

Draft Environmental Assessment

**Middlesex Temporary
Secure Residential Facility**

Washington County, VT

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FEMA

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**DRAFT ENVIRONMENTAL ASSESSMENT
MIDDLESEX SECURE RESIDENTIAL FACILITY
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Acronyms and Abbreviations

ANR	Agency for Natural Resources
APCD	Air Pollution Control Division
BMP	Best Management Practice
BGS	Vermont Department of Buildings and General Services
CAP	Consulting Archeology Program
CEQ	Council on Environmental Quality
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CMS	Centers for Medicare and Medicaid Services
CWA	Clean Water Act
DEC	Vermont Department of Environmental Conservation
DHP	Division for Historic Preservation
DMH	Department of Mental Health
EA	Environmental Assessment
EO 11990	Protection of Wetlands
EO 11988	Floodplain Management
EO 12898	Environmental Justice for Low Income and Minority Populations
EO 13045	Protection of Children from Environmental Health Risks and Safety Risks
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
JCAHO	Joint Committee on Accreditation of Health Care Organizations
LEED	Leadership in Energy and Environmental Design
MGSC	State of Vermont Middlesex General Services Center
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollution
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
PA	Public Assistance
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Officer
USGBC	U.S. Green Building Council
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VSH	Vermont State Hospital
VELCO	Vermont Electric and Power Company
WMD	Waste Management Division
WSOC	Waterbury State Office Complex

1.0 INTRODUCTION

As a result of damages caused by Tropical Storm Irene between August 27 and September 2, 2011, the President declared a major disaster for the State of Vermont under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This major disaster declaration, referenced as FEMA-4022-DR-VT, authorizes the Federal Emergency Management Agency (FEMA) to provide Public Assistance (PA) to local governments, state agencies and eligible private non-profit organizations in all Vermont counties.

In response to Irene and the flooding within the Waterbury State Office Complex (WSOC), the State of Vermont took immediate action to relocate patients housed in the Vermont State Hospital (VSH) on the WSOC campus to alternate facilities around the state. As part of its overall patient care plans, the State of Vermont's Department of Buildings and General Services (BGS) has applied for assistance under the PA Program to temporarily relocate the function of seven (7) beds of the state-run psychiatric hospital from the Waterbury State Office Complex to a temporary, secure residential facility to be constructed in Middlesex, VT.

FEMA has prepared this Environmental Assessment (EA) to meet its environmental review responsibilities under the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's (CEQ) implementing regulations (40 C.F.R. Parts 1500 through 1508), and FEMA's implementing regulations (44 C.F.R. Part 10). FEMA is also using the EA to document compliance with other applicable federal laws and executive orders for which FEMA has a responsibility for inter-agency consultation, including: the Endangered Species Act (ESA); the Magnuson-Stevens Fishery Conservation and Management Act (MSA); the National Historic Preservation Act (NHPA); Executive Order (EO) 11988, Floodplain Management; EO 11990, Protection of Wetlands; and EO 12898, Environmental Justice.

The purpose of this EA is to analyze potential environmental impacts from the proposed project, and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). Based on the analysis provided in this draft EA, and if no significant public or agency comments are received on this Draft EA, FEMA may determine that the project will not significantly affect the human or natural environment and issue a Finding of No Significant Impact.

1.1 Disaster Background and Overview

Tropical Storm Irene struck on August 27, 2011 and caused the most severe flooding since the record flood of November 1927. Waterbury was one of the most severely damaged communities. Flood waters from the Winooski River reached an elevation of 428.5 feet above mean sea level, which is 2.5 feet above the 100-year flood level established by FEMA for the WSOC site. The flooding and loss of power required the evacuation of VSH patients during the disaster to other mental health facilities around the state. As of October, 2012, patients continue to be treated and housed elsewhere.

The former VSH facility at the WSOC provided services to a variety of patients with different needs. Some patients were in crisis, requiring acute care, diagnosis and short-term treatment; others

were stabilized, but were not ready to move back into the community. In the latter category, several of the high acuity long-term patients requiring 24-hour supervision have been housed at the Springfield State Correctional Facility (Charlie Unit). This arrangement was taken as an essential short-term measure to move patients out of danger, but was never intended as more than a short-term solution for patient housing. Recently all but one of these patients has been moved to other community based settings. There are other individuals currently housed in acute care hospitals that no longer need acute care and would be more appropriately housed in a secure residential setting. Individuals with psychiatric problems that are moderate to severe in complexity remain at high risk for return and therefore need secure inpatient services and an intermediate level of support between acute/state hospital settings and community-based services.

This situation compounds the crisis faced by those in need of acute care. Vermont's private medical institutions continue to bear the brunt of the lost VSH capacity for new acute psychiatric patients. New voluntary and involuntary patients seeking treatment have few in-patient options because temporary capacity has been exceeded. As a result acute psychiatric patients wait longer than necessary in emergency rooms which have neither the staff nor the facilities to provide them appropriate care.

The Department of Mental Health proposes to develop a temporary seven (7)-bed secure residential treatment facility (hereafter referred to as "Middlesex Site" in this document) to serve the remaining Charlie Unit patients at Springfield and other non-acute patients who require this level of care, but are in acute care beds. This temporary facility will be created using two modular units on property the state owns in Middlesex. This parcel, located close to the I89 interchange, currently encompasses the State of Vermont Middlesex General Services Center (MGSC) and the Vermont State Police Middlesex Barracks. These existing facilities provide a parking lot and roadway system. BGS seeks assistance to operate this facility for at least 12 months, but for as long as three years. This facility would allow the Springfield Charlie Unit to be returned to the Department of Corrections and would relieve the pressure on private hospital emergency rooms awaiting in-patient acute care beds.

1.2 Purpose and Need

Since the closing of the 54-bed VSH, there have not been enough hospital beds to care for everyone who needs psychiatric care. People currently wait long periods in hospital emergency rooms and sometimes are turned away due to the lack of beds. Currently, patients have been distributed throughout the State in hospitals and facilities that previously cared for other mental health patients. This has put a tremendous amount of pressure on the State's ability to care for the mental health community.

In the State's efforts to relieve some of these pressures, the State has looked at a number of options including, but not limited to, renovations of existing facilities, development of new facilities, and utilization of existing facilities as temporary hospitals until the new state hospital facilities are completed. These options were reviewed and approved by the Administration and Legislature. Accordingly, the Department of Mental Health (DMH) and BGS have worked collaboratively to pursue the development of this temporary facility, until the construction of a permanent 25 bed facility in Berlin, VT has been completed.

2.0 ALTERNATIVES CONSIDERED

The State of Vermont considered several alternative sites to temporarily house patients in Windsor, St. Albans, Waterbury and Barre. A combination of prohibitive cost and distance from the original hospital's location ultimately ruled these options out.

2.1 Alternatives Analyzed and Dismissed

The first location considered was a small unit on the grounds of the Windsor Correctional Facility. After a review of the renovation costs and the limited space, this location was deemed unsuitable even for a temporary facility.

The State then began considering the possibility of modular units at several locations. The first was on the grounds of the St. Albans Northwest State Correctional Facility, at 3649 Lower Newton Road. This is a 160 acre parcel hosting a 252 bed correctional facility within about a 23-acre fenced-in area. BGS representatives met with the select board to discuss the possibility of placing the 7 bed secure residential treatment facility there. It would have been possible, but the site has limited sewage capability and the location was far from ideal. Ultimately, the site was ruled out due to commute distance for staff. These options would have required the hiring of new staff, as current staff would have rejected such a commute. Having experienced staff was deemed imperative for this facility.

The next location considered was at the site of the long running "flea market" on Route 2 in Waterbury. This would have been ideal for staff, and the town of Waterbury was supportive. However, the property owner would not lease, only sell, and the asking price was almost double the assessed value of the property, making the acquisition cost of the property prohibitive.

An established community care home in Barre, was identified as a potential site for relocating patients. This facility is a 12-bed, assisted-care home currently in operation with eight (8) patients living there. The owners were eager to sell, but the asking price was approximately \$2 million. The owners were not willing to negotiate a lease agreement, and acquiring this property would have been a permanent solution to a temporary problem. After a review of the property and a needs assessment of the DMH, this location was not deemed an appropriate solution.

In further review, BGS re-examined possible state owned sites, which led to the identification of the Middlesex site, which is ideally situated, cost effective and environmentally non-intrusive, as described below.

2.2 Alternatives Further Evaluated

2.2.1 No Action Alternative

Under the No Action Alternative, DMH would continue to operate the current network of facilities in an attempt to provide the services formerly provided by the VSH. High acuity long-term patients will remain under-served and inappropriately housed in acute care beds and

facilities across the state. This alternative results in improperly served patients and a shortage of available beds for new and incoming patients with acute needs.

2.2.2 Proposed Alternative

The State of Vermont intends to install a 6,000 +/- square foot facility, consisting of two prefabricated modular units, to house up to seven (7) mental health patients in order to alleviate a critical deficiency of mental health beds. Maximum dimensions of the assembled units are 80' long x 86' wide x 15' high. The facility will be located on state-owned land adjacent to the MGSC at 1078 Route 2, Middlesex, VT. The Vermont State Police barracks is situated nearby (Appendices A-Site Plan and D-Photographs).

This facility is intended to be temporary in nature, i.e., not to exceed three (3) years. It will be removed once a new 25-bed permanent replacement facility in Berlin has been permitted, built, and has begun to operate for a period of up to six (6) months. There are only a few adjoining residential neighbors as the location is currently a designated Industrial District. Site improvements needed for the installation of the temporary building will be minor. The facilities of the adjacent MGSC would be utilized for parking. Installation of double septic tanks and a leach field will provide sewage capacity. A well drilled on site and a connecting water line will provide potable water.

The State has reviewed several alternative locations and determined that this is the most feasible. Any impact will be of short duration and minor in nature.

3.0 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED

In the following section, the *No Action Alternative* consists of the continued operation of the current network of facilities scattered around the State of Vermont in an attempt to provide the services formerly provided by the VSH in Waterbury. No environmental impacts are anticipated to directly result from such undertakings and will not be addressed in the following analysis.

The *Proposed Alternative* is to build a temporary seven-bed facility on state owned land at 1078 Route 2, Middlesex, VT. This structure will consist of two modular buildings; minor improvements to the infrastructure will provide water, electricity, and sewage disposal (Appendix A). The life expectancy of this facility will not exceed three (3) years. As such, the long term impacts on the environment, as analyzed in the following pages, will be controlled and minor.

3.1 Summary of Effects

Table 3-1 summarizes the effects described and analyzed in this chapter (Affected Environments and Potential Impacts of the Alternatives Considered). Levels of potential effect are defined as follows:

- * Negligible: The resource area would not be affected, or changes would be non-detectable or if detected, effects would be slight and local. Impacts would be well below regulatory limits.
- * Minor: Changes to the resource would be measurable, although the changes would be small and localized. Impacts would be within or below regulatory limits. Mitigation measures may be necessary to reduce potential effects.
- * Moderate: Changes to the resource would be measurable and have localized and potentially regional scale impacts. Impacts would be within or below regulatory limits, but historical conditions would be altered on a short-term basis. Mitigation measures may be necessary to reduce potential effects.
- * Major: Changes would be readily measurable and would have substantial consequences on a local and potentially regional level. Impacts would exceed regulatory limits. Mitigation measures to offset the effects would be required to reduce impacts, although long-term changes to the resource would be possible.

Table 3-1.

PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT, COORDINATION AND MITIGATION APPLIED

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
		Negligible	Minor	Moderate	Major			
Geology	No Action	X						
	Proposed Site	X						No impacts to unique or protected geology.
Soils	No Action	X						
	Proposed Site		X				Site has been previously altered with fill, destroying the integrity of previously prime agricultural soil.	Lamoine Silt Loam, on site, is listed as prime agricultural soil.
Vegetation	No Action	X						
	Proposed Site	X						No removal of sensitive plant species
Wildlife	No Action	X						
	Proposed Site	X						Only the potential for limited, short-term disruption to wildlife patterns during construction.
Threatened and Endangered Species	No Action	X						
	Proposed Site	X						No federally-listed or state-listed threatened or endangered species in or near project area.
Floodplains	No Action	X						
	Proposed Site	X						Project is not located within a floodplain; no impact on floodplains or flooding.
Wetlands	No Action	X						
	Proposed Site	X						No effects on wetlands
Archaeological Resources	No Action	X						

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PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT, COORDINATION AND MITIGATION APPLIED

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
		Negligible	Minor	Moderate	Major			
	Proposed Site	X				SHPO concurred in a determination of No Historic Properties Affected.		Field inspection and sub-surface coring on 10/5/2012 revealed that topography had been heavily modified in construction of softball field
Historic Buildings	No Action	X						
	Proposed Site	X				SHPO concurred in a determination of No Historic Properties Affected.		Review of maps from 1873 and 1921 reveals no record of historic structures on this site.
Land Use and Zoning	No Action	X						
	Proposed Site	X				Middlesex Zoning Permit, Fire Safety Construction Permit	The Middlesex Site has been designed to comply with the Middlesex zoning ordinance	A Zoning Application for the project was filed September 10, 2012, and was approved
Utilities	No Action	X						
	Proposed Site		X			Wastewater System and Potable Water Supply Permit. State Transient Non-Community Water System (TNC) Permit. State compliance determination for energy standards.	Erosion and dust control during installation of the leach field.	1500 gallon septic tank and leach field will be installed. Well will be drilled to provide water for the facility. Electricity will be brought to location by installation of temporary electrical poles.
Traffic and Parking	No Action	X						

Table 3-1.

PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT, COORDINATION AND MITIGATION APPLIED

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
		Negligible	Minor	Moderate	Major			
	Proposed Site		X				Traffic impact assessment found that the proposed site would not have a significant impact.	Traffic patterns will change due to staff, visitor, and patient trips. Parking will be shared with existing facility.
Stormwater	No Action	X						
	Proposed Site		X			Stormwater Discharge General Permit 3-9015. Construction General Permit 3-9020.		Project may result in a minor increase in impervious area from the current level of development. Any runoff will be tied in with existing stormwater management at the MGSC building and compliance with 3-9015 and 3-9020 permits.
Air Quality	No Action	X						
	Proposed Site		X				Compliance with applicable air pollution control regulations.	Dust is not expected to occur during site preparation and assembly of prefabricated units.
Noise	No Action	X						
	Proposed Site		X				Construction hours may be restricted to day light hours. Construction equipment will comply with federal noise requirements.	There may be a temporary increase in noise during construction, otherwise noise levels will remain about the same as under current uses.
Hazardous Waste	No Action	X						
	Proposed Site	X						No hazardous waste at, or will be generated by the proposed site.
Seismic Safety	No Action	X						

Table 3-1.

PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT, COORDINATION AND MITIGATION APPLIED

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
		Negligible	Minor	Moderate	Major			
	Proposed Site	X						Site is low risk for damaging earthquakes.
Environmental Justice	No Action	X						
	Proposed Site	X				An Assisted Living and Therapeutic Community Residences Permit		No disproportionate impacts to minority or low-income populations will occur.
Climate Change	No Action	X						
	Proposed Site	X						Size and temporary nature of the facility result in no measurable change.

3.2 Terrestrial and Biological Resources

Terrestrial resources combine to form a mosaic landscape. Factors related to geology, soils, vegetation and wildlife are considered during project development to determine if one or more actions could adversely affect one or multiple resources or offset the balance among them.

3.2.1 Geology

3.2.1.1 Affected Environment

Underlying bedrock geologic features significantly affect regional and local topographic variability, forest type, and wildlife habitat. The Middlesex site sits on the Stowe Formation, which is primarily fine-grained, well-foliated, magnetite-chlorite-albite-sericite-quartz phyllite and schist (Appendix B). Bedrock outcrops are rare and extractive quarries are not located nearby. There are no unique or protected geologic resources or geologic hazards in the project vicinity.

3.2.1.2 Environmental Consequences

None identified.

3.2.2 Soils

3.2.2.1 Affected Environment

Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture (USDA) recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland. The Farm Protection Policy Act (7 USC 4201) states, "the purpose of the Act is to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses."

The soil classification for the Middlesex site, according to the National Resource Conservation Service (NRCS) on-line soil database, is primarily Lamoine Silt Loam (Appendix B). The parent material consists of clayey glacio-lacustrine deposits; soil drainage is classified as somewhat poorly drained. Soils at the southeast edge of the site are classified as Colton gravelly loamy sand. The parent material of this soil is sandy and gravelly glacio-fluvial deposits; soils are excessively drained.

3.2.2.2 Environmental Consequences

Colton gravelly loamy sand is not among the State's listed prime agricultural soils.

Lamoine Silt Loam is listed as prime agricultural soil. However, indigenous soils within the proposed area of the new facility have been extensively modified by grading and filling to create a softball field. When the State Archives building was constructed in an adjacent portion of this parcel, materials were re-deposited in the area of the ball field; other material was later brought in from off site. This activity would have destroyed the integrity of the Lamoine Silt Loam, no longer making it usable as prime agriculture soil.

Setting up the units will result in minimal amounts of ground disturbance. Steps to alleviate erosion and dust control will not be necessary.

3.2.3 Vegetation

3.2.3.1 *Affected Environment*

The site consists primarily of an athletic playing field surrounded by lawns, mowed fields, and parking areas. Adjacent portions of the property are occupied with state office buildings (Appendix D-Photographs).

3.2.3.2 *Environmental Consequences*

No disturbance or degradation of sensitive plant communities or habitats will occur; no conflicts with applicable federal, state, or local regulations protecting native vegetation are anticipated.

3.2.4 Wildlife

3.2.4.1 *Affected Environment*

There are currently no lakes or fish bearing streams located on the property. Small mammals may live on this developed property and game animals may pass through it. The natural functions of the site will not be significantly altered as a result of the proposed development.

3.2.4.2 *Environmental Consequences*

Short-term phases of construction and the temporary nature of the secured residential facility will have no significant long-term effect on wildlife habitat.

3.2.5 Threatened and Endangered Species

3.2.5.1 *Affected Environment*

The Vermont Department of Environmental Conservation (DEC) maintains a Geographic Information System (GIS) database for data of environmental interest and makes this data available through environmental interest mapping tools. The database was queried for wetlands, both state- and federally-listed rare, threatened and endangered species, and significant habitats. The resulting Environmental Interest Map is presented in Appendix B. The U.S. Fish and Wildlife Service (USFWS) maintains a list of federally-listed rare, threatened, and endangered species (Appendix B).

3.2.5.2 *Environmental Consequences*

Per the VT Agency of Natural Resources' (ANR) Natural Resource Atlas and U.S. Fish and Wildlife Service Table, no federally- or state-listed rare, threatened, or endangered species are present in the project area.

3.3 **Aquatic Resources**

3.3.1 Floodplains

3.3.1.1 *Affected Environment*

Executive Order 11988 Floodplain Management directs federal agencies to assume leadership in avoiding direct or indirect support of development in the 100 year floodplain. FEMA's National Flood Insurance Program (NFIP) publishes maps that identify areas at risk from flooding based on a 100-year and 500-year storm event.

3.3.1.2 Environmental Consequences

The project is not located within a designated floodplain as shown on the FEMA Flood Insurance Map, Panel Number 5001140011B, effective as of May 3, 1982 (Appendix B).

3.3.2 Wetlands

3.3.2.1 Affected Environment

Executive Order 11990 Protection of Wetlands requires federal agencies to avoid adverse impacts to wetlands to the extent possible. Section 404 of the Clean Water Act (CWA) establishes a wetland permit program administered by the U.S. Army Corps of Engineers. The Vermont Wetland Rules identify significant wetlands and regulate activities in and near these wetlands.

3.3.2.2 Environmental Consequences

A query of the VT ANR Natural Resource Atlas, as well as an on-site review, do not indicate that any wetlands are present.

3.4 Cultural Resources

Cultural resources include properties of historical, cultural, and/or archaeological significance. The National Historic Preservation Act (NHPA) of 1966 defines a historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register". Criteria for listing a property on the National Register of Historic Places (NRHP) are found at 36 C.F.R. Part 60. Two types of historic properties may be associated with the proposed Middlesex site; archaeological resources and historic buildings.

3.4.1 Archaeological Resources

3.4.1.1 Affected Environment

Native American communities have lived in present-day Vermont for approximately 11,000 years. Archaeological sites have been identified along the Winooski River and in its tributary drainages dating from the initial period of human migration into Vermont following retreat of the glaciers. Several prehistoric Native American sites have been identified close to the confluence of the Mad and Winooski River at lower elevations to the south of the project area. An archaeological survey conducted for a storage facility and golf practice range just to the west of the state-owned parcel did not identify archaeological evidence of former use.

3.4.1.2 Environmental Consequences

On October 5, 2012, Peter Thomas, FEMA Historic Preservation Specialist, and Scott Dillon, Staff Archaeologist, Vermont Division for Historic Preservation, conducted a field inspection of the proposed site, currently a constructed softball field. A heavily modified topography was observed. Land to the east of the ball field is some five feet higher than the field itself; a steep cut-bank and drainage ditch are evident along the east edge of the field. The ball field itself is

essentially level. At its western and southern edges, it then drops approximately six feet onto a mowed lawn. Fill slopes are roughly 45% (Appendix D-Photographs 1-4).

A soil corer was used to evaluate the underlying stratigraphy. Cores consistently exhibited a thin organic horizon of dark grayish brown silt loam near the surface, underlain by a grayish brown silt loam with ferric mottling, indicating relatively poor drainage. Evidence of mixing was visible in a few places; materials are fairly unconsolidated and no clearly developed B horizon was noted, both indicators of recent deposition. Given the lack of streams and known sites in the immediate area, coupled with poor drainage and the heavily modified condition of the indigenous soil, it was concluded that the probability of encountering a significant archaeological site that would meet the criteria for listing on the NRHP is extremely low. FEMA and SHPO concurred in a determination of No Historic Properties Affected (Appendix C).

3.4.2 Historic Buildings

3.4.2.1 *Affected Environment*

A review of the map of Middlesex in Beers' *Atlas of Washington County, VT* (1873) and the USGS 15 Minute *Montpelier Quadrangle* (1921) indicates that two nineteenth-century farmsteads have existed to either side of the state-owned property for over a hundred years and continue to exist in these locations adjacent to a remnant of old Route 2. The current segment of Route 2 adjacent to the state-owned parcel has been substantially raised and widened (Appendices B-Historic Maps and D-Photographs 7-10).

3.4.2.2 *Environmental Consequences*

Based on the map review, there is no indication that an early historic site with the potential to contain significant archaeological deposits exists within the proposed construction site. No evidence of a site was identified in the field. FEMA and SHPO concurred in a determination of No Historic Properties Affected (Appendix C).

3.5 **Land Use and Zoning**

3.5.1 *Affected Environment*

This area is zoned as an Industrial District by the Town of Middlesex. The site plan was submitted to the Town for review on September 10, 2012. The larger site contains several state-owned buildings. Adjacent properties contain residential homes and small barns (Appendix D-Photographs 1-10).

3.5.2 *Affected Environment*

The facility has been designed to comply with the Town of Middlesex zoning ordinance. The project will follow the zoning and design review process specified by the Town. A zoning application for the project was filed September 10, 2012 and accepted (Appendix E). The application was updated with the most recent plan for the facility during the review process, ensuring the project will be consistent with existing land use and the local land use and development requirements.

3.6 Infrastructure

3.6.1 Utilities

3.6.1.1 Affected Environment

Although the installation of the temporary facility is planned for a pre-developed site, most of its utilities will be newly developed because the existing utilities are sized for the current site uses (Appendix A-Site Plan).

A 1500 gallon septic tank will be installed on the edge of the temporary building footprint. From the septic tank, a 4" PVC sewer force main will be run to a float tank of approximately 440 gallons and then to an area next to the existing leach field of the MGSC building. A new primary leach field for this temporary facility will be installed and will consist of: 4 trenches, each 52' long x 4' wide, at a distance of 4' apart. A secondary leach field of the same size (as required by septic system standards), will be designed for placement next to the new primary leach field. However, this secondary leach field will not be constructed unless and until the new primary leach field fails.

To provide water to the facility, a well will be drilled at the rear of the temporary structures. Electricity will be temporarily brought to this site through the installation of overhead lines that begin near the MGSC building. These lines and poles will be temporary and only in place during the life of the facility.

3.6.1.2 Environmental Consequences

The installation of one septic tank and a float tank next to the modular units and a primary leach field adjacent to existing leach fields for the existing buildings will be the most invasive component of the infrastructure. As these areas consist of fill and are previously disturbed, there will be no major impact on the surrounding environment. This project requires a Vermont Wastewater System and Potable Water Supply Permit (WW permit) from the State and full compliance with permit conditions will ensure minimal environmental impact.

The fresh-water well to be drilled will be consistent with the uses of other industrial buildings on site and in the area, and does not represent a significant impact to the environment. The facility will require a Transient Non-Community Water System (TNC) permit, and full compliance will ensure minimal environmental impact.

The installation of temporary electrical poles to provide power to the facility will not cause any significant impact to the surrounding environment. Once plans have been fully developed, BGS will seek a determination of compliance for consistency with Vermont Energy Standards.

Installation of the utilities and septic tank will result in only minor soil disturbances. Installation of the leach field and connecting trench of the pipe will require both erosion and dust control measures.

3.6.2 Traffic and Parking

3.6.2.1 Affected Environment

This location is served by a major highway, State Route 2, and is immediately adjacent to the interstate exit, making this location ideal for the purposes intended.

Site features such as the access road, circulation road and some of the parking requirements will be accommodated by the existing site features. The facility will operate with a total of 40 employees, covering 3 shifts per day. Shift changes will occur from 6:30-7:00 AM, 2:30-3:00 PM, and 10:30-11:00 PM. In addition, the facility will generate a limited number of non-employee related trips including patient arrivals and departures, patient visitors, and patient representatives. The shift changes do not occur during the peak hour for traffic in the vicinity of the facility. The arrival and departure times for the 8:00 AM to 4:30 PM workers do occur during the peak hour 7:15-8:15 AM and 4:30-5:30 PM peak hours.

3.6.2.2 Environmental Consequences

The Vermont Agency of Transportation uses a threshold of 75 peak hour trips to require a traffic study. Given that there are a total of only 40 employees assigned to this facility, the estimated increase in peak hour trips is well below this threshold.

3.6.3 Stormwater

3.6.3.1 Affected Environment

Vermont administers the federal Clean Water Act (CWA) and the Vermont Water Quality Regulations. Surface water runoff may increase minimally due to a minimal increase in impervious area from the current level of development. Water quality is protected by compliance with the conditions of discharge permits issued by the Vermont Department of Conservation. Under Vermont regulations, a “Stormwater Discharge from New Development and Redevelopment General Permit 3-9015” is required for discharges of stormwater from new development projects equal to or greater than one (1) acre or discharge from expansion or redevelopment of an existing impervious surface. Under the CWA a “Construction General Permit 3-9020” is also required for stormwater runoff from earth disturbance activity covering one or more acres of land.

3.6.3.2 Environmental Consequences

Potential adverse effects from a minimal increase in impervious area will be mitigated by the on-site stormwater management system already installed as part of the MGSC building. In addition, compliance with the conditions listed in the “Stormwater Discharge from New Development and Redevelopment General Permit” and the “Construction General Permit 3-9020” will address off-site conveyance of stormwater and mitigate water quality impacts during construction.

3.7 Potential Hazards

3.7.1 Air Quality

3.7.1.1 Affected Environment

Air quality in Vermont is regulated by the Air Pollution Control Division (APCD) of the Vermont Agency of Natural Resources. APCD enforces both state and federal air quality regulations

including the Clean Air Act of 1990 and Amendments, and the Vermont Air Pollution Control Regulations (VT ANR, 2012).

Subchapter IV of the regulations sets out the requirements for Classification of Air Contaminant Sources, and source registration and operating permits and Subchapter V sets forth requirements for Review of New Contaminant Sources. Section 5-401 of the Regulations classifies fuel burning installations based on the fuel source (VT APCD Regulations, 2011).

3.7.1.2 Environmental Consequences

Compliance with the air pollution regulations will protect air quality.

3.7.2 Noise

3.7.2.1 Affected Environment

There may be a temporary increase in noise during site preparation and assembly of the modular units that will be constructed off site, otherwise noise levels will remain about the same as under current uses.

3.7.2.2 Environmental Consequences

Temporary increase in noise during construction will be mitigated by limitation of operating hours for construction to daylight hours. No permanent increase in ambient noise will occur as a result of construction or operation of the temporary facility.

3.7.3 Hazardous Waste

3.7.3.1 Affected Environment

Hazardous materials are regulated by both the federal and state governments. The two main laws that pertain to hazardous materials are CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) and RCRA (Resource Conservation and Recovery Act).

CERCLA was enacted in 1980 and amended in 1986. It was created to regulate activity on closed and abandoned hazardous waste sites, provide and determine liability for releases of hazardous materials at abandoned sites, and provide a funding mechanism for the cleanup of hazardous waste sites. CERCLA also established the National Priority List (NPL) which is a database of sites with known or suspected releases of hazardous materials (U.S. EPA, 2010). RCRA was enacted in 1976 and amended in 1984 and regulates and generation, transportation, storage, and disposal of hazardous materials (U.S. EPA, 2010a). It also set up a framework for the designation and classification of hazardous materials. In Vermont, RCRA generators are regulated by the Vermont Department of Environmental Conservation Waste Management Division (VT WMD).

3.7.3.2 Environmental Consequences

There are no CERCLA hazardous waste sites in the Town of Middlesex. No state hazardous waste sites are identified on the Middlesex site. The contiguous parcel, currently occupied by the Vermont State Archives, had a hazardous waste site that was closed in 2007. This site at one point had concerns about toxic materials leeching into the groundwater, but in 2001, a change was made so that water discharge and waste streams from photo-processing and print shop areas no longer

go to the septic system, but to an evaporator. Two underground storage tanks (#1814 and #446) are also located on this parcel; both were installed in 1989 and currently identified as being in good condition by the VT Agency of Natural Resources (Appendix B – Figure 8).

3.7.4 Seismic Safety

3.7.4.1 Affected Environment

Executive Order 12699 directs federal agencies to incorporate cost-effective seismic safety measures in all new buildings that are constructed, leased, assisted, or regulated by the federal government.

3.7.4.2 Environmental Consequences

The area around Middlesex, Vermont, has relatively low risk for damaging earthquakes, so concern about seismic activity for this proposed project are low.

3.8 Socioeconomic Issues

3.8.1 Affected Environment

EO 12898 is the Executive Order regarding Environmental Justice in Minority Populations. This requires federal agencies, departments, and their contractors to consider any potentially disproportionate human health or environmental risks to minority or low income populations posed by their activities, policies, or programs.

EO 13045 Protection of Children from Environmental Health Risks and Safety Risks requires agencies to identify and assess health and safety risks that may disproportionately affect children, and ensure that an agency's activities, policies, programs and standards address disproportionate risks to children.

3.8.2 Environmental Consequences

Based on 2010 Census, the population of Washington County is 98.1% white; 1.2% black or African American; 1.0 % American Indian or Alaska native; 1.1% Asian; and 0.4% other. There is not a significant minority of poor populations in Washington County. The median family income is \$66,968. 3.3% of the population receives cash public assistance; and 8.8% of the population is eligible for food stamps. 78.9% of the population is 18 years of age or older. Thus construction of the temporary secure residential facility in the Town of Middlesex will not have a disproportionate effect on minority or poor populations, or children and youth. An Assisted Living and Therapeutic Community Residences Permit will be obtained from the Agency of Human Services once detailed floor plans have been developed that demonstrate space allocation for all patients.

3.9 Climate Change

3.9.1 Affected Environment

The CEQ has issued a draft NEPA guidance document encouraging federal agencies to improve their consideration of the effects on greenhouse gas emissions and climate change in their evaluations of proposals subject to NEPA documentation (CEQ 2010).

3.9.2 Environmental Consequences

No mitigation measures related to climate change are specifically proposed for the project alternatives and none are required due to the temporary nature of this facility and its limited impacts on greenhouse gas emissions and climate change.

3.10 Cumulative Effects

Cumulative effects are those that result from the incremental effect of the Alternative Actions when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other action (40 C.F.R. 1508.7).

3.10.1 Affected Environment

The DMH is under legislative mandate to replace the former VSH at the WSOC. The current temporary system is not practical, nor sustainable. The proposed temporary replacement facility will help alleviate the burden currently on the mental health facilities throughout the state, while providing appropriate care for acuity long-term patients.

In the wake of the Irene flooding, other providers have stepped up to serve the current residents of the hospital, but none of these providers are prepared to care for those patients indefinitely. The VSH served the highest need patients in the system, so called “Level I” patients. These patients tend to be the hardest to care for, typically because of challenging behaviors. They are the patients most likely to be aggressive or violent, and do not fare well in crowded environments with other patients.

3.10.2 Environmental Consequences

No Action Alternative - The current No Action Alternative is unsustainable. The lack of capacity has required the state to seek alternative placements for many people in need of service and has resulted in people who request hospital services being turned away. Based on information derived from the DMH, every month since the flood, 10-20 people have had to be held in emergency rooms awaiting a bed in a psychiatric hospital. Until sufficient temporary and permanent facilities can open and relieve the pressure on the State’s mental healthcare needs, the State’s mental health system remains in crisis.

Proposed Alternative - Construction of the secure residential facility at the Middlesex Site would provide seven (7) beds for long term patients in need of a stable care environment. Such patients would otherwise be underserved in the State’s health care system. At the same time, the availability of acute care beds that are currently being occupied by those proposed for relocation to Middlesex would increase proportionately. Thus, the cumulative impact from construction of the Middlesex Facility would be positive.

4.0 AGENCY COORDINATION AND PERMITS

All required state and local permits will be obtained prior to commencement of construction activities at the site. These permit requirements include:

- *Local Zoning Permit*: issued September 26, 2012; will become effective October 26, 2012.
- *A Wastewater System and Potable Water Supply* permit was issued by the Agency for Natural Resources on October 18, 2012 (#WW-5-6211).
- *Storm Water Permit*: the application will be submitted by October 24, 2012.
- *Department of Public Safety {Fire Safety Division} – Construction permit*: the application will be submitted once detailed floor plans have been developed.
- *Agency of Human Services: Assisted Living and Therapeutic Community Residences Permit*: The application will be submitted once detailed floor plans have been developed.
- *Vermont Energy Standards Compliance*: a determination of compliance with the standards will be requested once plans are fully developed.

5.0 PUBLIC INVOLVEMENT

Public involvement with the proposed action was initiated through the Town of Middlesex's Local Zoning Permit application process. BGS applied for the local Zoning Permit on September 10, 2012.

- The Notice of Application was advertised in the *Times Argus* on September 11, 2012 and then again on September 17, 2012.
- The Notice of Application was physically posted at Town offices in two conspicuous places beginning on September 11, 2012 and remained in place for 30 days.
- A public hearing on the permit application was conducted on September 26, 2012.
- BGS received a Notice of Issuance on September 26, 2012 after the public hearing and posted it at the project location on September 27, 2012. This Notice of Issuance shall stay in place until October 26, 2012 at which time if there are no appeals it will become effective.

FEMA's Draft EA for the proposed action will be publicized in *The Times Argus* and *The Waterbury Record* on October 26, 2012, for a 15-day period. The draft EA and supporting documents will be available for public review at the Town Clerk's Office in Middlesex, Kellogg-Hubbard Public Library in Montpelier, and through posting on the FEMA, DMH and VEM websites. If no substantive comments are received, the Draft EA will become the Final EA and the initial Public Notice will serve as the final Notice. Substantive comments will be addressed in the final document as appropriate.

6.0 LIST OF PREPARERS

This document was prepared by:

Peter Thomas, FEMA Environmental Advisor

Erin Kizer, FEMA Environmental Specialist

Sharla Azizi, FEMA Historic Preservation Specialist

Lydia Kachadoorian, FEMA Region I Deputy REO

7.0 REFERENCES

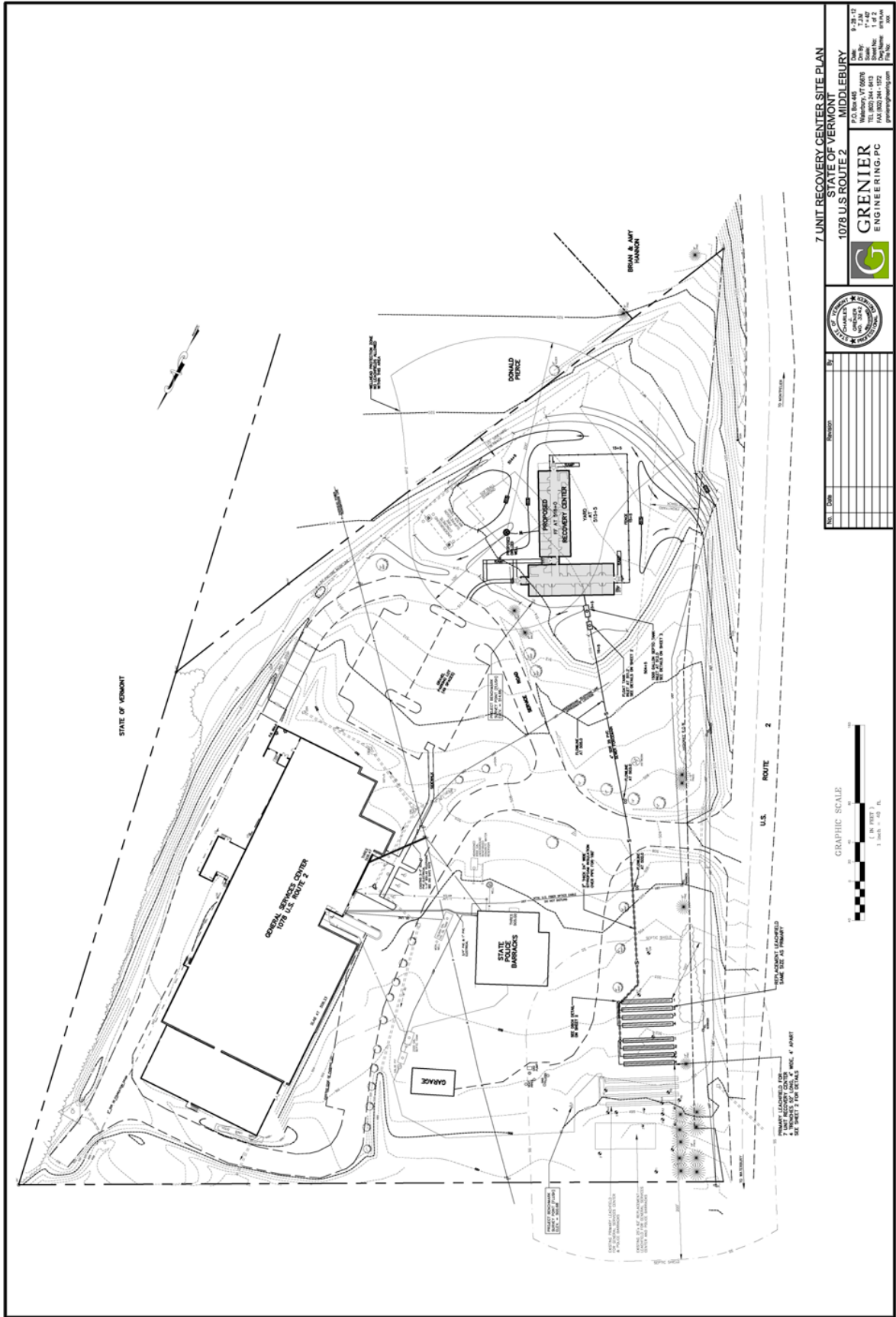
- Act 79, 2012. No. 79 An act relating to reforming Vermont's mental health system. Enacted by the General Assembly of Vermont. April 4, 2012.
- Act 49, 2011. No. 49 An act relating to capital construction and bonding. Enacted by the General Assembly of Vermont. May 20, 2011.
- Beers, F.W. County Atlas of Washington, Vermont. F.W. Beers. & Co. New York. 1873.
- CEQ, 2010. Memorandum for Heads of Federal Departments and Agencies. Subject: Draft NEPA guidance on consideration of the effects of climate change and greenhouse gas emissions. Authored by: Nancy H. Sutley, Chair, Council on Environmental Quality, February 18, 2010.
- EO 11988. Executive Order No. 11988. Floodplain Management, May 24, 1977. 42 C.F.R. 26951.
- EO 11990. Executive Order No. 11990. Protection of Wetlands, May 24, 1977. 42 C.F.R. 2691.
- EO 12699. Executive Order No. 12699. Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction. January 5, 1990.
- EO 12898. Executive Order No. 12898. Environmental Justice for Low Income and Minority Populations. 1994. 59 C.F.R. 7629.
- EO 13045. Executive Order No. 13045. Protection of Children from Environmental Health Risks and Safety Risks 1997. 62 C.F.R. 19883
- FEMA, 2011. Programmatic Agreement among Federal Emergency Management Agency, Region 1, Vermont Division for Historic Preservation, and Vermont Emergency Management dated May 9, 2011.
- NRCS, 2009. Prime and Important Farmland (VT), Washington County. Field Office Technical Guide, Vermont Office.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed October 10, 2012.
- US Census Bureau, 2010. American Factfinder; website accessed August 2012 for

- Washington County, VT, at
<http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>
- USEPA, 2012a. CERCLA National Priorities List (NPL) accessed October 2012:
<http://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0101479>
- USEPA, 2012b. Resource Conservation and Recovery Act (RCRA) information
accessed October 2012 at: <http://www.epa.gov/epawaste/inforesources/data/index.htm>
- USFWS, 2012. Endangered Species Consultation, United States Fish and Wildlife
Service, New England, accessed October 2012 at
www.fws.gov/newengland/endangeredspec-consultation.htm
- USGS 15 Minute Series Maps. Montpelier, VT Quadrangle. 1921.
- VTDEC, 2012 a. Vermont Interactive Mapping Environmental Interest Locator accessed October
2012 at http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/launch.jsp
- VTDEC, 2012 b. Vermont Solid Waste Rules. Waste Management Division, Department of
Environmental Conservation. Rule No. 11P-03. March 15, 2012.
- VTDEC, 2011 a. Vermont Air Pollution Control Regulations, adopted September 2011. Air
Pollution Control Division, Vermont Department of Environmental Conservation.
- VTDEC, 2011 b. Underground Storage Tank Rules, effective October 1, 2011. Waste
Management Division, Vermont Department of Environmental Conservation.
- VTDEC, 2005. Groundwater Protection Rule and Strategy. Chapter 12, Environmental Protection
Rules. February 14, 2005. Rule Number 04P-039.

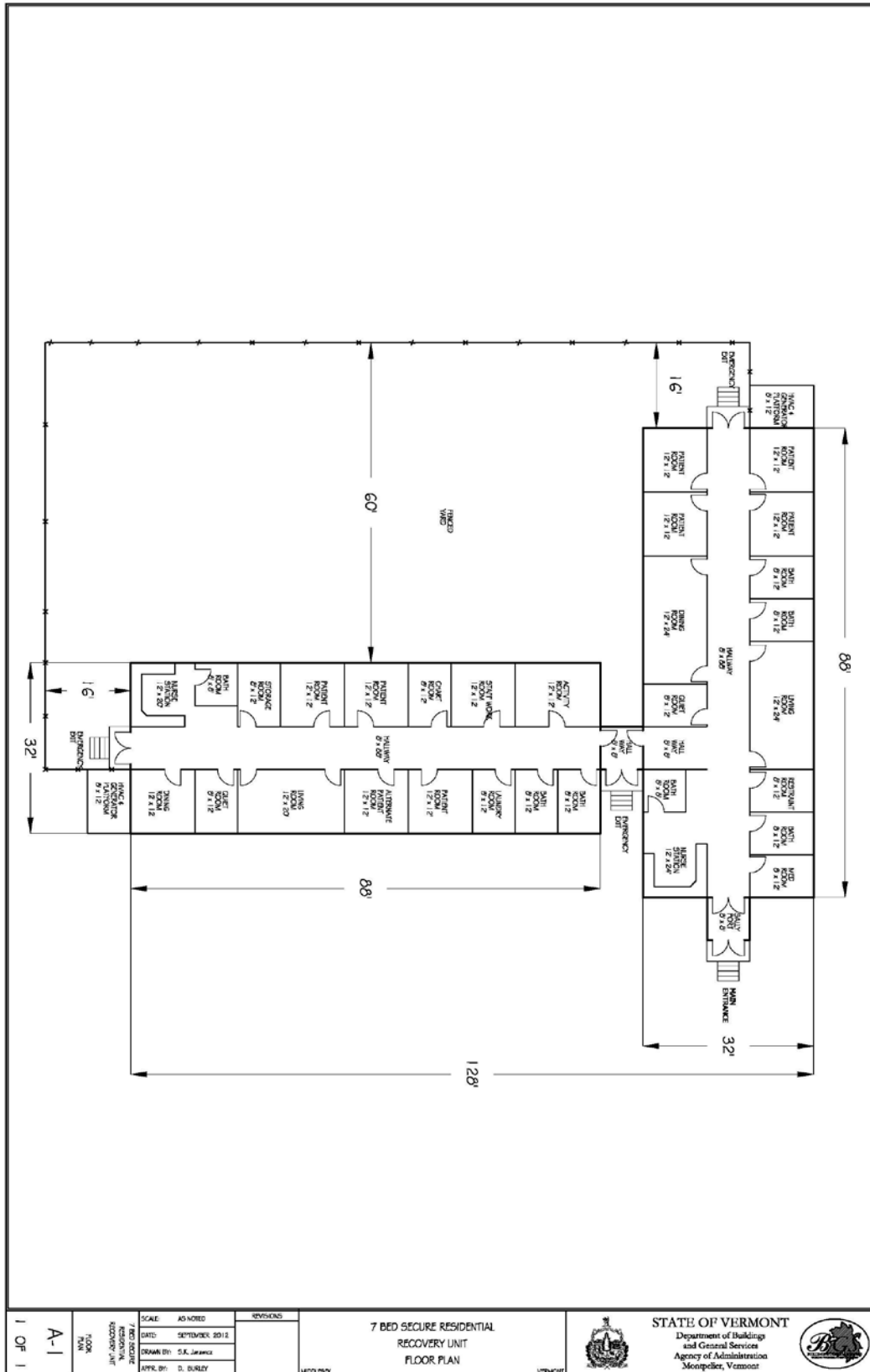
8.0 APPENDICES

Appendix A	Site Plan, Maps and Aerial Photographs
Appendix B	Environmental Interest Maps <ol style="list-style-type: none">1. Bedrock Geology2. USDA Soil Survey3. Endangered Species4. Critical Habitat5. List of Federal Threatened and Endangered Species6. Floodplain Map – FIRMettes7. Historic Maps8. Hazards Map
Appendix C	SHPO Correspondence
Appendix D	Photographs
Appendix E	Zoning Application and Permit

Appendix A Site Plan, Location Map and Aerial Photograph

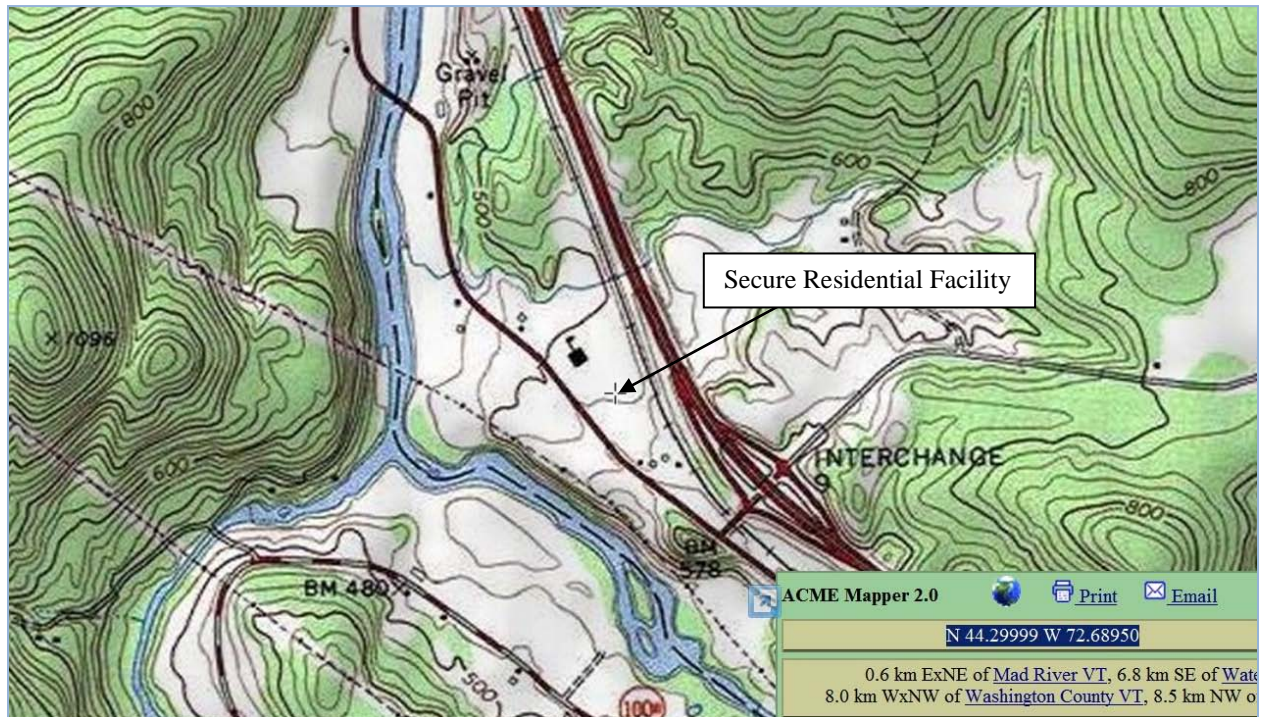


Site Plan 1



Site Plan 2

Secure Residential Facility Department of Mental Health
Route 2, Middlesex, VT
N 44.29999 W -72.68950



Location Map



Aerial Photograph

Appendix B Environmental Interest Maps

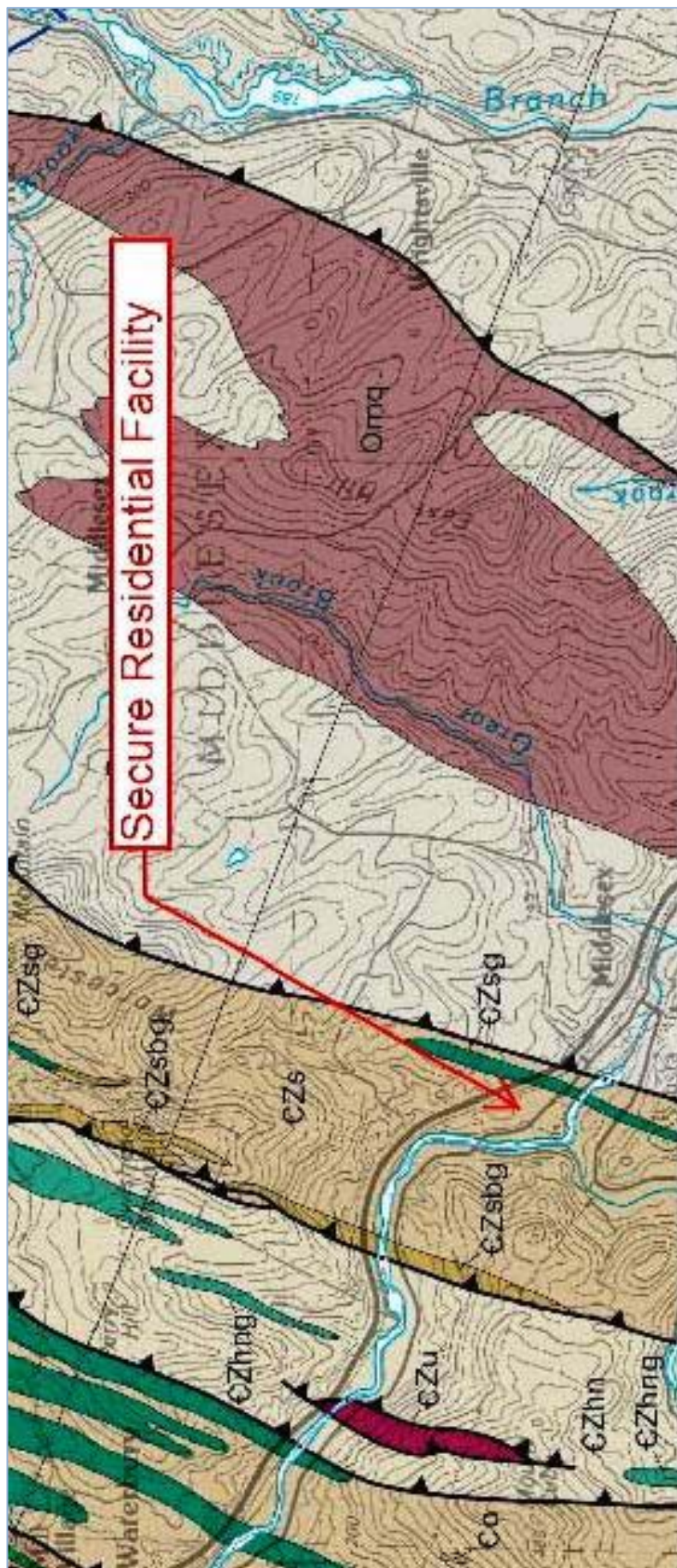


Figure 1. Bedrock Geologic Map of Vermont, 2011

CZs: Schist and phyllite member—Predominantly fine-grained, lustrous, well-foliated, silvery-green, grayish-green, and bright-green, quartz-ribbed and -knotted, magnetite-chlorite (biotite)-albite (plagioclase)-sericite (muscovite)-quartz phyllite and schist. Locally richly garnetiferous and biotite-flecked schist (CZsgt) at higher grades; areas rich in metadiabase dikes shown by overprint and symbol (CZsd)

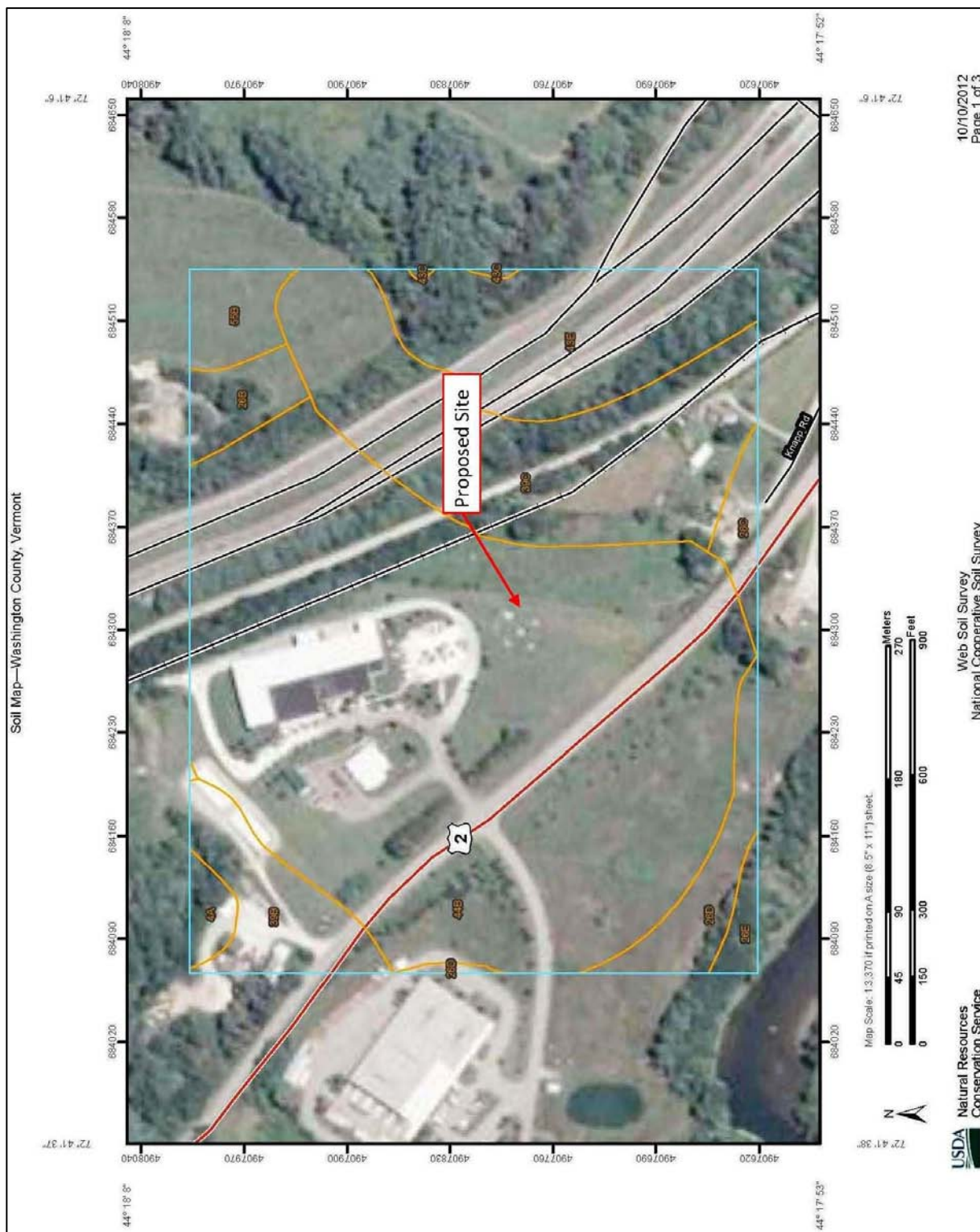
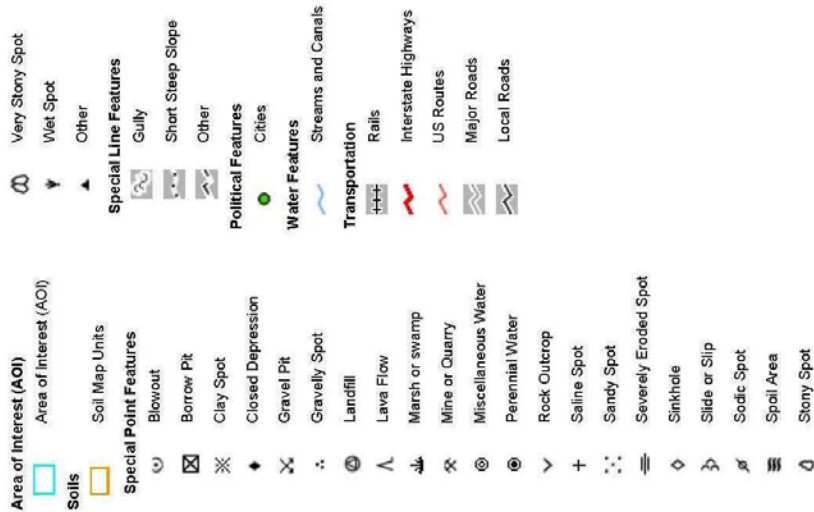


Figure 2a. Soil Types

MAP LEGEND



MAP INFORMATION

Map Scale: 1:3,370 if printed on A size (8.5" x 11") sheet.
 The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.
 Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washington County, Vermont
 Survey Area Data: Version 15, Jan 19, 2010
 Date(s) aerial images were photographed: 8/21/2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Figure 2b Soil Types

Map Unit Legend

Washington County, Vermont (VT023)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4A	Sunny silt loam, 0 to 2 percent slopes	0.5	1.0%
26B	Adams loamy fine sand, 3 to 8 percent slopes	1.0	2.1%
26C	Adams loamy fine sand, 8 to 15 percent slopes	0.6	1.4%
26D	Adams loamy fine sand, 15 to 25 percent slopes	1.6	3.4%
26E	Adams loamy fine sand, 25 to 60 percent slopes	0.4	0.9%
39B	Colton gravelly loamy sand, 3 to 8 percent slopes	2.1	4.6%
39C	Colton gravelly loamy sand, 8 to 15 percent slopes	7.8	17.1%
43C	Salmon very fine sandy loam, 8 to 15 percent slopes	0.1	0.1%
43E	Salmon very fine sandy loam, 25 to 50 percent slopes	4.8	10.4%
44B	Lamoine silt loam, 3 to 8 percent slopes	25.9	56.8%
55B	Nicholville silt loam, 3 to 8 percent slopes	1.0	2.2%
Totals for Area of Interest		45.6	100.0%



Figure 2c. Soil Types

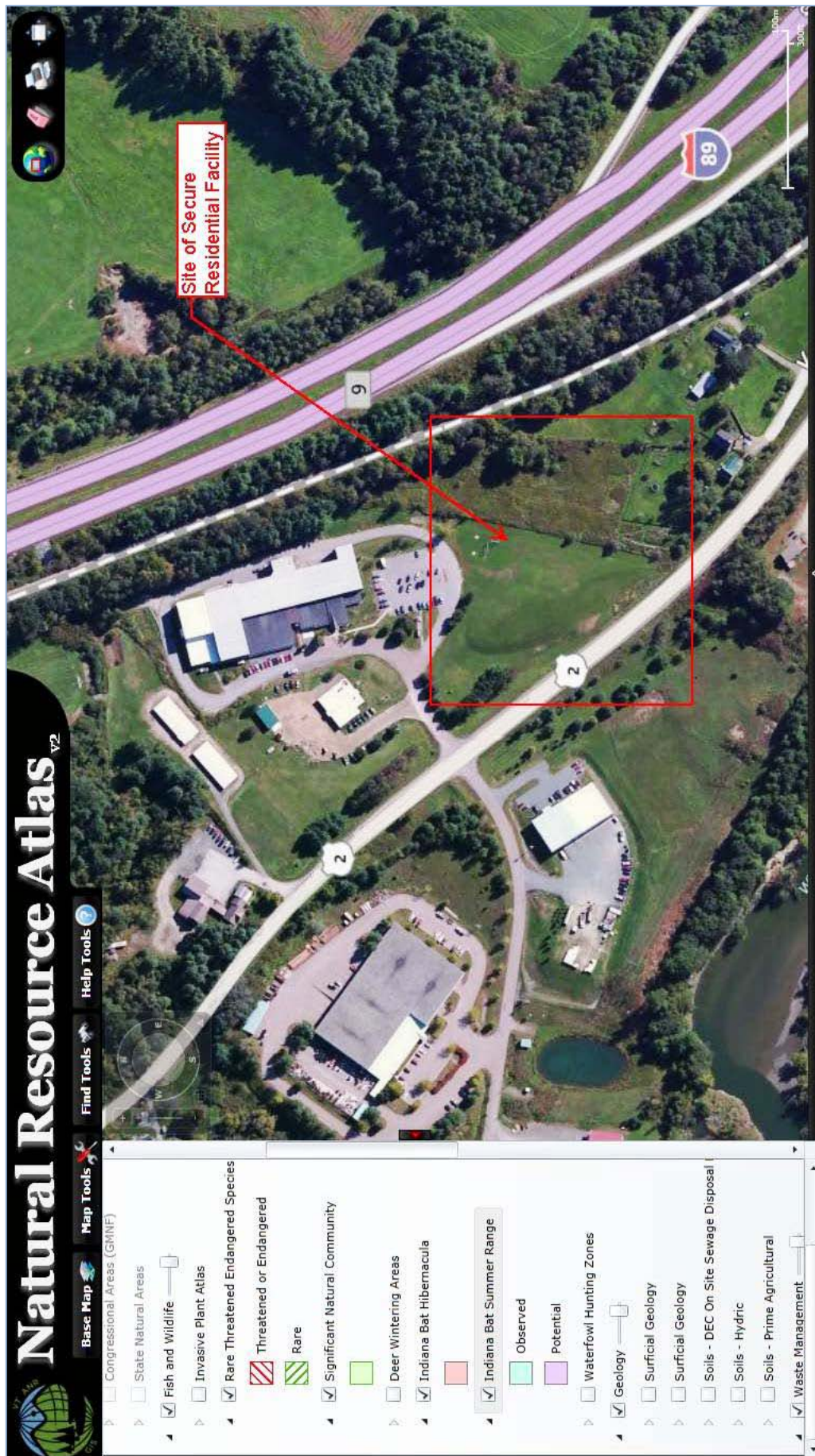


Figure 3. Endangered Species



Figure 4. Critical Habitat

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN VERMONT**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Addison	Indiana bat	Endangered	Forests and Woodlots.	Ferrisburg, Panton, Addison, Bridport, Shoreham, Orwell, Whiting, Cornwall, Weybridge, Vergennes, Waltham, New Haven, Monkton, Starksboro, Bristol, Middlebury, Salisbury, and Leicester
Bennington	Indiana bat	Endangered	Hibernacula (caves and mines)	Dorset, Manchester and Sandgate
Chittenden	Indiana bat	Endangered	Forests and Woodlots	Charlotte, Hinesburg and St. George
Essex	Dwarf wedgemussel	Endangered	Connecticut River main channel	Bloomfield, Maidstone, Guildhall, Lunenburg, and Concord
	Canada lynx	Threatened	Regenerating softwood forest, usually with a high snowshoe hare density	All
Orange	Dwarf wedgemussel	Endangered	Connecticut River main channel	Newbury, Bradford, Fairlee, and Thetford
Rutland	Indiana bat	Endangered	Forests and Woodlots Hibernacula (caves and mines)	Benson, Brandon, Sudbury, Fair Haven, Pittsford and West Haven
				Brandon and Chittenden
Windham	Dwarf wedgemussel	Endangered	Connecticut River main channel	Rockingham
	Northeastern bulrush	Endangered	Wetlands	Rockingham, Grafton, Townsend, Athens, Westminster, Newfane, Brookline, Putney and Dummerston
Windsor	Jesup's milkvetch	Endangered	Banks of the Connecticut River	Hartland
	Northeastern bulrush	Endangered	Wetlands	Springfield and Chester
	Dwarf wedgemussel	Endangered	Connecticut River and Black River main channel	Springfield, Weathersfield, Windsor, and Hartland

-There are no known occurrences for federally endangered or threatened species in Caledonia, Franklin, Grand Isle, Lamoille, Orleans and Washington Counties.

-Endangered gray wolves are not known to be present in Vermont, but dispersing individuals from source populations in Canada may occur statewide.

-There is no federally-designated Critical Habitat in Vermont.

3/12/2012

Figure 5. List of Federal Threatened and Endangered Species

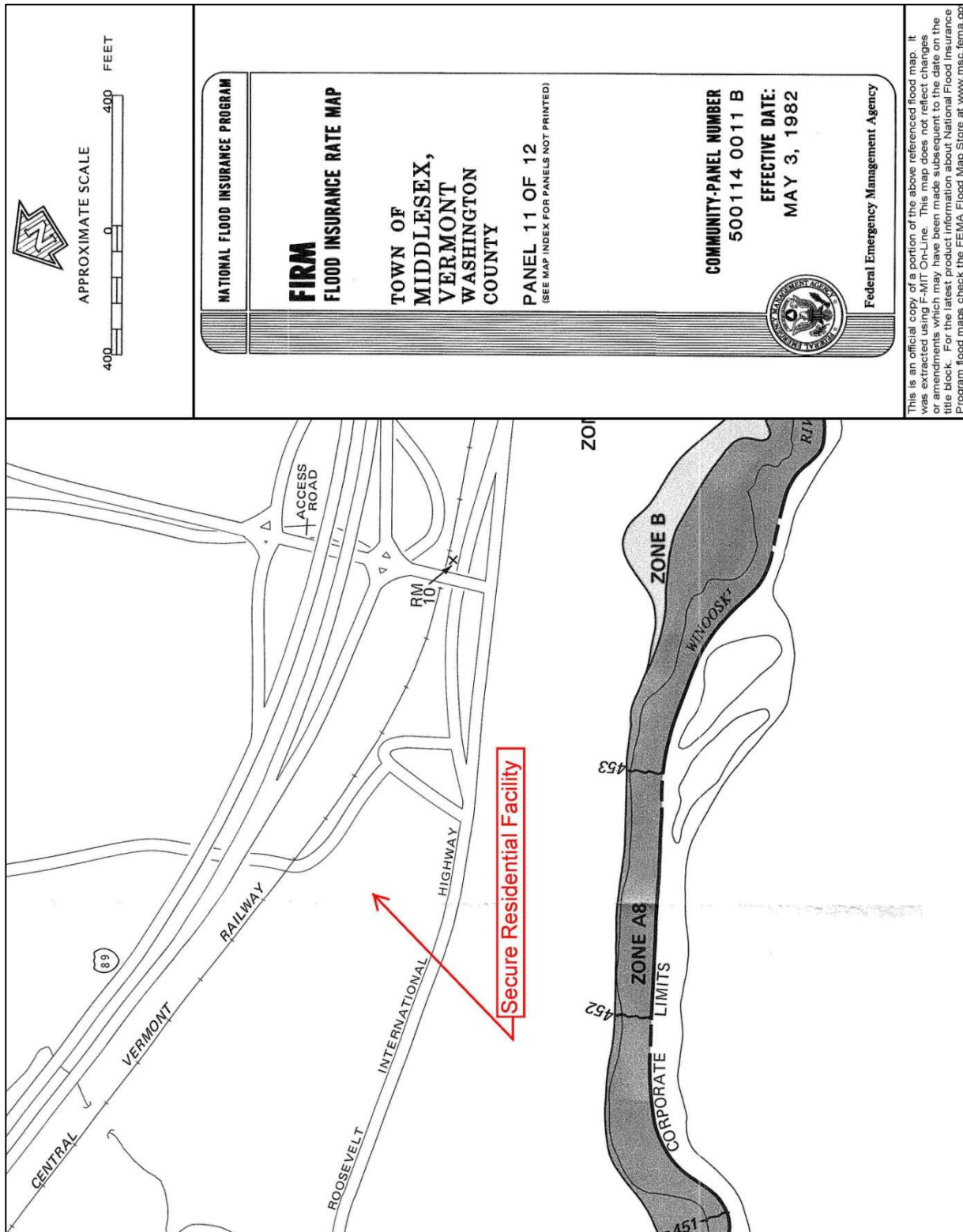


Figure 6. Floodplain Map - FIRMette

HISTORIC MAPS OF MIDDLESEX SITE

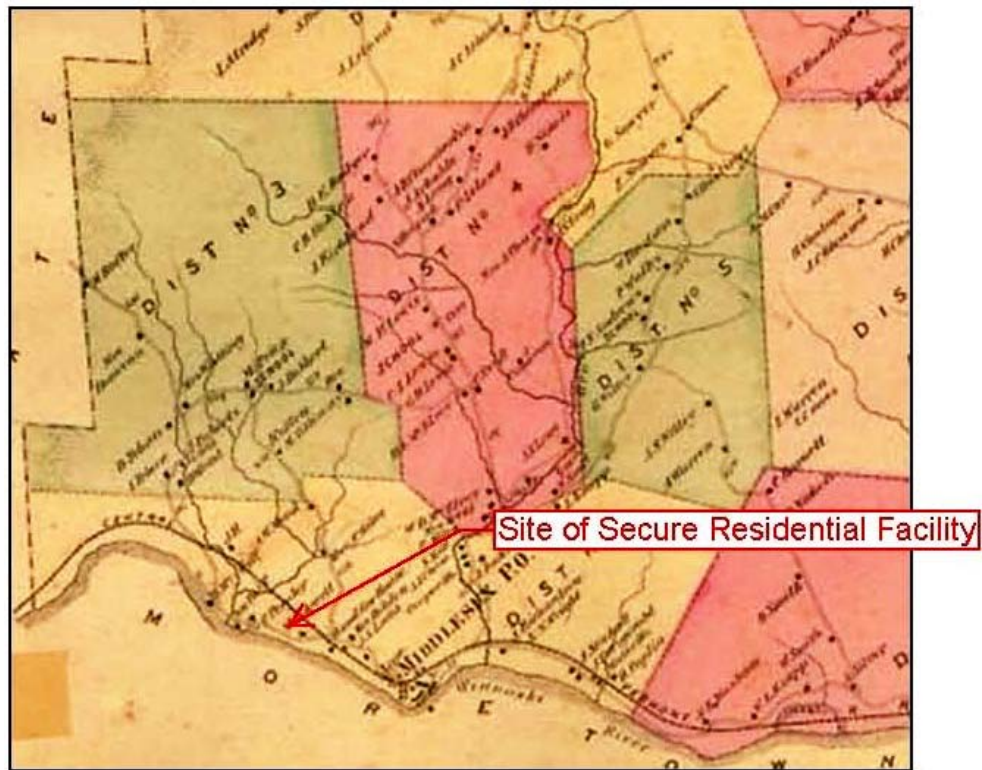


Figure 7a. From County Atlas of Washington, Vermont, 1873

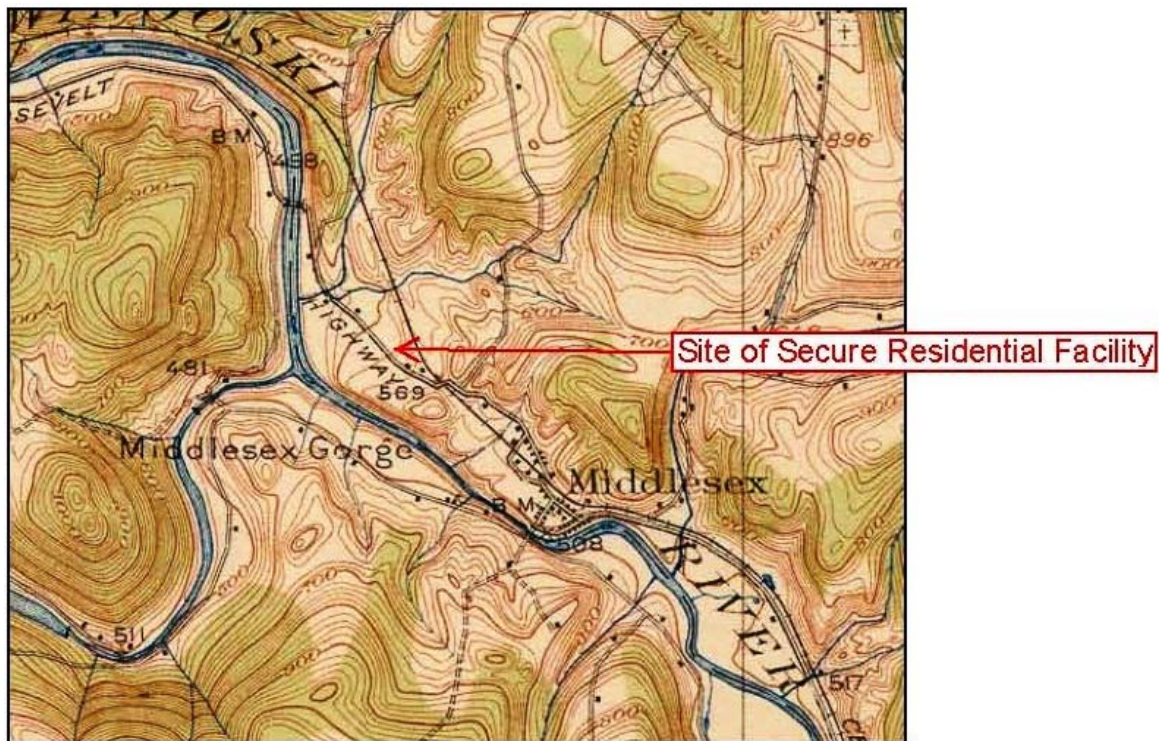


Figure 7b. From USGS Map of Vermont, 1921

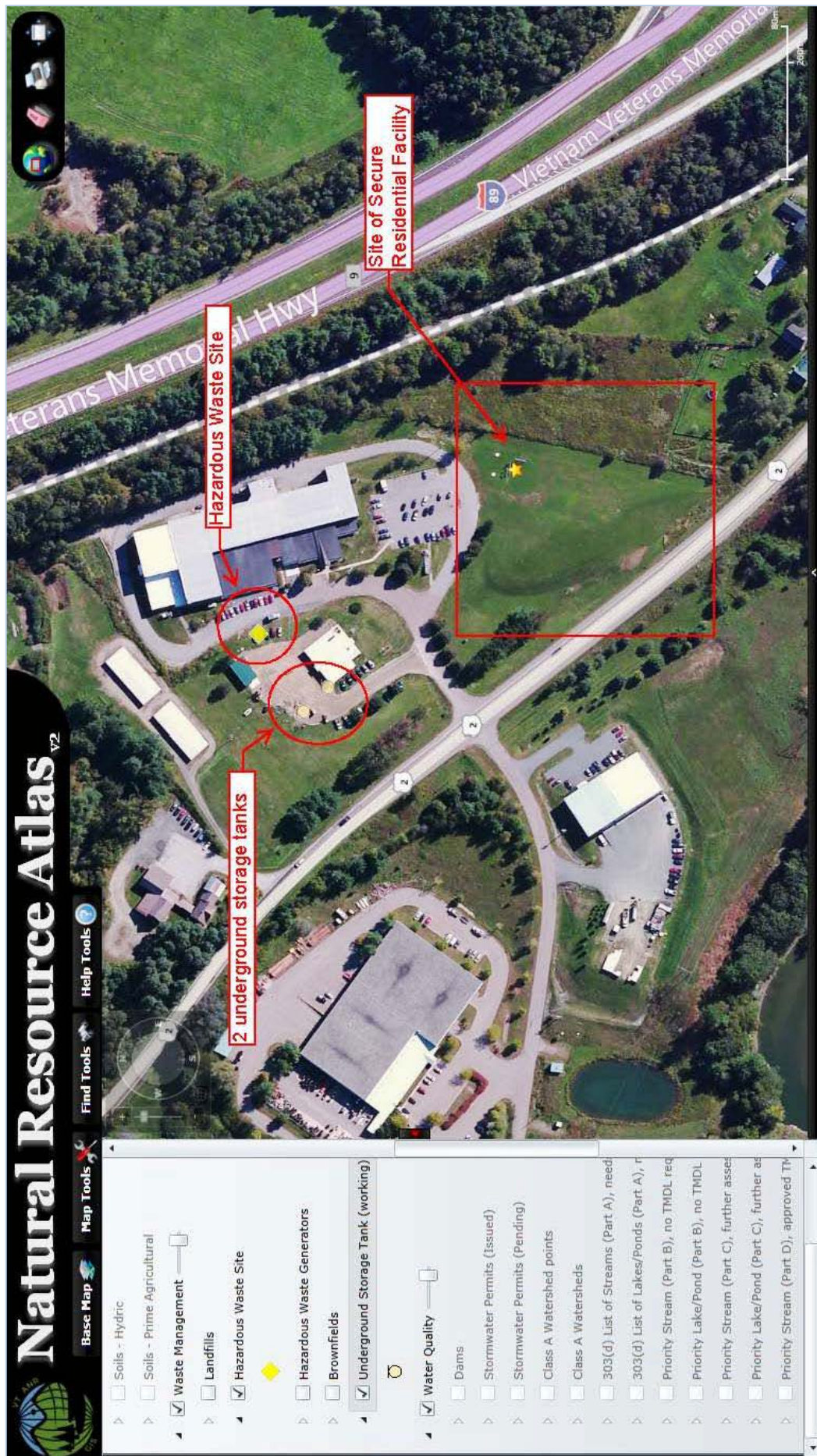


Figure 8. Hazards Map

Appendix C SHPO Correspondence

CONCUR

for SHPO


DATE 10/19/2012 *DEVIN A. COLEMAN*



U.S. Department of Homeland Security
FEMA/ Joint Field Office
DR-1995/4001/4022/4043-VT
30 Allen Martin Drive
Essex Junction, VT 05452

FEMA

October 18, 2012

Ms. Judith Ehrlich
Vermont Division for Historic Preservation
National Life Building, 6th Floor
Montpelier, VT 05620-1201

Re: *Results of a Site Visit and Request for Concurrence with FEMA's Determination of No Historic Properties Affected*
Proposed Project: *Middlesex Secure Residential Facility, a temporary relocation facility for patients serviced by the Vermont Department of Mental Health*

Dear Ms. Ehrlich:

As a result of damages caused by Tropical Storm Irene between 27 August and 2 September 2011, a Presidential Disaster, referenced as DR-4022-VT, makes Public Assistance funding available to local governments, state agencies and eligible private non-profit organizations in all counties in Vermont. The purpose of the Federal Emergency Management Agency (FEMA) Public Assistance Program is to provide funding to restore damaged facilities to their pre-disaster condition, or in this instance, to provide a temporary facility to house patients displaced from the Vermont State Hospital in Waterbury that is closed due to flood damage.

Project Description

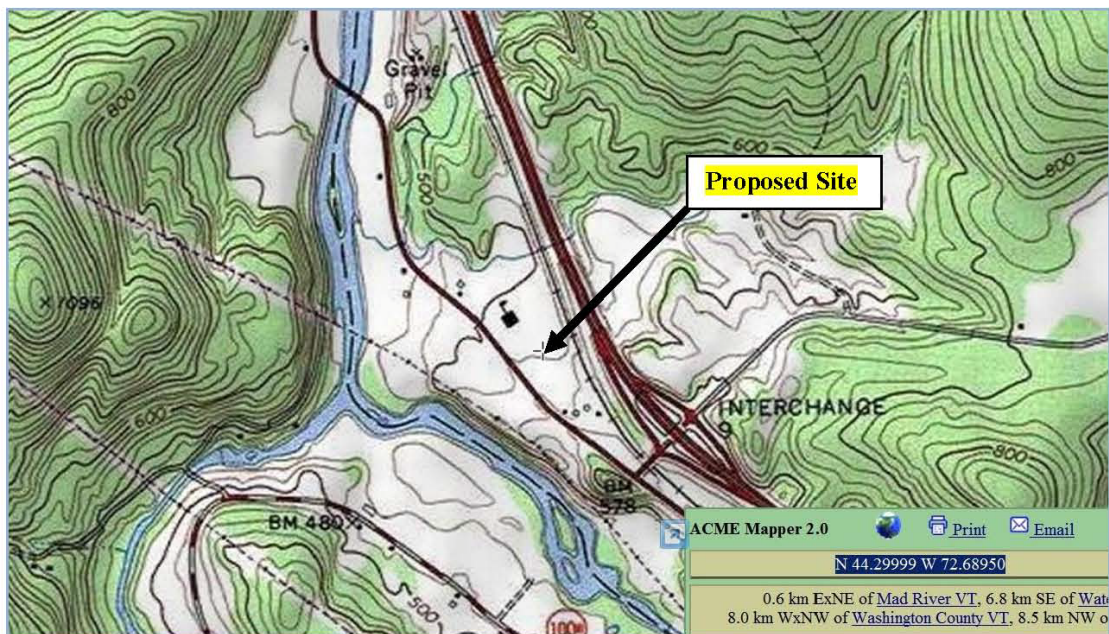
In response to Irene and the flooding within the Waterbury State Office Complex (WSOC), the State of Vermont took immediate action to relocate patients housed in Vermont State Hospital (VSH) on the WSOC campus to alternate facilities around the state. As part of its overall patient care plans, the State of Vermont has applied for assistance under the Public Assistance Program to temporarily relocate the function of seven beds of the state-run psychiatric hospital from the Waterbury State Office Complex to a temporary, secure residential facility to be constructed in Middlesex, VT.

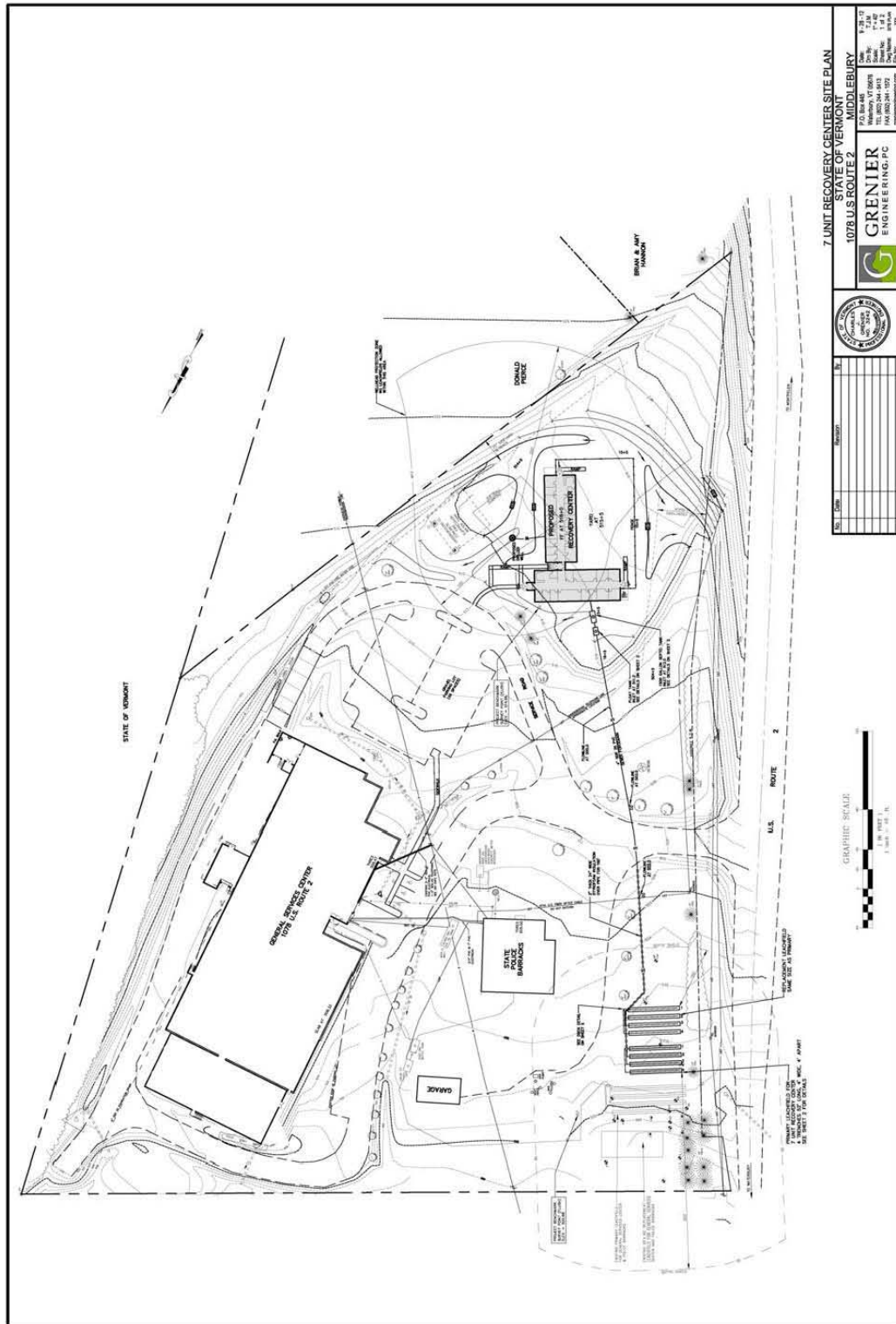
The former VSH facility at the WSOC provided services to a variety of patients with different needs. Some patients were in crisis, requiring acute care, diagnosis and treatment; others were stabilized, but were not ready to move back into the community. In the latter category, several of

the high acuity long-term patients have been housed at the Springfield State Correctional Facility (Charlie Unit). This arrangement was taken as an essential short-term measure to move patients out of danger, but was never intended as more than a very short-term solution for patient housing. Recently all but one of these patients has been moved to other community based settings. These individuals remain at high risk for return, however, and need a secure residential setting rather than acute hospital admission. There are other individuals currently housed in acute care hospitals that no longer need acute care and would be more appropriately housed in a secure residential setting.

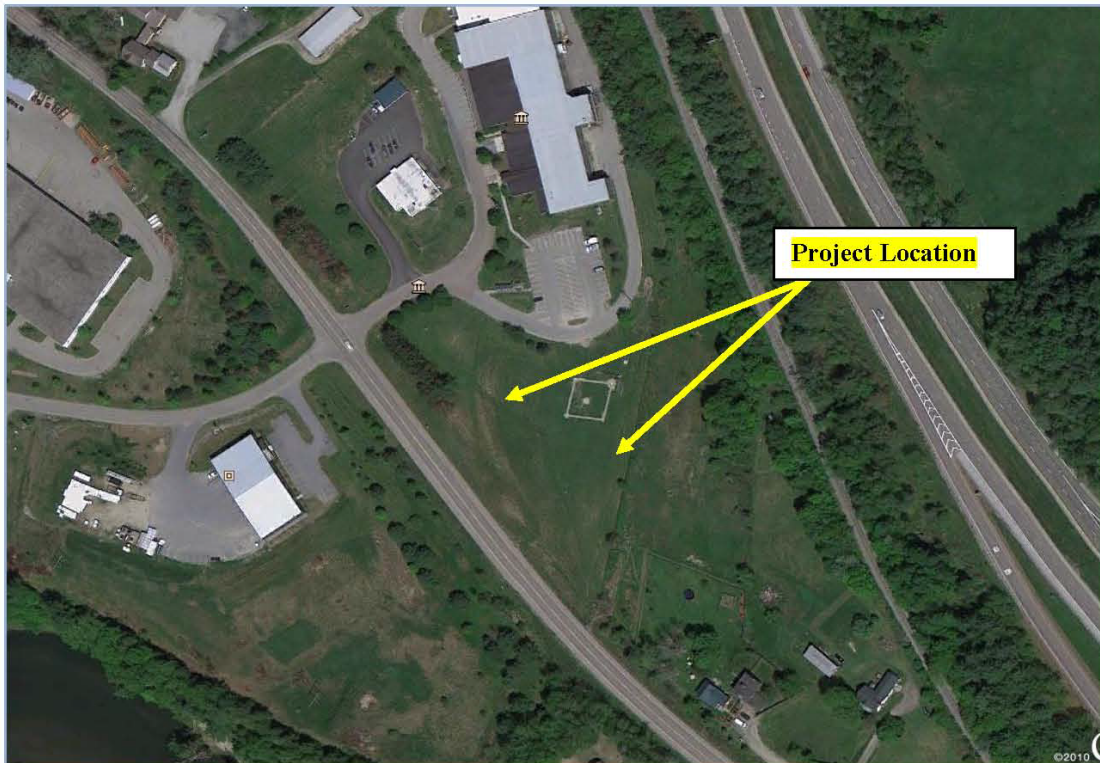
This situation compounds the crisis faced by those in need of acute care. Vermont's private medical institutions continue to bear the brunt of the lost VSH capacity for new acute psychiatric patients. New voluntary and involuntary patients seeking treatment have few in-patient options because temporary capacity has been maxed out.

As a partial remedy, the State of Vermont intends to install a 6,000±square foot secure residential facility, consisting of two prefabricated modular units, to house up to 7 mental health patients. Maximum dimensions of the assembled units are 80' long, by 86' wide, 15' high. The facility will be located on state-owned land adjacent to the State of Vermont's General Services Center at 1078 Route 2, Middlesex, VT (N 44.2999, W -72.6895). Site improvements needed for this installation will be minor. The facilities of the adjacent General Services Center will be utilized for parking. Double septic tanks and a leach field will provide sewage capacity. A well drilled on site and a connecting water line will provide potable water.





SITE PLAN



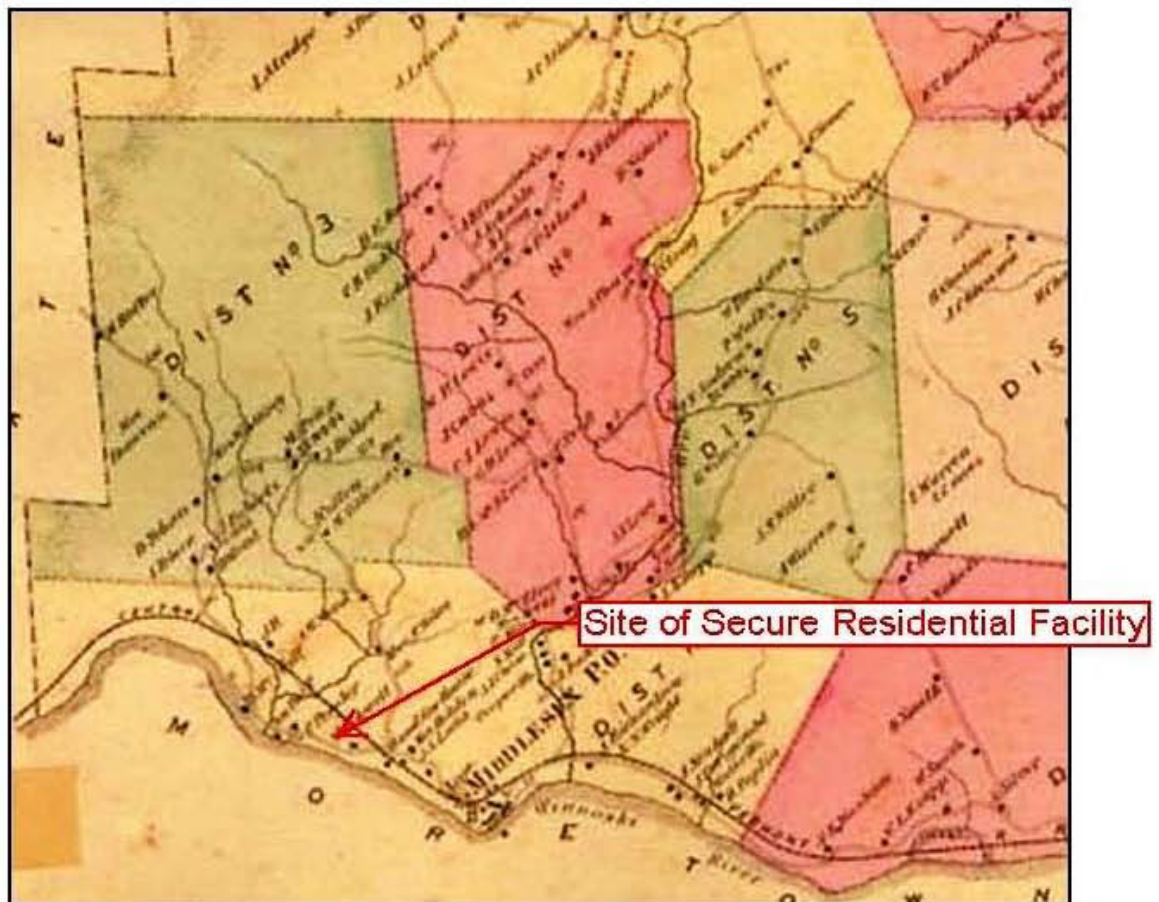
Results of a Field Inspection and Map Review

On October 5, 2012, Peter Thomas, FEMA Historic Preservation Specialist, and Scott Dillon, Staff Archaeologist, Vermont Division for Historic Preservation, conducted a field inspection of the proposed site, currently a constructed softball field. A heavily modified topography was observed. Land to the east of the ball field is some five feet higher than the field itself; a steep cut-bank and drainage ditch are evident along the east edge of the field. The ball field itself is essentially level. At its western and southern edges, it then drops approximately six feet onto a mowed lawn. Fill slopes are roughly 45%.

A soil corer was used to evaluate the underlying stratigraphy. Cores consistently exhibited a thin organic horizon of dark grayish brown silt loam near the surface, underlain by a grayish brown silt loam with ferric mottling, indicating relatively poor drainage. Evidence of mixing was visible in a few places; materials are fairly unconsolidated and no clearly developed B horizon was noted, both indicators of recent deposition. Given the lack of streams and known sites in the immediate area, coupled with poor drainage and the heavily modified condition of the indigenous soil, it was concluded that the probability of encountering a significant archaeological

site that would meet the criteria for listing on the National Register of Historic Places is extremely low.

A review of the map of Middlesex in Beers' *Atlas of Washington County, VT* (1873) and the USGS 15 Minute *Montpelier Quadrangle* (1921) indicates that two nineteenth-century farmsteads have existed to either side of the state-owned property for over a hundred years and continue to exist in these locations adjacent to a remnant of old Route 2. The current segment of Route 2 adjacent to the state-owned parcel has been substantially raised and widened (see historic maps and photographs of structure on adjacent parcels).



Town of Middlesex, Beers' *Atlas of Washington County, VT* (1873).



Former Farmstead West of the State-owned Parcel.



Former Farmstead East of State-owned Parcel.

Conclusions

Based on the joint archaeological site review, FEMA makes a determination of *No Historic Properties Affected*. Based on the map review, there is no indication that an early historic site with the potential to contain significant archaeological deposits exists within the proposed construction site. No evidence of a site was identified in the field. FEMA also makes a determination of *No Historic Properties Affected* with respect to both standing structures and associated archaeological deposits.

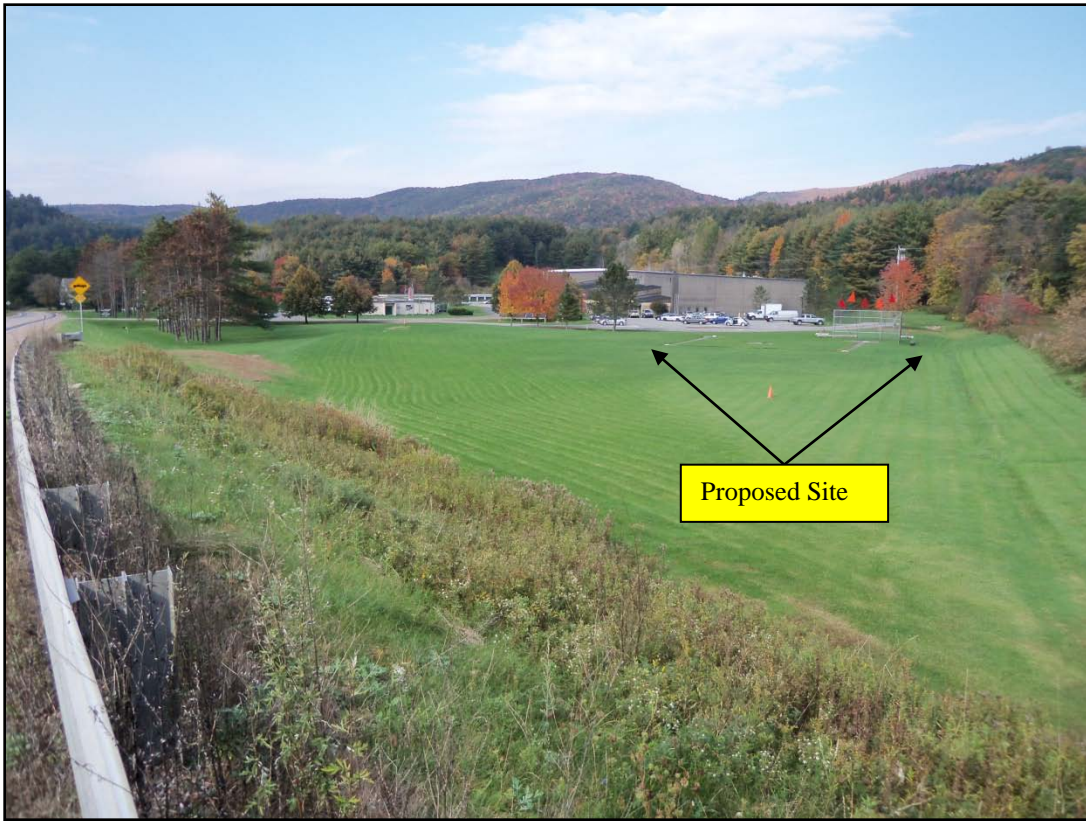
Per the *Programmatic Agreement among FEMA, VT State Historic Preservation Officer, VT Emergency Management Division of the Department of Public Safety, and the Advisory Council on Historic Preservation* (2011), FEMA requests SHPO concurrence with its determination of effect. Should you have any specific questions about this project, please contact me at 802-309-0190 or via email at peter.thomas2@fema.dhs.gov.

Sincerely,



Peter Thomas
EHP Advisor for DR-4022-VT
FEMA Joint Field Office
DR-1995/4001/4022/4043-VT
30 Allen Martin Drive
Essex Junction, VT 05452

Appendix D Photographs



Site Photo 1: Looking north from southern corner of site, alongside Route 2



**Site Photo 2: Eastern edge of property, looking south towards Route 2;
former surface downcut four feet**



Site Photo 3: Looking east from western edge of ball field; rise created by fill



Site Photo 4: Looking south at proposed site from behind existing ball field



Site Photo 5: Looking southwest from behind ball field



**Site Photo 6: Looking west from behind ball field, to existing parking lot,
to be used by new temporary facility**



Site Photo 7: House on lot depicted in 1921 Map, west of proposed site



Site Photo 8: House on lot depicted in 1921 Map, east of proposed site



Site Photo 9: House on lot depicted in 1921 Map, east of proposed site



Site Photo 10: House on lot depicted in 1921 Map, east of proposed site

Appendix E Zoning Application and Permit

Notice of Zoning Permit

Address: 1078 Rt 2
Description: 7 Bed Residential
Mental Health Facility
Applicant: David E. Burley, State of UT
Appeals Expiration Date: 10/26/2012

For more information contact:
Middlesex Town Hall
5 Church St.
223-5915

This notice shall be displayed on the subject premises and shall be clearly legible from a public way. Notice shall be displayed at the time of application and shall not be removed until after the appeals expiration date.

**APPLICATION FOR ZONING PERMIT
TOWN OF MIDDLESEX
5 CHURCH ST.
MIDDLESEX, VT 05602**

For Official Use Only

Application Number: <u>12-26</u>	Tax Map Number: <u>09.04.10</u>
Zoning District: <u>Industrial</u>	Parcel ID Number: <u>43002-040.000</u>
Date Application Received: <u>9/10/12</u>	Fee Paid \$ <u>7.50</u> Date: <u>9/10/12</u>

Nature of Project and Review Required (check where applicable):

- ☐ Single Family Dwelling ☐ Septic ☒ Planning Commission Site Plan Review
☐ Two-Family Dwelling ☐ Change of Use ☒ Town Board of Adjustment
☐ Multi-Family Dwelling ☐ Home Industry ☐ Appeal
☐ Garage ☐ Subdivision ☒ Conditional Use
☐ Porch #Lots ☒ Variance/Waiver
☐ Deck
☐ Shed
☐ Addition
☐ Industrial
☐ Commercial/Retail
- Other: Institutional - State of Vermont

Applicant (s):

Name(s): David E. Burley, Regional Director

Mailing Address: 2 Governor Aiken Avenue, Montpelier, Vermont 05633-5801

Telephone(s) Home: 802-229-0826 Work: 802-828-5643 Cell: 802-272-4392

E-Mail: dave.burley@state.vt.us

Landowner (s) (if different from applicant)

Name(s): Michael J. Obuchowski, Commissioner

Mailing Address: 2 Governor Aiken Avenue, Montpelier, VT 05633-5801

Telephone(s) Home: _____ Work: 802-828-3314 Cell: _____

E-Mail: michael.obuchowski@state.vt.us

Physical Location of Property (911 Address)

General Services Facility Property, 1078 rt.2 Middlesex, Vermont

Builder's Name: MMIC

Phone: 1-800-748-2322

Estimated Start Date of Construction:

INSTRUCTIONS:

Please provide ALL OF THE INFORMATION REQUESTED IN THIS Application AND A SKETCH PLAN. Read the Zoning Bylaws and familiarize yourself with the requirements for building and development in the Town of Middlesex. Failure to provide all required information will delay the processing of this application. Submit one copy of the completed application and a check payable to the Town of Middlesex according to the fee schedule attached herein.

WARNING: State permits may be required for this project. Call 802-476-0195 to speak to the state permit specialist before beginning construction.

A PERMIT WILL EXPIRE AND BECOME NULL AND VOID WITHIN (1) YEAR FROM THE DATE OF ISSUANCE, IF THE PERMITTED DEVELOPMENT HAS NOT BEEN SUBSTANTIALLY COMMENCED.

Middlesex Zoning Permit Application - Page 2

The undersigned hereby applies for a Zoning Permit for the use described in pages 1 through 3 of this application to be issued on the basis of the representations made herein all of which the applicant swears to be complete and true.

ALL APPLICANTS AND LANDOWNERS MUST SIGN THIS APPLICATION.

David E. Burley
Signature (s) of Applicant
David E. Burley Regional Director

9/10/2012
Date

Michael J. Obuchowski
Signature (s) of Landowners:
Michael J. Obuchowski, Commissioner

9/10/2012
Date

Complete the following:

Year Property Acquired: Purchased June 1970/1971 Size of Property in Acres: 10.01 Acres
Frontage on Road (s) or Access by Rights of Way: 952' +/-
Existing Use of Property: General Services Facility & Public Safety Field Station

Proposed Use of Property:

7 Bed residential mental health facility
General Services Facility & Public Safety Field Station

Deed Book 34 page 98-99 Deed Book 51 page 547

Description of Project Applied For:

State of Vermont intends to place 7,100 sq. ft. of prefabricated modular units on a temporary basis not to exceed 3 years for the housing of up to 7 mental health patients to alleviate a short term crisis in mental health beds.

Dimensions of Proposed Buildings		
Length <u>80' +/-</u>	Width <u>86' +/-</u>	Height: <u>15' +/-</u>
Total Footprint Square Feet: <u>7,100 sq. ft.</u>		
Setbacks from centerline of Rights of Way or Public Road (s): <u>185' +/-</u>		
Property Lines (Setbacks) Front: <u>115' +/-</u> Rear: <u>390' +/-</u> Side(s): <u>75' +/-</u>		

For Use by Administrative Officer	
<input checked="" type="checkbox"/> Approved	} Date of Decision: <u>9/26/12</u> } Effective Date: <u>10/26/12</u>
<input type="checkbox"/> Denied	
<input type="checkbox"/> Referred to Planning Commission	
<input checked="" type="checkbox"/> Referred to Board of Adjustment	
Remarks and or conditions: <u>negotiate screening with neighbor, all lights to be down lights</u>	
Authorized Signature: <u>[Signature]</u>	Date: <u>9/26/12</u>
Date of Approval or Denial by Planning Commission:	
Date of Approval or Denial by Board of Adjustment: <u>9/26/12</u>	

Submission Requirements and Sketch Plan

Please include a sketch with measurements and attach your project drawn to scale. List all information. You may use the space provided below or attach separate sheets.

- Dimensions of Lot ✓
- Existing curb cuts and driveways ✓
- Existing and proposed setbacks ✓
- Dimensions of all structures ✓
- Location of existing and proposed structures ✓
- Property lines and dimensions ✓
- Easements and or rights-of-way ✓
- Access to public roads, parking. ✓
- Outside storage areas. ✓
- Location of existing & Proposed water and waste-water systems ✓ *see Attachments*

see Attachments

TOWN ROAD

Route 2 @ 1373 Rt. 2 Middlesex, VT.

Supplementary Information
7 Bed Temporary Secure Residential Unit
Middlesex, Vermont

In accordance with Section 5.5 of the Middlesex Land use and development Regulations; The following additional comments are submitted for consideration:

(C) General Standards:

1. Capacity of existing or planned community facilities or services: This facility is not likely to increase the demand for municipal services. Police protection, if necessary – will be provided by the adjacent Public Safety Field Station and the facility will be completely sprinkled as a result of life safety code requirements.
2. Character of the neighborhood or area affected: This facility – due to its temporary nature – i.e. not more than 3 years - will be removed once the new VSH has been permitted, built and has been in operation for up to 6 months. There are few adjoining residential neighbors and as it is located in the Industrial District any minor impact will be of short duration and minor in nature. And further as this facilities need has been well publicized what minor impacts created are far overshadowed by the importance of providing these services at this site. The state has looked into several alternative locations and this is a superior location to all other sites investigated to this point.
3. Traffic on roads and highways in the vicinity: This location is served by a major State Route – Route 2 and is immediately adjacent to the interstate exit making this location ideal for the purposes intended.
4. Bylaws in effect: The board is to determine conformance with the Town Plan.

(D) Zoning District Standards: Included in our application is a matrix comparing the Industrial District requirements to the planned results of our project. We meet and exceed all stipulated requirements for the Industrial zoning district.

**TOWN OF MIDDLESEX
ZONING DEPARTMENT**

CERTIFICATE OF OCCUPANCY

THIS IS TO CERTIFY THAT

NAME

PROPERTY ADDRESS

HAS SUBSTANTIALLY COMPLETED

THE PROJECT FOR WHICH PERMIT

WAS ISSUED AND IS NOW ABLE TO OCCUPY SAME.

ZONING ADMINISTRATOR

DATE