavated and disposed off-site from the 2,000 gallon UST excavation. Soil borings were advanced and 3 groundwater monitoring wells were installed to determine the extent of soil contamination related to the 2,000-gallon UST release. No petroleum hydrocarbons were detected in the soil boring or groundwater samples following the removal of the UST; however TCA, 1,1-DCE, and 1,1-DCA were detected in one of the

groundwater samples. Clean Harbors replaced the 550-gallon steel UST with a 550-gallon double walled fiberglass UST.

ATEC Associates removed a 2,500-gallon fuel oil UST in 1994. The tank was located south of the Reserve Center. While the tank was inspected and found to be in excellent condition, contaminated soil was encountered and a total of 63.5 tons of soil was removed. Final confirmation soil samples indicated that VOCs, SVOCs, and TPH were reported at either non-detect levels or below the RSR criteria.

The 550-gallon fiberglass UST was removed by Roy F. Weston, Inc. in 1997. Upon removal of the tank, it was inspected and it appeared to be in acceptable condition and no releases were noted. Soil samples were collected and analyzed for volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), PCBs, and Resource Conservation and Recovery Act (RCRA)-8 metals. VPH and EPH analytes and PCBs were not detected. Several of the RCRA-8 metals were reported, but at concentrations that would be expected for background conditions.

The reports are included in Appendix D.

3.5 Review of Previous Environmental Reports

A review of reasonably available records produced several reports pertaining to the Property. The following subsections provide a brief summary of these reports. Copies of the reports, unless otherwise specified, are provided in Appendix D.

3.5.1 Nike Launcher Sites (Middletown and East Windsor, CT), a Photo Documentation of Two Nike Launcher Sites Slated for Demolition

The document was prepared by the USACE in 1988 and details the history of the Nike sites in the area and assesses the condition of the Property. The buildings were noted to be of cinderblock construction and to be in fair to good condition. The launcher area was overgrown and an established wetland area was noted on the southeast side of the launcher area. The launcher was in fair to poor condition. The underground components of the launchers (that is, the silos) were flooded and the elevators had been capped with rectangular concrete slabs. The launcher area was considered unsafe and recommended for demolition.

3.5.2 Letter Report, Limited Subsurface Investigation

Clean Harbors Environmental Engineering removed a 2,000-gallon No. 2 fuel, oil-steel UST and a 550-gallon No. 2 fuel, oil-steel UST in 1990. Inspection of the 2,000-gallon tank revealed several perforations on the sides and bottom of the tank and stained soil. One hundred cubic yards of contaminated soil were removed from the 2,000-gallon UST excavation and disposed offsite. Three soil borings were installed and completed with groundwater monitoring wells around the 2,000-gallon UST excavation to define the limits of the contamination. No petroleum hydrocarbons were detected in the soil boring or groundwater samples; however TCA, 1,1-DCA, and 1,1-DCE were detected in one of three groundwater samples. The 550-gallon steel tank was replaced with a 550-gallon, double-wall, fiberglass UST. Further site investigation was recommended to determine the source of the contamination.

3.5.3 Geohydrologic Study

As a follow up to the Limited Subsurface Investigation conducted by Clean Harbors Environmental Engineering in December 1990, the Geohydrologic Study was performed by the U.S. Army Environmental Hygiene Agency in June 1992. The purpose of the study was to conduct a limited environmental investigation to identify the source of TCA detected in groundwater. The study identified five areas of concern (AOCs):

- Three Nike Missile Silos. These silos were closed in 1988. Prior to closure, asbestos and hydraulic fluid were removed. The silos were then filled with a sand slurry and debris from the walls of the silos. While no samples were collected during the closure, solvents and metals are common contaminants associated with Nike missile site activities.
- Acid Neutralization Pit: located underneath the Garage (also known as the Warhead Building). These pits were typically used for disposal of waste liquids and solids at Nike sites. Wastes could have included waste POLs or solvents.
- 2,000-gallon UST
- Material storage (solvents)
- Septic Tank and Leaching Field. This was used until the facility was connected to the sanitary sewer system.

Fourteen groundwater monitoring wells were installed in June 1992 and one of the wells was found to be dry. Eight subsurface soil samples, one surface soil sample, and 13 groundwater samples were collected. Soil samples were analyzed for total metals, VOCs (except for 4 samples), SVOCs, and TPH. Groundwater samples were analyzed for dissolved metals, VOCs, SVOCs, TPH, nitrates/nitrites, pesticides and PCBs. TPH was detected in several of the surface soil samples, but only one exceeded the cited regulatory limit. The report concludes that petroleum products likely were used to control dust at the Property, and that the TPH detected in surface soil samples did not appear to present a threat to the groundwater. VOCs and SVOCs were not detected in the soil samples. Metals were detected in soil samples at concentrations similar to background levels.

Carbon tetrachloride, TCE, chloroform, and cis-1,2-DCE were detected in two groundwater samples. Carbon tetrachloride and TCE were detected at concentrations exceeding the CTDEP RSR criteria. Metals were detected in all groundwater samples at concentrations below applicable regulatory criteria.

The report recommended additional groundwater sampling.

3.5.4 Technical Report for Underground Storage Tank Closure

ATEC Associates removed a 2,500-gallon No. 2 fuel oil UST in March 1994. The tank was located south of the Reserve Center. Upon removal, the tank was inspected and found to be in excellent condition. No holes or areas of severe corrosion were noted during the tank inspection. However, contaminated soil was encountered and a total of 63.5 tons of soil was removed. Field screening and two soil samples of the final excavation were collected for VOCs, SVOCs, and TPH. The concentrations of the VOCs, SVOCs, and TPH were reported

at either non-detect levels or below the RSR criteria. The confirmatory analytical data for the tank closure was included in the report.

3.5.5 Underground Storage Tank Closure Report

A UST was removed by Roy F. Weston, Inc., in January 1997. The 550-gallon, fiberglass UST contained Number 2 fuel oil. Upon removal of the tank, it was inspected and it appeared to be in acceptable condition and no releases were noted. Soil samples were collected and analyzed for VPH, EPH, PCBs, and RCRA-8 metals. VPH and EPH analytes and PCBs were not detected. Several of the RCRA-8 metals were reported, but at concentrations that would be expected for background conditions.

3.5.6 Environmental Baseline Study

The EBS was prepared in November 1998 by DTC for the demolition of three Nike missile structures on the Property (the Warhead Building, the Missile Test and Assembly Building, and the Former Barracks Building). The report appendices were not reasonably available for this report. The following issues were discussed in the EBS report:

- The EBS summarized the findings of the June 1992 Geohydrologic Study prepared by the U.S. Army Environmental Hygiene Agency. This report is discussed in Section 3.5.3 above.
- The EBS summarized excerpts from the January 30, 1997, Underground Storage Tank Closure Report prepared by Roy F. Weston, Inc. This report is discussed in Section 3.5.5 above.
- The EBS summarized the December 7, 1990, Limited Subsurface Investigation prepared by Clean Harbors Environmental Engineering. This report is discussed above in Section 3.5.2.
- The EBS summarizes a 1996 Floor and Storm Drain Inventory and Natural Resources Inventory, conducted by the USACE. The summary states that a wash rack with OWS is located approximately 25 feet north of the former Missile Test and Assembly Building. The wash rack discharges to the OWS, which discharges to the sanitary sewer. No information is summarized regarding natural resources.
- The EBS summarizes a 1996 Total Facility Assessment Report prepared by the Fort Devens Engineering Team. The EBS summary indicates that the former Missile Test and Assembly Building is referred to as a maintenance shop and the former Warhead Building is referred to as Cold Storage Building. No vehicle maintenance was performed in the building at the time of the 1996 site visit, however, three 55-gallon drums of unknown content were observed in a historical photograph taken from outside of the former Missile Test and Assembly Building/OMS. Two of the drums were on secondary containment pallets in the photograph. The Fort Devens Facilities Engineering Team did not observe drums or any staining during the 1996 site visit.
- The EBS summarizes the results of a National Environmental Policy Act (NEPA) Screen conducted to identify the 100-year and 500-year floodplains, floodways, historic districts, archaeological and Indian burial sites; and threatened and endangered species

which may be impacted during the proposed demolition of the site buildings. This information has been incorporated in Section 7 of this report.

- The EBS states that asbestos surveys were performed historically on the Property in 1990 and in 1995. The surveys identified 144 square feet of 12-by-12-inch floor tile; 5,250 square feet of 9-by-9-inch floor tile; 275 linear feet (lf) of pipe insulation and associated fittings; 2,220 square feet of asbestos cement board; 23 thermal insulation mud fittings; and 100 square feet of water tank insulation. During the EBS visual inspection, asbestos-containing material (ACM) also was identified in the roofing materials of the Missile Test and Assembly Building. The buildings containing this ACM were demolished sometime after 1998.

- XRF technology identified LBP in all three buildings slated for demolition, however, a composite sample of building materials tested for toxicity characteristic leaching procedure (TCLP) lead did not contain levels above the detection limit.

- Four soil samples were collected during the EBS, two samples each from beneath the concrete slabs in the Warhead Building and the Missile Test and Assembly Building and analyzed for VOCs, SVOCs, PCBs, TPH, and RCRA metals. Total barium was detected in all four soil samples at concentrations below the CTDEP Residential Direct Exposure Criteria (DEC). TPH was detected in two soil samples at levels below the State Residential DEC. No other constituents were detected.

- The EBS indicates that the Property is listed with the State of Connecticut as "being suspect regarding the release of solvents, oils, and PCBs to the ground." A No. 2 fuel oil spill was reported at the site in 1992 from a transfer line, which reportedly impacted groundwater.

- During the EBS visual inspection the following observations related to environmental conditions were made:

  - Warhead Building. A-6-by-6-foot, soil-filled pit was identified approximately 25 feet southeast of the Warhead Building, which historically contained acid. A flammable materials cabinet, located just west of the northwest corner of the building, contained three 1-gallon paint cans; four quart-sized paint cans; eight aerosol paint cans; and two 1-gallon cans of paint thinner. No staining or evidence of a release was observed on the ground near this storage cabinet, and the cans were all in fair to good condition.

3.5.7 Stormwater Pollution Prevention Plan

The SWP3 was prepared by the USGS in September 1999. The plan stated the USAR Center posed a "moderate" risk to surface waters of the State of Connecticut, because of the disposal of PPMs behind the "control building" (also known as the former Warhead Building or Garage) and potential leaks from military vehicles parked in an unpaved area. PPMs include any hazardous material that could come in contact with precipitation or stormwater runoff. While the report did not include a hazardous material inventory, it did note that a pool of POL was present within the secondary containment berm of the POL shed (located in the Nike missile silo area) and that discarded aerosol paint cans, some quart and gallon size paint cans, and a half-empty 1-gallon can of wood cleaner were present in an unused flammables materials storage cabinet located in the paved area behind the control

building. Although no spill sites were noted in the report, it was recommended that military vehicles be parked only in an established military equipment parking (MEP) with drip pans.

The SWP3 also identifies the OWS and the wash rack on the Property, and reports that it was no longer used and was last serviced in October 1999 (however, the date of the SWP3 is September 1999).

3.5.8 94th Regional Support Command Water Quality Survey

The water quality survey was performed to evaluate water quality and provided recommendations to ensure that water is of good quality to protect human health. It was performed by the U.S. Army Center for Health Promotion and Preventative Medicine in February 2003. The water in the facility was found to be within potable standards, but the water still was found to be turbid and had a bad taste. The water also was found to be "aggressive" in nature due to pH levels or because sodium hydroxide was added to the water before discharging from the water treatment plant. The aggressive nature of the water could cause the leaching of lead from the piping system. Recommendations were made to replace the system with a new system using polyvinyl chloride (PVC) piping. It also was recommended that a point-of-use water filtration be installed to reduce the turbidity and that a daily flush plan should be implemented to remove metals from the water.

3.5.9 Groundwater Monitoring Report

The draft Groundwater Monitoring Report was submitted in August 2006 by Kemron Environmental Services. The report summarizes investigation activities conducted at the Property between 1990 and 1998, presents the groundwater data collected from the August 2005 and the February 2006 sampling events, and provides recommendations regarding whether a remedial investigation is warranted.

Five wells were sampled in August 2005, and nine wells were sampled in February 2006. Groundwater samples were generally analyzed for TPH, VOCs, SVOCs, and total and dissolved metals. Metals were detected in groundwater during both sampling events, but at levels below the applicable RSR criteria. Cis-1, 2-DCE and toluene were detected at concentrations below the applicable RSR criteria. Carbon tetrachloride, chloroform, and TCE were detected, but only TCE exceeded the applicable RSR criteria. No site-related SVOCs were detected in any of the groundwater samples. TPH was detected in one well, but at a concentration below the applicable RSR criteria.

The source of the TCE contamination was not identified, however, based on the sample locations is suspected be the former Garage (also known as the Warhead Building) and/or Maintenance Shop (also known as the Missile Test and Assembly Building) or former USTs. The former Nike missile silos are located side-gradient to the observed contamination, therefore, they are less likely to be the source.

The report recommends a supplemental investigation to further investigation potential sources of soil impacts that could explain the contamination noted in the impacted monitoring well. Additionally, a groundwater investigation was recommended to attempt to delineate the extent of VOC impacts observed. The recommendations are detailed in the report and are under review by the 94th RRC for implementation.

3.5.10 Historic Resources Inventory

A historic resources inventory was conducted at the facility by the Public Archaeology Laboratory in 1995. The Historic Inventory Report consisted of five completed inventory forms, a short description of the building, and a site history. The following five buildings were assessed:

- Storage Building—Originally built in 1956 as the Nike Enlisted Men's Barracks and Officers Quarters and was a one-story structure consisting of two contiguous wings. The building was constructed of concrete block with shed roofs. The building was converted into a Reserve Center and then used for storage after the new reserve Center was constructed in 1987.
- Storage Building—Originally built in 1958 as the Missile Assembly and Test Building and was a one-story structure built on a concrete slab with concrete block walls and a flat roof.
- Storage Building—Originally built in 1956 as the Nike missile Warhead Building and was a one-story structure built on a concrete slab with concrete block walls and a flat roof.
- Sentry Station—Originally built in 1956 as a sentry station, this is a one-story, 8-by-6.5-foot, concrete block building on a concrete slab.
- Reserve Center—a 16-by-74-foot brick building with a flat roof constructed in 1987. The building is situated on the brow of an open, terrace hillside. After construction, earth beams were piled up against the foundations on the northeast, northwest, and southeast sides of the building.

The report does not provide a summary of the historical significance of the buildings on the property.

4 Adjacent Properties

Adjacent property land uses are significant to the ECP process, as these current or past uses may have an environmental impact on the USAR Center. Typically adjacent properties within 0.25 mile of the USAR Center property boundaries are reviewed and surveyed visually. For the purposes of this ECP, the adjacent property reconnaissance was performed from the USAR Center property boundaries and from public access points. Historical aerial photographs and topographic maps also were reviewed for conditions or activities that may have had an environmental impact on the Property.

4.1 Land Uses

During the site reconnaissance, the adjacent properties were undeveloped. No evidence of past development of the adjacent lands was noted in aerial photos taken in 1989 and 1995 or on topographic maps from 1965, 1972, 1984, and 1992. An area to the east, approximately 0.4 mile away, has a residential development that has been present, according to topographic maps, since before 1965.

4.2 Findings

The EDR database search results were reviewed for any evidence that adjacent properties may have past or present environmental issues that would impact the USAR Center. The areas adjacent to the Property were undeveloped and appeared to be open, unused land. No major activities on the properties were identified during the site interviews.

Water well databases at the federal and state level were reviewed to identify any water supply source near the Property. Two water wells were found on the USGS database within 0.02 and 0.5 mile of the property. The owners of the wells were not specified in the EDR report, and they are not listed as wells used as drinking water sources.

5 Review of Regulatory Information

An essential component of an ECP is the review of records and databases containing information on the Property and adjacent properties. The review includes reasonably obtainable federal, state, and local government records, and is intended to identify a release or likely release of any hazardous substance or any petroleum product, which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product to the Property.

The majority of the regulatory information for this ECP was obtained from EDR on July 13, 2006. EDR provides a regulatory database summary that consolidates standard federal, state, local, and tribal environmental record sources based on ASTM D6008 recommended minimum search distances from the Property.

All findings reported in Sections 5.1, 5.2, and 5.3 below are from the EDR report unless otherwise noted. A copy of the complete EDR report is included in Appendix E.

5.1 Federal Environmental Records

5.1.1 Federal National Priorities List Sites within 1 Mile

USEPA maintains a record of the nations' worst uncontrolled or abandoned hazardous waste sites, known as the National Priorities List (NPL). Sites on the NPL undergo long-term remedial action under CERCLA. The USAR Center is not an NPL site, nor were any such sites located within 1 mile of the Property.

5.1.2 Federal Comprehensive Environmental Response, Compensation and Liability Act Information Systems Sites within 0.5 Mile

The CERCLA Information System (CERCLIS) contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies, and private persons, pursuant to Section 103 of the Act. CERCLIS contains sites that are either proposed to be or are on the NPL and sites that are in the screening and assessment phase for possible inclusion on the NPL.

The USAR Center is not a CERCLIS site and there are no CERCLIS sites located within 0.5 mile of the center.

5.1.3 Resource Conservation and Recovery Act Corrective Action Sites within 1 Mile

RCRA corrective action (CORRACTS) sites represent facilities that have generated or managed hazardous wastes and require corrective action. The USAR Center is not a CORRACTS site, nor were any such sites identified within one mile of the USAR Center.

5.1.4 RCRA Treatment, Storage, and/or Disposal Sites within 0.5 Mile

RCRA defines and regulates sites that generate, transport, or provide treatment, storage, or disposal (TSD) of hazardous wastes. The RCRA Information System (RCRIS) includes selective information on these sites.

The USAR Center is not a RCRIS-TSD site and there are no such sites located with 0.5 mile of the USAR Center.

5.1.5 Federal RCRA Small and Large Quantity Generators List within 0.25 Mile

Conditionally exempt small quantity generators are defined as facilities generating less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. RCRA small quantity generators are defined as facilities generating between 100 kg and 1,000 kg of hazardous waste per month. A facility generating more than 1,000 kg of hazardous waste or over 1 kg of acutely hazardous waste per month is defined as a large quantity generator.

The USAR Center is not a small-quantity generator or large-quantity generator site, nor were any such sites located within 0.25 mile of the Property.

5.1.6 Federal Emergency Response Notification System List

The federal Emergency Response Notification System (ERNS) List maintains information on reported releases of oil and hazardous substances. The USAR Center is not on this notification list.

5.2 State and Local Environmental Records

Most of the information presented in this subsection was obtained from the EDR report. Additional information was also obtained from online database searches of the State of Connecticut's databases. No state and local agency personnel were interviewed via telephone during this assessment.

5.2.1 State Lists of Hazardous Waste Sites within 1 Mile

The USAR Center is not on the state list of hazardous waste sites. One site, the J.J. Vinci Coal Company, was identified within 1 mile of the USAR Center, and its information is summarized in Table 1. The company was cited for the alleged burial of drums and the presence of a lagoon. The USAR Center is upgradient of the site; therefore, any migration from the J.J. Vinci site would not affect the Property. Additionally, the EDR Report documented that remediation actions at the site were completed and approved by the CTDEP on July 13, 1989.

TABLE 1
Nearby State Hazardous Waste Sites
Middletown USAR Center, Middletown, CT

Company/Site	Address	Distance and Direction from Property	Regulatory Status	Elevation Relative to Property
J.J. Vinci Coal Company	1000 Newfield Street Middletown, CT 06457	Approx 5,260 ft. NE	Active	Lower

5.2.2 State-Registered Landfills or Solid Waste Disposal Sites within 0.5 Mile

The USAR Center does not have a solid waste landfill, incinerator, or transfer station within the Property boundaries.

No adjacent properties within 0.5 mile of the USAR Center have a solid waste landfill, incinerator, or transfer station.

5.2.3 State-Registered Leaking UST Sites within 0.5 Mile

In addition to information obtained from the EDR report, the CTDEP maintains a comprehensive database of leaking UST (LUST) sites. The USAR Center is not listed in the state LUST database.

However, within 0.5 mile of the Center, one LUST site was identified. A 1-gallon No. 2 diesel fuel spill from the Kasden Elm City fuel tank was reported in July 1989. Table 2 summarizes the information relative to the USAR Center, and provides the status of its corrective action. The site is downgradient of the Property and, therefore, offsite migration from this site will not impact the Property.

TABLE 2
Nearby Leaking Underground Storage Tank Sites
Middletown USAR Center, Middletown, CT

Company/Site	Address	Distance and Direction from Property	Regulatory Status	Elevation Relative to Property
Kasden Elm City Fuel	397 Mile Lane Middletown, CT 06457	Approx 1,330 ft. ENE	Inactive	Lower

5.2.4 State-Registered UST Sites within 0.5 Mile

The USAR Center is not a state-registered UST site, nor were any such sites identified within 0.5 mile of the USAR Center.

5.2.5 State Spills Incidents

The USAR Center is not listed on the Connecticut state petroleum spill list. However, the 1998 EBS indicates that a No. 2 fuel oil spill from a transfer line was reported in 1992.

5.2.6 Records of Contaminated Public Wells

The City of Middletown Water and Sewer Board does not own or operate any municipal water supply wells within 0.25 mile of the USAR Center.

5.2.7 Voluntary Remediation Program Sites within 0.5 Mile

The USAR Center is not listed in the Connecticut Brownfields Program (the successor to the Voluntary Cleanup Program). No sites located within 0.5 mile of the USAR Center are listed as being in the Brownfields Program.

5.2.8 State Registered Bulk Fertilizer and Pesticide Storage Facilities within 0.25 Mile

The USAR Center is not registered with the state as a bulk fertilizer and pesticide storage facility. Additionally, no adjacent properties within 0.25 mile were registered as one of these facilities.

5.3 Unmapped Sites

Some sites within the ASTM D6008 recommended minimum search distances have the same zip code as the USAR Center, but no street address. These sites, known as unmapped or orphan sites, can not be mapped from the EDR results alone. None of the sites were located within corresponding ASTM D6008 recommended minimum search distances.

5.4 Summary of Properties Evaluated to Determine Risk to the Property

To summarize Subsections 5.1 through 5.3, two separate properties, near or adjacent to the USAR Center, were evaluated as potential risks to the Property. These adjacent properties evaluated were identified as a result of information obtained during area reconnaissance, interviews, and regulatory database searches, and are summarized below in Table 3.

Based on an evaluation of reasonably available information and details concerning the properties listed in Table 3, none of the facilities evaluated exhibit significant environmental conditions that have the probability of adversely affecting the environmental conditions at the Property. The Kasden Elm City Fuel property and the J.J. Vinci Coal Company are located downgradient of the Property, therefore, have minimal potential to impact the Property. Additionally, the EDR report indicates that all remedial actions at the site were completed and approved by the CTDEP, therefore, impacts to the Property are unlikely.

TABLE 3
Properties Evaluated for Potential Environmental Risks
Middletown USAR Center, Middletown, CT

Company/Site	Database	Elevation Relative to Property?	Potential Impact on the Property?	Comments
Kasden Elm City Fuel	LUST	Lower	No	Downgradient of the Property
J.J. Vinci Coal Company	SHWS	Lower	No	Downgradient of the Property

Notes: SHWS = State Hazardous Waste Site

6 Site Investigation and Review of Hazards

Findings documented in the following subsections are based on the August 22, 2006, site reconnaissance, a review of reasonably available records, search of federal and state environmental databases, and information obtained from USAR personnel.

6.1 Underground Storage Tanks/Aboveground Storage Tanks

No ASTs or USTs were present on the property during the site reconnaissance. Four USTs were removed from the Property as described in Section 3.4.

6.2 Inventory of Chemicals/Hazardous Substances

Chemicals used and stored at the Property at the time of the site reconnaissance were associated with facility maintenance activities and janitorial services. Janitorial chemicals such as window cleaner, toilet bowl cleaner, tub-tile cleaners were stored in cabinets, in the bathroom area, and in the janitorial area. Building maintenance-related products such as latex paints, spray paints, lubricants, minor amounts of motor oil, and so forth were stored in flammable cabinets located in the storage bay in the south side of the Reserve Center.

Certain types of chemical products used and stored at the Property historically would have contained hazardous substances pursuant to CERCLA 101(14) (42 USC 9601(14)). Historical storage of these substances is discussed in Section 3.3.1 above.

6.3 Waste Disposal Sites

Available records and interviews did not indicate the practice of onsite waste disposal associated with the USAR activities other than through managed storage and offsite disposal, or through the sewer or septic systems. No waste disposal sites were observed during the site reconnaissance, nor were any signs of past onsite waste disposal (such as stressed vegetation or suspicious depressions in the landscape) observed.

The potential for historical waste disposal, primarily into the drainage field, is discussed in Section 3.3.1 above.

6.4 Pits, Sumps, Drywells, and Catch Basins

An acid neutralization pit has been reported in several documents and by site personnel in the former Warhead Building (also known as the Garage) during the operation as a Nike missile facility. The foundation of Warhead Building still was present south of the Reserve Center. A slight depression existed in the asphalt around the foundation and it was noted through site interviews that the depression was the acid neutralization pit. No stressed vegetation or staining was noted in the area.

There is a wash rack that discharges to an OWS located approximately 25 feet north of the former missile test and assembly building (also known as maintenance building). The wash rack reportedly discharged to the OWS and exits the site via the sanitary sewer (DTC, 1998). Reports indicate that the OWS was no longer in use as of 1999. It was last serviced in October of 1999 (USGS, 1999).

6.5 Asbestos-Containing Material

The Reserve Center was built in 1987. Because of the recent date of construction, asbestos likely was not used in construction materials for the building. ACM previously located at the facility is discussed in Section 3.5.6 above.

6.6 PCB-containing Equipment

No transformers or other DoD-owned, PCB-containing equipment were noted during the site reconnaissance, and no documented surveys of the facility were available at the time of this report preparation. Site personnel indicated during the site reconnaissance that if PCB-containing equipment was present, it most likely was removed during the demolition of the Nike missile buildings.

6.7 Lead-based Paint

Because the Reserve Center was constructed after 1978, there is limited potential for LBP. At the time of the site reconnaissance, the painted surfaces at this facility were in good condition. The historical presence of LBP in demolished buildings is discussed in Section 3.5.6 above.

6.8 Radon

Radon surveys have not been performed for the Property. USEPA and USGS predicted an average screening level of 2 to 4 picoCuries per liter of air (pCi/L) in Middlesex County. USEPA has recommended 4 pCi/L as an action level for radon abatement. Based on this information, the radon concern is considered low for the Property because average levels in the area are below 4 pCi/L.

6.9 Munitions and Explosives of Concern

Based on a review of available records, the site reconnaissance, and interviews with USAR Center personnel, there are no indications that munitions and explosives of concern (MEC) are or were present at the Property. As one of two Hartford Defense Area sites retained in the early 1960s, Nike-Hercules missiles, which were armed with tactical nuclear warheads and Nike Ajax missiles were present on the Property. The primary munitions associated with Nike sites included the Hercules missiles themselves and missile propellants and fuels. These propellants and fuels could have included jet fuel (JP-4), perchlorate (solid rocket fuel), analine-furfuryl alcohol (starter fuel), IRFNA (rocket fuel oxidizing agent), and UDMH (starter fluid). The exact components comprising the warheads, missile propellants

and fuels used at the Property were not detailed in the reports reviewed during the preparation of this ECP report. Due to the highly reactive nature of the liquid fuels, great care typically was taken during missile fueling activities. Liquid rocket fuels rarely were spilled in significant quantities. All facilities associated with the former use of the Property as a Nike missile battery have been demolished. There were no records that indicate the warheads were handled improperly.

6.10 Radioactive Materials

Based on a review of available records, the site reconnaissance, and interviews with USAR Center personnel, there is no indication that radioactive materials were released at the USAR Center. Nike Hercules missiles likely were armed with nuclear warheads. The radioactive materials (electron tubes) in these missiles were shipped, stored, handled and disposed of in accordance with technical manuals (USACE, 2003). Periodic wipe tests were performed to identify radioactive leaks. The wipes were to be disposed of in lead-lined drums as radioactive waste but frequently were disposed of as regular solid waste. However, no accounts of radioactive leakage have been identified at Nike missile sites (Law Engineering Testing Company, 1986).

7 Review of Special Resources

7.1 Land Use

The City of Middletown has designated this Property and surrounding properties as Residential. The Property is located in an area that consists mostly of undeveloped land, with residential use east of the Property.

7.2 Coastal Zone Management

The Office of Long Island Sound Program (OLISP) is the lead agency for the Connecticut Coastal Management Program. OLISP defines coastal zone as area within 1,000 feet from a tidal river or the shore. This Property is not included in the coastal zone management plan nor is it in a coastal zone.

7.3 Wetlands

According to the 1988 U.S. Fish and Wildlife Service (USFWS) National Wetlands maps (Figure 10, Appendix A), no wetlands are located on the Property, or on adjacent properties. However, a 1988 report on the Nike launcher sites indicates the presence of a well established wetland on the southern end of the facility. During the August site reconnaissance for this ECP report, a dry creek bed was observed on the southern end of the property.

7.4 100-year Floodplain

A review of the Federal Emergency Management Agency (FEMA) digital Flood Hazard Area map indicates that the Property is not located within the 100-year floodplain. Figure 11 in Appendix A provides a map of the 100-year floodplain elevations located in the immediate vicinity of the Property.

7.5 Natural Resources

The EBS summarizes a NEPA Screen conducted in advance of building demolition in the late 1990s. The NEPA Screen did not identify any endangered or threatened species on the Property based on a review of the federal and state list of endangered or threatened species contained in Department of Environmental Protection's (DEP) Natural Diversity Data Base.

7.6 Cultural Resources

A historical resource inventory report for the Property was prepared in 1995. The report describes five buildings, four of which have since been demolished. The State of Connecticut Historical Commission stated that the demolition activities would not impact any historic, architectural, or archaeological resources listed or eligible for the National Register of

Historic Places. The current structure, the Reserve Center, was built in 1987 and based on the date of construction would not meet the criteria for inclusion on the register. Appendix D provides a copy of the report.

8 Conclusions

The following information was obtained after reviewing available historical information, conducting interviews with knowledgeable parties connected with the Property or with state and local agencies, and conducting a reconnaissance of the Property and adjacent properties.

8.1 Findings

Hazardous Substances. According to USAR personnel and site records, onsite disposal of hazardous substances pursuant to CERCLA 101(14) (42 USC 9601(14)) or wastes has occurred at the Property. Given the primarily administrative nature of USAR activities at the Property, these releases likely are related to activities conducted at the Property when it operated as a Nike missile facility. Hazardous substances were commonly associated with Nike missile operations including:

- Solvents, POLs, and paints used during missile assembly and disassembly
- Solvents and lubricants used as part of missile fueling operations
- Solvents, paints, and hydraulic fluids used in the missile silos
- Drain tile fields which could have received hazardous substances discharged into facility drains.

Various site investigations have been performed on the Property, which indicate that both soil and groundwater have been impacted by historical releases. The investigations report that TCA, 1,1-DCE, 1,1-DCA, carbon tetrachloride, TCE, chloroform, TPH, cis-1,2-DCE and toluene have been detected in the groundwater. TCE is the only constituent that consistently has been detected at concentrations exceeding the applicable CTDEP RSR criteria. The source of this contamination has not been identified and is suspected to be in the areas around the Garage, Maintenance Building, and/or the Nike missile silo area. Investigations are still underway to determine the nature and extent of contamination.

During the site interviews, site personnel noted the historical application of chlordane under the foundations of the Nike missile buildings. A 1999 report also notes that PPMs were potentially improperly disposed of behind the Garage. The report does not specify the types of PPMs.

An OWS is located on the property. The OWS has not been used since at least 1999 and it reportedly was serviced last in 1999. Older OWSs frequently leak, and, therefore, may be a potential source of observed groundwater contamination.

While not hazardous substances, petroleum products reportedly were used on the Property to control dust.

USTs/ASTs. No ASTs have been located at the USAR Center. However four USTs containing No. 2 fuel oil have been removed from the Property. A 2,000-gallon No. 2 fuel oil UST was removed in December 1990. One hundred cubic yards of petroleum-contaminated

soil were excavated and disposed offsite. A subsequent investigation detected TCA,1,1-DCE, and 1,1-DCA in the groundwater, however, the UST is not suspected to be the source of the groundwater contamination.

A 550-gallon steel No. 2 fuel oil UST was also removed in 1990. The report indicates that "minimal" contamination was observed during removal of this tank.

A 2,500-gallon No. 2 fuel oil UST was removed in March 1994 along with 63.5 tons of petroleum-impacted soil. Confirmation soil samples collected following the excavation indicate that VOCs, SVOCs, and TPH were either non-detect or below the CTDEP regulatory criteria.

A 550-gallon fiberglass No. 2 fuel oil tank was removed in 1997. According to the closure documents, there is no evidence of a petroleum release from this UST.

Non-USTs/ASTs Petroleum Storage. No non-UST/AST petroleum storage was observed at the facility during the site reconnaissance. Historical reports indicate the presence of 55-gallon drums (contents unknown), hydraulic fluids, lubricants, and fuels historically at the Property. A POL shed was formerly located in the Nike missile silo area on the Property. A pool of POL was noted in the bottom of this shed during a 1999 site visit. The POL pool was no longer present during the 2006 site reconnaissance.

PCBs. No transformers or other DoD-owned, PCB-containing equipment were noted during the site reconnaissance, and no documented surveys of the facility were available at the time of this Draft ECP report preparation. Site personnel indicated during the site reconnaissance that if PCB-containing equipment was present, it was most likely removed during the demolition of the Nike missile buildings

ACM. The only remaining buildings at the USAR Center were built in 1987. Because of the recent date of construction, asbestos was not likely present in any of the construction materials used for this building.

LBP. Because the USAR Center was constructed after 1978, there is limited potential for LBP. At the time of the site reconnaissance, the painted surfaces at this facility were in good condition.

Radiological Materials. Based on a review of available records, the site reconnaissance, and interviews with USAR Center personnel, there is no indication that radioactive materials were released at the USAR Center.

Radon. Radon surveys have not been performed for the Property. Based on the USEPA and USGS predicted average screening level of 2 to 4 pCi/L of air in Middlesex County, the radon concern is considered low for the Property because average levels in the area are below the USEPA-recommended action level.

MEC. Available records do not indicate any MEC currently or formerly located at this Property.

Surrounding Properties. Potential environmental sites of concern, located within the ASTM D6008 recommended minimum search distances from the Property, were evaluated through database review and site reconnaissance. None of the adjacent properties evaluated

exhibited environmental conditions that had or have the potential to adversely affect environmental conditions at the Property.

Wetlands and Floodplain. According to the 1988 USFWS National Wetlands maps and visual observations, no wetlands were observed on the Property, or on adjacent properties. However, a 1988 report noted that a well-established wetland was present at the Property.

A review of the FEMA digital Flood Hazard Area map indicates that the Property does not lie within the nearest 100-year floodplain.

Threatened and Endangered Species. A NEPA Screen conducted in the late 1990s did not identify any endangered or threatened species on the Property based on a review of the federal and state list of endangered or threatened species contained in DEP's Natural Diversity Data Base.

Archaeological and Historical Resources. Because the Reserve Center building was constructed in 1987, it is not yet eligible for listing on the National Register of Historic Places.

8.2 Environmental Condition of Property

Findings of this ECP report were based on reasonably available environmental information, interviews with site and state and local personnel, review of previous environmental studies and federal and state databases, and file information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products. Results also were based on visual observations of the Property and adjacent properties.

In accordance with DoD policy defining the classifications (see Sherri Goodman Memorandum dated 21 October 1996), the Property has been classified into one of seven property types. Based on the results of this ECP study, the property has been assigned an overall DoD Environmental Condition Type 7. The property type is based primarily on the following major findings.

- The presence of various contaminants (TCA, 1,1-DCE, 1,1-DCA, carbon tetrachloride, TCE, carbon tetrachloride, chloroform, extractable total petroleum hydrocarbons [ETPH], cis-1,2-DCE , and toluene) in the groundwater. The source of this contamination is unknown and investigations are currently underway.
- Potential releases from the former septic system/drain tile field that was historically used for the Nike missile site.
- The possible improper disposal of PPMs behind the garage.

9 References

Persons Contacted

- Steve Lombardi, 94th Regional Readiness Environmental Contractor, 978-796-2607, August 21, 2006
- Gary Puryear, Director 94th Regional Readiness Environmental Department, August 21, 2006
- Sgt. Brooks, 1205th TROB, Cell 203-980-6683. Transferred to 226th TROB in Chicopee, MA.

Resources Consulted

- Aerial Photographs provided by EDR dated 1998, and 1995.
- Undated Aerial Photograph provided by Sgt. Brooks during the Site visit on August 21, 2006.
- FEMA Flood Hazard Insurance Map, http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView
- USFWS National Wetlands Inventory maps
- USEPA Map of Radon Zones, http://www.epa.gov/radon/zonemap.html
- OSLIP, http://www.dep.state.ct.us/olisp/index.htm.
- Federal Regulatory Databases
  - NPL, April 20, 2006
  - Proposed NPL Sites
- State and Local Regulatory Databases
  - Underground Storage Tank Data

Works Cited

ATEC Associates. 1994.Technical Report for Underground Storage Tank Closure.

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DTC. 1998. Environmental Baseline Study, Middletown U.S. Army Reserve Center.

Goodman, Sherri. 1996. Memorandum. October 21.

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Law Engineering Testing Company. 1986. Final Report Investigation of Former Nike Missile Sites for Potential Toxic and Hazardous Waste.

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USACE. 1988. Nike Launcher Sites (Middletown and East Windsor, CT), a Photo Documentation of Two Nike Launcher Sites Slated for Demolition by the USACE.

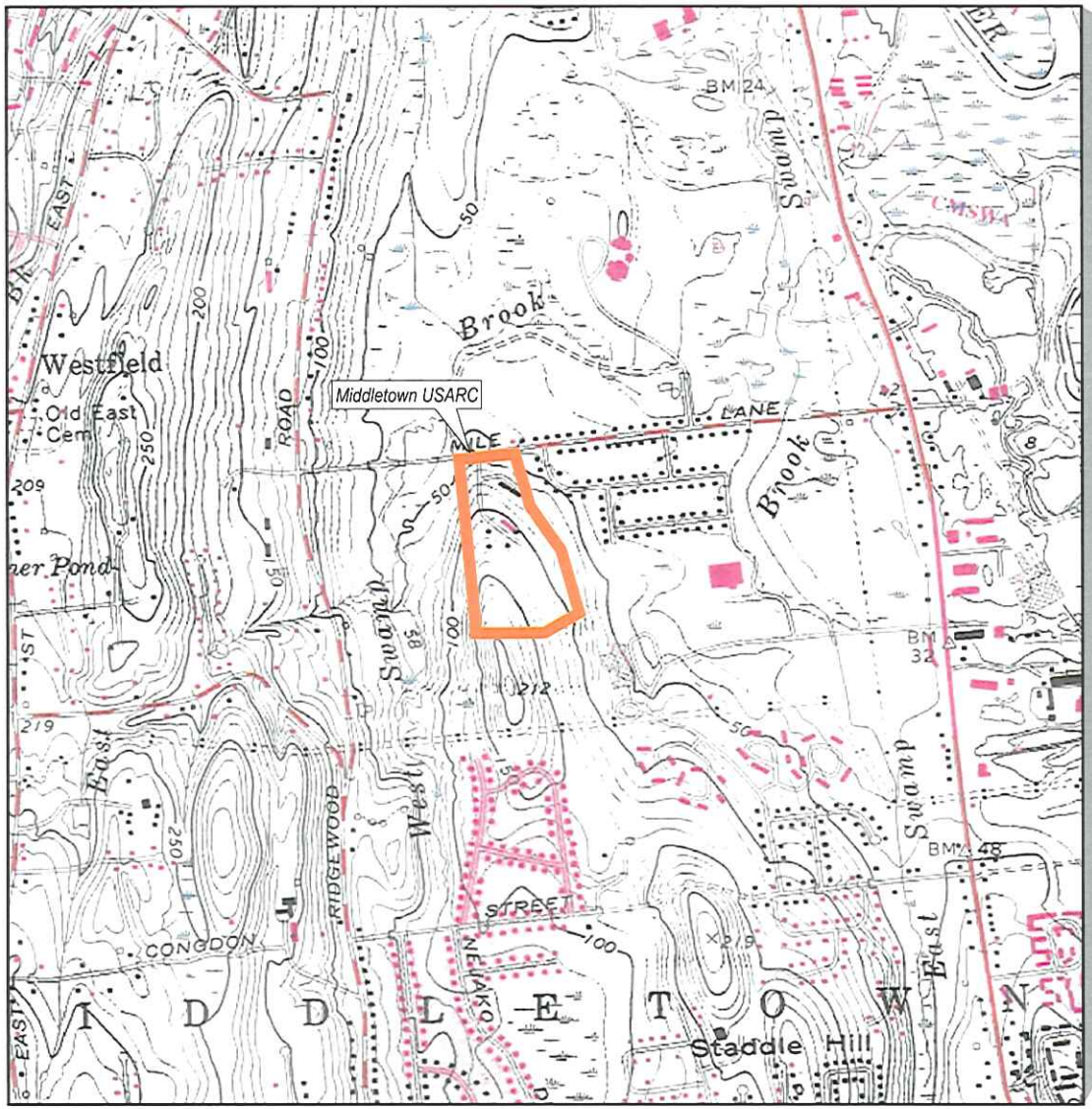
USACE. 2003. Final Report, Nike Missile Battery, Environmental Conditions Assessment Guide.

U.S. Army Environmental Hygiene Agency. 1992. Geohydrologic Study No. 38-26-KL46-92.

USGS, Connecticut Division. 1999. U.S. Army Reserve Stormwater Pollution Prevention Plan.

Weston, Roy F. 1997.Underground Storage Tank Closure Report for UST removals at USARCs in Brocton and Springfield MA and Middletown, CT.

Appendix A
Figures



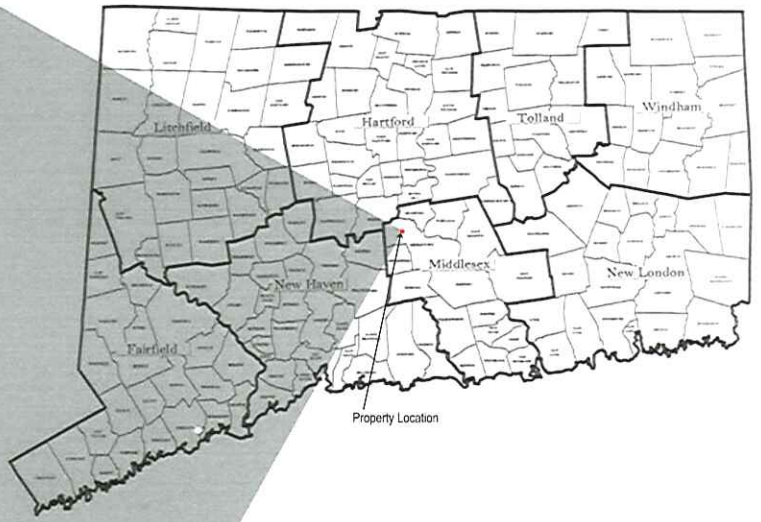
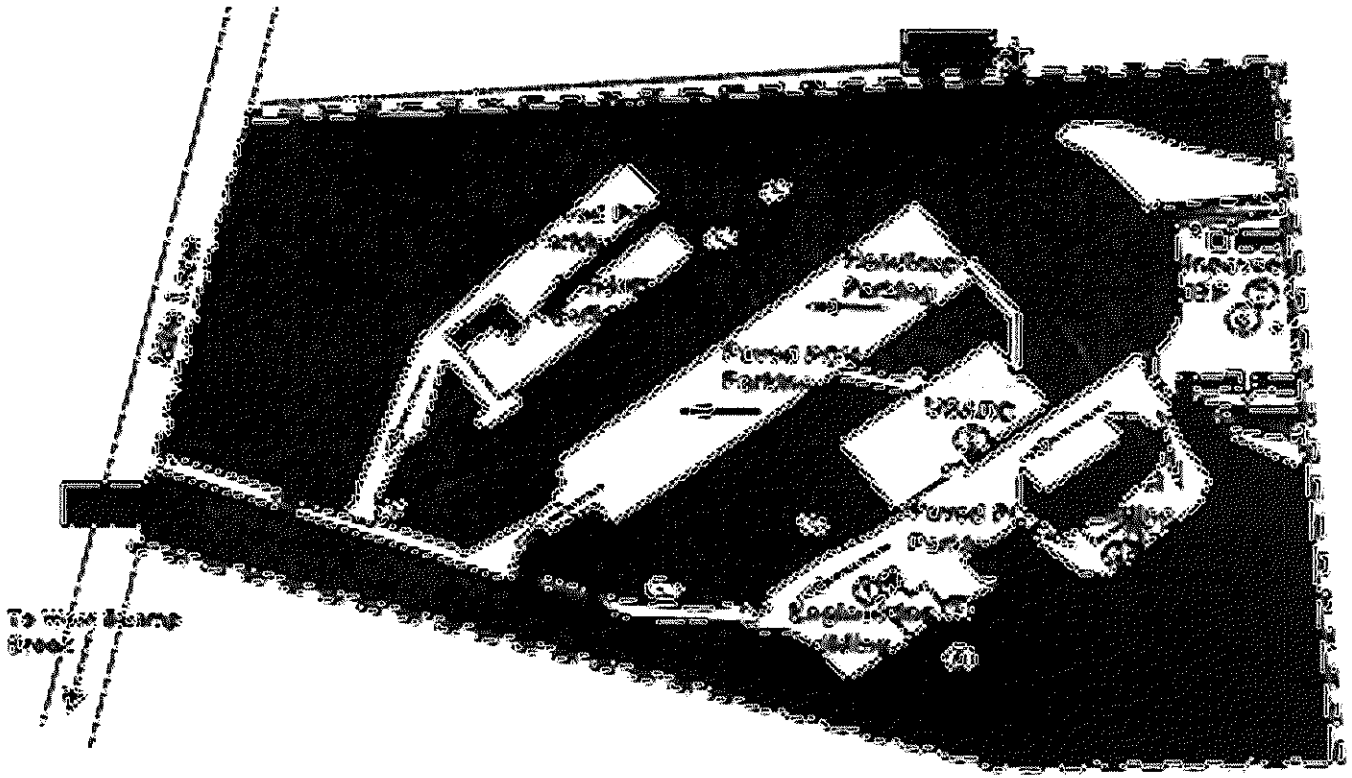


FIGURE 1
General Site Location Map
Phase I ECP Report
Middletown U.S. Army Reserve Center



North

Not To Scale

FIGURE 2
Site Layout Plan
Phase I ECP Report
Middletown U.S. Army Reserve Center

ES082006013MKE Figure_2_Site_Layout_Plan-Middletown_v2 01.23.07 cae

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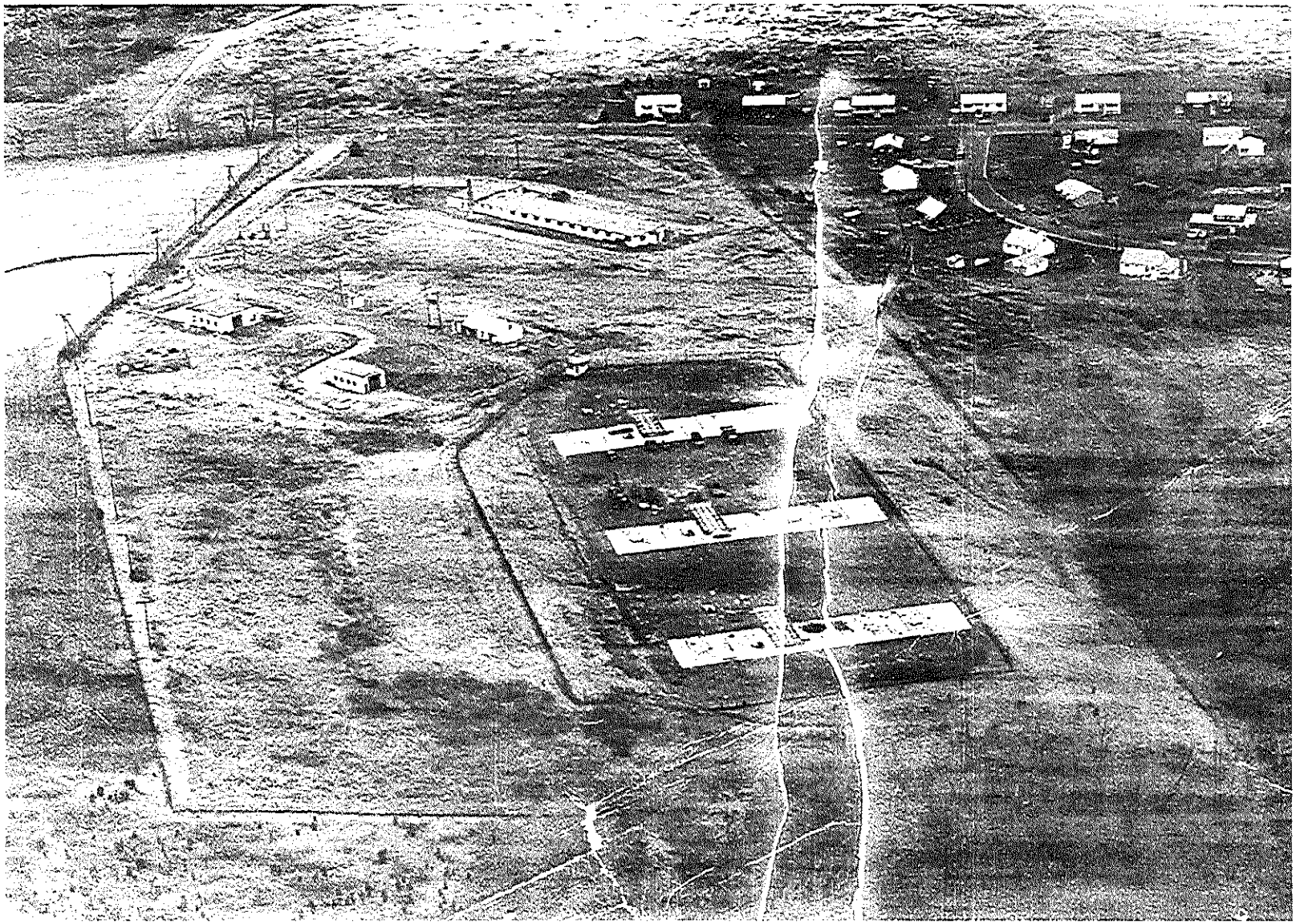

FIGURE 3
Nike Missile Site Aerial, Date Unknown
Phase I ECP Report
Middletown U.S. Army Reserve Center

Scale Unknown

ES082006013MKE Figure_3_Nike Missile Site Aerial-Middletown_v2 01.23.07 cae

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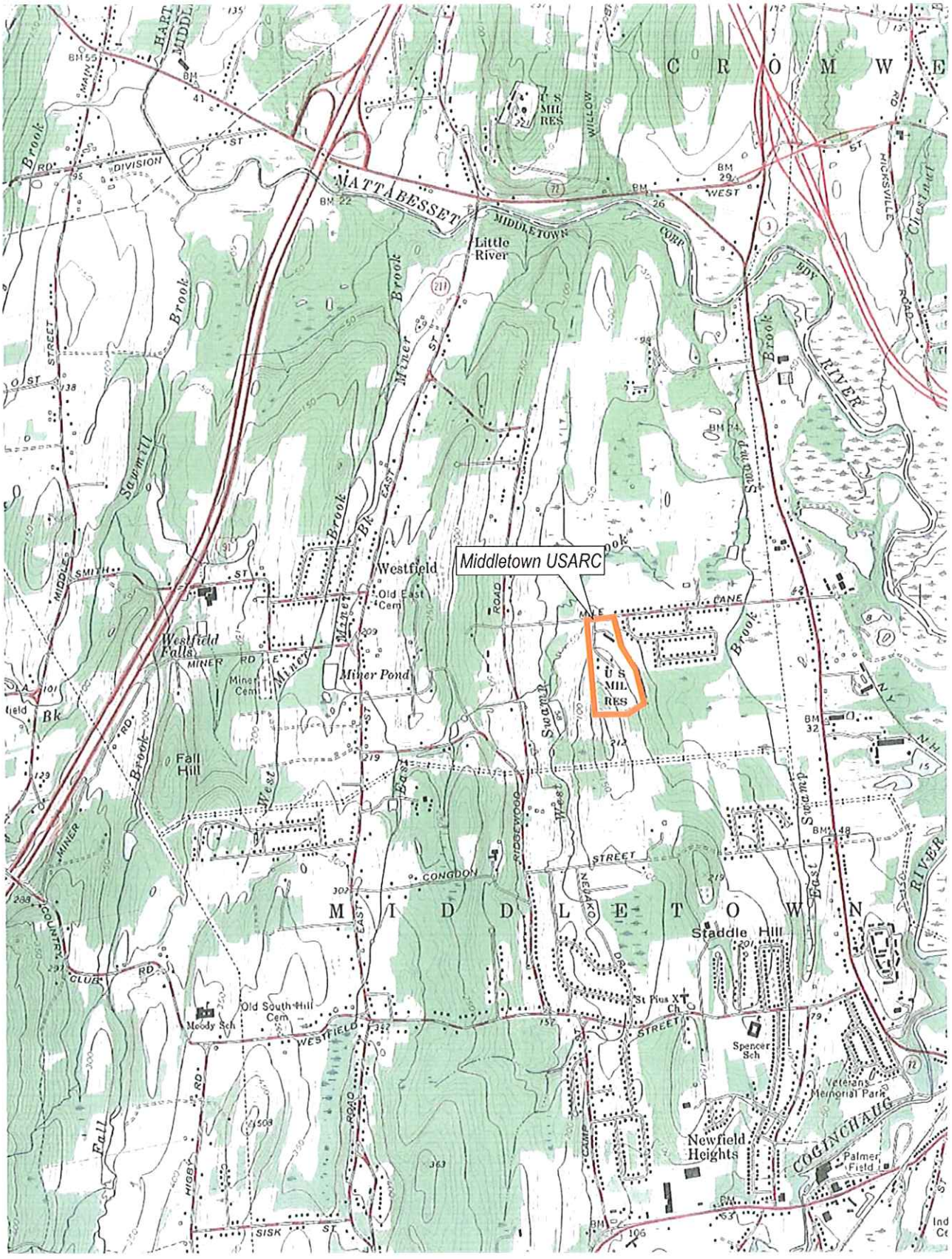

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1:24000

FIGURE 4
1965 USGS 7.5 Minute Topographic Map, Middletown
Phase I ECP Report
Middletown U.S. Army Reserve Center

CH2MHILL

ES082006013MKE Figure_4_1965 USGS 7.5 Minute Topographic Map, Middletown_v2 01.23.07 cae

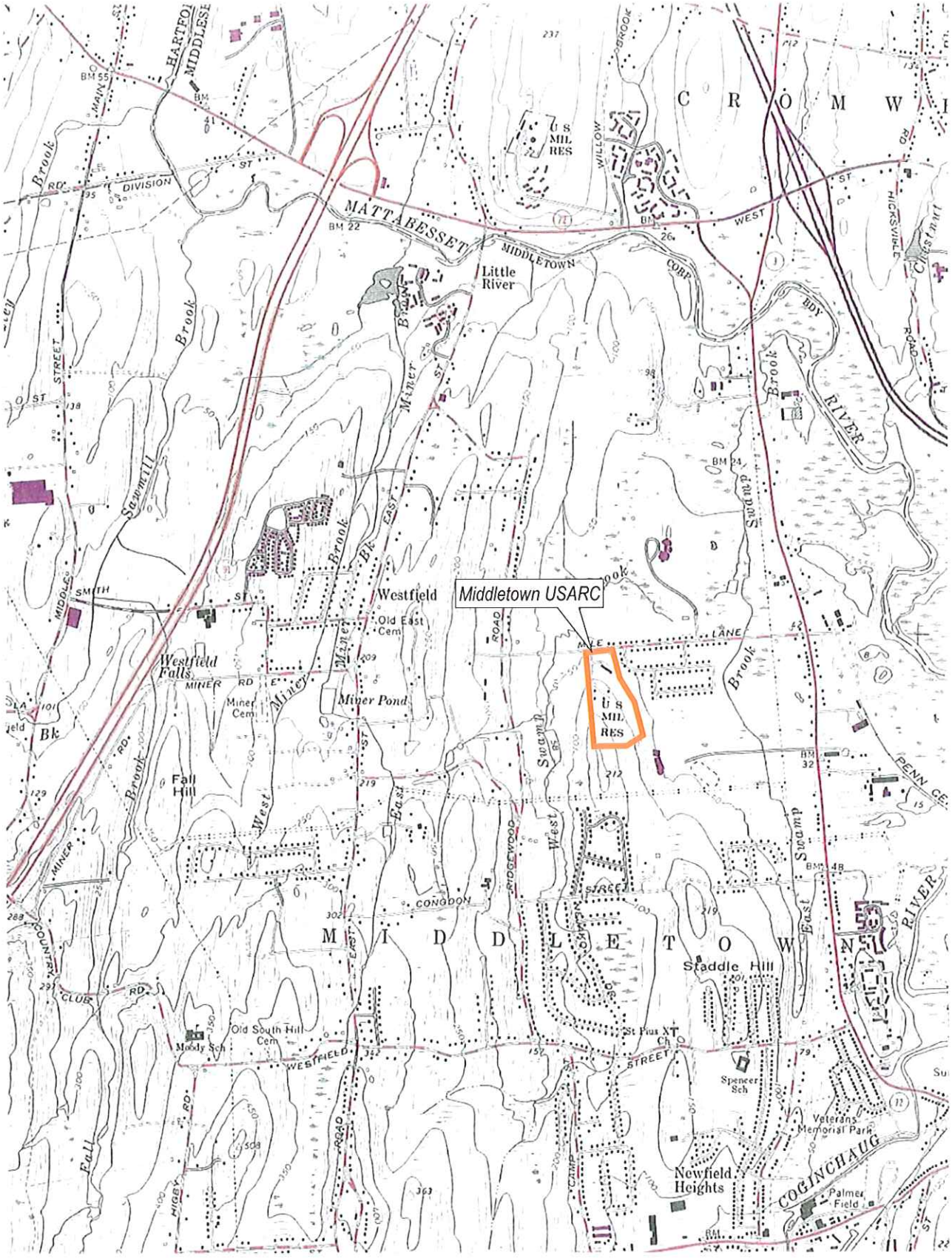

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FIGURE 5
1972 USGS 7.5 Minute Topographic Map, Middletown
Phase I ECP Report
Middletown U.S. Army Reserve Center

CH2MHILL

ES082006013MKE Figure_5_1972_USGS_7.5_Minute_Topographic_Map - Middletown_v2 01.23.07 cae

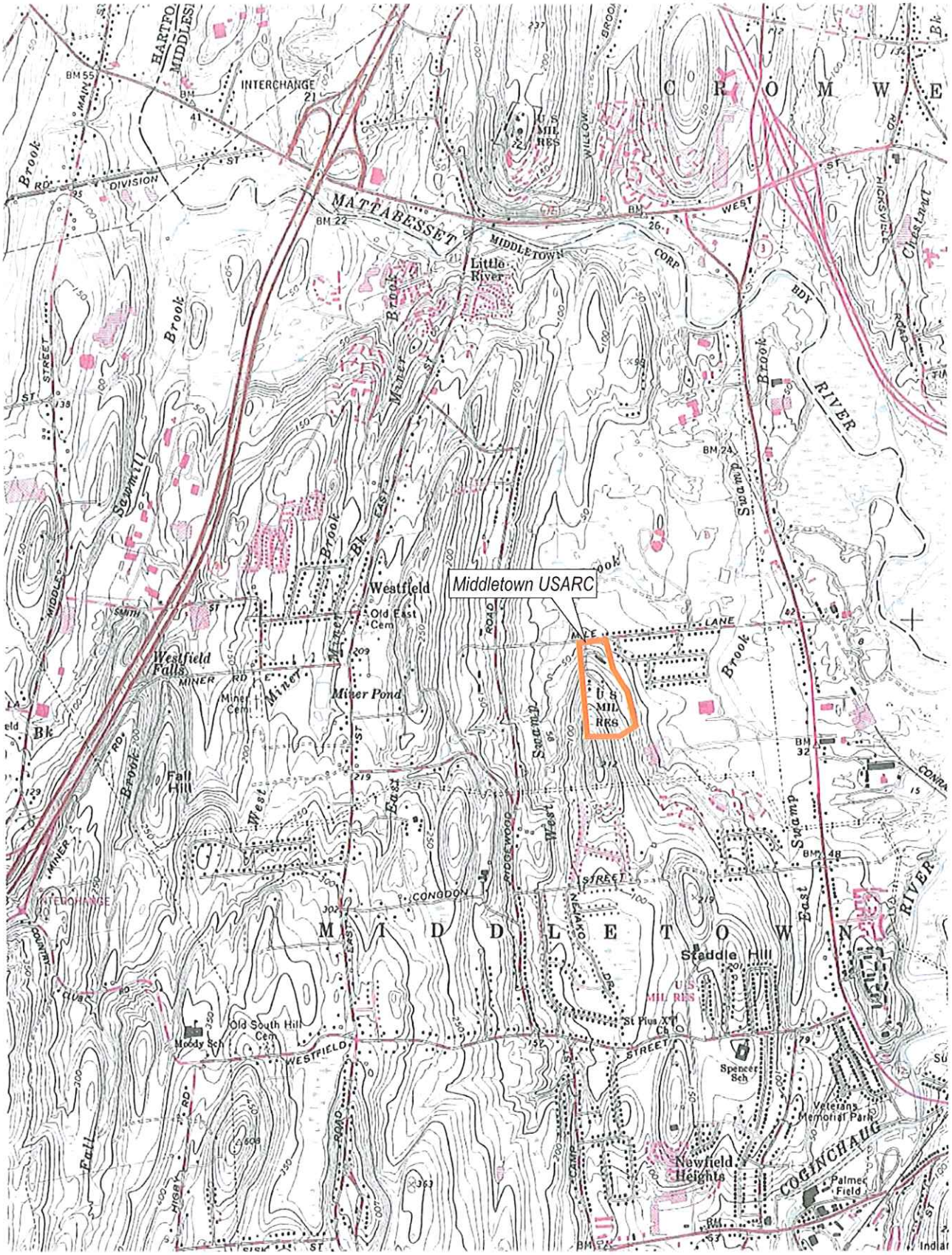

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FIGURE 6
1984 USGS 7.5 Minute Topographic Map, Middletown
Phase I ECP Report
Middletown U.S. Army Reserve Center

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ES082006013MKE Figure_6_1984_USGS_7.5_Minute_Topographic_Map - Middletown_v2 01.23.07 cae

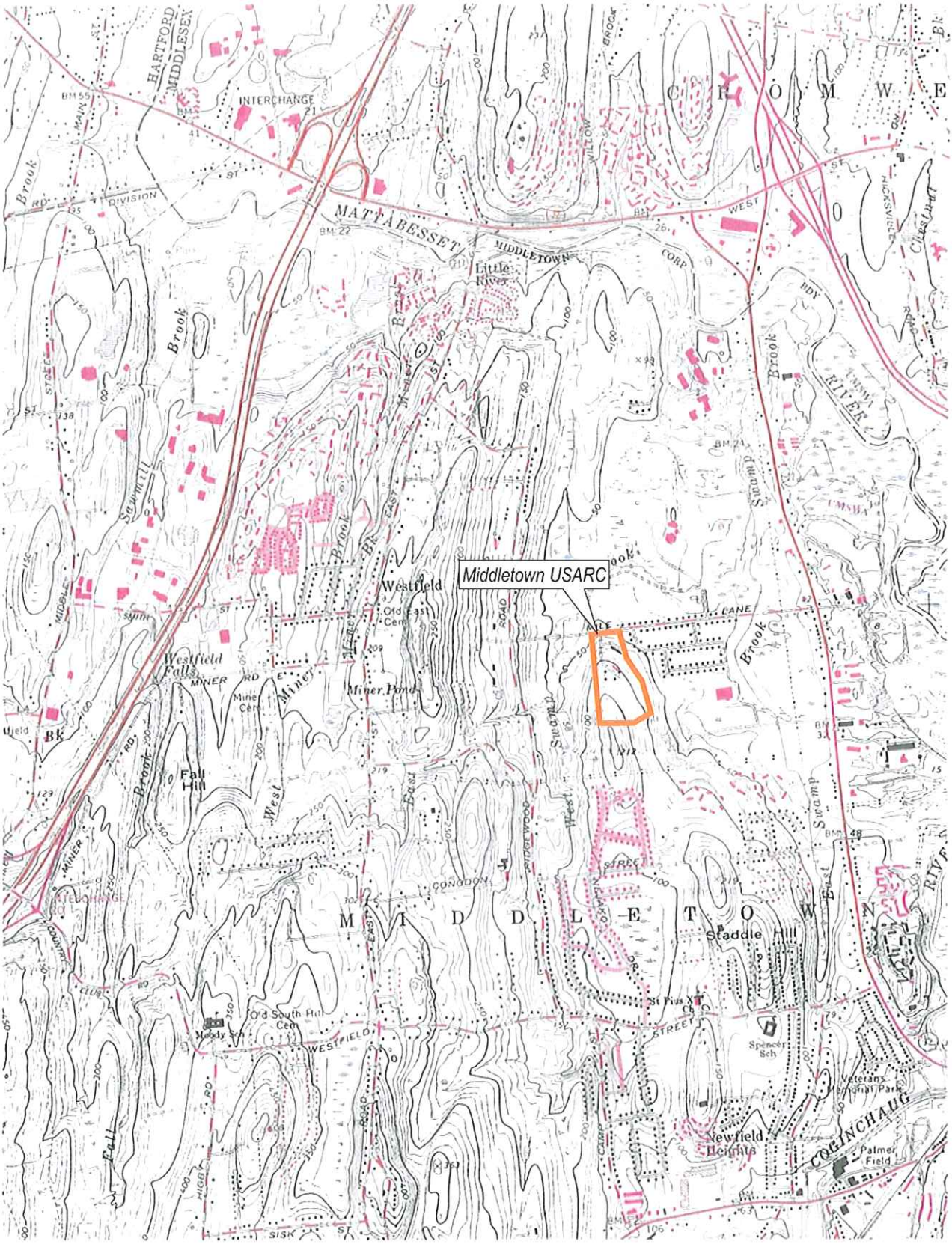
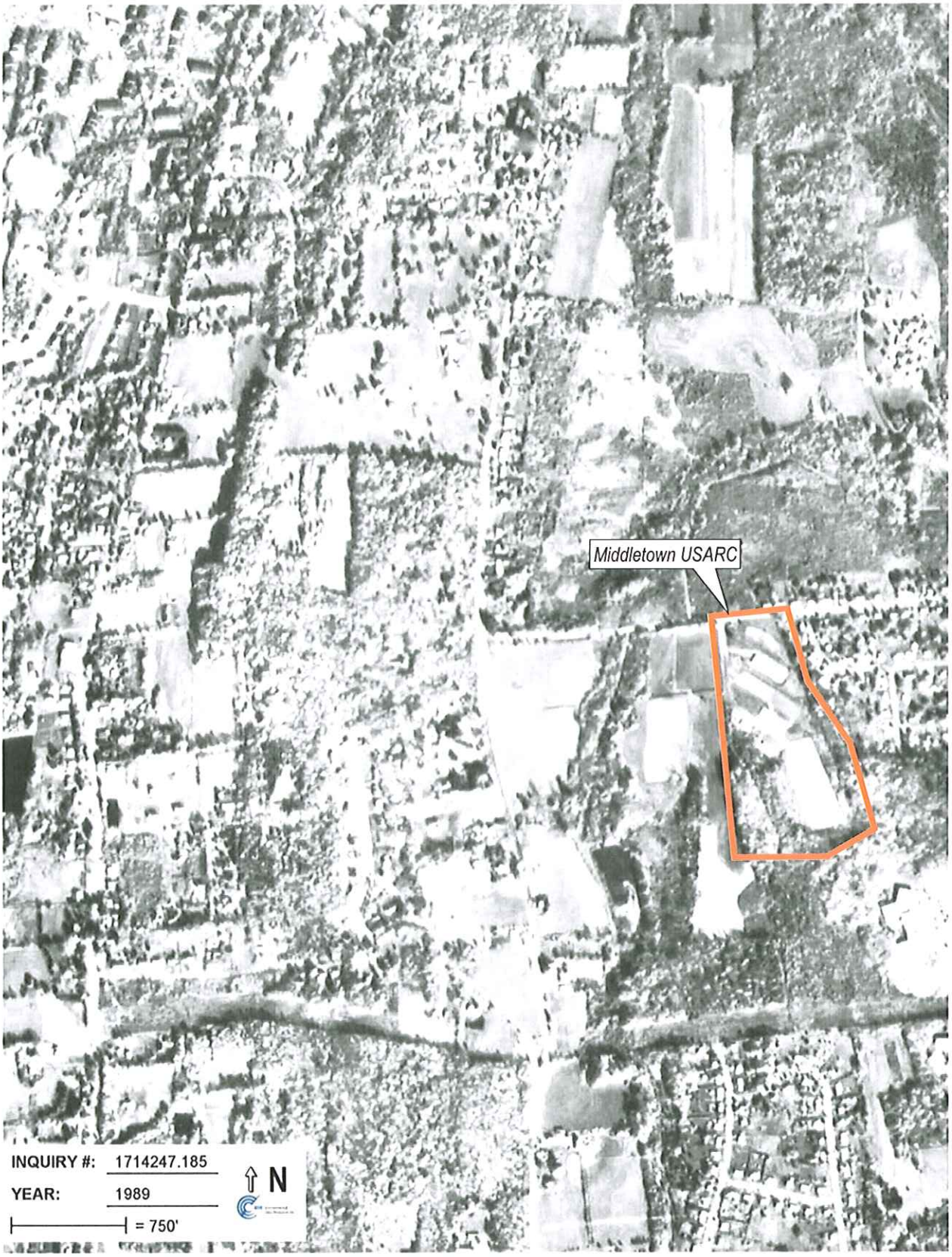


FIGURE 7
1992 USGS 7.5 Minute Topographic Map, Middletown
Phase I ECP Report
Middletown U.S. Army Reserve Center



North

FIGURE 8
1989 Aerial Photo
Phase I ECP Report
Middletown U.S. Army Reserve Center

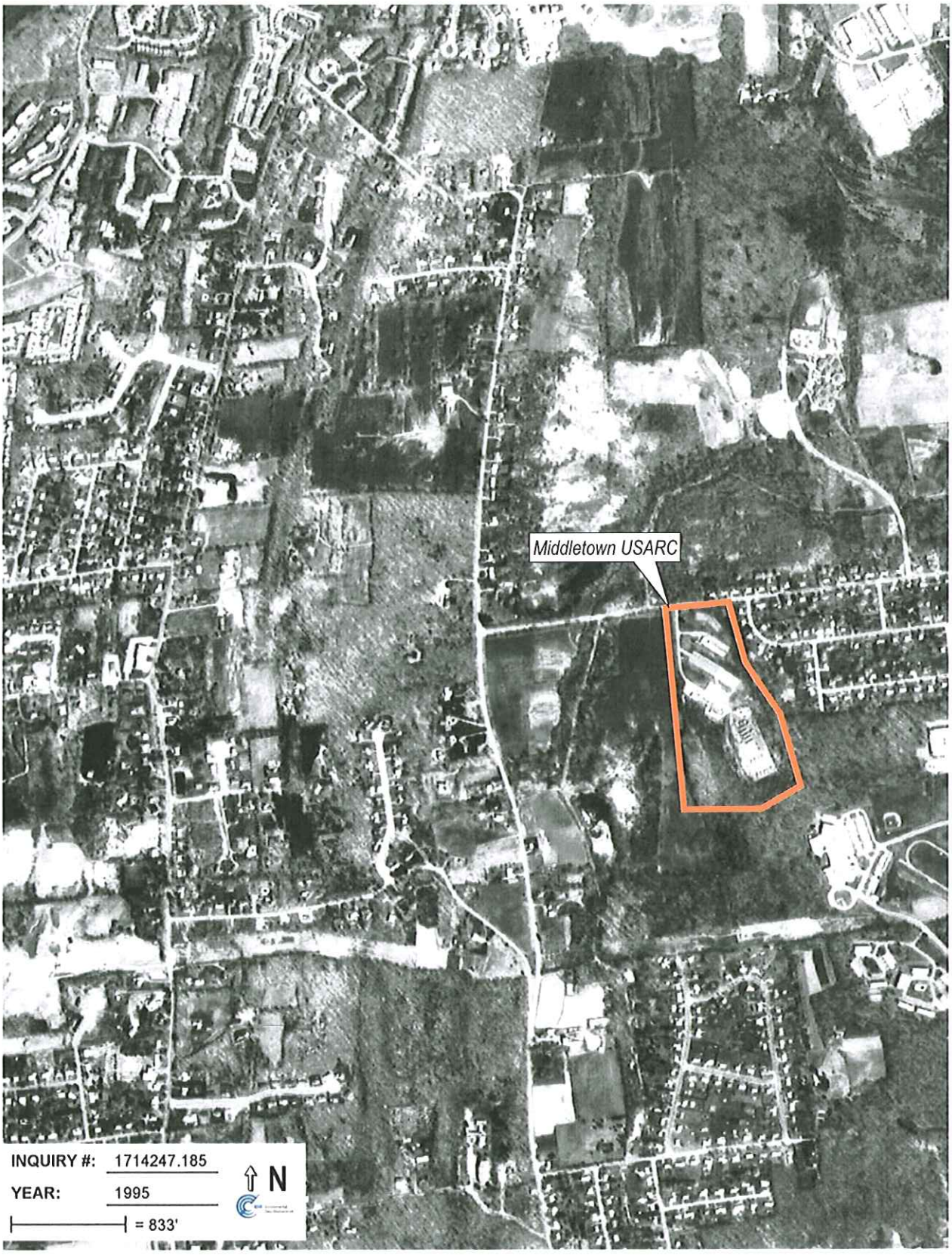


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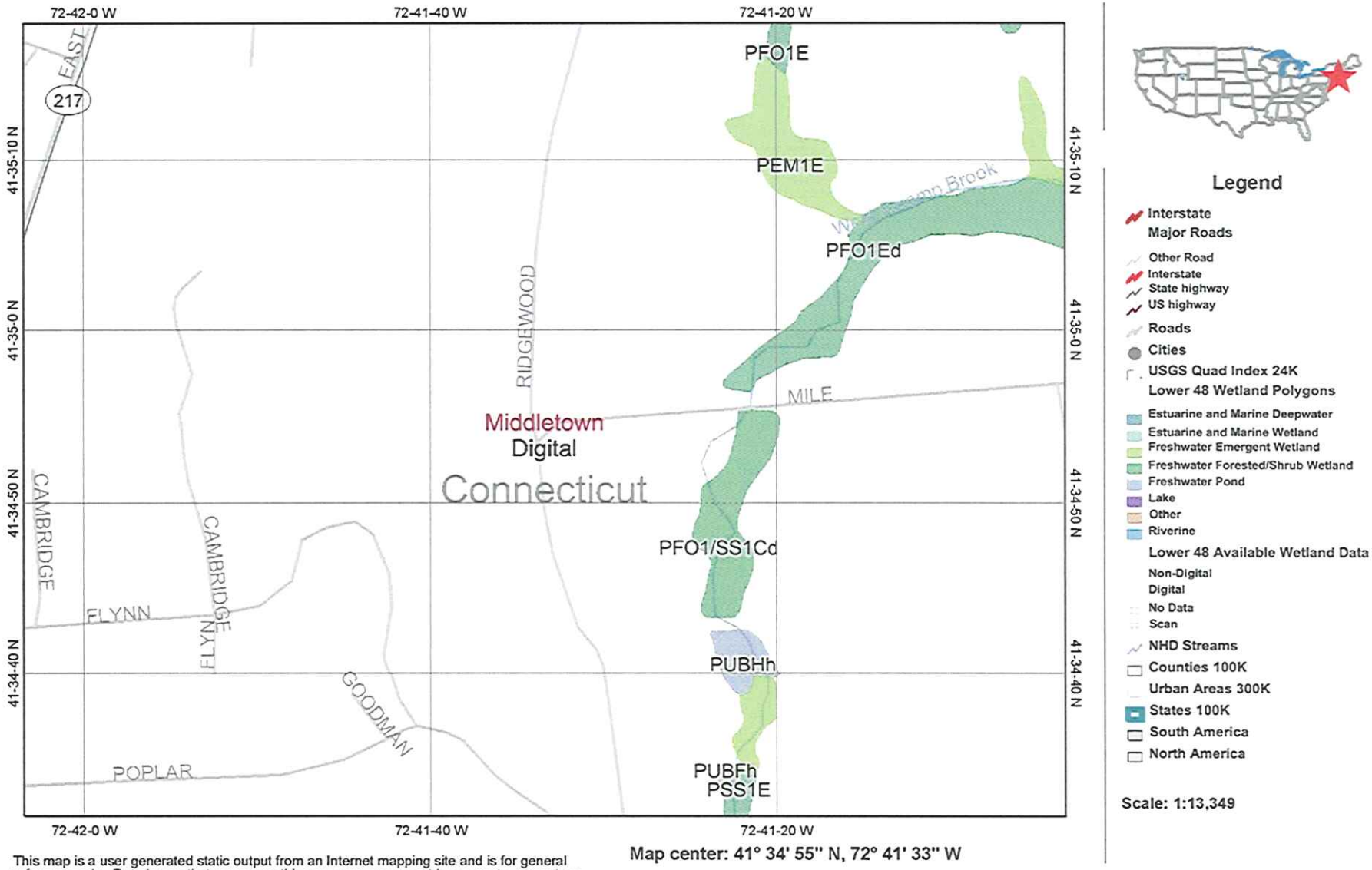
FIGURE 9
1995 Aerial Photo
Phase I ECP Report
Middletown U.S. Army Reserve Center



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

North

FIGURE 10
Wetland Map
Phase I ECP Report
Middletown U.S. Army Reserve Center

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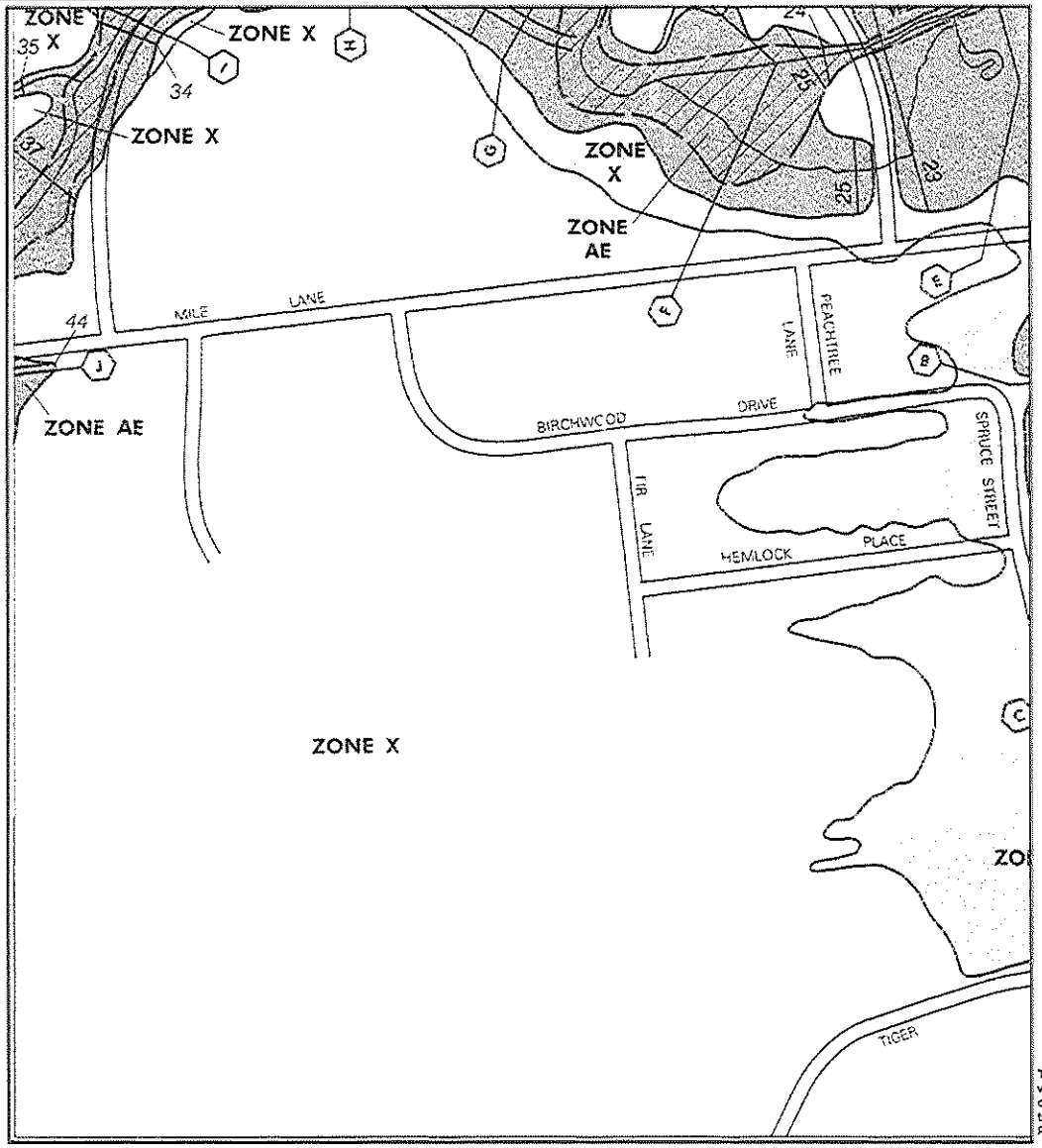
ES082006013MKE Figure_10_Wetland_Map - Middletown_v2 01.23.07 cae



This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

North

FIGURE 11
Flood Plain Map
Phase I ECP Report
Middletown U.S. Army Reserve Center

Appendix B

Site Reconnaissance Photographs

APPENDIX B

Site Reconnaissance Photographs

1. Middletown USARC Building—Northeast Side

2. Middletown USARC Building—Southwest Side

3. Privately Owned Vehicle Parking Area

4. Main Entrance with Arms Vault on Left

5. Main Office Area

6. Drill Area

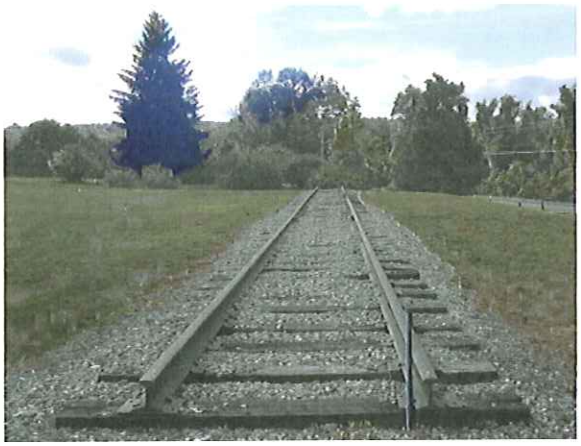
7. Kitchen (no longer in use) Located in the Drill Area

8. Former Classroom

9. Equipment Storage Area

10. Boiler Room

11. Septic Tank/Leach Field Area with Railroad Section in Background



12.Railroad Section

13. Acid Neutralization Building Foundation—East Side

14. Acid Neutralization Building Foundation—West Side

15. General Maintenance Building Foundation

16. Possible Acid Neutralization Pit

17. Barracks/Reserve Center Foundation

18. Former Nike Missile Launch Pad Site

19. Rail Timbers Disposed of in South Portion of the Property.

20. View along the Rear of Property along the South Side

Appendix C

Property Acquisition Documents and Chain of Title Report

5) Total Facility Assessment Report

An August 15, 1996 Total Facility Assessment Report, prepared by the Devens Facilities Engineering Team contains a series of photographs of their site investigation. In the report, the Missile Test and Assembly Building is referred to as the organizational maintenance shop (OMS) Building and the Warheading Building is referred to as Cold Storage Building. Three 55-gallon drums of unknown content are apparent in a photograph of the exterior of the Missile Test and Assembly Building. The drums are located next to the northeast corner of the building. Two of the drums appear to be on a secondary containment pallet intended to prevent potential spillage from reaching the ground surface. However, no drums or evidence of drum storage, such as staining, were observed during the site visit in the subject area. The report indicated that no vehicle maintenance was performed in the building, which at the time was used for unspecified storage..

6) Relevant Information from Chain of Title Review

An informal chain-of-title for the USARC property is summarized below based on review of the Middletown City Clerk records on August 4, 1998.

TABLE 1
SUMMARY OF INFORMAL CHAIN-OF-TITLE

From	*To*	*Volume*	*Page*	*Date*
Irving Sherman	United States of America	269	132	9/22/55
Irving Sherman	United States of America	269	133	9/22/55
Paul A. Gilbert	United States of America	269	134	9/22/55

7) General Site Information

Based on DTC's review of the 1934 and 1951 aerial photographs and the Middletown Clerk records, the site appears to have been farmland prior to development as a Nike site circa 1955. The former Nike surface-to-air missile battery [illegible]-48 was decommissioned in 1968 according to the May 1997 Final Historic Inventory Survey of Army Reserve Facilities Throughout New England Under the 94th Regional Support command. The site was transferred to the USARC circa 1970.

A National Environmental Policy Act (NEPA) Screen was conducted to identify the 100 year and 500 year floodplain, floodways, historic districts, archaeological and Indian burial sites and threatened or endangered species which may be impacted during the proposed demolition of the site buildings. A NEPA Screen map is attached as Exhibit C-1. The subject site is located outside the 100- and 500-year flood plain as shown in the Flood Insurance Rate Map for the Town of Middletown, Connecticut. The State of Connecticut Historical Commission records indicated that the proposed demolition activities at the site would not impact any historic, architectural, or archaeological resources listed or eligible for the National Register of Historic Places. No endangered or threatened species are recorded in the project area based on review of

Source

VOL. 269 PAGE 132
Tract No. A-106

VOL 269 PAGE 133
Tract No. A-106 3
or
A-106B

VOL 269 PAGE 134
Tract No. A-107

Info copied from EBS
Report. A copy of this
Report has been Requested

Appendix D

Previous Environmental Site Assessment Reports

Appendix D is included on a CD inside the back of this report.

Appendix E

Regulatory Database Search Reports

Appendix E is included on a CD inside the back of this report.