F.E.M.A. REGION 1 FINAL ENVIRONMENTAL ASSESSMENT (E.A)

VERMONT STATE AGRICULTURE AND ENVIRONMENTAL LABORATORY (V.A.E.L), RANDOLPH, ORANGE COUNTY, VT

4022-DR-VT, PUBLIC ASSISTANCE (P.A.) GRANT PROGRAM
JUNE 20, 2016

U.S. Department of Homeland Security (D.H.S.)
Federal Emergency Management Agency (F.E.M.A.)
Region I, Environmental & Historic Preservation Office (R.1.E.H.P.)
99 High St., 6th Floor
Boston, MA 02110

Prepared for:

U.S. Department of Homeland Security (D.H.S.)
Federal Emergency Management Agency (F.E.M.A.)
Region I, Environmental & Historic Preservation Office (R.1.E.H.P.)
99 High St., 6th Floor
Boston, MA 02110

Contacts:

David Robbins, Regional Environmental Officer
(978) 914-0378; david.robbins@fema.dhs.gov

Lydia Kachadoorian, Deputy Regional Environmental Officer
(617)956-7610 lydia.kachadoorian@fema.dhs.gov

Prepared by:

DuBois & King, Inc.
28 North Main Street
Randolph, VT 05060-0339

&

U.S. Department of Homeland Security (D.H.S.)
Federal Emergency Management Agency (F.E.M.A.)
Region I, Environmental & Historic Preservation Office (R.1.E.H.P.)
99 High St., 6th Floor
Boston, MA 02110

DRAFT ENVIRONMENTAL ASSESSMENT
VERMONT STATE AGRICULTURE AND ENVIRONMENTAL LABORATORY

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Acronyms and Abbreviations

A.P.C.D.	Vermont Air Pollution Control Division
B.F.E.	Base Flood Elevation
B.G.S.	Vermont Department of Buildings and General Services
B.M.P.	Best Management Practice
C.A.A.	Clean Air Act
C.E.Q.	Council on Environmental Quality
C.E.R.C.L.A	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
C.W.A.	Clean Water Act
D.E.M.H.S.	Vermont Division of Emergency Management and Homeland Security
D.H.P.	Vermont Division for Historic Preservation
E.A.	Environmental Assessment
E.I.S.	Environmental Impact Statement
E.O.	Executive Order
E.S.A.	Endangered Species Act
F.E.M.A.	Federal Emergency Management Agency
F.I.R.M.	Flood Insurance Rate Map
F.O.N.S.I.	Finding of No Significant Impact
G.I.S.	Geographic Information System
L.E.E.D.	Leadership in Energy and Environmental Design
M.S.G.P.	Multi-Sector General Permit
N.A.A.Q.S	National Ambient Air Quality Standards
N.E.L.A.C.	National Environmental Laboratory Accreditation Conference
N.E.P.A.	National Environmental Policy Act
N.F.I.P.	National Flood Insurance Program
N.H.P.A.	National Historic Preservation Act
N.P.D.E.S.	National Pollutant Discharge Elimination System
N.P.L.	National Priority List
N.R.A.	Natural Resources Atlas
N.R.C.S.	Natural Resources Conservation Service
P.A.	Public Assistance
P.N.P.	Private Non-Profit
R.C.R.A.	Resource Conservation and Recovery Act
S.Q.G.	Small Quantity Generator
T.R.O.R.C.	Two Rivers Ottauquechee Regional Commission
U.S.A.C.E.	U.S. Army Corps of Engineers
U.S.E.P.A.	U. S. Environmental Protection Agency
U.S.G.B.C.	U.S. Green Building Council
U.S.D.A.	U.S. Department of Agriculture
U.S.F.W.S.	U.S. Fish and Wildlife Service
V.A.E.L.	Vermont Agriculture and Environmental Laboratory
V.A.N.R.	Vermont Agency of Natural Resources
V.A.F.M.	Vermont Agency of Agriculture, Food and Markets

V.A.Q.C.	Vermont Air Quality and Climate Division
V.D.E.C.	Vermont Department of Environmental Conservation
V.D.F.S.	Vermont Division of Fire Safety
V.D.G.P.D.	Vermont Drinking and Groundwater Protection Division
V.F.P.R.	Vermont Department of Forests, Parks and Recreation
V.F.W.D.	Vermont Fish and Wildlife Department
V.T.C.	Vermont Technical College
V.W.M.D.	Vermont Waste Management Division
W.S.O.C.	Waterbury State Office Complex

1.0 INTRODUCTION

As a result of damages caused by Tropical Storm Irene (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 of 1973 (Stafford Act). This major disaster declaration, referenced as F.E.M.A.-4022-DR-VT, authorizes the Federal Emergency Management Agency (F.E.M.A.) to provide Public Assistance (P.A.) through the Vermont Division of Emergency Management and Homeland Security (D.E.M.H.S./Grantee) to local governments, state agencies and eligible Private Non-Profit (P.N.P.) organizations in all Vermont counties.

In response to Irene and the flooding within the Waterbury State Office Complex (W.S.O.C.), the State of Vermont took immediate action to relocate laboratory facilities and staff housed in the Vermont State Agriculture and Environmental Laboratory (V.A.E.L.) on the W.S.O.C. campus to alternate facilities around the state. The State of Vermont Department of Buildings and General Services (B.G.S./Sub-Grantee) has applied for assistance under the P.A. program to relocate the function of the state-run agriculture and environmental laboratories from the W.S.O.C. to a new facility to be constructed on the campus of the Vermont Technical College (V.T.C.) in Randolph, Vermont (Appendix A-1).

This Environmental Assessment (E.A.) has been prepared in accordance with 44 Code of Federal Regulations (C.F.R.) for F.E.M.A., Subpart B, Agency Implementing Procedures, Part 10.9, and pursuant to Section 102 of the National Environmental Policy Act (N.E.P.A.) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (C.E.Q.); 40 C.F.R. Parts 1500-1508. The purpose of this E.A. is to analyze the potential environmental impacts of proposed alternatives to this project to determine whether to prepare an Environmental Impact Statement (E.I.S.) or a Finding of No Significant Impact (F.O.N.S.I.).

F.E.M.A. is also using this E.A. to document compliance with other applicable federal laws and Executive Orders (E.O.) including: the Clean Air Act (C.A.A.), the E.O. 13693: Planning for Federal Sustainability, the Clean Water Act (C.W.A.), the E.O. 11988: Floodplain Management, the E.O. 11990: Protection of Wetlands, the Endangered Species Act (E.S.A.), the National Historic Preservation Act (N.H.P.A.), and the E.O. 12898: Environmental Justice.

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. The Village of Waterbury was one of the most severely impacted communities, with flood damage to over 250 buildings. In Waterbury, floodwater (mainly 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 F.E.M.A. for the W.S.O.C. site. The flooding and loss of power required the evacuation of the agriculture and environmental laboratories to other facilities around the state. As of June 2016, laboratory facilities and staff still operate from a network of five separate facilities.

The proposed project involves the construction of a new facility for the state-run agriculture and environmental laboratories on the campus of the V.T.C. in Randolph, Vermont. The freestanding facility would provide a laboratory building with 37,995 square feet of floor space, a wood chip heat plant, a vehicle storage building and parking for 72 vehicles. The site design includes a roadway connection between the laboratory and V.T.C.'s main campus area, which would allow shared parking during overflow situations. Pedestrian walkways would be provided on-site. The project is being designed to be at least U.S. Green Building Council (U.S.G.B.C.) Leadership in Energy and Environmental Design (L.E.E.D.) Gold equivalent (version 4.0).

1.2 Purpose and Need

Purpose

The purpose of the Stafford Act, as amended, is to provide a range of federal assistance to state and local governments to supplement efforts and resources in alleviating damage or loss from major disasters and/or emergencies. Through F.E.M.A.'s P.A. program, the Agency provides grant assistance to state, tribal, and local governments, and eligible P.N.P. organizations for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly-owned facilities and the facilities of eligible P.N.P. organizations. The P.A. program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. The purpose of this E.A. is to analyze the potential environmental impacts of proposed alternatives to this project.

Need

Prior to late August 2011, the state's 33,210-square-foot Agricultural and Environmental Laboratory was located at the W.S.O.C. The laboratories supported the missions of the agencies of Agriculture, Food and Markets and Natural Resources by supporting and encouraging commerce while protecting the working landscape, human, animal, and plant health and the environment.

Tropical Storm Irene damaged the laboratories substantially. Floodwater reached a height of 2.8 feet on the first floor, inundating floors, walls, electrical equipment, heating ventilation air conditioning components, cabinetry and the elevator, thereby necessitating repair or replacement of the building and its laboratories. Since the time of the initial damage, the laboratories and associated functions (i.e., forest biology, environmental chemistry, fish and wildlife analysis, air quality, animal pathology) have been dispersed at different locations around the state. The proposed project would reunite these services at a single location more centralized within the state and favorable for supporting various functions.

2.0 ALTERNATIVES CONSIDERED

C.E.Q. regulations require federal agencies to consider a reasonable range of alternatives that meet the purpose and need of proposed actions in their N.E.P.A. review. Reasonable alternatives include other possible means to meet project needs, but with varying degrees of environmental impact. Under N.E.P.A. guidelines, a No Action Alternative is also required, in large measure to set a baseline by which to judge the other practicable alternatives.

The following section describes various alternatives analyzed and considered in restoring the functionality of the V.A.E.L. at one consolidated location. The alternatives that were analyzed and dismissed were not considered further within this document when comparing the impacts to resources on the selected alternatives.

The State of Vermont considered returning the V.A.E.L. to facilities at the W.S.O.C., as well as to nineteen potential new locations in eight municipalities, including Colchester, Burlington, South Burlington, Richmond, Waterbury, Montpelier and Berlin, and five potential sites on the campus of the V.T.C. in Randolph. According to B.G.S., the V.T.C. site is the only location that possessed the following combined advantages: 1) State-owned land; 2) offers potential to share utilities such as heat; 3) offers ease of construction; 4) easily accessible to Agency staff; and 5) strong program benefits such as increased collaboration between faculty and staff.

2.1 Alternative 1 – The No Action Alternative

Under the No Action Alternative, B.G.S. would continue to operate the current network of five replacement facilities to replace the functions of the W.S.O.C. lab. The use of these disparate facilities hinders collaboration among the laboratory facilities and staff, resulting in redundancy and inefficiency. Furthermore, the majority of the W.S.O.C. laboratory functions were temporarily located in the Hills Building on the University of Vermont campus, and the University intends to demolish the building as part of its long-range plan.

2.2 Alternative 2 - Proposed Alternative - V.T.C. Campus, Northern Site

The State of Vermont proposes to construct a new V.A.E.L. on the northern edge of the V.T.C. campus in Randolph, Vermont. The center of the site is at approximately N 43.941796 W -72.603721. The site is bordered to the north by Furnace Street, and partially bordered to the south by Admin Drive. It is approximately 750 feet east of Vermont Route 66 (Ridge Road).

The site is centrally located in the state, and offers opportunities for collaboration among the agriculture and environmental labs, equipment and staff with V.T.C.'s agriculture, engineering and veterinary technology programs and with Orange County's strong working landscape economy. It is also in proximity to higher education and health care institutions, including Gifford Medical Center, the Vermont Law School, Dartmouth College and the Dartmouth-Hitchcock Medical Center (Appendix B).

The facility would be comprised of a two-story laboratory building with 37,995 square feet of floor space, a vehicle storage area and wood chip heat plant. The site plan will provide 72 parking spaces and a roadway connection between the laboratory and V.T.C.'s main campus area, allowing the sharing of parking in overflow situations. Access to the V.A.E.L. would be from Admin Drive within the V.T.C. campus. Pedestrian walkways would be provided on site. The project would use municipal water through V.T.C. The building and infrastructure would be L.E.E.D. Gold equivalent (version 4.0), at minimum. The overall project has been designed to be as compact as possible, and would have a footprint of approximately 2.2 acres, keeping the rest of the site in agricultural use (Appendix A-2).

2.3 Other Alternatives Considered and Eliminated

2.3.1 Return Vermont Agriculture and Environmental Laboratory to Waterbury State Office Complex

The W.S.O.C. site lies within the floodplain of the Winooski River. The floodwaters from Tropical Storm Irene reached a height of 2.83 feet on the first floor of the original V.A.E.L. at the W.S.O.C., inundating floors, walls, electrical equipment, Heating Ventilation Air Conditioning (H.V.A.C.) components, cabinetry and the elevator.

In addition to necessary repairs, F.E.M.A. studied three flood-proofing options, as discussed in an October 19, 2015, letter from George Vanderschmidt of F.E.M.A. to Justin Johnson of the Vermont Agency of Administration, to bring the building into compliance with the Town of Waterbury's May 2012 Interim Zoning Regulations (Appendix C-1). These regulations require that, among other things, upon repair, substantially damaged buildings must be flood-proofed to a level of at least the Base Flood Elevation (B.F.E.) plus two feet. The three flood-proofing options were:

1. Dry proof the building by using either exterior wall dry flood-proofing or constructing a perimeter flood wall up against the exterior wall;
2. Elevate the building to the B.F.E.+2 feet; or
3. Abandon the Ground or Basement Levels and add a new Upper Level.

B.G.S. proposed a greater than minimum hazard mitigation measure involving the dry flood-proofing of the building to an elevation of the B.F.E. plus 4.7 feet. These measures were found to be compliant with F.E.M.A.'s Recovery Policy, and F.E.M.A. approved the Hazard Mitigation Proposal. In preparation for reconstruction at the W.S.O.C, B.G.S. requested approval for the abatement of hazardous materials and demolition of the damaged V.A.E.L (Appendix C-2). On March 30, 2015, the Vermont Agency of Administration, on behalf of B.G.S. sent a letter to F.E.M.A. providing an update and requesting an Improved Project in addition to a time extension. At that time, B.G.S. informed F.E.M.A. that it no longer intended to rebuild the V.A.E.L. at the W.S.O.C, but rather pursue construction of a new facility on the V.T.C campus in Randolph, Vermont.

2.3.2 Construction of a New Facility at Twenty-Two Additional Alternate Sites

The Vermont legislature, through Act 178 of 2014, Section 33 (Act 178, 2014), requested that B.G.S., the Vermont Agency of Agriculture, Food and Markets (V.A.F.M.) and the Vermont Agency of Natural Resources (V.A.N.R.) submit a site location proposal for a shared laboratory to the House Committee on Corrections and Institutions and the Senate Committee on Institutions, noting that it was the intent of the General Legislature that when evaluating site locations, preference was to be given to state-owned property.

Initially, nineteen alternate locations were considered, including the aforementioned V.T.C. Campus Northern Site (Proposed Alternative). At that time, fifteen privately-own and four state-owned sites in eight municipalities (including Colchester, Burlington, South Burlington, Richmond, Waterbury, Montpelier and Berlin, and Randolph) were evaluated according to a scoring system that utilized eight criteria: lot size, lot physical characteristics, utilities, zoning/permitting, neighborhood, special construction costs, benefits of the location to users, and benefits of the location to the State of Vermont as a whole. The V.T.C. Campus Northern Site in Randolph scored highest in this ranking system (Appendix A-3). A report on the site review process was presented to the legislative committees referenced above, who in turn recommended the V.T.C. site to the Joint Fiscal Committee. On September 5, 2014, this site was formally chosen for the V.A.E.L., thus eliminating the other eighteen sites from further review.

More recently, in a further effort to be thorough and build strong relationships with the Randolph Center community, four additional locations were evaluated against the V.T.C. Campus Northern Site employing the same criteria utilized for the original nineteen. Of these four additional sites, three were located on the V.T.C. campus and the other was off-campus. The original site, on the northern edge of V.T.C.'s campus, was again found to be the best choice (Appendix A-4). The result of this review eliminated the other four potential sites from further consideration.

In summary, twenty-two additional alternate sites were measured against the V.T.C. Campus Northern Site and each was found to be lesser-rated than the Proposed Alternative for reasons documented in the aforementioned appendices.

3.0 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED

The ***No Action Alternative*** as defined under N.E.P.A. (40 C.F.R. 1502.14(d)) is continued use of laboratory facilities scattered throughout the state, and is not evaluated further since there would be no added adverse effect to the environment if this alternative were chosen.

The ***Proposed Alternative*** as defined under N.E.P.A. (40 C.F.R. 1502.14(e)) may have direct effects on the V.T.C. site. These potential effects are addressed where appropriate.

Environmental reviews typically conducted for F.E.M.A.-funded projects consider a variety of federal environmental laws to determine if they are triggered by a proposed action. The following laws were considered, but were determined not to apply to actions related to any of the alternatives: Coastal Barrier Resources Act; Coastal Zone Management Act; Fish and Wildlife Coordination Act; Migratory Bird Treaty Act; and the Wild and Scenic Rivers Act.

Under F.E.M.A.'s P.A. program, all sub-grantees are required to comply with all federal, state and local environmental laws and regulations. For this Proposed Action as defined under N.E.P.A. (Federal Register Vol. 46. No.55. 18028. March 23,1981), B.G.S. is obligated to comply with Act 250 (10 VSA Chapter 151) – Vermont's Development and Control Law. Act 250 is administered by the District Environmental Commissions of the Natural Resources Board and is the state's principle framework to ensure that the requirements of state and local laws and ordinances are met.

The Act 250 program provides a public, quasi-judicial process for reviewing and managing the environmental, social and fiscal consequences of major subdivisions and developments in Vermont. Act 250 considers a number of environmental resource variables covered in this E.A. However, the specifics of these reviews may differ. The Act 250 review may incorporate other permits required by the State of Vermont including, but not limited to, permits issued by the Agency of Natural Resources, review by the Division for Historic Preservation, and review by the Agency of Agriculture. Act 250 also considers town and regional plans.

Table 3-1 summarizes the effects described and analyzed in this chapter. 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.
PROPOSED ALTERNATIVE: SUMMARY OF POTENTIAL EFFECT, COORDINATION AND MITIGATION APPLIED

Affected Environment/ Resource Area	Preferred Alternative	Impact - Negligible	Impact - Minor	Impact - Moderate	Impact - Major	Agency Coordination/ Permits	Mitigation/B.M.P.s	Comments
Geology	**New Lab at V.T.C. north**	**X**				None	None	No impacts to geology.
Soils	**New Lab at V.T.C. north**		**X**			N.R.C.S.; V.A.F.M.	On-site mitigation for farmland provided per 10 VSA §609, subject to VT Act 250 approval. Stormwater Plan BMP's include pervious pavers, a bio-retention area, underground chamber systems, and stormwater system outlet to the existing stabilized drainage outfall.	Agricultural/farmland soil impacts mitigated on-site. Pesticide and herbicide residues at insignificant levels.
Vegetation	**New Lab at V.T.C. north**	**X**				V.A.N.R. N.R.A. mapping	None	No impacts to plant species of concern or to significant natural communities.
Wildlife	**New Lab at V.T.C. north**	**X**				Coordination with U.S.F.W.S., V.F.W.D.	V.F.P.R. Voluntary Guidelines for Landowners in Vermont. Alternate bidding for wood chips from certified sustainable forests.	No impacts to animal species of concern or critical habitats.
Threatened and Endangered Species	**New Lab at V.T.C. north**	**X**				Coordination with U.S.F.W.S., V. F.W.D.	V.F.P.R. Voluntary Guidelines for Landowners in Vermont.	No impacts to roost trees or hibernacula. No effect to threatened or endangered species.
Floodplains	**New Lab at V.T.C. north**	**X**				F.E.M.A. and V.A.N.R. mapping show no floodplains	None	No impact on floodplains or flooding.
Wetlands	**New Lab at V.T.C. north**	**X**				No wetlands on N.W.I. mapping.	None	Delineation completed, no impacts to wetlands or buffers anticipated.
Groundwater	**New Lab at V.T.C. north**	**X**				V.D.G.P.D., no source protection areas	Spill Prevention Plan, per N.E.L.A.C. guidelines	Municipal water and sewer will not impact groundwater.

Affected Environment/ Resource Area	Preferred Alternative	Impact - Negligible	Impact - Minor	Impact - Moderate	Impact - Major	Agency Coordination/ Permits	Mitigation/B.M.P.s	Comments
Archaeological Resources	**New Lab at V.T.C. north**	**X**				SHPO finding of No Effect, June 22, 2014. Stockbridge-Munsee tribe had no comments.	N.H.P.A. inadvertent discoveries requirement	No impacts to archeological resources.
Historic Buildings	**New Lab at V.T.C. north**	**X**				SHPO finding of No Effect, June 22, 2014.	None	No impacts to historic buildings.
Land Use and Zoning	**New Lab at V.T.C. north**	**X**				Randolph Zoning Permit	The facility has been designed to comply with the Randolph zoning ordinances, and the project will follow the Design Review Process.	Project will require Conditional Use determination and Site Plan Approval under current zoning regulations, and Site Plan Approval only under proposed zoning regulations.
Utilities	**New Lab at V.T.C. north**	**X**				Town of Randolph affirms adequate sewer and water allocation.	Water meter to be installed prior to occupancy.	Requires pump station to tie into existing sewer system and potable water tie-in to V.T.C. water system. Will tie into on-site telecommunications and power utilities.
Traffic and Parking	**New Lab at V.T.C. north**	**X**				Town of Randolph	Parking requirements in Randolph Zoning Ordinances	Traffic impact assessment found that the facility would not have a significant impact.
Potable Water, Wastewater, Stormwater	**New Lab at V.T.C. north**		**X**			N.P.D.E.S. Construction General Permit, Low Risk anticipated; Wastewater and Potable Water Supply Permit; Operational Stormwater Permit;	U.S.G.B.C. L.E.E.D. Gold standards for stormwater management and water conservation. Stormwater Plan BMP's include pervious pavers, a bio-retention area, underground chamber systems, and stormwater system outlet to the existing stabilized drainage outfall.	Project will result in increase in impervious area from the current level of development. Potable water to be supplied from two public sources.

Affected Environment/ Resource Area	Preferred Alternative	Impact - Negligible	Impact - Minor	Impact - Moderate	Impact - Major	Agency Coordination/ Permits	Mitigation/B.M.P.s	Comments
Air Quality	**New Lab at V.T.C. north**	**X**				V.A.Q.C.; no permit required. Act 250; dust control. VT Construction Stormwater Discharge permit.	Compliance with VT Act 250 applicable air pollution control regulations; VT Construction Stormwater Discharge Permit will help to manage dust through stabilized construction entrance, dust control with water or calcium chloride, and minimization of disturbed land at any one time.	Laboratory and wood chip heat plant will not require Air Pollution Control permit.
Noise	**New Lab at V.T.C. north**		**X**			Town of Randolph	Town of Randolph Development Review Board restrictions will apply. Construction equipment will meet local, state and federal noise regulations. Idling time shall be limited onsite.	There may be a temporary increase in noise during construction. HVAC and boiler plant noise levels expected to be within typical noise levels for such systems. Minimal increase in noise levels at neighbor property lines.
Asbestos, Structural Debris, and Fuel Tanks	**New Lab at V.T.C. north**		**X**			V.T.W.M.D.; V.D.F.S. tank permit	Compliance with V.W.M.D. Solid Waste Rules. Waste reduction plan per Act 250 and L.E.E.D. equivalency. V.D.F.S. tank permit, with Storage and Use Plan, for belly tank.	One underground propane tank, no underground fuel oil tanks, one above-ground diesel fuel belly tank, two above-ground nitrogen tanks, one above-ground argon tank. No stumps or asbestos.
Hazardous Waste	**New Lab at V.T.C. north**		**X**			V.D.F.S.; V.W.M.D., Hazardous Materials Management Program; V.A.F.M.; U.S.E.P.A.	V.D.F.S. Hazardous Materials Storage and Use Plan; Laboratory emergency management plan with Spill Prevention, Countermeasure & Control Plan. Hazardous Waste Handler Site ID; N.E.L.A.C. accreditation.	Site will be a Small Quantity Generator. Environmental Site Assessment not warranted. No C.E.R.C.L.A. sites. R.C.R.A. regulations under V.W.M.D. authority.
Seismic Safety	**New Lab at V.T.C. north**	**X**				V.A.N.R. N.R.A. geology layer indicates low potential for seismic activity	None	No impacts.

Affected Environment/ Resource Area	Preferred Alternative	Impact - Negligible	Impact - Minor	Impact - Moderate	Impact - Major	Agency Coordination/ Permits	Mitigation/B.M.P.s	Comments
Environmental Justice	**New Lab at V.T.C. north**	**X**				EPA 2010 Census Summary Report, Two Rivers Ottauquechee Regional Commission demographics reports.	None	No disproportionate impacts to minority or low-income populations will occur.
Climate Change	**New Lab at V.T.C. north**	**X**				E.O. 13693	USBGC L.E.E.D. Gold standards	Biomass heat plant will reduce dependence on fossil fuels.

3.1 Terrestrial and Biological Resources

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

3.1.1 Geology

3.1.1.1 Affected Environment

Underlying bedrock geologic features can significantly affect regional and local topographic variability, vegetative cover types, wildlife habitat and weather.

The Vermont Department of Environmental Conservation (V.D.E.C.) maintains a Geographic Information System (G.I.S.) database for data of environmental interest and makes this data available through environmental interest mapping tools, such as the Natural Resource Atlas (N.R.A.).

The N.R.A. database Geology Layer (Appendix C-3) indicates that the site is located within the Connecticut River Valley Trough belt of the Gile Mountain Formation. The primary rock type is schist, and the secondary rock type is quartzite. The surficial geology is glacial till. There are no unique or protected geologic resources or geologic hazards in the project vicinity.

3.1.1.2 Environmental Consequences

No environmental consequences related to geology have been identified and therefore the project would result in negligible impacts to geology.

3.1.2 Soils

3.1.2.1 Affected Environment

Because high-quality farmland is limited, the U.S. Department of Agriculture (U.S.D.A.) recognizes that responsible governing bodies, as well as individuals, should encourage and facilitate the wise use of our nation's prime farmland. The Farmland 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."

N.R.A. mapping of National Resource Conservation Service (N.R.C.S.) soils units in the vicinity of the project is provided as Appendix C-4. The soils classifications at the site according to the N.R.C.S. on-line soil database (N.R.C.S., 2016) include Buckland loam, 8-15% slope (BuC) and Cabot silt loam, 0-8% slope (CaB). The parent material of both soil series is loamy lodgment till. The Buckland soil is moderately well drained, and the Cabot soil is poorly drained. Buckland loam 8-15% slope is classified as agricultural soil of statewide importance. Cabot silt loam 0-8% is classified as statewide (b) agricultural soil, limited by wetness (N.R.C.S., 2016).

3.1.2.2 Environmental Consequences

The project would impact 2.15 acres of agricultural soil (Appendix C-5). Impacts to the agricultural soil were assessed in an N.R.C.S. Farmland Conversion Impact Rating (Appendix C-6). The Site Assessment Criteria totaled 158, which is below the threshold of 160 for which NRCS typically requests re-evaluation of impacts to the site. In addition to being below the NRCS threshold for re-evaluation, the site design includes a proposed 6.0 acre prime agricultural soils mitigation area in the northeastern portion of the site (Appendix C-7).

The impacts and proposed mitigation were reported in a V.A.F.M. application (Appendix C-8). The V.A.F.M. found that the amount of mitigation required pursuant to 10 VSA §6093(a) is 4.3 acres. The proposed mitigation site is 6.0 acres. Therefore, the proposed mitigation is acceptable to the V.A.F.M., but subject to final approval by the Vermont Land Use District Commission through the Act 250 permit (Appendix C-9).

Site clearing, grading and construction at the site would create a potential for soil erosion and transport. The project will require a Vermont Stormwater Construction General Permit to comply with state law and the federal Clean Water Act. A stormwater management plan for the project includes best management practices such as pervious pavers for vehicle parking spaces, a bio-retention area for treatment of stormwater from the upper asphalt driveway, underground chamber systems for water quality filtering and peak flow control for runoff from building rooftops and the lower asphalt driveway, and stormwater system connection to the existing stabilized drainage outfall in the southwestern corner of the site (Appendix C-10). U.S.G.B.C. L.E.E.D. design guidance will be used for stormwater management.

The site has been tested at four sample sites for herbicide and pesticide residue, since the land had been actively used for corn production for many years. The V.A.F.M. analyzed samples for six herbicides and pesticides. Five of the analytes were not detected, and the sixth, metolachlor, was found in one sample at a level of 0.039 microgram per gram.

Correspondence with V.A.F.M. indicates that this level of metolachor is minimal to the point of insignificant as a source of future exposure risk (Appendix C-11).

Based on all the factors considered, through coordination with regulatory agencies and compliance with required permits, this undertaking would result in only minor impacts to soils.

3.1.3 Vegetation

3.1.3.1 Affected Environment

The site consists primarily of agricultural field, with a gravel road at the southern end of the property. The adjacent property to the west is a mowed recreational field. The adjacent properties to the east and north are agricultural fields. The property to the south consists of development associated with the V.T.C. campus, including roadways, parking lots and buildings.

As shown on N.R.A. mapping, the site does not support any natural communities of concern or rare, threatened or endangered plant species (Appendix C-12). The N.R.A. mapping includes both state and federally listed threatened and endangered plant species, as well as state rare and uncommon plant species.

3.1.3.2 Environmental Consequences

Based on references cited, the project would have a negligible impact on vegetation.

3.1.4 Wildlife

3.1.4.1 Affected Environment

The site consists primarily of agricultural field with a small gravel road at the southern end. It does not provide significant wildlife habitat. N.R.A. mapping shows no significant natural communities, deer winter range, state rare, threatened or endangered animal species or federal threatened or endangered species in the vicinity of the project (also included in Appendix C-12). No lakes or fish-bearing streams are located on the property. Small mammals may live on this developed property and game animals may pass through it.

3.1.4.2 Environmental Consequences

A January 27, 2016 Vermont Fish and Wildlife Department (V.F.W.D.) review found “no issues of immediate concern to the department,” but requested further review of the project’s protocols for sourcing biomass (Appendix C-13). This comment refers to the cutting of forests to provide the wood chips for the proposed boiler, in relation to the potential of that work to impact fish and wildlife. In accordance with the 2016 Vermont State Agency Energy Plan (B.G.S., 2016), wood products purchased for use in state building heating systems will be sourced from forests managed in accordance with the Vermont Department of Forests, Parks and Recreation (V.F.P.R.) “Voluntary Harvesting Guidelines for Landowners in Vermont” (V.F.P.R., 2015). The guidelines cite state and federal laws and regulations protecting endangered and threatened species, and provide guidance for the protection of biodiversity and wildlife habitat, as well as for water resources and soils. B.G.S. has for years included in their bidding documents the opportunity for suppliers to provide alternate pricing to provide wood chips from certified

sustainable forests, as stated in a March 9, 2016 letter from B.G.S. to V.F.W.D. (Appendix C-14). Upon review of the B.G.S. March 9, 2016 letter, the V.F.W.D. found no issues of concern in regard to the V.A.E.L. (Appendix C-15).

Based on references cited, the project would have a negligible impact on wildlife.

3.1.5 Threatened and Endangered Species

3.1.5.1 Affected Environment

The site is located almost entirely on agricultural field. The N.R.A. database shows no significant natural communities or state or federal rare, threatened or endangered species in the vicinity of the project (Appendix C12).

The U.S. Fish and Wildlife Service (U.S.F.W.S.) maintains a list of federally listed threatened and endangered species. The species list for this project indicates the potential presence of the federally listed Northern Long-eared Bat (Appendix C-16). The U.S.F.W.S. Northern Long-Eared Bat Final 4(d) Rule (U.S.F.W.S., 2016) regulates activities which might harm this species, including any activities within winter refuges (hibernacula) and tree cutting within one-quarter mile of hibernacula or within 150 feet of a known, occupied roost tree. Known hibernacula and roost trees are mapped by the Vermont N.R.A.

3.1.5.2 Environmental Consequences

The Northern Long-eared Bat is considered to exist statewide in Vermont, although its numbers have been drastically reduced in recent years by the disease, white-nose syndrome. The habitat for this species includes caves and mines for winter hibernacula and forested habitat for summer foraging and roost trees. The site is devoid of caves, mines and trees that could provide critical habitat for the species.

In accordance with the 2016 Vermont State Agency Energy Plan (B.G.S., 2016), wood products purchased for use in state building heating systems will be sourced from forests managed in accordance with the Vermont Department of Forests, Parks and Recreation (V.F.P.R.) “Voluntary Harvesting Guidelines for Landowners in Vermont” (V.F.P.R., 2015). The guidelines cite state and federal laws and regulations protecting endangered and threatened species, and provide guidance for the protection of biodiversity and wildlife habitat, as well as for water resources and soils.

Based on the references cited, the project would have a negligible impact on threatened and endangered species. In addition, F.E.M.A. made a finding of “No Effect” with regard to the proposed project impact on the Northern Long-Eared Bat and its habitat.

3.2 Aquatic Resources

The site is located in an upland setting approximately 750 feet west of and 30 feet higher in elevation than Penny Brook. Penny Brook flows southeastward from the site approximately 2.9 miles to its junction with the Second Branch of the White River.

3.2.1 Floodplains

3.2.1.1 Affected Environment
E.O. 11988 directs federal agencies to assume leadership in avoiding direct or indirect support of development in the 100-year floodplain. F.E.M.A.'s National Flood Insurance Program (N.F.I.P.) publishes maps that identify areas at risk from flooding based on a 100-year and 500-year storm event.

The site is located within F.E.M.A. Floodplain Map, Panel Number 5000730010B, effective date July 16, 1991, but this panel is not printed (Appendix C-17). A non-printed panel has the potential to be a surveyed area that contains no floodplains. It can also have the potential to be an area that was not surveyed, so the potential presence of floodplains is unknown. Given the topography of the area and the location of the nearest stream, Penny Brook, at a distance of 750 feet east and 30 feet lower in elevation, it is unlikely that floodplain is present on the site. The Vermont N.R.A. database shows no floodplain or other flood prone area in the vicinity of the site, but does show a 50-foot setback for the Penny Brook stream corridor (Appendix C-18).

3.2.1.2 Environmental Consequences
The project would not encroach on any F.E.M.A. or state-mapped floodplain or other flood prone area, or the 50-foot setback for the stream corridor. Based on references cited, the project would have a negligible impact on floodplains.

3.2.2 Wetlands

3.2.2.1 Affected Environment
E.O. 11990 requires federal agencies to avoid adverse impacts to wetlands to the extent possible. Section 404 of the Clean Water Act (C.W.A.) establishes a wetland permit program administered by the U.S. Army Corps of Engineers (U.S.A.C.E.). The Vermont Wetland Rules identify significant wetlands and regulate activities in and near these wetlands.

The U.S.F.W.S. National Wetlands Inventory mapping indicates the presence of a Freshwater Forested/Shrub wetland along Penny Brook, approximately 790 feet east of the project area (Appendix C-19).

Wetland in the vicinity of the site was field-delineated on October 7 and 16, 2014, and the boundary was added to the Existing Conditions Plan (Appendix C-20). The wetland is subject to both federal and state wetland rules and regulations.

3.2.2.2 Environmental Consequences
The state and federally-jurisdictional wetland and the state-jurisdictional, 50-foot wetland buffer are outside of the site work and would not be impacted. Thus, no permitting or further review of wetlands will be required. Based on references cited, the project would have a negligible impact on wetlands.

3.2.3 Groundwater

3.2.3.1 Affected Environment

V.D.E.C. has adopted a Groundwater Protection Rule and Strategy to protect Vermont's groundwater resource (V.D.E.C., 2005). This rule provides for the establishment of Groundwater Source Protection Areas to protect public water supplies obtained from groundwater. The Vermont Drinking and Groundwater Protection Division (V.D.G.P.D.) identifies two Groundwater Source Protection Areas in the vicinity of the project, but none within the site itself (Appendix C-21).

3.2.3.2 Environmental Consequences

The V.A.E.L. would be served by municipal water, primarily through V.T.C. and directly through the village in the event that the V.T.C. system is offline. The V.A.E.L. would be served by the municipal sewer system. Thus, facility water supply and sewer would not impact groundwater.

A spill prevention plan will be prepared for the proposed laboratory, which will include an emergency action plan should there be a spill at the facility. More details on this topic are provided in Section 3.6.4 Hazardous Waste below.

Based on references cited, the project would have a negligible impact on groundwater.

3.3 Cultural Resources

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 can be found in 36 C.F.R. Part 60. Cultural properties include a broader category of physical assets, such as archaeological, architectural, and historical properties, that do not meet National Register criteria, but which may have cultural value.

3.3.1 Archaeological Resources

3.3.1.1 Affected Environment

Native American populations have been present in the geographic area currently defined as Vermont for approximately 11,000 years, and archaeological sites have been identified in many areas of the state.

The National Historic Preservation Act (N.H.P.A.) requires proper treatment of inadvertently discovered archaeological materials and/or human remains.

3.3.1.2 Environmental Consequences

Most of the site has been in agricultural production, including row crops, for years, and the remainder of the site has been developed as a gravel road and construction staging area. Site preparation for the facility would include grading, installation of utilities, construction of buildings and parking areas and other activities that would modify the top few feet of soil within much of the site.

The Vermont Division for Historic Preservation (D.H.P.) conducted a review of the property in 2014, and found that "no archaeologically sensitive areas were identified in the project area" (Appendix C-22).

The Stockbridge-Munsee Tribe was contacted about the proposed V.A.E.L. on February 1, 2016, and a reply was received on February 10, 2016 (Appendix C-23). The tribe considers the V.A.E.L. out of its area of interest and requires no further consultation.

To address the potential for subsurface discoveries of archaeological materials and/or human remains, F.E.M.A. will place the following condition on the grant:

> In the event of the discovery of archaeological materials and/or human remains, B.G.S. and their contractor shall immediately stop all work in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. B.G.S. and their contractor shall secure all human remains discoveries and restrict access to discovery sites. B.G.S. and their contractor shall follow the provisions of applicable state laws, including 13 V.S.A. 3761 (Unauthorized Removal of Human Remains), 13 V.S.A. 3764 (Cemeteries and Monuments – Grave markers and historic tablets) and 18 V.S.A. 5212 (Permit to Remove Dead Bodies) or any amendments or supplanting laws and regulations. Violation of state law will jeopardize F.E.M.A. funding for this project. B.G.S. will inform the Office of the Chief Medical Examiner (802-863-7320), the State Archaeologist (Jess Robinson, 802-272-2509), D.E.M.H.S. (Ben Rose, 802-585-4719), and the F.E.M.A. Deputy Regional Environmental Officer (Lydia Kachadoorian, 857-205-2860). F.E.M.A. will consult with the S.H.P.O. and Tribes, if remains are of tribal origin. Work in sensitive areas may not resume until the consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.

Based on references cited and coordination, the project would have a negligible impact on archaeological resources.

3.3.2 Historic Buildings

3.3.2.1 Affected Environment

There are no buildings located on the proposed V.A.E.L. site. A State Register-listed property, the "Langevin House," is located approximately 1400 feet to the east of the V.A.E.L., and the National Register-listed Randolph Center Historic District is located approximately 500 feet west of the V.A.E.L.

3.3.2.2 Environmental Consequences

The Vermont Division for Historic Preservation (D.H.P.) conducted a review of the property in 2014 and examined the project's impact to the Langevin House and properties included in the Randolph Center Historic District. D.H.P. found that "the Collaborative Laboratory Project will have No Effect on any historic properties that are listed in or eligible for inclusion in the State or National Registers of Historic Places."

Based on references cited, the project would have a negligible impact on historic buildings.

3.4 Land Use and Zoning

3.4.1 Affected Environment

The V.A.E.L. would be located on the northern edge of the existing Vermont Technical College campus. The campus includes residence halls, conference facilities and classroom, office and laboratory buildings. Thus, the proposed agricultural and environmental laboratory would be consistent with current land use. This area is currently zoned rural use by the Town of Randolph. The Town is currently revising their zoning regulations. The laboratory would be classified as a Low Volume Office under the new zoning regulations. The project will be reviewed through the Randolph Development Review Board under both the existing and the proposed regulations.

3.4.2 Environmental Consequences

The facility has been designed to comply with the Town of Randolph existing and proposed zoning ordinances. The project will follow the Design Review Process specified by the Town. A zoning application for the project has been filed, and the Site Plan was presented to the Town's Development Review Board on April 26, 2016. The project would be consistent with existing land use and the local land use and development requirements. As such, the project would have a negligible impact in regard to land use and zoning.

3.5 Infrastructure

3.5.1 Utilities

3.5.1.1 Affected Environment

The site would be serviced by municipal water and sewer, and the town has stated that it has adequate capacity for both. Water would typically be supplied through V.T.C., with a water meter to be installed prior to occupancy (Appendix C-24). In the event that the V.T.C. water is off-line, water would be supplied directly through the village. The project would tie into the Town of Randolph's sewer system at the intersection of East Bethel Road and Route 66 (Main Street) (Town of Randolph, 2015). Public services and utilities are available for this site. Electricity would be provided by Green Mountain Power Corporation and communications by FairPoint Communications. Police protection would be provided by the Orange County Sheriff's Department and the Vermont State Police; V.T.C. maintains a security team on campus. The Randolph Center Fire Station, located on Furnace Street, would provide fire protection, and V.T.C. offers a firefighter degree program on campus. The Town of Randolph operates a solid waste transfer facility. White River Valley Ambulance, in association with Gifford Medical Center, would provide emergency medical and rescue services.

3.5.1.2 Environmental Consequences

All utilities and public safety services are readily accessible. As such, this project would have a negligible impact on them.

3.5.2 Traffic and Parking

3.5.2.1 Affected Environment

Access to the new facility would be from internal roadways within the V.T.C. campus. Furnace Street, a town roadway, would be used only for exiting of long trucks. The laboratory would be staffed by 32 full time employees on-site. It is estimated that an additional 21 state employees would use laboratory facilities on a part-time basis, and an additional 18 temporary/seasonal employees would work at the laboratory. The site plan includes 72 parking spaces, with many of these reserved for state vehicles for air quality monitoring, fish and wildlife investigations, agricultural testing and the like. The site design also includes a roadway connection between the laboratory and V.T.C.'s main campus area, so that parking can be shared between uses in overflow situations.

3.5.2.2 Environmental Consequences

A Traffic Impact Review completed for the site estimates that the facility would generate 197 trips per day, 31 during the morning peak hour and 30 during the afternoon peak hour at maximum seasonal levels of employment. This volume can easily be accommodated by the surrounding roadway network without resulting in any traffic congestion or safety impacts. No traffic impacts during the morning and afternoon peak hours are anticipated from the full proposed operation of the laboratory**,** and no off-site improvements are warranted (Appendix C-25). Parking space would be in conformance with the Town of Randolph Zoning Ordinances.

Based on references cited, the project would have a negligible impact on traffic and parking.

3.5.3 Potable Water, Wastewater, Stormwater

3.5.3.1 Affected Environment

The site would be serviced by municipal water and sewer. Regarding stormwater, the State of Vermont administers the federal Clean Water Act (C.W.A.) and the Vermont Water Quality Regulations. Water quality would be protected from undue adverse impacts due to stormwater runoff through a stormwater management plan and best management practices to be approved through Stormwater Discharge permits issued by the V.D.E.C.

Stormwater Construction Permits address stormwater runoff from earth disturbance activity of one or more acres of land during construction**,** and Stormwater Discharge permits regulate stormwater post-construction.

A Multi Sector General Permit (M.S.G.P.) is a federally mandated National Pollutant Discharge Elimination System (N.P.D.E.S.) permit that covers new and existing discharges of stormwater from industrial facilities. Industrial facilities conduct activities and use materials that have the potential to impact the quality of Vermont's waters. The M.S.G.P. permit requires facilities to examine potential sources of pollution, implement measures to reduce the risk of stormwater contamination, and test stormwater discharges for sources of pollution. The M.S.G.P. will require the preparation of a Stormwater Pollution Prevention Plan.

3.5.3.2 Environmental Consequences
The project would be subject to a Vermont Wastewater and Potable Water Supply Permit. Surface water runoff would increase due to the increase in impervious area from the current level of development. A stormwater management plan with associated best management practices, to be approved through a Vermont Stormwater Construction General Permit (Low Risk) and a Vermont Stormwater Discharge Permit, will address and mitigate potential water quality impacts during construction and post-construction, respectively. An M.S.G.P. will address and mitigate potential water quality impacts of the ongoing laboratory operations. The project is designed to meet U.S.G.B.C. L.E.E.D. gold standards for stormwater management and water conservation.

Based on all the factors considered, through coordination with regulatory agencies, and compliance with required permits, this undertaking would only result in minor impacts in regard to potable water, wastewater and stormwater.

3.6 Potential Hazards

3.6.1 Air Quality

3.6.1.1 Affected Environment
Air quality in Vermont is regulated by the Air Pollution Control Division (A.P.C.D.) of the V.D.E.C. A.P.C.D. enforces both state and federal air quality regulations including the Clean Air Act of 1990 and Amendments, and the Vermont Air Pollution Control Regulations (V.D.E.C., 2011a). 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 (V.D.E.C., 2011a).

The U.S.E.P.A has established the National Ambient Air Quality Standards (N.A.A.Q.S.) to protect the public health with “an adequate margin of safety.” Additionally, N.A.A.Q.S serve to protect the environment and public welfare. If the concentration of one or more criteria pollutants in a geographic area is found to exceed the regulated or ‘threshold’ level for one or more of the N.A.A.Q.S., the area may be classified as a nonattainment area. Areas with concentrations of criteria pollutants that are below the levels established by the N.A.A.Q.S. are considered either attainment or unclassifiable areas.

3.6.1.2 Environmental Consequences
The site is located within an air quality attainment area. The project’s potential to impact air quality relates to heat plant emissions and potential process chemical emissions.

The heating load for this building is anticipated to be approximately 2 million BTU per hour. Heat for the building would be supplied by a 60 horsepower wood chip-fired boiler plus a propane back-up boiler. Each boiler would have one primary pump matched with the boiler. The building would be equipped with a propane-fired domestic hot water heater and cooling system. The wood chip boiler would not require an air pollution control permit, as the boiler horsepower is below the permitting threshold. However, the unit would be

subject to visible smoke emission limits. The unit would be designed, sized, installed, operated and maintained to ensure that it complies with the visible smoke limits. Special attention would be placed on locating the unit and the exhaust stack so it does not impact the building air intakes or negatively impact neighbors. The stack height would be tall enough to avoid downwash impacts caused by the wind pulling the exhaust downward on the backside of the building. The stack would not be equipped with a rain cap that impedes upward flow of the exhaust. The boiler would be subject to federal regulation that requires the unit to be evaluated and adjusted every two years, or less frequently if the unit has an oxygen trim system to automatically adjust the combustion air.

In regard to all state laboratory operations in general, the Air Quality Division's primary concern is methylene chloride emissions from commercial scale use. The anticipated use of methylene chloride at the V.A.E.L would not be more than one gallon per year. Emissions from under 17 gallons per year of the chemical are allowed without being subject to an air quality permit (Appendix C-26).

Dust associated with construction would be controlled in accordance with the Vermont Act 250 Land Use Permit and a Vermont Stormwater General Permit. Methods to control dust include provision for a stabilized construction entrance and dust control using water or calcium chloride. Soil disturbance at any one time will be minimized in accordance with the Erosion Prevention and Sediment Control Plan of the Stormwater Permit.

Based on all the factors considered and compliance with any required permits and regulations, this undertaking would only result in negligible impacts to air quality.

3.6.2 Noise

3.6.2.1 Affected Environment

The site is located on the V.T.C. campus within approximately 350 feet of the existing bio-digester, maintenance building and heating plant. The proposed V.A.E.L. would be located within approximately 500 feet of a few residential structures, within approximately 100 feet of the Randolph Center fire station, within approximately 500 feet of a camping area, and within approximately 1600 feet of the developed portion of the Vermont Veterans Cemetery. Noise generated from the proposed facility would be associated with standard air handling equipment, the boiler plant, the loading dock and truck traffic.

3.6.2.2 Environmental Consequences

The wood chip boiler plant would be located south of the building and adjacent to the V.T.C. existing central heat plant. All truck traffic associated with the wood chip plant would access the site from Admin Drive. The program with the most truck traffic (Weights and Measures) is also located at the south end of the site, nearest the existing V.T.C. development. The only truck traffic that would use Furnace Street is a 30' boat trailer and very long trucks for large equipment deliveries, both of which are expected to occur only a few times per year. All equipment would meet local, state, and federal noise regulations. Idling time would be limited onsite.

The Town of Randolph regulates noise impact as part of its site plan review. Testimony on noise was taken at the Development Review Board hearing, and that body will determine restrictions and limits for the project. Any increase in noise at property boundaries is expected to be minimal.

Based on all the factors considered, this undertaking would only result in minor impacts in regard to noise.

3.6.3 Asbestos, Structural Debris, and Fuel Tanks

3.6.3.1 Affected Environment

The Vermont Asbestos Rules require an asbestos inspection before any building demolition to determine if there are any asbestos containing materials present (18 V.S.A. Chapter 26). Building demolition materials must be disposed of according to the Vermont Solid Waste Rules (V.D.E.C., 2012c). Underground storage tanks are regulated by the Vermont Waste Management and Prevention Division in accordance with the Vermont Underground Storage Tank Rules (V.D.E.C., 2011b). Aboveground tanks for diesel fuel and process materials, such as nitrogen and argon, are regulated by the Vermont Division of Fire Safety (V.D.F.S.).

3.6.3.2 Environmental Consequences

There are no buildings on this site; thus, no asbestos inspection is required.

Demolition of the W.S.O.C. laboratory occurred under a separate F.E.M.A. project, approved on May 24, 2013. That project received F.E.M.A. programmatic and compliance review, and was subject to its own environmental conditions.

Regarding structural debris, there would be no demolition involved with the preparation of the site, as there are currently no buildings on-site. V.A.E.L. design will include a waste reduction plan in accordance with Vermont Land Use regulations and Act 250 requirements. This plan will be part of the L.E.E.D. equivalency procedures. Any material to be disposed of in a landfill would be disposed of in accordance with federal and Vermont laws and regulations. No stumps would be produced by the project, as there are no trees on the site.

The N.R.A. database indicates no existing fuel tanks on the site proposed for the laboratory (Appendix C27). Two active 12,000 gallon underground storage tanks for #4 fuel oil are located at the existing central heat plant of V.T.C. These are not identified as Hazardous Sites on the N.R.A. mapping, and would not be affected by the Proposed Alternative. Underground storage tanks at nearby Floyd's Store, the Randolph Center Fire Station and the Randolph Center Post Office have been removed (Appendix C 28).

The project design includes a new underground propane tank. Propane tanks are not regulated by V.W.M.D.

The V.A.E.L. design also includes an aboveground "belly" diesel fuel tank (incorporated into generator structure) for the generator. All belly tanks are required to conform to Vermont Division of Fire Safety (V.D.F.S.) regulations and V.W.M.D. above-ground

storage tank regulations. A storage and use plan will be filed with and approved by Vermont's Division of Fire Safety (V.D.F.S.) in accordance with Vermont law.

The V.A.E.L. design calls for two aboveground nitrogen tanks and an aboveground argon tank. These substances are not considered fuel, and are not regulated by the V.W.M.D., but the tanks would require a Tank Permit from the V.D.F.S.

Detailed review of proposed fuel tanks will be accomplished through the Division of Fire Safety's Tank Permit process. Based on all the factors considered, through coordination with regulatory agencies, and compliance with required permits, this undertaking would only result in minor impacts in regard to asbestos, structural debris and fuel tanks.

3.6.4 Hazardous Waste

3.6.4.1 Affected Environment

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

C.E.R.C.L.A was enacted in 1980 and amended in 1986. It was created to regulate activity on closed and abandoned hazardous waste sites, determine liability for releases of hazardous materials at abandoned sites, and provide a funding mechanism for the cleanup of hazardous waste sites. C.E.R.C.L.A also established the National Priority List (N.P.L.), which is a U.S. Environmental Protection Agency (U.S.E.P.A.) database of sites with known or suspected releases of hazardous materials (U.S.E.P.A., 2016a). R.C.R.A. was enacted in 1976 and amended in 1984 and regulates the generation, transportation, storage, and disposal of hazardous materials. It also set up a framework for the designation and classification of hazardous materials (U.S.E.P.A., 2016b). In Vermont, R.C.R.A. generators are regulated by the V.W.M.D.

A lender reviewing a potential project may sometimes require an Environmental Site Assessment to identify potential or existing environmental contamination liabilities. Such assessments typically address both the underlying land as well as physical improvements to the property.

3.6.4.2 Environmental Consequences

A review of the U.S.E.P.A. Superfund website and Superfund National Priorities List found no C.E.R.C.L.A hazardous waste sites in the Town of Randolph (U.S.E.P.A., 2016a).

The Vermont N.R.A. database shows no state hazardous waste sites on the V.A.E.L. site (Appendix C-27). Three state hazardous waste sites resulting from petroleum contamination are identified in the vicinity of the site, at Floyd's Store, the Randolph Center Fire Station and the Randolph Center Post Office; all of them have been closed and will have no adverse impact on the site (Appendix C-28).

The V.A.E.L. uses solvents to dissolve trace amounts of chemicals to be analyzed (analytes), such as pesticide residuals, from contaminated materials submitted for analysis,

such as fruits and vegetables, clothing and soil. The solvents are used to pump analytes through laboratory instruments, so the amount of contaminating chemicals can be measured. Acids are used to preserve certain samples and are also used like solvents to dissolve metal contaminants, such as arsenic and lead, so that they can be measured (Appendix C-29).

Biowaste would be generated and disposed of at least monthly. The laboratory is permitted to handle only Biosafety Level I and II wastes, the least infectious categories. The Vermont Department of Health Laboratory, not the V.A.E.L., handles any samples that may contain agents that are highly infectious to humans. V.A.E.L. laboratories may work with diseased animal carcasses, including livestock and fish, and plant material, including crops and forest materials. These materials, if suspected of containing agents infectious to non-human species, would be appropriately labeled, containerized and disposed of as "infectious waste" through a contracted biowaste hauler. Animal carcasses would be handled in a room specially constructed for complete disinfection. Non-infectious biowaste would be generated during analysis of dairy products, fish, insects and plants, and would be disposed of similarly, but would be categorized as medical waste and primarily contain used plastic ware, such as pipette tips, petri dishes and plastic gloves. On a daily basis, these wastes would be bagged, boxed and stored in a climate-controlled room until pick-up by a certified waste handler.

The laboratory operates under a set of detailed guidelines for accepted laboratory practices to maintain accreditation by the National Environmental Laboratory Accreditation Conference (N.E.L.A.C.). The guidelines are contained within a Quality Systems Manual, a Chemical Hygiene Plan and a Hazardous Chemical Waste Management Plan, all of which are updated at least annually, and which include solvents and biowaste. An emergency management plan would be developed specifically for the Randolph site. Three laboratory supervisors would fill the roles of quality assurance and safety officers, ensuring that accreditation criteria are met, including monthly safety inspections and preventive maintenance. N.E.L.A.C. inspection occurs every three years, reviewing all criteria for accreditation. Chemical wastes would be collected and stored per N.E.L.A.C. criteria. Upon relocation of the V.A.E.L. to Randolph, the lab will contract with V.T.C. and existing local accredited hazardous waste management services to provide disposal service, audits and third party inspections and training.

The lab currently holds a Hazardous Waste Handler Site ID, and has submitted the request for a new site ID for the Randolph location.

The proposed laboratory would be a Small Quantity Generator (S.Q.G.) with 356 kg/month estimated**.** No hazardous materials would be disposed on-site, and on-site storage would not exceed 180 days. Therefore, no Hazardous Waste Generator permits would be required; however, as required, the V.W.M.D. Hazardous Waste Management Program would be notified prior to, or upon, commencement of waste generation. The generator will be subject to ongoing V.W.M.D. inspection and overview (V.W.M.D., 2016c).

V.T.C. is now a Conditionally Exempt Hazardous Waste Generator (V.W.M.D., 2016b). Permits for V.T.C. and the laboratory would not be combined. A spill prevention plan

would be prepared for the proposed laboratory, which will include an emergency action plan, should there be a spill at the facility.

There is no known evidence of previous occupation or structures on the site, and agricultural residues are at insignificant levels. Therefore, an Environmental Site Assessment is not warranted.

Based on all the factors considered, through coordination with regulatory agencies and compliance with required permits, this undertaking would only result in minor impacts in regard to hazardous waste.

3.6.5 Seismic Safety

3.6.5.1 Affected Environment

E.O. 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, 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.

3.6.5.2 Environmental Consequences

The area around Randolph, Vermont, has relatively low risk for damaging earthquakes, so concern about seismic activity for the V.A.E.L. is low. There would be negligible impacts in regard to seismic safety.

3.7 Environmental Justice

3.7.1 Affected Environment

E.O. 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.

3.7.2 Environmental Consequences

Based on the 2010 Census information provided by the Two Rivers Ottauquechee Regional Commission (T.R.O.R.C.), the population of the Town of Randolph is 96.9% white; 0.5% black or African American; 0.8 % American Indian of Alaskan native; 0.8% Asian; 0% Pacific Islander and 0.3% other race. The median family income is $49,328. 17.1% of the population is below the federal poverty level. 4.8% of the population receives cash public assistance, and 20.2% of the population is eligible for food stamps. 39.2% of the population is 18 years of age or older (T.R.O.R.C., 2016). Construction of the V.A.E.L. in the Town of Randolph would not have a disproportionate effect on minority or low-income populations; there would be no impacts to existing homes, and the Proposed Alternative would provide additional employment within the town. As such, the project would result in negligible impacts in regard to environmental justice.

3.8 Climate Change

3.8.1 Affected Environment

E.O. 13693 promotes federal leadership in sustainability and greenhouse gas reductions.

The 2016 Vermont State Agency Energy Plan (B.G.S., 2016) establishes a goal of meeting 35% of the state government's energy needs—following the reduction of total energy consumption goals outlined in the plan—from renewable sources by 2025. The plan also recommends that state agencies increase the use of modern wood heating with biomass.

3.8.2 Environmental Consequences

The facility design includes a biomass heat plant, which will reduce dependence on fossil fuels. The facility is also being designed to meet at least U.S.G.B.C. L.E.E.D. Gold criteria. These criteria apply to building materials, insulation, heating and cooling, water use reduction, light pollution reduction, stormwater management, and renewable energy. Following the L.E.E.D. criteria will assure that the facility has a negligible impact on greenhouse gas emissions and climate change.

3.9 Cumulative Effects

Cumulative effects are defined by the C.E.Q. in 40 C.F.R. 1508.7 as:

"Cumulative effects are those that result from incremental effects of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions."

The C.E.Q. states that cumulative impacts should not be limited to those resulting from actual proposals, but should include impacts from actions that are reasonable foreseeable. Cumulative impact analysis captures the effects that result from the Proposed Action(s) in combination with the effects of other actions in the same geographic area. N.E.P.A. looks to analysis of cumulative environmental effects of a Proposed Action, or set of actions, on resources that may often be manifested only at the cumulative level, such as traffic congestion, air quality, noise, biological resources, cultural resources, socioeconomic conditions, utility system capacities, and others.

3.9.1 Affected Environment

Projects that have recently been constructed or are currently under construction or that have been identified as reasonably foreseeable include the following:

V.T.C. Campus

- Remodeling of the Hartness Library (completed)
- Renovation of the Allen House (completed)

- Construction of a Bio-Digester (completed)
- Student Center Addition to the Shape Building (completed)
- Fire Training building (completed)
- Building/class room remodeling (foreseeable)
- Barn Replacement (foreseeable)

State of Vermont

- Refurbishment of VT Route 66 (completed)
- Expansion of VT Veterans Cemetery (in process)

Private

- Gifford Medical Center Senior Living Community - Skilled Nursing Home completed in 2014, Assisted Living Facility proposed for construction in 2016-17.

No other federal or federally funded projects are planned or envisioned in proximity to the Proposed Alternative within the next 5 years. Other projects, such as the development at Exit 4, were considered, but not included in the Cumulative Effects as the certainty was unknown at the time of this analysis and, thus, not reasonably foreseeable.

3.9.2 Environmental Consequences

Implementation of the Proposed Alternative, in conjunction with the projects listed above, is not expected to result in any adverse cumulative impact to Geology, Vegetation, Wildlife, Threatened/Endangered Species, Floodplains, Wetlands, Archeological Resources, Historic Buildings, Land Use, Potable Water, Waste Water, Air Quality, Noise, Asbestos, Structural Debris, Fuel Tanks, Hazardous Waste, Seismic Safety, Environmental Justice or Climate Change as the resource is either not present, not impacted or the impact is negligible for the Proposed Alternative. The Proposed Alternative would have minimal to minor impacts to the following resources, which are assessed below in terms of potential cumulative impacts.

Soils – The Proposed Alternative, in conjunction with the projects listed above, would result in impacts to Primary and Statewide designated agricultural soils. According to the Regional Plan, there are 11,897 acres in agricultural use in Randolph and 154,600 in the region. The cumulative effect of all projects listed in 3.9.1 as well as the V.A.E.L. is less than 0.17% and 0.013% of those acreages, respectively. In addition, many of the projects are subject to mitigation agreements for impacts to primary agricultural soils with the Vermont Agency of Agriculture, Food and Markets.

Groundwater – Implementation of the Proposed Alternative in conjunction with the projects listed above would not result in an adverse impact to groundwater or water

supply, according to State Hydrologist, Scott Stewart. The water source (combination of the VTC wells and Fire District) has the capacity to serve the projects without impact to the aquifer.

Traffic – The traffic assessment completed for the Proposed Alternative considered growth in background traffic, which has been flat for the past 20 years, as well as the traffic anticipated from the Proposed Alternative. The projects listed above which have been completed were accounted for in the existing background traffic assessment. The reasonably foreseeable projects outlined above are not anticipated to generate significant traffic, in that their traffic will be primarily outside of the peak hours. Traffic from the Proposed Action can be accommodated by the existing transportation network without resulting in congestion or impacts to safety. The assessment notes that the intersection of the VTC campus access drive/Route 66/East Bethel Road is not ideal, but has no significant accident history, and that the intersection can accommodate the traffic from the Proposed Action. Therefore, the Proposed Alternative, in conjunction with the projects listed above, would not result in congestion or an unsafe condition with respect to traffic.

Utilities – The Proposed Alternative, in conjunction with the projects listed above, can be accommodated without burden to the existing infrastructure including water, wastewater, power, and communications. There is sufficient capacity in each of these utilities (lines, plants, supplies) to accommodate the project.

Stormwater – Stormwater management systems for all projects listed must be designed, implemented and monitored in compliance with state standards for water quality and groundwater recharge. The Proposed Alternative would receive thorough state review of its stormwater plan through the Construction and Operational Stormwater permitting processes. There are no known dysfunctions of existing properties in the area. Thus, no adverse cumulative impacts are anticipated for stormwater.

Most of the resource impacts associated with the V.A.E.L. proposal are negligible. Loss of agricultural soils would be mitigated for this project, and other future projects would be subject to mitigation requirements through V.A.F.M. and Vermont Act 250. Erosion prevention and sediment control would be accomplished through stormwater discharge best management practices. Noise restrictions will be determined by the Town of Randolph Development Review Board. Fuel tanks will comply with V.D.F.S. regulations. Storage, use and disposal of hazardous wastes is subject to N.E.L.A.C. guidelines and accreditation and V.W.M.D. oversight. Based on all the factors considered, through coordination with regulatory agencies and compliance with required permits, this undertaking will only result in minor impacts in regard to cumulative effects.

4.0 AGENCY COORDINATION AND PERMITS

Coordination has been accomplished with the N.R.C.S., U.S.F.W.S., A.P.C.D., V.F.W.D., V.W.M.D., V.A.F.M., V.A.Q.C., V.D.F.S., D.H.P. and the Town of Randolph Zoning Administrator. Vermont G.I.S. data layers for prime agricultural soils, hazardous waste, mapped wetlands, floodplains and river corridors, waterways, rare, threatened and endangered species and wildlife habitat were reviewed.

All required state and local permits will be obtained for the project. A list of all the required permits identified to date is included in Appendix D. The facility must also meet all applicable state fire safety and occupational health and safety standards or requirements.

5.0 PUBLIC INVOLVEMENT

Notice of the availability of the Draft E.A. document for the Proposed Action was publicized in *The Times Argus* and *The Herald of Randolph* on May 5, 7, and 12, 2016 for a period of 15 calendar days (Appendix E). The draft E.A. was posted on-line at F.E.M.A. and B.G.S. websites and a hard copy was available for public review at the Town Clerk's Offices in Randolph. No substantive comments were received.

5.1 Legislative Hearings

Vermont Act 178 of 2014 authorized spending for the development of a proposal for site location, programming and design of the Agency of Agriculture, Food and Markets and Agency of Natural Resources laboratory. The bill proposing this action, H.864, was reviewed by the Vermont House Committee on Appropriations and the Vermont House Committee on Corrections and Institutions during the period of February 25, 2014, through June 9, 2014. The bill was reviewed by the Vermont Senate Committee on Economic Development, Housing and General Affairs during the period of March 12, 2014, through May 6, 2014. The bill was signed by the Governor on June 9, 2014. Section 33 of Act 178 of 2014 made the following statutory request: *"On or before August 15, 2014, the Department of Buildings and General Services, the Agency of Agriculture, Food and Markets, and the Agency of Natural Resources shall submit a site location proposal for a shared laboratory to the House Committee on Corrections and Institutions and the Senate Committee on Institutions. It is the intent of the General Assembly that when evaluating site locations, preference shall be given to State-owned property."*

5.2 Public Consultations

5.2.1 Town of Randolph and Village of Randolph Center

Neighborhood meetings were convened in the Village of Randolph Center on March 31, April 21 and May 26, 2015, with the purposes of informing the public regarding the site selection and design process and soliciting public input. Emails were sent to the neighbors and other contacts on December 7 and 11, 2015, to share the results of the traffic study. A further email was sent to neighbors and other contacts on January 20, 2016, to share the updated site plan, including a stand-alone wood chip plant at the north end of the site (Appendix C-30). The site of the wood chip plant was subsequently moved to its current location adjacent to the V.T.C. central heat plant. The site plan for the facility was presented at the Town of Randolph Development Review Board meeting on January 26, 2016 and at a subsequent Development Review Board meeting on April 26, 2016. The plan must receive Town approval prior to construction.

6.0 CONCLUSIONS

No significant impacts were identified during F.E.M.A.'s analysis or during the public comment period between May 5-20, 2016. F.E.M.A. updated the E.A. per comments received by F.E.M.A. Regional Counsel on May 26, 2016. The Agency has determined that it is reasonable to issue a F.O.N.S.I with specific conditions for the Proposed Alternative. See Appendix F for a copy of the F.O.N.S.I. signed by Lydia Kachadoorian, Deputy Regional Environmental Officer on June 20, 2016. The conditions included in the F.O.N.S.I. will be added to F.E.M.A.'s Record of Environmental Consideration (R.E.C.), which shall be provided to B.G.S. as part of the grant award package. All of the conditions in the R.E.C. and F.O.N.S.I. will become conditions of this F.E.M.A. P.A. program grant; B.G.S. will be required to comply with these conditions to secure and maintain funding eligibility. Compliance with this conditions will be verified during grant close-out in conjunction with D.E.M.H.S. and B.G.S.

F.E.M.A. has posted a copy of the final E.AEA. on its website at http://www.fema.gov/resource-document-library.

7.0 LIST OF PREPARERS

This document was prepared by:

DuBois & King, Inc.
28 North Main Street
Randolph, Vermont 05060
802-728-3376
http://www.dubois-king.com

and

U.S. Department of Homeland Security (D.H.S.)
Federal Emergency Management Agency (F.E.M.A.)
Region I, Environmental & Historic Preservation Office (R.1.E.H.P.)
99 High St., 6th Floor
Boston, MA 02110

8.0 REFERENCES

Act 178, 2014. No. 33. An act relating to capital construction and bonding. Enacted by the General Assembly of Vermont, June 9, 2014.

B.G.S., 2016. 2016 Vermont State Agency Energy Plan, Vermont Agency of Administration, Department of Buildings and General Services.

E.O. 11988. Executive Order No. 11988. Floodplain Management, May 24, 1977. 42 C.F.R. 26951.

E.O. 11990. Executive Order No. 11990. Protection of Wetlands, May 24, 1977. 42 C.F.R. 2691.

E.O. 12699. Executive Order No. 12699. Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction. January 5, 1990.

E.O. 12898. Executive Order No. 12898. Environmental Justice for Low Income and Minority Populations. 1994. 59 C.F.R. 7629.

E.O. 13693. Executive Order No. 13693. Planning for Federal Sustainability and Greenhouse Gas Emission Reductions. March 2015.

F.E.M.A., 2012b. Programmatic Agreement among Federal Emergency Management Agency, Region 1, Vermont Division for Historic Preservation, and Vermont Emergency Management dated May 9, 2012.

N.R.C.S., 2016. Orange County Soil Map, Natural Resource Conservation Service, US Department of Agriculture website accessed February 2016 at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Town of Randolph, 2015. Personal communication, Town of Randolph Water and Wastewater Superintendent Elizabeth Walker and B.G.S. Project Manager Sandra Vitzthum, May 22, 2015.

T.R.O.R.C., 2016. American Factfinder; website accessed February 2016 for Town of Randolph at: http://www.trorc.org/towns/randolph/

U.S.E.P.A., 2016a. E.P.A. Superfund Site accessed 03.11.16: http://www.epa.gov/superfund/search-superfund-sites-where-you-live

C.E.R.C.L.A National Priorities List (N.P.L.) accessed February 2016: http://www.epa.gov/superfund/state-designated-top-priority-national-priorities-list-npl-sites

U.S.E.P.A., 2016b. Resource Conservation and Recovery Act (R.C.R.A.) information accessed February 2016 at: http://www.epa.gov/epawaste/inforesources/data/index.htm

U.S.F.W.S., 2016. U.S.F.W.S. Northern Long-Eared Bat Final 4(d) Rule, Federal Register, January 14, 2016.

V.D.E.C., 2012. Vermont Solid Waste Rules. Waste Management Division, Department of Environmental Conservation. Rule No. 11P-03. March 15, 2012.

V.D.E.C., 2011a. Vermont Air Pollution Control Regulations, adopted September 2011. Air Pollution Control Division, Vermont Department of Environmental Conservation.

V.D.E.C., 2011 b. Underground Storage Tank Rules, effective October 1, 2011. Waste Management Division, Vermont Department of Environmental Conservation.

V.D.E.C., 2005. Groundwater Protection Rule and Strategy. Chapter 12, Environmental Protection Rules. February 14, 2005. Rule Number 04P-039.

V.F.P.R., 2015. Voluntary Harvesting Guidelines for Landowners in Vermont, January, 2015.
http://fpr.vermont.gov/sites/fpr/files/Forest_and_Forestry/Your_Woods/Voluntary_Harvesting_Guidelines/VHG_FINAL.pdf

V.D.F.S., 2016. Personal communication with Todd Cosgrove, Chief, Hazardous Materials Response Team, February 4, 2016.

V.W.M.D., 2016a. Vermont Waste Management Interactive Database accessed February 2016 at: http://www.anr.state.vt.us/dec/wastediv/sms/wmid_intro.htm

V.W.M.D., 2016b. Personal communication with Linda Joyal, VT Hazardous Waste Management Program, February 4, 2016.

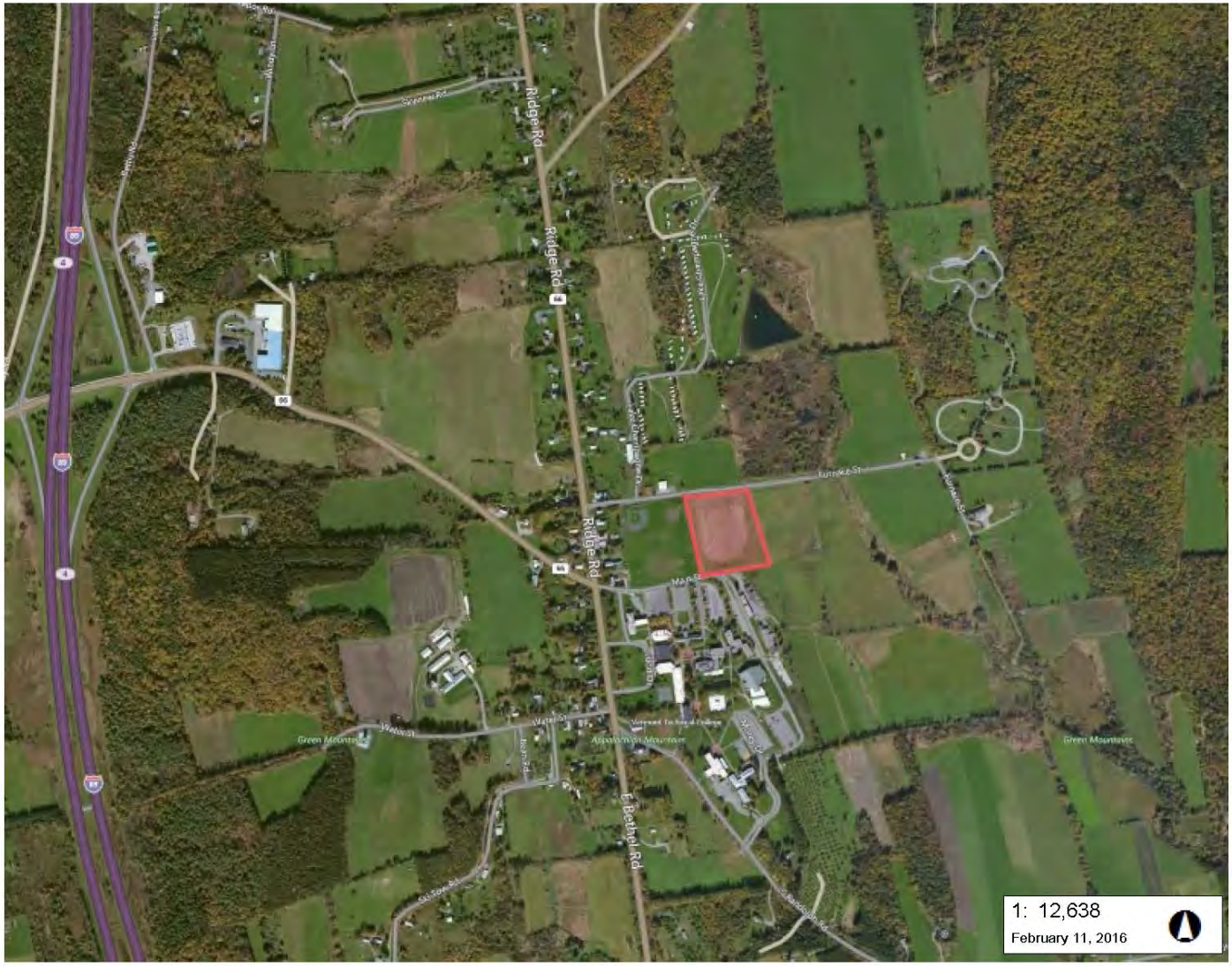
APPENDIX A

PREFERRED AND ALTERNATIVE SITES MAPPING AND ANALYSIS

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

642.0 0 321.00 642.0 Meters

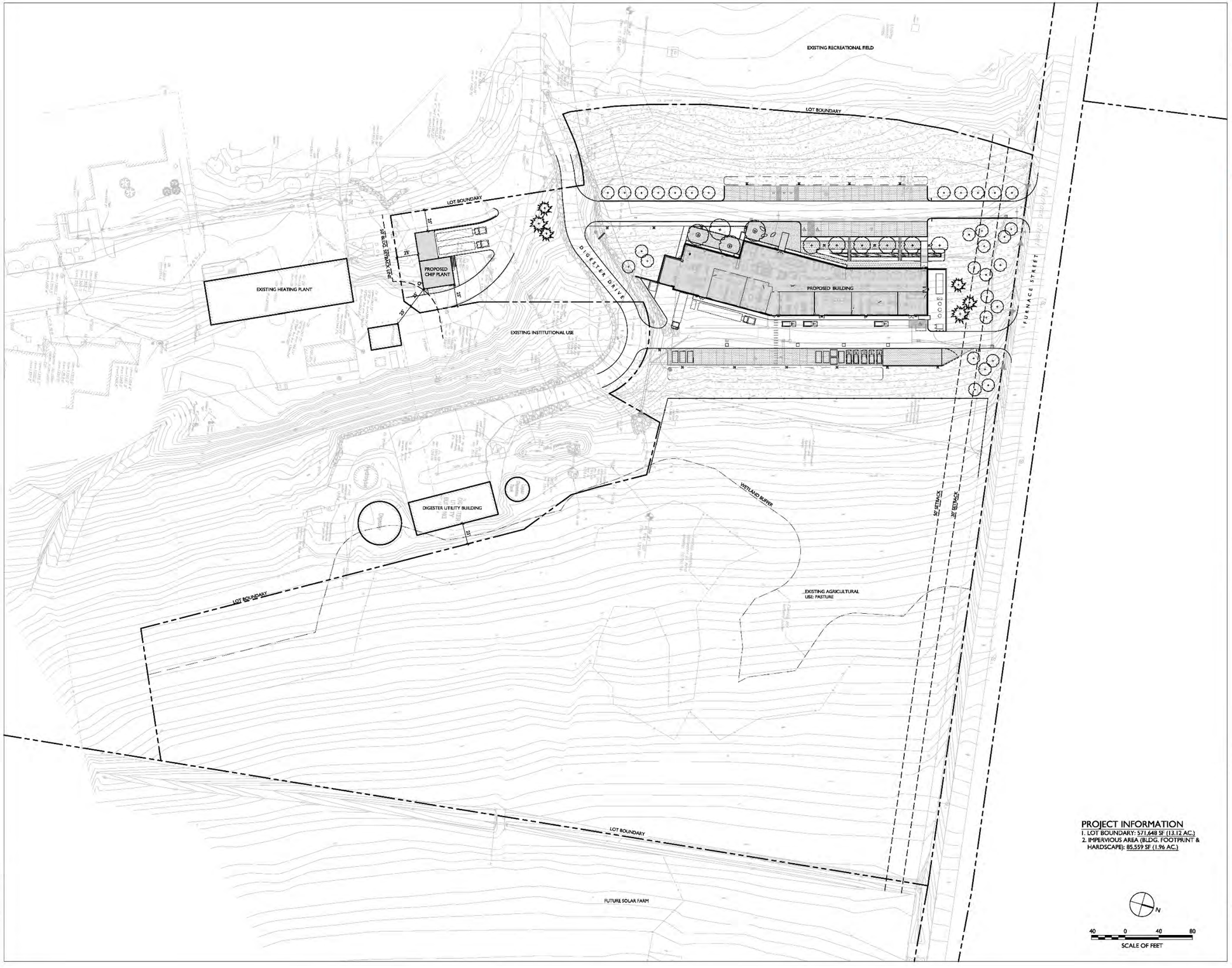
WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 1053 Ft. 1cm = 126 Meters

© Vermont Agency of Natural Resources

THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

A-1, Site Location Map



PROJECT INFORMATION

1. LOT BOUNDARY: 571,648 SF (13.12 AC.)
2. IMPERVIOUS AREA (BLDG. FOOTPRINT & HARDSCAPE): 85,559 SF (1.96 AC.)

VERMONT

VERMONT AGRICULTURAL AND ENVIRONMENTAL LABORATORIES

CANNONDESIGN

WAGNERHODGSON
LANDSCAPE ARCHITECTURE

CANNONDESIGN
Architecture/Planning/MEP/FP
99 Summer Street, Suite 600
Boston, MA 02110

STATE OF VERMONT
BUILDING & GENERAL SERVICES
Client
2 Governor Aiken Avenue
Montpelier, VT 05633-3801

FREEMAN FRENCH FREEMAN
Associate Architect
81 Maple Street
Burlington, VT 05401

KNIGHT CONSULTING ENGINEERS
Geotechnical Engineer
51 Knight Lane
Williston, VT 05495

HOWE ENGINEERS
Code Consultant
101 Longwater Circle, Suite 203
Norwell, MA 02061

WAGNER HODGSON
Landscape Architect
7 Marble Avenue
Burlington, VT 05401

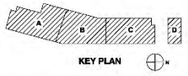
VANASSE HANGEN BRUSTLIN
Civil Engineer
7056 U.S. Route 7
North Ferrisburgh, VT 05473

KREBS & LANSING ENGINEERS
Surveyor
164 Main Street
Colchester, VT 05446

VERMEULENS CONSULTING
Cost Estimating
470 Atlantic Avenue, 4th Floor
Boston, MA 02210

DESIGN DEVELOPMENT
50% PACKAGE
MARCH 08, 2016

No.	Description	Date
3	Design Development	28 APRIL 2016
2	50% Design Development	08 MARCH 2016
1	Schematic Design	29 MAY 2015



Drawing Title:

PROJECT PLAN

Scale: 1"=40' Issue Date: 03/25/2016
Project No.: 004614.00 Checked by: JH

L000

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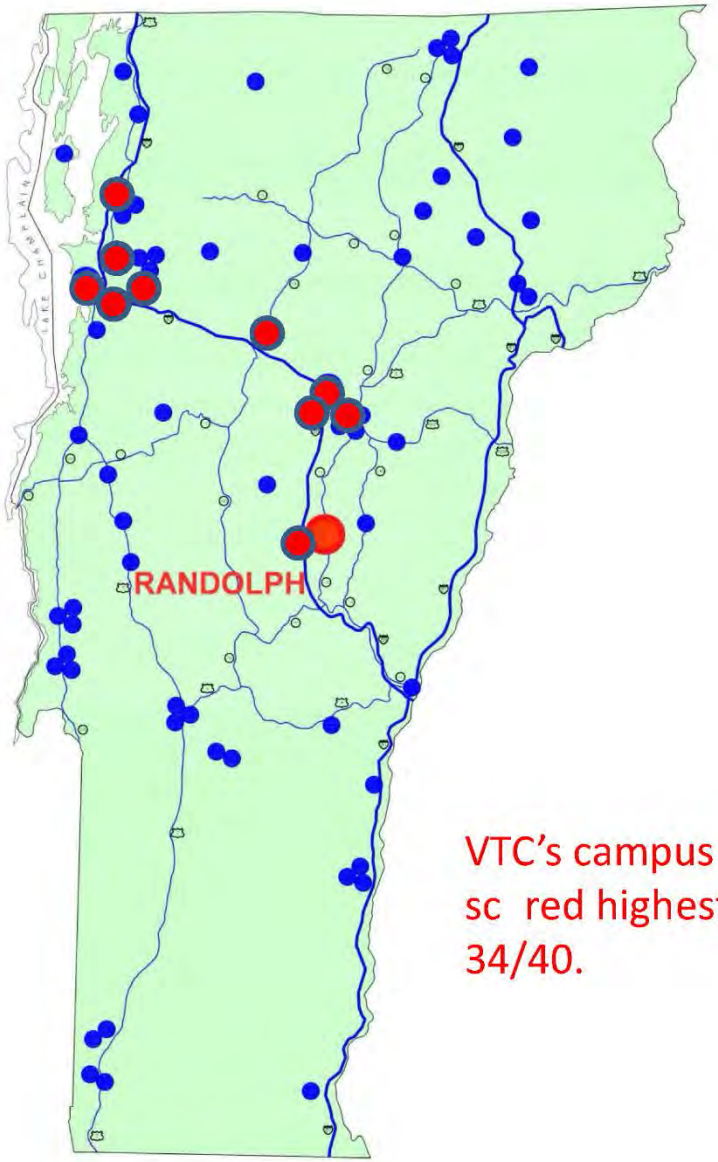
A-2, Site Location Map

SITE/LOCATION

19 sites were offered for use
They were scored with 8 criteria

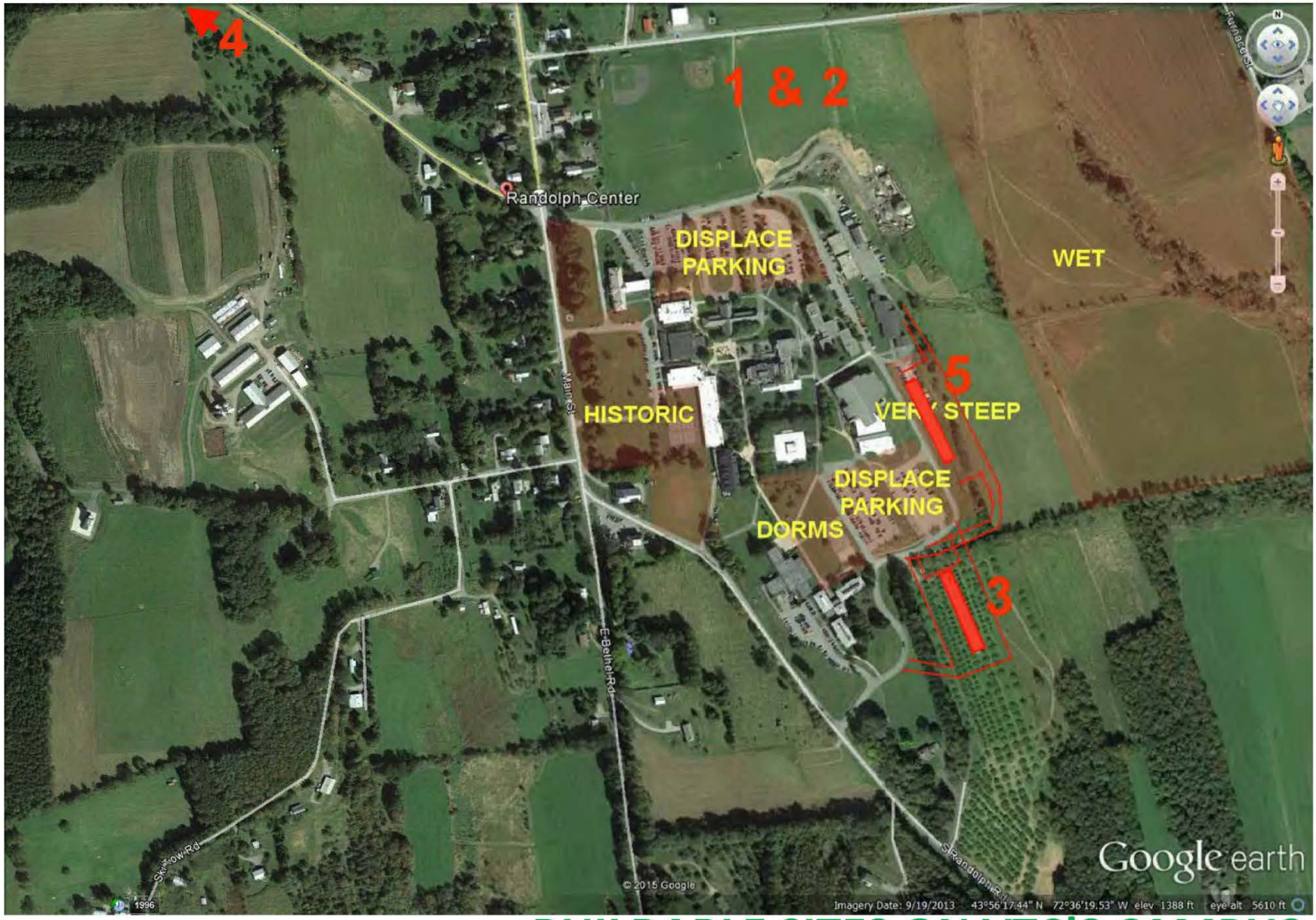


VTC's campus sc red highest, 34/40.

VERMONT AGENCIES OF AGRICULTURE & NATURAL RESOURCES LAB FACILITY
FACILITY SITE OPTIONS CRITERIA SCORING SUMMARY

SITE	VARIATION	CRITRION 1 LOT SIZE	CRITERION 2 PHYSICAL	CRITERION 3 UTILITIES	CRITERION 4 ZONING	CRITERION 5 NEIGHBORHOOD	CRITERION 6 CONSTRUCTION	CRITERION 7 QUALITY	CRITERION 8 BENEFITS	TOTAL
1	Milton	2.8	2.8	3.2	2.8	3.2	3	1.2	1.2	20.2
2	Colchester Severance	4.3	4.2	4.3	3.7	4	4.8	1.7	2.2	29.2
3	Colchester Health Lab	3.5	3.3	4.8	4.5	4.2	4	2.2	3.3	29.8
4	Burlington 195 Colchester	1.2	1.5	4.8	2	2	1	1.5	3.2	17.2
5	So Burl Spear St	3.3	3.5	4.7	3	3.8	3.8	2.3	3.8	28.2
6	So Burl Tech Park	3.5	3.8	4.8	4.3	4.5	3.3	2.2	2.2	28.6
7	So Burl Hinesburg Rd	4	4.3	4.8	4.2	3.5	4.2	1.3	1	27.3
8	Richmond Rte 2	2.3	3	1.5	2.5	2.2	3	1.7	1.3	17.5
9	Richmond Creamery	2.3	3.3	4.3	3.8	2.7	3.5	1.8	2.5	24.2
10	Waterbury	4	3.7	4.3	4	2.8	3.8	4	4	30.6
11	Montpelier Armory	2	2.7	4.5	3.3	3.8	3.5	4	3	26.8
12	Montpelier 2 Rivers Farm	4.2	2.8	4.3	3.3	3.8	2.7	3.7	3	27.8
13	Berlin F&W Land	3.7	2.2	1.2	3.2	2.8	3.5	3.8	2.8	23.2
14	Berlin Route 12	3.8	3.5	1.8	3.2	3.7	3.2	4.3	3.7	27.2
15	Berlin Dog River Rd	4.2	3.8	2	3.8	3.7	3.7	4.3	3.7	29.2
16	Berlin Regional Library	3.3	3.2	4.2	2	3.7	2.7	3.5	3.5	26.1
17	Berlin Back Field	4.5	3.5	4.2	2	4	3.7	3.7	3.7	29.3
18	Randolph VTC Campus	4.5	4.5	4	4.3	4	4.5	3.6	4.6	34
19	Randolph Exit 4	3.6	2.4	2.6	2.8	3.2	3.6	2.8	3	24

A-3, Nineteen Alternatives Map and Table



BUILDABLE SITES ON VTC'S CAMPUS

2015 DECCISION TO EVALUATE ALL VTC SITES

A) REPLICATE 2014 PROCESS AS CLOSELY AS POSSIBLE
B) UPDATE2014 ANALYSES WITH NEW INFORMATION
C) BRING NEW VTC SITE UP TO THE SAMLE LEVEL OF DETAIL

SITE 1: NORTH (ORIGINAL PROPOSED SITE)
SITE 2: NORTH, SHIFTED SLIGHTLY SOUTH
SITE 3: SOUTH (ORCHARD)
SITE 4: WEST (RTE 66, ENTERPRISE SITE)
SITE 5: EAST (LOWER RING ROAD)

FIGURE: A-4, Analysis of Four Additional Sites

VERMONT AGENCIES OF AGRICULTURE & NATURAL RESOURCES LAB FACILITY
FACILITY SITE OPTIONS CRITERIA SCORING SUMMARY

SITE	VARIATION	CRITRION 1 LOT SIZE	CRITERION 2 PHYSICAL	CRITERION 3 UTILITIES	CRITERION 4 ZONING	CRITERION 5 NEIGHBORHOOD	CRITERION 6 CONSTRUCTION	CRITERION 7 QUALITY	CRITERION 8 BENEFITS	TOTAL
1	NORTH	5	5	4.4	4	4	4.5	3.1	4.6	34.6
2	NORTH-SHIFTED	4.9	5	4.4	4	4	4.4	3.1	4.6	34.4
3	SOUTH (Orchard)	4.5	4.3	4.1	3.6	4.2	3.6	2.8	4.4	31.5
4	WEST (Rte 66)	3.9	4.2	3.3	4.4	4.1	3.1	2.5	2.1	27.6
5	EAST (Lower Ring)	4	3.4	4.5	4.3	4.3	3.2	2.8	4.5	31

AGENCIES OF AGRICULTURE AND NATURAL RESOURCES COLLABORATIVE LABORATORY

Matrix of Scored Site Options **REVISED APRIL 16, 2015**

RANK		LOCATION	SCORE	7 & 8	Acquisition Cost	Notes
NEW	1	Randolph: VTC NORTH	34.6 34	7.7 8.2 (#1)	$0	VTC agreement
NEW		VTC NORTH/shifted	34.4	7.7	$0	
NEW		VTC SOUTH (orchard)	31.5	7.2	$0	
NEW		VTC EAST (lower ring)	31	7.3	$0	
	2	Waterbury	30.6	8.0 (#2 tie)	$0	State owned
	3	Colchester: Health Lab	29.8	5.5 (#12)	$0	UVM agreement
tie		Berlin: Back Lot	29.3	7.4 (#5)	$1,200,000	
tie		Berlin: Dog River Rd	29.2	8.0 (#2 tie)	$632,500	
tie		Colchester: Severance Rd	29.2	3.9 (#16)	$1,260,000	
	7	So Burl: Tech Park	28.6	4.4 (#14)	lease	
	8	So Burl: Spear St	28.2	6.1 (#10)	negligble	
	9	Mplr: 2 Rivers Farm	27.8	6.7 (#8)	$245,000	
NEW		Enterprise Site (Rte 66)	27.6	4.6	$0	
	10	So Burl: Hinesburg Rd	27.3	2.3 (#19)	$725,000	
	11	Berlin: Rte 12	27.2	8.0 (#2 tie)	$400,000	
	12	Mplr: Armory	26.8	7.0 (#6 tie)	lease	
	13	Berlin: Regional Library	26.1	7.0 (#6 tie)	$0	State owned
	14	Richmond: Creamery	24.2	4.3 (#15)	$575,000	
	15	Randolph: Exit 4	24	5.8 (#11)	$500-750k	
	16	Berlin: F&W Land	23.2	6.6 (#9)	??	currently F&W land
	17	Milton	20.2	2.4 (#18)	$550,000	
	18	Richmond: Rte 2	17.5	3.0 (#17)	$1,250,000	

APPENDIX B

SITE PHOTOGRAPHS

Photographs,
Proposed VAEL Site

Figure B-1: Google Earth Image, taken September 19, 2013.

Figure B-2: Site Visit Photo: From proposed site looking north.

Figure B-3: Site Visit Photo: From the east side of the VTC ballfield, looking east at the proposed site

Figure B-4: Site Visit Photo: View from Furnace Street east of site, looking west over proposed site.

Figure B-5: View of a mock-up of proposed building, showing the scale of the proposed facility.

APPENDIX C

SUPPORTING DOCUMENTATION

C-1, F.E.M.A./George Vanderschmidt Letter, October 19, 2015

U.S. Department of Homeland Security
FEMA Region I
99 High Street
Boston, MA 02110

FEMA

October 19, 2015

Justin Johnson
Secretary
Governor's Authorized Representative
Vermont Agency of Administration
109 State Street
Montpelier, VT 05609-0201

Re: FEMA-4022-DR-VT, Vermont Department of Buildings and General Services −Public Assistance (PA) ID 000-US9QN-00 − Project Worksheet (PW)-03237 – WSOC JWE E AG LAB – Improved Project and Time Extension Requests

Dear Mr. Johnson:

I am responding to the Vermont Agency of Administration's letter of March 30, 2015, which transmitted an update to Project Worksheet ("PW") #3237 under major disaster declaration FEMA-4022-DR-VT. In addition, the Vermont Division of Emergency Management and Homeland Security ("DEMHS" or "Grantee") and the Vermont Department of Buildings and General Services ("Applicant") are requesting: 1) an improved project to relocate the Agricultural and Environmental Laboratory Building ("Ag Lab" or "facility") from the disaster site at the Waterbury State Office Complex ("WSOC") to a new location at the Vermont Technical College ("VTC") campus in Randolph, Vermont ; and 2) an extension of the period of performance for PW #3237. As detailed below, the Applicant's proposed scope of work – a new Agricultural Laboratory Building located on the VTC campus – is eligible. Notwithstanding, in order for FEMA to approve the scope of work, the Applicant must provide FEMA with some additional information as detailed in this letter. In addition, I am approving the time extension of the project completion date also known as the period of performance until June 30, 2018.

I. BACKGROUND

The Agricultural and Environmental Laboratory Building is owned and operated by the Vermont Department of Buildings and General Services and operated by the Agencies of Agriculture and Natural Resources. It is a 33,210 square foot, two-story building constructed in 1990 located at the WSOC in Waterbury, Vermont. From August 27 to September 2, 2011, floodwaters from Tropical Storm Irene inundated the first floor of the building. Specifically, the floors, walls, electrical equipment, Heating Ventilation Air Conditioning (HVAC) components, cabinetry, and elevator were damaged. There was no damage to the second floor.

The Applicant applied for financial assistance under the Public Assistance grant for major disaster declaration FEMA-4022-DR to repair the Ag Lab. Upon receiving the request, the

Federal Emergency Management Agency ("FEMA") prepared PW #3237 to identify disaster-related damage, set forth the eligible scope of work to restore the facility, and estimate the eligible cost to perform the work.

In addition to repairing the Ag Lab, FEMA studied three flood proofing options, which could bring the facility into compliance with the Town of Waterbury's May 2012 Interim Zoning Regulations. Ultimately, FEMA determined that dry proofing the building by using either exterior wall dry flood proofing or constructing a perimeter flood wall up against the exterior wall would be the most effective method to provide the required mitigation.

The Applicant then requested funding for greater hazard mitigation measures than the minimum required by the zoning regulations. The Applicant proposed dry flood proofing the building to an elevation of 431.5 feet or Base Flood Elevation (BFE) plus 4.7 feet.[1] The estimated cost for these hazard mitigation measures was $1,785,678.00. FEMA found these measures compliant with Policy[2] and approved the Hazard Mitigation Proposal (HMP). On October 25, 2013, FEMA approved PW #3237 to include the repairs of the Ag Lab plus hazard mitigation and Direct Administrative Costs (DAC). After a reduction for anticipated insurance proceeds, the remainder was a final PW total of $1,802,288.00.[3]

Next, in accordance with the Sandy Recovery Improvement Act of 2013 and the Alternative Procedures Pilot Program Guide for Permanent Work, on May 13, 2014, the Applicant, the Grantee, and FEMA entered into a fixed estimate subgrant agreement for the total amount of $1,802,288.00.[4] The Applicant notified FEMA that it did not intend to repair the facility at its current location and intended to pursue either an improved or alternate project. FEMA approved the request but notified the Applicant that they were prohibited from using any of the FEMA funding for the restoration of the Ag Lab for any purpose until it had requested, and FEMA had approved, an improved or alternate project for that building. The Ag Lab was razed in the fall of 2013.[5]

The Applicant notified FEMA that the new laboratory would be built at the WSOC but on higher ground. The first occupied floor elevation would be six feet above the 500-year flood level and provide the same flood risk reduction as would have been achieved by the approved hazard mitigation measures described in the original scope of work. In comparison, the two projects'

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[1] [1] BFE=426.8 feet.

[2] Recovery Policy 9526.1 *Hazard Mitigation Funding Under Section 406*, specifically Appendix A, *Buildings – General* (Mar. 30, 2010).

[3] Repairs ($2,507,933.00) + Hazard Mitigation ($1,785,678.00) + DAC ($16,610.00) + Anticipated Insurance Proceeds (-$2,415,545.00) = $ 1,802,288.00. See also, PW 3237, version (2).

[4] See letter from Michael Obuchowski, Vermont Department of Buildings and General Services, and Jeb Spaulding, Secretary, Governor's Authorized Representative, Vermont Agency of Administration to Robert Grimley, FEMA Region I re: *Vermont Agencies of Agriculture and Natural Resources Collaborative Laboratory Project - FIXED SUBGRANT AGREEMENT for PW # 3237* (May 13, 2014).

[5] Letter from Mark H. Landry, Federal Coordinating Officer, to Ben Rose, Public Assistance Officer, Vermont Emergency Management & Homeland Security *re: Request for Approval to Abate Hazardous Materials and Demolition of Structures – Waterbury State Office Complex – Select Damaged Facilities* (May 24, 2013).

mitigation measures were of equal benefit.[6] As such, in accordance with the Sandy Recovery Improvement Act of 2013 and the Alternative Procedures Pilot Program Guide for Permanent Work, FEMA advised the Grantee that the Hazard Mitigation funding could travel (be applied) and be approved for the construction of the improved project – the new laboratory building at the WSOC.[7]

A. Improved Project and Time Extension Requests

On March 30, 2015, the Vermont Agency of Administration sent a letter to FEMA providing an update to the project, as well as attaching requests for an improved project and a time extension.[8] Most notably, the Applicant no longer intends to rebuild the Ag Lab at the WSOC, but rather at the VTC campus in Randolph, Vermont; the rationale being that the Randolph site is superior to the WSOC. The Applicant notes that Randolph is closer to the center of the state, and the VTC offers shared heat and significant collaboration possibilities with staff and students. The Randolph site offers more space for exterior function and room to expand. It also is well above the flood plain.

The Applicant details in its letter that the new location raises the building far above any flood hazard. The proposed WSOC location was at 429.5 feet of elevation, whereas the proposed Randolph site is approximately 1,320 feet above sea level. The proposed site is currently in a cornfield, so the Applicant asserts that new facility will have negligible historic or environmental impact. Additionally, they assert that the new facility would meet or exceed all the functions, capacity and staffing levels that were housed in the damaged Ag Lab. The Applicant requests that FEMA approve the amended scope of work to locate the project in Randolph, subject to National Environmental Protection Act ("NEPA") review.[9]

Included in Vermont's correspondence to FEMA was a request to extend the period of performance of PW #3237, which currently ends on September 1, 2015. In their request, the Grantee asked that the FEMA Regional Administrator ("RA") extend the period of performance

[6] The 500-year BFE=531.00 feet. The Improved project is designed to provide protection to the 500 year BFE + 6". 531.00 feet + 6 inches or 0.5 feet = 531.50 feet. The original HMP was designed to provide protection to 531.50 feet. The improved project would provide the same level protection as the design of the original HMP.

[7] Letter from Robert Grimley to Ben Rose, State Public Assistance Officer, Vermont Division of Emergency Management and Homeland Security re: *FEMA-4022-DR-VT–Vermont Department of Buildings and General Services Public Assistance (PA) ID-000-US9QN-00 –Project Worksheet(PW)3237–WSOC JWE E AG LAB – Synopsis of the Approved Scope of Work, Hazard Mitigation Measures and the Fixed Cost Agreement* (Oct. 20, 2014).

[8] Letter from Justin Johnson, Governor's Authorized Representative, Vermont Agency of Administration to Paul Ford, Acting Regional Administrator, FEMA Region I, and Robert Grimley, Recovery Division Director, FEMA Region I re: *Update, Improved Project Request and Period of Performance Extension Request: for Sandy Recovery and Improvement Act (SRIA) Alternative Procedures Pilot Program; FEMA-4022-DR-VT-PW-03237 Ag Laboratory; Applicant - Vermont Department of Buildings and General Services-BGS;* (Mar. 30, 2015).

[9] Letter from Michael Obuchowski to Kimberly Canarecci, Public Assistance Officer, Vermont Division of Emergency Management and Homeland Security re: *UPDATE, IMPROVED PROJECT REQUESTS and PERIOD OF PERFORMANCE EXTENSION REQUEST: for PW 3237 Ag Lab SRIA Fixed Cost Estimate: FEMA-4022-DR-VT-Vermont Department of Buildings and General Services (Applicant) Public Assistance (PA) ID-000-US9QN-00- Project Worksheet (PW) 3237: WSOC JWE E AG LAB* (Jan. 30, 2015) [hereinafter *letter from Michael Obuchowski (Jan. 30, 2015)*].

until June 30, 2018. The Grantee stated that the magnitude of Tropical Storm Irene (48 State buildings damaged in Waterbury) forced the State to phase repairs. The Ag Lab is the last major effort to repair this damage. The Vermont Legislature continues to approve funding and construction as quickly as possible given restrictions to staff and bonding, as well as a seasonal legislative process. If construction of the Ag Lab begins by mid-2016, then the project should be completed by June 2018.[10][10]

Additionally, the Grantee's time extension request included all previous extensions granted by the State, and the extenuating circumstances beyond the control of the Applicant that led to this request as detailed above.[11][11]

II. DISCUSSION

A. Sandy Recovery Improvement Act and Environmental Compliance

Section 406 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act authorizes FEMA to provide financial assistance for a local government to repair, restore, reconstruct, or replace a facility damaged by a major disaster.[12][12] FEMA administratively carries out this authority as "permanent work" under its Public Assistance grant program.

On January 29, 2013, President Obama signed into law the Sandy Recovery Improvement Act of 2013. This law amends Title IV of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.). Specifically, the law adds section 428, which authorizes alternative procedures for the Public Assistance program under sections 403(a)(3)(A), 406, 407 and 502(a)(5) of the Stafford Act. It also authorizes FEMA to implement the alternative procedures through a pilot program.[13][13]

To participate in the Alternative Procedures for Permanent Work, subgrantees must agree to a subgrant based on a fixed estimate for that subgrant. FEMA will approve funding for large, uncompleted, permanent work subgrants on the basis of a fixed estimate. This procedure varies from that described in 44 CFR §206.203(c), which provides for funding the actual cost of completing the eligible scope of work. FEMA review for compliance with Environmental and Historic Preservation ("EHP") laws, executive orders, and other regulations must be completed before work can take place.[14][14]

FEMA is required to ensure compliance with applicable EHP laws, regulations, and executive orders when implementing alternative procedures. FEMA will conduct additional EHP

[10] Letter from Kim Canarecci to Paul Ford and Robert Grimley, re: *FEMA-4022-DR-VT; Project Worksheet #3237; Ag Laboratory - Period of Performance Time Extension Request* (Mar. 28, 2015) [hereinafter *Letter from Kim Canarecci (Mar. 28, 2015)*]
[11] Id.
[12] Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288, § 406 (1974) (codified as amended at 42 U.S.C. § 5172).
[13] *Public Assistance Alternative Procedures Pilot Program Guide for Permanent Work (Version 2)* (Dec. 19, 2013).
[14] Id, at 4.

compliance reviews when fixed subgrant funds (either single or consolidated) are used under these procedures for changes in scope of work that do not substantially conform to the predisaster design, function and location of the damaged facilities. The Grantee will notify FEMA of the proposed work and FEMA will determine whether additional EHP review must be conducted to ensure compliance before construction begins. In some instances, no further EHP review will be required for certain actions.[15][15]

Here, the Applicant opted to take part in the Alternative Procedures and entered into a fixed- estimate subgrant agreement with the Grantee and FEMA for the total amount of $1,802,288.00.[16][16] The previous scope of work provided by the Applicant constituted replacing the substantially damaged Ag Lab with a new laboratory at the original disaster site, the WSOC. However, the Applicant has since provided an amended scope of work to instead construct the new facility in Randolph. Since the proposed scope of work does not substantially conform to the predisaster location of the damaged facility, additional EHP review must be conducted to ensure compliance before construction begins.

The first step in applying the NEPA process is to determine whether to prepare an Environmental Assessment ("EA"). Early determination will help ensure that necessary environmental documentation is prepared and integrated into the decision-making process. In some cases, it will be readily apparent that a proposed action will have significant impact on the environment, such as if an action will result in an extensive change in land use or the commitment of a large amount of land.[17][17] Pursuant to this regulation, the Applicant is responsible for completing an Environmental Assessment. The Applicant can use the fixed estimate subgrant to fund the EA.

Note that the Grantee provided a letter from the State Historic Preservation Officer ("SHPO") who performed a site visit to the proposed location and determined there would no effect on historic properties.[18][18]

B. Hazard Mitigation

Section 406 hazard mitigation funds are discretionary funds that can be added to project funding for the repair of disaster-damaged facilities and must prevent future damage similar to that caused by the declared event. Under standard PA procedures, 406 mitigation funds cannot be retained on alternate projects or improved projects that involve relocation or facility replacement

[15] Id, at 13.
[16] See letter from Michael Obuchowski, Vermont Department of Buildings and General Services, and Jeb Spaulding, Secretary, Governor's Authorized Representative, Vermont Agency of Administration to Robert Grimley, FEMA Region I re: *Vermont Agencies of Agriculture and Natural Resources Collaborative Laboratory Project - FIXED SUBGRANT AGREEMENT for PW # 3237* (May 13, 2014).
[17] 44 CFR § 10.8
[18] Letter from Laura Trieschmann, State Historic Preservation Officer, Vermont Division for Historic Preservation to Sandra Vitzthum, Department of Buildings and General Services re: *State of Vermont Agencies of Agriculture and Natural Resources Collaborative Laboratory Construction, Vermont Technical College, Furnace Street, Randolph Center, Vermont. Vermont Historic Preservation Act, Act 250 Land Use Permit # 3R0581 Amendment, and U.S. Department of Homeland Security Federal Emergency Management Agency Section 106 Review* (Jan. 22, 2015).

at same site. In an effort to promote greater flexibility in the use of funds after accepting a fixed grant and allow more resilient mitigation with the alternative procedures authorized under Section 428, FEMA may allow the retention of 406 mitigation funds in the aforementioned circumstances on a case-by-case basis where prevention of future similar damage is proven to be of greater or equal benefit than that which would have been achieved with the approved mitigation scope of work in the agreed upon fixed subgrant(s).[19]

The original scope of work in PW #3237 includes hazard mitigation measures designed to protect the repaired Ag Lab from the 500-year flood event. Therefore, the 406 mitigation funds can only be maintained on the Applicant's proposed project if the flood mitigation is proven to be of greater or equal benefit as the original hazard mitigation measures. The Applicant originally notified FEMA that the new laboratory would be built at the WSOC but on higher ground. Specifically, it would be built six feet above the 500-year flood level and provide the same flood risk reduction as would have been achieved by the approved hazard mitigation measures described in the original scope of work. Consequently, FEMA advised the Grantee that the 406 mitigation funding could travel and be approved for the construction of the improved project.

Presently, the Grantee has informed FEMA that the new laboratory will instead be built at a new location in Randolph. The Applicant asserts that the new site is well above the flood plain, specifically 1,320 feet above sea level (versus 429.5 feet at the WSOC). Notwithstanding, the Applicant must show that the hazard mitigation measures of the proposed project are of at least equal benefit as the hazard mitigation measures in the original PW. Specifically, the original mitigation measures called for dry flood proofing the building to Base Flood Elevation plus 4.7 feet, so the proposed project's flood hazard mitigation must be of least equal benefit.

C. Facility function and capacity

Finally, in order for the Hazard Mitigation funding to travel with the new scope of work, the Applicant must build a facility with the same function as the damaged facility. To illustrate, since the Ag Lab was damaged during the disaster, the Applicant must build an Ag Lab – and not a different type of facility, such as a police station – in order to maintain the Hazard Mitigation funding.

Here, the Applicant asserts that the scope of work as previously agreed upon with FEMA has only been amended to incorporate the change in location. The new laboratory will be built at the VTC campus in part to allow for collaboration between students and lab staff. The new building will improve the functions and testing capacity of the original building while not being much larger. Additionally, all the staff that were employed in the Ag Lab before Irene will be employed in Randolph. Therefore, all functions and staff that were housed in the pre-Irene building will be housed in the new facility, so the function of the Ag Lab will be met.[20]

[19] Id, at 14.
[20] Letter from Michael Obuchowski (Jan. 30, 2015).

D. Time Extension

The project completion deadlines for the PA Program are set from the date that a major disaster is declared and apply to all projects under the PA grant.[21][21] For PA Categories C through G (permanent work), the project completion deadline is 18 months from the date of the major disaster declaration.

Based on extenuating circumstances or unusual project requirements beyond the control of an applicant, the grantee may extend the deadlines for an additional 30 months for permanent work.[22][22] The grantee must submit requests for time extensions beyond the grantee's authority to the RA. These requests must include (1) the dates and provisions of all previous time extensions on the project; and (2) a detailed justification for the delay and a projected completion date. If the RA approves the request, the approval letter shall reflect the approved completion date and any other requirements the RA may determine necessary to ensure that the new completion date is met.[23][23]

After reviewing this request, the information submitted by the Grantee meets the requirements for requesting an extension of time for project completion. The Applicant was provided with 18 months from the date of the major disaster declaration to complete permanent work. The major disaster was declared on September 1, 2011, which meant that the period of performance ended on March 1, 2013. On July 22, 2013, the Grantee, within their statutory authority, approved a time extension until September 1, 2015, the maximum allowable under their authority.[24][24] Now, a further extension of the period of performance is needed to allow for FEMA concurrence with the proposed location change of the improved project, the securing of funding from the Vermont legislature, as well as the completion of construction which is set to begin by mid-2016.

According to the Applicant's time line, the work will be completed by June 30, 2018.[25][25]

III. CONCLUSION

The Vermont Department of Buildings and General Services intends to build the new laboratory at a site in Randolph, Vermont, rather than at the WSOC. In order for the $1,802,288.00 in 406 mitigation funding to travel with the new project under the Alternative Procedures, the Applicant must 1) complete an Environmental Assessment with FEMA and 2) provide documentation that the proposed scope of work provides at least the same flood protection as the hazard mitigation measures in the original PW. The Applicant has already provided documentation to show that the new laboratory will maintain the same function as the original damaged facility. I encourage you to contact David Robbins, Regional Environmental Officer (david.robbins@fema.dhs.gov and/or

[21] 44 C.F.R. § 206.204(c)(1).
[22] 44 C.F.R. § 206.204(c)(2).
[23] 44 C.F.R. § 206.204(d).
[24] Letter from Ron Pentkowski, Public Assistance Coordinator, Vermont Division of Emergency Management and Homeland Security to Sandra Vitzthum, Project Manager II, Department of Buildings and General Services re: *FEMA-4022-DR-VT; Project Worksheet #3237; Ag Laboratory - Period of Performance Time Extension Request* (July 22, 2013).
[25] Letter from Kimberly Canarecci (Mar. 28, 2015).

ph#978-914-0378), at your earliest convenience to initiate an inter-agency scoping meeting for the Environmental Assessment.

Furthermore, I am approving the request to extend the period of performance of PW #3237 until June 30, 2018, to allow the Applicant to complete all requirements of the fixed estimate subgrant and to construct the new laboratory.

This letter constitutes the official notification to the Grantee. Please inform the Applicant of my decision. If you have any questions, please contact Jean McDonough, Public Assistance Coordinator, FEMA Region I, at (617) 832-4757 or Jean.McDonough@fema.dhs.gov.

Sincerely,

G. Fred Vanderschmidt
Disaster Recovery Manager
FEMA-4022-DR-VT

GFV/sp

C-2, F.E.M.A Approval, W.S.O.C. Laboratory Demolition

U.S Department of Homeland Security
FEMA Joint Field Office
135 Allen Brook Lane
Williston, VT 05495-9209

FEMA

May 24, 2013

Mr. Ben Rose
Public Assistance Officer
Vennont Emergency Management & Homeland Security
103 South Main Street
Waterbury, VT 05671-2101

RE: Request for Approval to Abate for Hazardous Materials and Demolition of Structures
Waterbury State Office Complex – select Damaged Facilities

Dear Mr. Rose:

This is in reply to your letter dated May 24, 2013, forwarding the request from Buildings and General Services (BGS) for approval to move forward with hazardous materials abatement and demolition at the following eleven (11) buildings:

- Brooks
- Brooks Annex (Old Storehouse)
- Agricultural Testing and Water Resources Laboratory (Ag Lab)
- Repair and Maintenance Building
- Boiler House
- 43.5 Randall Barn
- Garage behind 123 South Main
- Garage near Lumber Storage
- Old Green House
- Lumber Storage
- Garage at Logue Cottage

We are aware that the State of Vermont is keen to start work on redevelopment of the Waterbury State Office Complex (WSOC) and that in preparation for construction you plan hazardous materials abatement and demolition of certain WSOC buildings. These demolitions will facilitate one of the first construction projects at the Complex – the building of a new consolidated Central Plant. The Central

Plant will be constructed at the current location of the State's Agricultural Testing and Water Resources Laboratory (Ag Lab).

We have completed programmatic and compliance review of the proposed, limited scope of work at these eleven buildings. Documents detailing the Environmental and Historic Preservation (EHP) conditions to this work proceeding are enclosed. By this letter, I am approving the State to move forward with the scope of hazardous materials abatement and demolition of these buildings only.[1]

It should be noted that BGS cannot move forward with the scope of its future project for the Ag Lab until they fully identify such a project and FEMA completes its EHP review for the project. Also, BGS cannot begin construction of the new Central Plant until they have requested a consolidated project under the Sandy Recovery Improvement Act (SRIA) Pilot Program for the eight buildings and FEMA approves the fixed Sub-grant for the project.

FEMA funding does not accompany this approval, i.e. FEMA Public Assistance (PA) will not be available to fund the elective scope of abatement and demolition. The intent is to address work that can be done while the actual plans, specifications and permits for the redevelopment of WSOC are completed and funding options for the Ag Lab are developed in accordance with PA program timelines.

Specifically, this letter acknowledges approval and clearance through the EHP process of the following scope of work at the eleven buildings:

- Hazardous materials abatement
- Demolition of the pre-disaster structure
- Removal of the pre-disaster foundation
- Removal of associated utilities
- Removal of associated sidewalks, fencing, and paved areas
- Backfill of voids created by removal of pre-disaster site features, and
- Clearing and grubbing of the site perimeter, and site safety and security, as necessary.

All work excluded from this list, such as the construction of new foundations, utilities construction, placement of fill beyond filling voids created by the removal of pre-disaster foundations and utilities, and further site preparation work is <u>not</u> permitted.

I encourage you to forward any information regarding the future use of the Ag Lab funding as soon as it is identified. You will need to provide VEM&HS and FEMA with a request for a funding option available under the PA program or SRIA in accordance with program conditions, eligibility and

[1] Note: On March 28, 2013, FEMA provided written approval for Asbestos Abatement at 27 historic buildings at WSOC. On May, 24, 2013, a follow up letter approved asbestos abatement of the remaining non-historic buildings that are part of your Option B, Modified Plan for the redevelopment of WSOC.

We look forward to finalizing and fulfilling our support to your redevelopment of the Waterbury State Office Complex. We understand the importance of its recovery to the State of Vermont. Please do not hesitate to contact me with any questions regarding the specifics of this approval letter.

Sincerely,

Mark H. Landry
Federal Coordinating Officer
DR-4022-VT

Enclosures – sixteen (16) record copies sent separately:

- Eleven (11) individual *Record of Environmental Consideration* (REC) documents – Brooks, Brooks Annex (Old Storehouse), Agricultural test and Water Resources Laboratory (Ag Lab), Repair and Maintenance Building, Boiler House, 43.5 Randall Barn, Garage behind 123 South Main, Garage near Lumber Storage, Old Green House, Lumber Storage, and the Garage at Logue Cottage
- *Environmental Review Summary* – Brooks and Annex
- *Environmental Review Summary* Ag Lab
- *Environmental Review Summary* – Repair and Maintenance Building, Boiler House, 43.5 Randall Barn, Garage behind 123 South Main, Garage near Lumber Storage, Old Green House, Lumber Storage, and the Garage at Logue Cottage
- *Request for Concurrence* (pursuant to the Secondary Programmatic Agreement) – Brooks and Annex
- *Request for Concurrence* (pursuant to the Secondary Programmatic Agreement) – Repair and Maintenance Building, Boiler House, 43.5 Randall Barn, Garage behind 123 South Main, Garage near Lumber Storage, Old Green House, Lumber Storage, and the Garage at Logue Cottage

C-.3 Natural Resources Atlas Map

VERMONT

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov

LEGEND

- Agricultural Soil Mitigation
- Quarry

Surficial Geology (Linear Featu

- Rockline
- Striation
- Til Fabric

Surficial Geology (Feature Typ

- Glacial deposit
- Glaciofluvial deposit
- Glaciofluvial
- Eolian deposit
- Glaciolacustrine deposit
- Postglacial fluvial deposit
- Champlain Sea deposit
- Champlain Sea landform
- Pluvial deposit
- Bedrock exposure
- Surface Water

Surficial Geology (Lithology)

- till
- terminal moraine
- moraine
- isolated kame
- kame terrace
- kame moraine
- outwash
- esker

321.0 0 160.00 321.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 527 Ft. 1cm = 63 Meters

© Vermont Agency of Natural Resources

THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

NOTES

;Map created using ANR's Natural Resources Atlas
Geology

C-3, .N.R.A, Geology Map

C-4 Natural Resources Atlas Soils Map

VERMONT

Area Soils Mapping - Randolph VTC North

Vermont Agency of Natural Resources

vermont.gov

LEGEND

Soils - Prime Agricultural

- Local
- Local (b)
- Not rated
- Prime
- Prime (b)
- Prime (f)
- Statewide
- Statewide (a)
- Statewide (b)
- Statewide (c)

Soils

- <all other values>
- Association
- Consociation
- Undifferentiated group
- Complex

833.0 0 416.00 833.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 417 Ft. 1cm = 50 Meters

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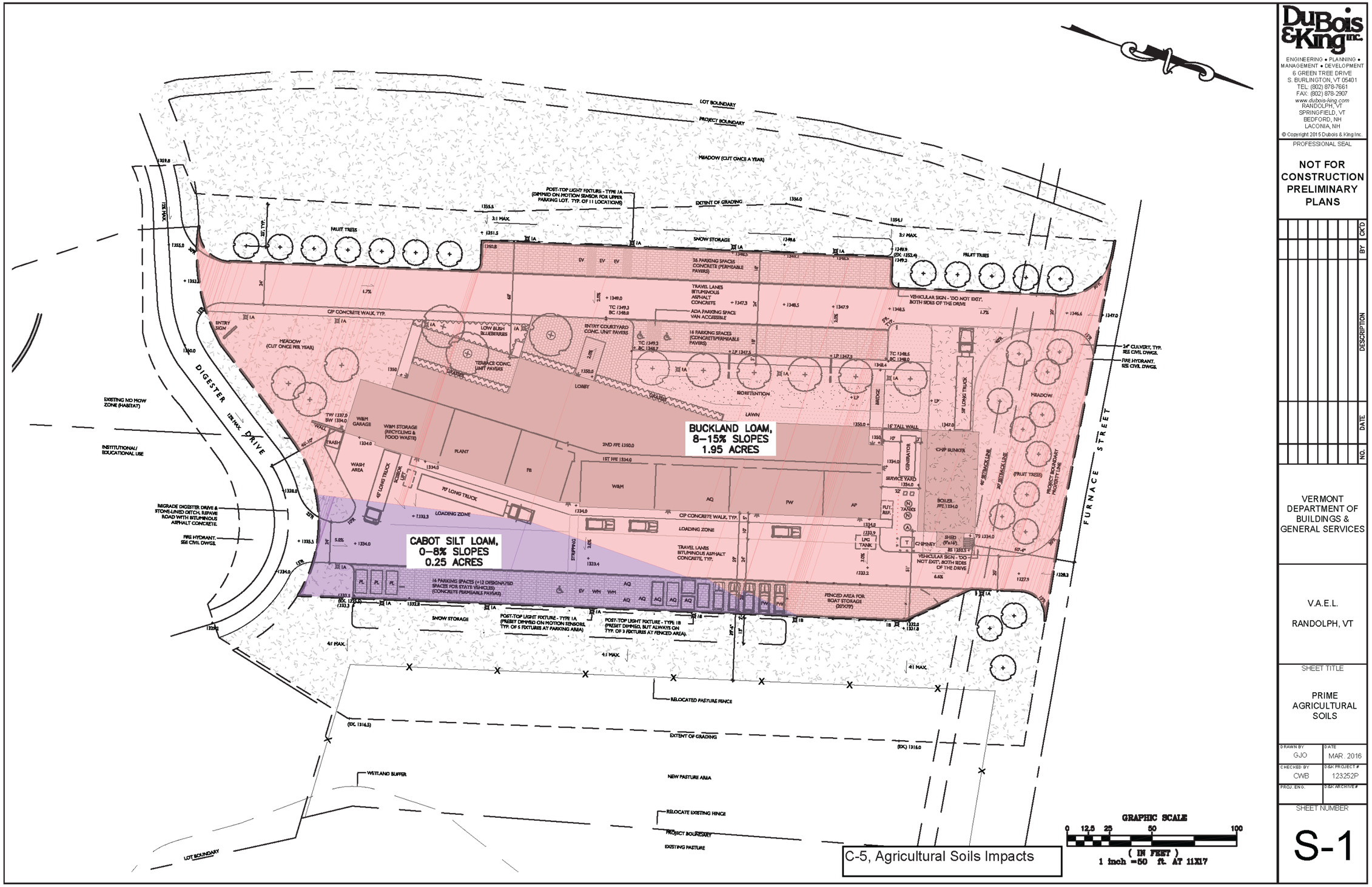
NOTES

Map created using ANR's Natural Resources Atlas

C-4, N.R.A., N.R.C.S. Soils Map

C-5Agricultural Soils Impacts Plan



C-5, Agricultural Soils Impacts

DuBois & King inc.

ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
6 GREEN TREE DRIVE
S. BURLINGTON, VT 05401
TEL: (802) 878-7661
FAX: (802) 878-2907
www.dubois-king.com
RANDOLPH, VT
SPRINGFIELD, VT
BEDFORD, NH
LACONIA, NH

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PROFESSIONAL SEAL

NOT FOR CONSTRUCTION PRELIMINARY PLANS

NO.	DATE	DESCRIPTION	BY	CK'D

VERMONT DEPARTMENT OF BUILDINGS & GENERAL SERVICES

V.A.E.L.

RANDOLPH, VT

SHEET TITLE

PRIME AGRICULTURAL SOILS

DRAWN BY: GJO	DATE: MAR. 2016
CHECKED BY: CWB	D&K PROJECT #: 123252P
PROJ. ENG.	D&K ARCHIVE #

SHEET NUMBER

S-1

C-6 N.R.C.S Farmland Conversion Impact Rating Form

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request March 14, 2016
Name of Project Vermont State Agriculture and Environme	Federal Agency Involved FEMA
Proposed Land Use Construct new lab bldg & appurtenanc	County and State Orange County, Vermont
PART II *(To be completed by NRCS)*	Date Request Received By NRCS March 29, 2016 / Person Completing Form: Thomas Villars

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated 0	Average Farm Size 141
Major Crop(s) Dairy - corn silage	Farmable Land In Govt. Jurisdiction Acres: 331237 % 75	Amount of Farmland As Defined in FPPA Acres: 82518 % 19	
Name of Land Evaluation System Used VT Ag Value Groups	Name of State or Local Site Assessment System none	Date Land Evaluation Returned by NRCS March 29, 2016	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	2.15			
B. Total Acres To Be Converted Indirectly	0			
C. Total Acres In Site	14.34			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0			
B. Total Acres Statewide Important or Local Important Farmland	2.2			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<0.01			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	75			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	55			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	14			
2. Perimeter In Non-urban Use	(10)	9			
3. Percent Of Site Being Farmed	(20)	20			
4. Protection Provided By State and Local Government	(20)	20			
5. Distance From Urban Built-up Area	(15)	15			
6. Distance To Urban Support Services	(15)	0			
7. Size Of Present Farm Unit Compared To Average	(10)	0			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	5			
10. On-Farm Investments	(20)	20			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	103	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	55	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	103	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	158	0	0	0

Site Selected: A	Date Of Selection 04.01.16	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Site received extensive review and comparison to 23 other potential sites, and ranked highest among all sites reviewed according to eight criteria. State requirement for mitigation is 4.3 acres; mitigation proposed is 6.0 acres, which is acceptable to the Vermont Agency of Agriculture, Food and Markets.

Name of Federal agency representative completing this form: Charlotte Brodie for FEMA | Date: 04.01.16

(See Instructions on reverse side) **Form AD-1006 (03-02)**

C-6, N.R.C.S. Farmland Conversion Impact Rating

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

C-7 Prime Agricultural Soils Mitigation Site

C-8, V.A.F.M. Prime Agricultural Soils Impact and Mitigation Application

VERMONT
AGENCY OF AGRICULTURE, FOOD & MARKETS
www.Agriculture.Vermont.gov

Dear Applicant,
Please take a moment to fill out this form completely and return to the Vermont Agency of Agriculture, Food and Markets regarding your Act 250 Criteria 9(B) Primary Agriculture soils review along with plans clearly showing all the requested information below. If you have any questions regarding the information requested below, contact: Lauren Masseria at agr.act250@vermont.gov or 802-505-5413.

Definitions:

Primary Agricultural Soils 10 VSA § 6001 (15)

(A) An important farmland soils map unit that the Natural Resources Conservation Service of the U.S. Department of Agriculture (NRCS) has identified and determined to have a rating of prime, statewide, or local importance, unless the District Commission determines that the soils within the unit have lost their agricultural potential. In determining that soils within an important farmland soils map unit have lost their agricultural potential, the Commission shall consider:

(i) impacts to the soils relevant to the agricultural potential of the soil from previously constructed improvements;

(ii) the presence on the soils of a Class I or Class II wetland under chapter 37 of this title;

(iii) the existence of topographic or physical barriers that reduce the accessibility of the rated soils so as to cause their isolation and that cannot reasonably be overcome; and

(iv) other factors relevant to the agricultural potential of the soils, on a site-specific basis, as found by the Commission after considering the recommendation, if any, of the Secretary of Agriculture, Food and Markets.

(B) Soils on the project tract that the District Commission finds to be of agricultural importance, due to their present or recent use for agricultural activities and that have not been identified by the NRCS as important farmland soil map units.

Primary Agricultural Soils 10 VSA § 6086 9(B)

A permit will be granted for the development or subdivision of primary agricultural soils only when it is demonstrated by the applicant that, in addition to all other applicable criteria, either, the subdivision or development will not result in any reduction in the agricultural potential of the primary agricultural soils;

(i) the development or subdivision will not significantly interfere with or jeopardize the continuation of agriculture or forestry on adjoining lands or reduce their agricultural or forestry potential; and

(ii) except in the case of an application for a project located in a designated growth center, there are no lands other than primary agricultural soils owned or controlled by the applicant which are reasonably suited to the purpose of the development or subdivision; and

(iii) except in the case of an application for a project located in a designated growth center, the subdivision or development has been planned to minimize the reduction of agricultural potential of the primary agricultural soils through innovative land use design resulting in compact development patterns, so that the remaining primary agricultural soils on the project tract are capable of supporting or contributing to an economic or commercial agricultural operation; and

(iv) suitable mitigation will be provided for any reduction in the agricultural potential of the primary agricultural soils caused by the development or subdivision, in accordance with section 6093 of this title and rules adopted by the Natural Resources Board.

VERMONT
AGENCY OF AGRICULTURE, FOOD & MARKETS
www.Agriculture.Vermont.gov

Date:	03/18/2016
District:	District 3
Amendment:	No
LUP Permit Number:	Not designated yet.
Brief Description of Project:	New 36,000 sf State environmental laboratory with associated structures, driveways, and parking space.

Project Information:

Project Name:	Vermont Ag & Env Laboratory
Project Address:	Project 163 Admin Drive
Town: Project	Randolph
Coordinates:	43 56' 31" N; 72 36' 13" W

Project Contact Information:

Contact Person:	Michael Kuhn, Project Manager
Contact Phone:	802-828-4651
Contact Email:	mike.kuhn@vermont.gov

Prime Agricultural Soils (PAS) Information:

**Note all values in acres*

Total Parcel:	13.12

Total PAS + Total Unrated Soils = Total Parcel

Total PAS (Ag Value 1-7):	13.12

No Previous Impacts + Previously Impacted = Total PAS

PAS with No Previous Impacts:	12.34
Previously Impacted PAS:	0.78
Total Unrated Soils (Ag Value 7+):	0

Include Acres of Class I & II Wetlands in Total Unrated Soils

Total Proposed Impacts to PAS:	2.15

Other Features:

Wetlands:	No
Slopes Over 15%:	No
Pipes <2' in Depth:	No

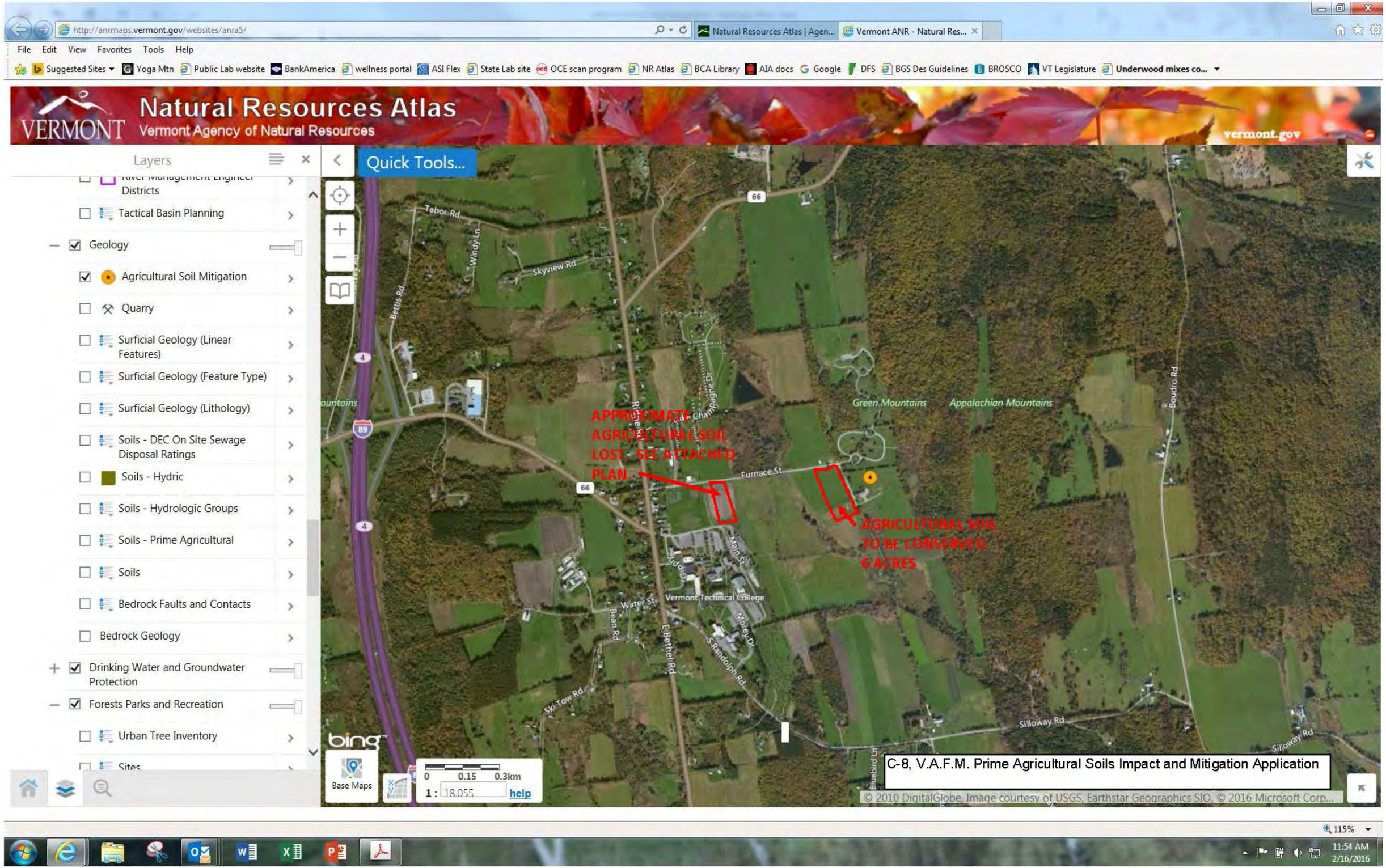
Additional comments:

Soil Matrix:

Please fill out the soil information for the entire parcel in the table below:

**Note existing impacts as defined by Primary Agricultural Soils 10 VSA § 6001 (15). Refer to the definitions listed on page 1 of this document.*

Key	*Soil Type*	*Ag Value*	*Total Area*	*Existing*	*Prop*
BuB	Buckland Loam (Prime)	3	0.57	0	0
BuC	Buckland Stony Loam (Statewide)	7	5.11	0.71	2.15
CaB	Cabot Stony Silt Loam (Statew. B)	6d	7.43	0.07	0


http://anrmaps.vermont.gov/websites/anra5/
Natural Resources Atlas | Agen...
Vermont ANR - Natural Res...
File Edit View Favorites Tools Help
Suggested Sites
Yoga Mtn
Public Lab website
BankAmerica
wellness portal
ASI Flex
State Lab site
OCE scan program
NR Atlas
BCA Library
AIA docs
Google
DFS
BGS Des Guidelines
BROSCO
VT Legislature
Underwood mixes co...
VERMONT
Natural Resources Atlas
Vermont Agency of Natural Resources
vermont.gov
Layers
Quick Tools...
Districts
Tactical Basin Planning
Geology
Agricultural Soil Mitigation
Quarry
Surficial Geology (Linear Features)
Surficial Geology (Feature Type)
Surficial Geology (Lithology)
Soils - DEC On Site Sewage Disposal Ratings
Soils - Hydric
Soils - Hydrologic Groups
Soils - Prime Agricultural
Soils
Bedrock Faults and Contacts
Bedrock Geology
Drinking Water and Groundwater Protection
Forests Parks and Recreation
Urban Tree Inventory
Sites
Tabor Rd
Windy Ln
Skyview Rd
Bettis Rd
Champagne Dr
Green Mountains
Appalachian Mountains
Boudro Rd
APPROXIMATE AGRICULTURAL SOIL LOST - SEE ATTACHED PLAN
Furnace St
AGRICULTURAL SOIL TO BE CONSERVED. 6 ACRES
Main St
Vermont Technical College
Water St
Bean Rd
E Bethel Rd
Morey Dr
S Randolph Rd
Ski Tow Rd
Silloway Rd
Bluebird Ln
C-8, V.A.F.M. Prime Agricultural Soils Impact and Mitigation Application
bing
Base Maps
0 0.15 0.3km
1 : help
© 2010 DigitalGlobe, Image courtesy of USGS, Earthstar Geographics SIO, © 2016 Microsoft Corp...
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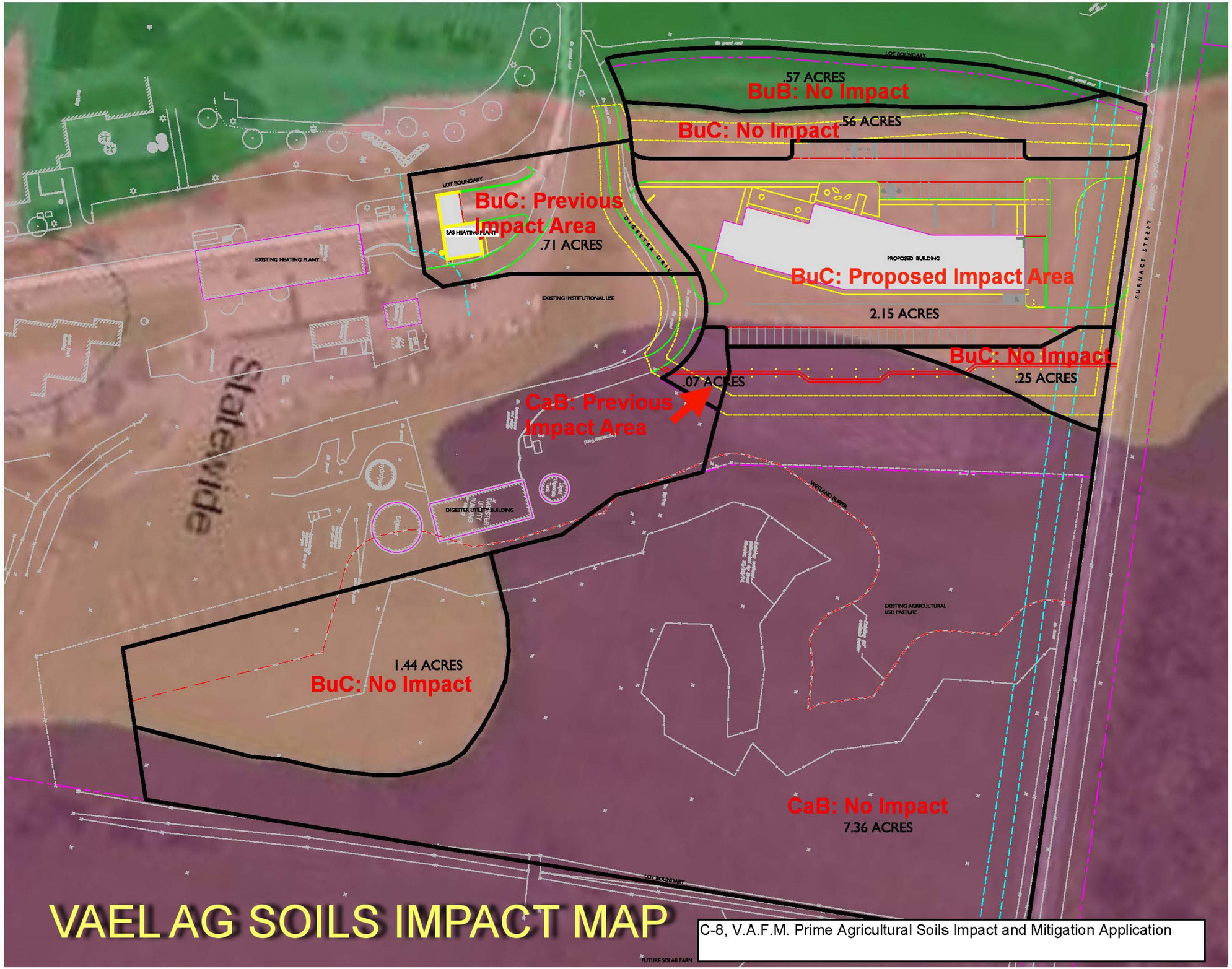
2/16/2016



C-8, V.A.F.M. Prime Agricultural Soils Impact and Mitigation Application

PROJECT INFORMATION

1. LOT BOUNDARY: 571,648 SF (13.12 AC.)
2. IMPERVIOUS AREA (BLDG. FOOTPRINT & HARDSCAPE): 85,559 SF (1.96 AC.)

VERMONT

VERMONT AGRICULTURAL AND ENVIRONMENTAL LABORATORIES

CANNONDESIGN

WAGNERHODGSON
LANDSCAPE ARCHITECTURE

CANNONDESIGN
Architecture/Planning/MEP/FP
99 Summer Street, Suite 600
Boston, MA 02110

STATE OF VERMONT
BUILDING & GENERAL SERVICES
Client
2 Governor Aiken Avenue
Montpelier, VT 05633-3801

FREEMAN FRENCH FREEMAN
Associate Architect
81 Maple Street
Burlington, VT 05401

KNIGHT CONSULTING ENGINEERS
Geotechincal Engineer
51 Knight Lane
Williston, VT 05495

HOWE ENGINEERS
Code Consultant
101 Longwater Circle, Suite 203
Norwell, MA 02061

WAGNER HODGSON
Landscape Architect
7 Marble Avenue
Burlington, VT 05401

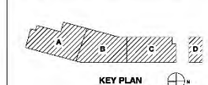
VANASSE HANGEN BRUSTLIN
Civil Engineer
7056 U.S. Route 7
North Ferrisburgh, VT 05473

KREBS & LANSING ENGINEERS
Surveyor
164 Main Street
Colchester, VT 05446

VERMEULENS CONSULTING
Cost Estimating
470 Atlantic Avenue, 4th Floor
Boston, MA 02210

DESIGN DEVELOPMENT
50% PACKAGE
MARCH 08, 2016

No.	Description	Date
3	Design Development	28 APRIL 2016
2	50% Design Development	08 MARCH 2016
1	Schematic Design	28 MAY 2015



Drawing Title:

PROJECT PLAN

Scale: 1"=40' Issue Date: 03/25/2016
Project No.: 004614.00 Checked by: JH

L000

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C-8, V.A.F.M. Prime Agricultural Soils Impact and Mitigation Application

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
8 GREEN FREE DRIVE
S. BURLINGTON, VT 05403
TEL. (802) 878-7881
FAX. (802) 878-2087
www.dubois-king.com
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PROFESSIONAL SEAL

NOT FOR CONSTRUCTION PRELIMINARY PLANS

NO.	DATE	DESCRIPTION	BY	CKD

VERMONT DEPARTMENT OF BUILDINGS & GENERAL SERVICES

V.A.E.L.

RANDOLPH, VT

SHEET TITLE

AGRICULTURAL SOILS MITIGATION SITE

DRAWN BY: GJO	DATE: MAR. 2016
CHECKED BY: CWB	DBK PROJECT #: 12C252P
PROJ. ENG.	DBK ARCHIVE #

SHEET NUMBER

S-2

C-9, V.A.F.M. Prime Agricultural Soils Mitigation Approval

VERMONT
AGENCY OF AGRICULTURE, FOOD & MARKETS
www.Agriculture.Vermont.gov

Sandra Vitzthum
Department of Buildings and General Services
2 Governor Aiken Drive
Montpelier, VT 05633-5801

4/1/2016

Re: Vermont Agriculture and Environmental Laboratory
Consideration of primary agricultural soils under 10 V.S.A. §§6093, 6086

Dear Applicant:

Thank you for the opportunity to comment on the above-referenced project.

Purpose:

This review letter will aid in the District Commission's determination whether any reduction in the agricultural capability of the primary agricultural soils will occur as a result of the construction of the project. Please note that this letter focuses solely on whether there are primary agricultural soils on the project site (10 V.S.A. § 6001(15)), any impact to these primary agricultural soils and whether any proposed mitigation is adequate, pursuant to 10 VSA §6093(a).

Summary of Agency Review:

The Agency holds the opinion that the project site contains:
12.34 acres of primary agricultural soils, as defined by Act 250. See 10 V.S.A. §6001(15)
2.15 acres of primary agricultural soils that will be impacted, either directly or indirectly;
4.3 acres of mitigation necessary because of the statutory multipliers;
6.1 acres will be mitigated onsite.

Process and Basis for Opinion:

The Agency was originally contacted by Sandra Vitzthum on behalf of Vermont Agriculture and Environmental Laboratory (the "Applicant"), to review a project generally described as New 36,000 sf State environmental laboratory with associated structures, driveways, and parking space. The Agency's review primarily consisted of a review of the following submitted materials:

- A letter and email from Sandra Vitzthum, dated 3/30/2016;
- AAFM Intake Form dated 3/18/2016;
- Site Plan, titled "Agricultural Soils Mitigation Site", dated 3/1/2016;
- Site Plan, titled "VAEL Ag Soils Impact Map", not dated;
- Site Plan, titled "Project Plan", dated 3/25/2016.

Our review of primary agricultural soils is also based on an evaluation of USDA soil survey(s), satellite imagery, the supplied site development plans, supplied ground topographic survey, soil limitations, size, location, landscape patterns and other elements of the definition of primary agricultural soil as applied to the project site. See 10 V.S.A. §6001(15)

The review and evaluation indicates:
±13.12 acres = soils with an agricultural value of 1-12 (NRCS)(total project)
±13.12 acres = soil with an agricultural value of 1-7 (NRCS)
±0.78 acres = soil with an agricultural value of 1-7 (NRCS) that does not meet the statutory definition of primary agricultural soils (due to previous development)

The project site contains 12.34 acres of primary agricultural soils, as defined by 10 V.S.A. §6001(15), consisting of the following soil types:

Key	*Soil Type*	*Ag Value*	*Acreage*
BuB	Buckland Loam	3	0.57
BuC			
CaB	Cabot Stony Silt Loam	6d	7.36

We accept your assertion that there are 0.78 acres of preexisting impacts and that 2.15 acres of theacres of the primary agricultural soils on the site that will be directly or indirectly impacted by the proposed development.

Recommendations:

The project is located outside of a duly designated growth center so suitable on-site mitigation is presumably required in the project plan to comply with sub-criteria iv of 10 V.S.A. §6086(a)(9)(B) and with 10 V.S.A. §6093. Please note all mitigation is subject to final approval by the District Commission.

Based on the 2.15 acres of impact, the total amount of mitigation required pursuant to 10 V.S.A. § 6093(a) is 4.3 acres.

> Mitigation equation: 2.15 acres (impact to "statewide" soils in value group 5-7) x 2 (Stipulated multiplier) = 4.3 acres

On-site protection of 6.0 acres depicted on site plan, "Agricultural Soils Mitigation Site" Sheet S-2, dated 3/2016 is acceptable to the agency. The Agency requests these 6.0 acres be protected, at a minimum, through a permit condition issued by the district commission.

a. *The protected primary agricultural soils as depicted in Exhibit_____(the designated mitigation area) shall be maintained in a manner ensuring that they will be available for economic or commercial agriculture, in perpetuity. Only activities designated as "farming" pursuant to 10 V.S.A. § 6001(22) shall be permissible in the designated mitigation area. All other activities, development, construction, or improvements shall be prohibited. If, at any time, the designated mitigation area is not used for an economic or commercial agricultural purpose, the Permittees shall ensure that the soils remain open and unobstructed by haying or brush hogging the area a minimum of once every two years. A Rule 34(E) hearing, otherwise known as Stowe Club Highlands Analysis, is required if any activity, other than those defined as farming by 10 V.S.A. § 6001(15), is proposed in the designated mitigation area.*

b. *Pursuant to 10 V.S.A. § 6081(s), no permit amendment is required for farming that will occur on primary agricultural soils preserved in accordance with 10 V.S.A. § 6093 or will not conflict with any condition in this permit.*

c. *The following "right to farm" covenant shall be included in any declaration of covenants for the project and in each deed conveying any portion of the project tract:*
    i. *Notice is given of the existence of preserved agricultural lands located in the vicinity of the lands conveyed herein. Current or future agricultural operations on these lands may include, without limitation: plowing; planting; fertilizing; spraying; the use of agricultural chemicals, pesticides and herbicides in the course of cultivating, harvesting, storing and transporting agricultural products; and the raising, feeding and management of livestock. Consistent with this notice, the lands are conveyed subject to a perpetual easement for any noise, odors, dust, and/or byproducts and impacts that may occur in the course of conducting accepted agricultural and best-management practices on these nearby agricultural lands. Grantees, by the acceptance of this deed, waive any objection to impacts arising from accepted agricultural and best-management practices, and are further notified that existing agricultural activities which are consistent with accepted agricultural and best-management practices do not constitute a nuisance or a trespass.*

Next Steps

The applicant should provide a copy of this review letter to the District Commission as part of the Act 250 application. The District Commission will advise the applicant and the Agency if the proposed use of on-site mitigation is acceptable in order to address the impact to the 2.15 acres of primary agricultural soils.

Sincerely,

Lauren Masseria, Act 250 Coordinator
802-505-5413 | lauren.masseria@vermont.gov
Vermont Agency of Agriculture, Food and Markets
116 State Street | Montpelier, VT 05602
Cc: District 3 Coordinator, Linda Matteson

C-9, V.A.F.M. Prime Agricultural Soils Mitigation Approval

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
8 GREEN FREE DRIVE
S. BURLINGTON, VT 05403
TEL. (802) 878-7881
FAX. (802) 878-2087
www.dubois-king.com
RANDOLPH, VT
SPRINGFIELD, VT
ROCHESTER, NH
LACONIA, NH
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PROFESSIONAL SEAL

NOT FOR CONSTRUCTION PRELIMINARY PLANS

NO.	DATE	DESCRIPTION	BY	CKD

VERMONT DEPARTMENT OF BUILDINGS & GENERAL SERVICES

V.A.E.L.

RANDOLPH, VT

SHEET TITLE

AGRICULTURAL SOILS MITIGATION SITE

DRAWN BY: GJO	DATE: MAR. 2016
CHECKED BY: CWB	DBK PROJECT #: 1Z3252P
PROJ. ENG.	DBK ARCHIVE #

SHEET NUMBER

S-2

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION

NOTICE OF INTENT (NOI) TO DISCHARGE STORMWATER PURSUANT TO GENERAL PERMIT 3-9015

For Dept. Use Only

Notice of Intent No:

Submission of this Notice of Intent (NOI) constitutes notice that the applicant(s) requests authorization to discharge stormwater for their project listed below pursuant to Chapter 18: Stormwater Management Rule and General Permit 3-9015. To obtain authorization, the applicant must submit a complete and accurate NOI, as well as all required supporting materials. Submission of an NOI does not confer coverage under GP 3-9015. Please carefully read all guidance information in the Narrative Template and Application Requirements Document before signing.

1. Applicant(s) Information[1] (*starred fields in Section 1 are required)

A. Applicant Name(s)*: State of Vermont Department Buildings & General Services

Address of Applicant(s)*: 2 Governor Aiken Avenue

City*: Montpelier State*: VT Zip*: 05633

Telephone Number*: (802) 828-4651 E-mail Address*: mike.kuhn@vermont.gov

B. Additional Applicant Name(s) if necessary: Vermont Technical College/Vermont State Colleges

Address of Applicant(s): P.O. Box 500

City: Randolph Center State: VT Zip: 05061

Telephone Number: (802) 728-1639 E-mail Address: ltyler@vtc.vsc.edu

C. Applicant* B is the current land owner. (Fill in A or B)

Applicant* A will be billed for the annual operating fee and be the primary contact for correspondence with the Stormwater Program. (Fill in A or B)

[1]The applicant(s) shall be the owner and operator. If the applicant is a business, the business must be registered with the Vermont Secretary of State. If the application is made in connection with a new housing or commercial development, the developer and an owners' association accepting responsibility for the stormwater management system shall apply as co-permittees [§18-308 (b)(4)]. For projects that require listing more than two applicants, please attach an additional page.

2. Application Preparer/ Consultant Information

Application Preparer Name: Peter Smiar

Application Preparer Company: VHB

Address of Application Preparer: 40 IDX Drive, Building 100, Suite 200

City: South Burlington State: VT Zip: 05403

Telephone Number: (802) 497-6165 E-mail Address: psmiar@vhb.com

3. Project Information

A. Is this NOI being submitted in connection with a subdivision (includes, but is not limited to residential and commercial subdivisions, universities, industrial parks, and ski areas)? YES ☑ NO ☐

B. Existing Stormwater Permit/Authorization Number related to this project (if any): 4374-9015.0 through .3

C. Is this an amendment to an existing Stormwater Permit/Authorization? YES ☐ NO ☑

If yes: I have contacted the district analyst to determine application review fees. YES ☐ NO ☑

If yes: you must submit a complete application package with all materials to be covered under the authorization regardless of whether or not they have changed since the original application.

D. Have you or will you be submitting an NOI for coverage under a Stormwater Construction Discharge Permit? YES ☑ NO ☐

E. Does the project involve activities that are classified as stormwater hotspots? YES ☐ NO ☑

F. Project Name: State of Vermont Agriculture and Environmental Laboratory

G. J. Project Physical Address: 163 Admin Drive, Randolph Center, VT 05061

H. Street Address: 163 Admin Drive

Town: Randolph County: Orange Zip: 05061

I. Project Coordinates (project center in Decimal Degrees with 6 digits to the right of the decimal):

Latitude: 43.941330 Longitude: 72.603540

I. Receiving Water(s)[2] Penny Brook

J. Number of Discharge Points: 1

K. Parcel(s) SPAN: Enter the 11-digit number that is printed on the property tax bill for the applicable parcel(s). Projects that involve more than 1 parcel shall list all applicable SPANs.

50715912910

M. Project Description: Briefly describe the project. (If an amendment, please describe the previously permitted project and the proposed change to the previously permitted project.):

Construction of new State laboratory building and separate wood chip heating plant building on land owned by Vermont Technical College. No tie-in with existing stormwater infrastructure is proposed.

[2] Receiving water is the name of the waterbody that runoff from the site first enters. In the case of an unnamed water, specify that the receiving water is an unnamed tributary, or wetland, etc. and state the first named receiving water downstream (e.g. unnamed tributary to Trout Brook). See Schedule A section of the Application Requirements for further information.

4. Manner of Discharge

A manner of discharge is required for each discharge point of the project. The manner of discharge shall specify the type of impervious surfaces, the conveyance, and type of treatment proposed to meet applicable treatment standards, and shall describe the stormwater outfall to the specified receiving water.

S/N 001: Stormwater runoff from *[list impervious surfaces]* via *[describe conveyance]* to *[treatment practices]* discharging to *[Receiving water].*

S/N 001: *Stormwater runoff from warehouse building rooftop on Lot 2 and a portion of access road, via sheet flow to grass channel #1, all routed to a wet pond with pre-treatment forebay, discharging by controlled outlet structure and stabilized outfall to Trout Brook. Additional runoff from building rooftop on Lot 3, is disconnected in accordance with Disconnection of Rooftop Runoff Credit, discharging overland to Trout Brook*

Use the format and example above to provide a written manner of discharge for each discharge point. If more space is needed, provide an additional sheet.

S/N 001 - Stormwater runoff from driveways, sidewalks, parking lots, and lab building rooftop is collected in a closed drainage system and treated via in underground sand filter/ chamber storage system #1, discharging via controlled outlet structure to an existing stone outfall east of Digester Drive. Runoff from a new chip boiler plant rooftop and driveway is collected in a closed drainage system and treated via a underground sand filter/ chamber storage system #2, also discharging via controlled outlet structure to the same existing stone outfall east of Digester Drive. Runoff flows from the outfalls overland to Penny Brook. Groundwater recharge is achieved using the Disconnection of Rooftop Runoff Credit by directing a portion of lab building rooftop runoff to a drywell located east of the building.

5. Plan Set Reference

Provide a complete list of all plans applicable to the stormwater management design that have been included with this application. Specify who the plans have been prepared by (e.g. Fairweather Stormwater Design, Inc.) and list the plans using the following format: Sheet *[##]*, "*[Sheet Title]*," dated *[mm/dd/yyyy]*, last revised *[mm/dd/yyyy]*; (e.g. Sheet 1, "Existing Condition Plan", dated 01/15/2014, last revised 02/06/2014).

Dated plans are required. Using the above format enter the plan set reference for the project in the space below. If more space is required, provide an attachment.

Design firm: VHB

6. Impervious Area Summary

Complete the following table with the appropriate impervious acreage as applicable. Round all areas to the nearest **0.01 acres**. For definitions of new impervious surface, expanded impervious surface, redevelopment and existing impervious surface, see Chapter 18: Stormwater Management Rule http://www.anr.state.vt.us/dec/waterq/stormwater/docs/sw_rule-unimpaired.pdf

Impervious Surfaces Proposed for Coverage		
1. **New/Expanded Impervious Area:**	1.78	Acres
2. **Redeveloped Impervious Area:**	0.00	Acres
3. **If this is an amendment**[3] Previously Permitted Impervious Area:	1.95	Acres
4. **Total impervious area to be permitted for this project:** (Add lines 1+2+3)	3.73	Acres
5. **Total Area for application fee calculation**: (For new projects add lines 1+2, for amendments see below[3]. Carry this value over to following page.)	1.78	Acres

[3] *If the current application is an amendment, contact the District Analyst who covers the Project Town prior to submitting this NOI to determine if a full review fee is required.*

IMPORTANT: DO NOT include impervious area in the fee calculation unless the stormwater runoff from the surface will meet the applicable treatment standards set forth in the Vermont Stormwater Management Manual.

This impervious surface breakdown as completed above MUST match the total impervious surfaces presented in the Schedule A's completed for the discharge points in your application. If these totals do not match, your application will be returned to you as administratively incomplete.

7. Permit Application Fees (Per 3 V.S.A. Sec. 2822)

Administrative Processing Fee	$240.00 (standard)	**$240.00**
Application Review Fee	1.78 total impervious acres **X** $860 per impervious acre (Class B waters)* _____ total impervious acres **X** $1400 per impervious acre (Class A waters)* * Water classification can be found here: http://www.anr.state.vt.us/dec/waterq/erp/docs/erp_wqs.pdf	$ 1,530.80 (A minimum app. review fee of $440 applies) $ 0.00 (A minimum app. review fee of $1400 applies)
Total Permit Application Fees	**Enclosed Check#**_____ **Paid by:**_____	$ 1,770.80

Include a check payable to State of Vermont for the appropriate permit fees. Do not send a copy of the check. Round impervious acreage to nearest 0.01 acre.

8. Certification of Complete Application and Designer Certification

Please carefully read all guidance information in the Narrative Template and Application Requirements Document before signing.

A complete application shall contain the following items saved as separate PDFs:

- **A complete NOI form**
- **Attachment 1: Narrative.** Narrative, Location Map and Soils Map (see Narrative Guidance).
- **Attachment 2: Worksheets.** Schedule A's, waivers and BMP worksheets. These shall be grouped by discharge point (see Application Requirements Document) .
- **Attachment 3: Modeling.** Hydrologic modeling for the existing and proposed conditions including the pertinent storm events; WQv, 1-year, 10-year and 100-year storm (see Application Requirements Document, Modeling Section).
- **Attachment 4: Plans.** Pertinent plan sheets with legend, scale bar and north arrow for the existing condition and proposed condition, as well as a detail plan sheet (see Application Requirements Document, Plan Sheet Section).

Designer Certification: I hereby certify that I have reviewed the Application Requirements Document and have included the required information with this NOI. I hereby certify that the design-related information submitted with the NOI for coverage under General Permit 3-9015 was prepared under my direction or supervision and that the information is, in the exercise of my reasonable professional judgment, true, accurate and complete. I also hereby certify that the stormwater collection, treatment and control system design submitted with this application **complies with DEC's Stormwater Management Rule and the Vermont Stormwater Management Manual**.

Signature of Stormwater Designer[4]	Date
Peter Smiar, P.E.	VHB
Designer Name and Title	Company Name (if applicable)

[4.] **Please sign the document electronically. If you cannot sign electronically, please only submit the signatures page in the paper form, do not scan entire NOI.**

9. Applicant(s) Certification

An authorized representative of each applicant as listed in Section 1 of this NOI shall complete the section below. If additional space is needed, the applicant may attach additional copies of this page to the NOI.

I hereby certify that I have read General Permit 3-9015 (http://www.vtwaterquality.org/stormwater/htm/sw_3-9015.htm) and agree to abide by its terms. I understand that there will be annual reporting requirements and annual operating fees based on the amount of impervious permitted herein.

	Commissioner, SOV BGS
Signature of Owner or Authorized Representative[5]	Title
Michael J. Obuchowski	
Type Name	Date
	Commissioner, SOV BGS
Signature of Operator or Authorized Representative[5]	Title
Michael J. Obuchowski	
Type Name	Date

Please sign the document electronically. If you cannot sign electronically, please only submit the signatures page in the paper form, do not scan entire NOI.

[5] If the applicant is a business, the signature must be provided by one of the following: i) the person listed as the registered agent with the Secretary of State; ii) an executive figure such as the president, chairperson or superintendent, or; iii) an individual whose status as an authorized representative is verified in writing by the registered agent or executive figure. If the applicant is an individual, but the NOI is being signed by an authorized representative, a letter from the applicant stating that that person is the authorized representative must accompany this NOI.

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATERSHED MANAGEMENT DIVISION	**NOTICE OF INTENT (NOI)** **FOR STORMWATER DISCHARGES** **ASSOCIATED WITH CONSTRUCTION ACTIVITIES ON MODERATE RISK SITES** **Under Vermont Construction General Permit 3-9020**	For Dept. Use Only **Notice of Intent No:**

Submission of this completed Notice of Intent (NOI) constitutes notice that the entities in Section 1 intend to be authorized to discharge pollutants to waters of the State, from the project identified in Section C, under Vermont's Construction General Permit (CGP). Submission of this NOI also constitutes notice that the parties identified in Section 1 of this form have read, understand and meet the eligibility conditions of the CGP; have determined that the project qualifies for coverage as a Moderate Risk project in conformance with Appendix A of the CGP; agree to comply with all applicable terms and conditions of the CGP; understand that continued authorization under the CGP is contingent on maintaining eligibility for coverage; and, that the applicable practices within the authorized Erosion Prevention and Sediment Control Plans must be implemented and maintained for the duration of construction activities. In order to be granted coverage, all information required on this form must be provided and an application fee payable to the State of Vermont must be submitted.

1. Applicant(s) Information (*starred fields in Section 1 are **required**)

A. Landowner Name*: Vermont Technical College/Vermont State Colleges

Address*: P.O. Box 500

City*: Randolph Center State*: Vermont Zip*: 05061

Telephone Number:* 802-728-1639 E-mail Address*: ltyler@vtc.vsc.edu

B. Principal Operator (**if unknown, must be added prior to commencement of construction**):

Company: State of Vermont Department of Buildings & General Services

Address: 2 Governor Aiken Avenue

City: Montpelier State: VT Zip: 05633

Telephone Number: 802-828-4651 E-mail Address: mike.kuhn@vermont.gov

2. On-Site Plan Coordinator Information (if unknown, must be added prior to commencement of construction)

On-Site Plan Coordinator Name: To be determined

On-Site Plan Coordinator Company:

Address:

City: State: Zip:

Telephone Number: E-mail Address:

3. EPSC/Application Preparer Information (if applicable) (all fields are required if completing this section)

EPSC Plan/Application Preparer Name: Peter Smiar

EPSC Plan/Application Preparer Company: VHB

Address: 40 IDX Drive, Building 100, Suite 200

City: South Burlington State: VT Zip: 05403

Telephone Number: (802) 497-6165 E-mail Address: psmiar@vhb.com

4. Project Information *All information in this section is required.

A. Project Name: State of Vermont Agriculture and Environmental Laboratory

Is this project part of a Common Plan of Development[1]? ☑ Yes ☐ No

If yes, name of Development: Vermont Technical College Randolph Campus

B. Does this project have any previously issued or pending stormwater discharge permits? ☑ Yes ☐ No

If yes, prior NOI number(s): 4374-9015.1, 4374-9015.2, 4374-9015.3

C. Physical Address of Project:

Street: 163 Admin Drive City/Town: Randolph County: Orange

D. Project Coordinates (project center in Decimal Degrees with 6 digits to the right of the decimal):

Latitude: 43.941330 Longitude: 72.603540

E. Parcel(s) SPAN: Enter the 11-digit number that is printed on the property tax bill for the applicable parcel(s). Projects that involve more than 1 parcel shall list all applicable SPANs.

50715912910

F. Name of Receiving Water(s)[2]: Class II wetland in watershed of Penny Brook

G. Include a topographic location map - Must provide sufficient information to determine the location of the project. Must be in the form of a USGS topographical map or directional map.

H. Project Type: ☐ Residential ☐ Commercial ☐ Industrial Other: State Government

I. Total Area of Disturbance: 6.12 acres (<= 5 acres: $480 per application, > 5 acres: $640 per application)

J. Description of construction activities to be permitted (below):

Construction of new State laboratory building and separate wood chip heating plant building on on land owned by Vermont Technical College. Earth disturbing activities will be associated with foundation installation, utility service and subsurface stormwater system installation, and general site grading.

5. Plan Set Reference

Provide a complete list of all plans applicable to the stormwater management design that have been included with this application. Specify who the plans have been prepared by (e.g. Fairweather Stormwater Design, Inc.) and list the plans using the following format: Sheet [##], "[Sheet Title]," dated [mm/dd/yyyy], last revised [mm/dd/yyyy]; (e.g. Sheet 1, "Existing Condition Plan", dated 01/15/2014, last revised 02/06/2014).

Dated plans are required. Using the above format enter the plan set reference for the project in the space below. If more space is required, provide an attachment.

Design Firm: VHB

[1] Common Plan of Development" is defined within the CGP 3-9020, Appendix C – Definitions, page A-12

[2] "Waters of the State" (i.e. receiving water) is defined within the CGP 3-9020, Appendix C – Definitions, page A-16

5. Public Notice Requirement

Prior to submitting the complete NOI for review, you must provide a copy of this complete NOI and related Appendix A to the municipal clerk for posting in the municipality in which the project is located. If the project and the related discharge(s) are located in different municipalities, then the completed NOI must be filed with the municipal clerk in each municipality. In order to be considered complete, **you must include the date of posting.**

Date of Posting at Municipal Office(s): _____

*Information for the Municipal Clerk regarding posting instructions can be found on **Page 5** of this NOI.*

* In addition to the NOI and Appendix being posted in the Town Clerk(s) office(s), once the application is deemed administratively complete, the Stormwater Program starts its required 10 day public comment period. This includes sending an email notice to a list of interested parties as well as posting on our division website for 10 days.

6. Certification Relating to the Accuracy of the Information Submitted

I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I also certify that the Erosion Prevention and Sediment Control Plan authorized with this Notice of Intent will be implemented and maintained in accordance with Construction General Permit 3-9020 (amended 2008).

Landowner Name: Daniel Smith, for Vermont Technical College Title: President, VTC

Signature: _____ Date: _____

Principal Operator (if known): Michael J. Obuchowski Title: Commissioner, SOV BGS

Signature: Michael J. Obuchowski Digitally signed by Michael J. Obuchowski Date: 2016.05.17 14:39:07 -04'00' Date: May 17, 2016

On-Site Plan Coordinator (if known): _____ Title: 163 Admin Drive

Signature: _____ Date: _____

Application Preparer (if applicable): Peter Smiar, P.E. Title: Civil Engineer

Signature: _____ Date: _____

Submit this form and the $ 640.00 **fee to:**

Vermont Department of Environmental Conservation
Watershed Management Division, Stormwater Program
1 National Life Drive, Main Building Second Floor
Montpelier, VT 05620-3522

For Department Use Only

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION AUTHORIZATION TO DISCHARGE

A determination has been made that the proposed construction activities qualify for coverage under General Permit 3-9020 (amended 2008) as a Moderate Risk project. Subject to the conditions of General Permit 3-9020 (amended 2008) the applicant is hereby authorized to discharge stormwater runoff from a construction site as described in this Notice of Intent Number _____-9020.

Dated this _____ day of _____, 20____

Alyssa B. Schuren, Commissioner, Department of Environmental Conservation

By: _____
Padraic Monks, Program Manager

Charlotte Brodie <cbrodie@dubois-king.com>

Metolachlor Environmental Fate Info

Comstock, Jeff <Jeff.Comstock@vermont.gov> Fri, Feb 12, 2016 at 12:11 PM
To: "cbrodie@dubois-king.com"
Cc: "Wood, Matthew" <Matthew.Wood@vermont.gov>, "Giguere, Cary" <Cary.Giguere@vermont.gov>

Charlotte – I have attached a summary report on the environmental fate of the herbicide metolachlor published by the California Department of Pesticide Regulation (CDPR) in April, 2003.

As a follow-up to our phone conversation on Feb 12, 2016 related to the laboratory analysis of soil samples at the site of the proposed State of Vermont Agricultural/Environmental Laboratory in Randolph, VT, the CDPR report includes several data points that are particularly relevant to your site assessment.

1) In Table 1 (Physical-Chemical Properties) the average field dissipation half-life is 114 days. This value represents the composite half-life value for degradation of metolachlor residues as used under field application conditions. The individual breakdown processes such as soil degradation and photolysis days. Overall, metolachlor is considered to be moderately persistent. This soil ranking, context of seasonal crop rotation cycles and is not considered a long-term environmental the chlorinated hydrocarbons which have soil half-lives calculated in years.

2) In Table 3 (Water Quality Criteria) the CDPR report lists the drinking water health advisory as 0.525 mg/L (0.525 ppm = 525 ppb) and the HAL (lifetime health advisory) as 70 ppb. The drinking water health advisory of 525 ppb is usually reported as an acute standard (1-10 day exposure period). The lifetime HAL of 70 ppb is established based on the consumption of 2 liters of water per day during a 70 year lifetime.

3) As cited by EXTOXNET, the dermal LD50 for metolachlor ranges from 5,000-10,000 mg/Kg (ppm).

4) The laboratory analysis report for the five (5) soil samples collected on November 23, 2015 indicate only one (1) detection of 0.039 ug/g (0.039 ppm = 39 ppb).

Therefore, based on the available reference data, this residue detection of 39 ppb in soil is minimal to the point of insignificant as a source of future exposure risk.

If we need to discuss this information further, please give me a call.

Take care.

Jeff

****

Jeff Comstock

Agency of Agriculture

116 St.a St.

Montpelier, VT 05620

(802) 8.284473

(802)828-1410 Fax

jeff.comstock@vermont.gov

****

(Please Note: Official Email Address Change)

Metolachlor.Environ Fate.CDPR2003.pdf
174k

C-12, Natural Resources Atlas Map, for Endangered Species and other Animals of interest

VERMONT

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov

LEGEND

Rare Threatened Endangered
- Threatened or Endangered
- Rare

Significant Natural Community

Uncommon Species and Other
- Animal
- Plant
- Natural Community

Deer Wintering Areas

Habitat Blocks
- 10 - Higher Priority
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1 - Lower Priority
- 0

Natural Communities on ANR
- Acidic Riverside Outcrop
- Alder Swamp
- Alluvial Shrub Swamp
- Alpine Meadow
- Alpine Peatland

642.0 0 321.00 642.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 1053 Ft. 1cm = 126 Meters

© Vermont Agency of Natural Resources

THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

NOTES

Map created using ANR's Natural Resources Atlas

C-12, N.R.A., Plants and Animals

C-13, VFWD Response Letter, January 27, 2016

VERMONT

Fish and Wildlife Department
5 Perry Street, Suite 40
Barre, VT 05641
www.vtfishandwildlife.com

[phone] 802-476-0199
[fax] 802-476-0129

Agency of Natural Resources

January 27, 2016

Via Email
Charlotte Brodie, Field Naturalist, CWS
DuBois & King Inc.
6 Green Tree Drive
South Burlington, VT 05403
cbrodie@dubois-king.com

RE: Vermont Buildings and General Services
Vermont Agricultural and Environmental Laboratory (VAEL), Randolph, VT
Environmental Assessment (EA); Initial Notice and Request for Comments

Dear Ms. Brodie,

Thank you for reaching out early in the design stage of the project. I am responding on behalf of the Vermont Fish and Wildlife Department (the Department) to your request for initial comments, questions and/or concerns in your letter to Commissioner Porter dated January 4, 2016. Upon my initial review of the information provided in your letter and department data available through the Natural Resources Atlas, I find no issues of immediate concern to the department. There are however two project components mentioned in your letter which warrant additional information. Specifically, your letter mentions that the current concept provides for wood chip heat and solar collectors. Each of these project components may raise concerns depending on how they are proposed.

Wood chip heat or biomass is an increasingly common practice in New England with potential benefits to consumers and forests alike. However, the benefits to forests are only realized through careful certification and monitoring of harvesting operations to ensure sustainable forest management. Please provide additional information regarding protocols for sourcing biomass for the proposed project. The size and location of any solar array has a bearing on the impact to wildlife and wildlife habitat. Panels located on existing structures pose relatively little impact while a standalone array could raise several concerns depending on location. Please provide additional information on the proposed location, size and design of any solar array associated with the project.

Again, the department appreciates being contacted early in the planning process. I look forward to hearing from you.

Sincerely,

Noel E. Dodge, *Wildlife Biologist*
Regulatory Review Biologist
(802) 689-0000 [cell]
noel.dodge@vermont.gov

C-14, B.G.S. March 9, 2016 Letter

VERMONT

Department of Buildings & General Services
2 Governor Aiken Avenue
Montpelier, VT 05633-5801

[phone] 802-828-3314
[fax] 802-828-3533

Agency of Administration

March 9, 2016

Via Email
Noel E. Dodge, Wildlife Biologist
Fish and Wildlife Department
5 Perry Street, Suite 40
Barre, VT 05641

RE: Vermont Agriculture and Environmental Laboratory (VAEL), Randolph, VT
Environmental Assessment (EA)

Dear Mr. Dodge:

I am the Project Manager from BGS assigned to work on the proposed VAEL project in Randolph, VT. I am in receipt of your letter to Charlotte Brodie on January 27, 2016 regarding the Initial Notice and Request for Comments for our Environmental Assessment in our pursuit of compliance with Federal requirements for the development of the Lab. In your letter, you requested additional information regarding protocols for sourcing biomass for our proposed wood chip boiler heating system. While I know of no Statutory or Regulatory requirement for procuring wood chips from sustainably managed forests, for years BGS has included in our bidding documents the opportunity for suppliers to provide alternate pricing to provide wood chips from certified sustainable forests. This language below has been included in our bid documents and s provided for your information:

> **Sustainable Products:** Vendors are encouraged to provide alternate quotations on wood or paper products that are derived from sustainably managed forestlands. Such products must be independently third-party certified to acceptable standards. Sustainable-managed forest lands shall be defined as those lands enrolled and licensed under one of the following: Sustainable Forestry Initiative Program, the American Tree Farm System, the Canadian Standards Association's Sustainable Forest Management System Standards, the Finnish Standard, Forest Stewardship Council, Pan-European Forest Certification, Swedish Standard, the United Kingdom Woodland Assurance Scheme or other such credible programs as they are developed and implemented. Vendors must provide satisfactory documentation of certification with their bid.

We would be more than happy to work with you to strengthen inclusion of procuring wood products from certified sustainably managed forests while maintaining the competitive bidding process.

Your letter also expressed concern relative to the size and location of a potential solar array. We have made no final determination as to including a solar array in our project, but we are anticipating putting out an RFP for a third party to provide a net-metered array as a canopy over the proposed parking area if economically feasible. We may also be considering a net-metered array again with an independent party at an off-site location (not determined at this point) that would go through the normal approval process with the Department of Public Service.

I hope this additional information adequately addresses your concerns. I look forward to your positive response regarding our Environmental Assessment and if you have any further questions or concerns, please do not hesitate to contact me at mike.kuhn@vermont.gov.

Sincerely,

Michael J. Kuhn, RA
Buildings Engineer III

C: Charlotte Brodie
Sandra
Vitzthum

VERMONT

Fish and Wildlife Department *Agency of Natural Resources*
5 Perry Street, Suite 40 [phone] 802-476-0199
Barre, VT 05641 [fax] 802-476-0129
www.vtfishandwildlife.com

March 14, 2016

Via E-mail
Michael J. Kuhn, RA
Buildings Engineer III

RE: Vermont Agriculture and Environmental Laboratory (VAEL), Randolph, VT
Environmental Assessment (EA)

Dear Mr. Kuhn,

Thank you for your response regarding my comment letter to Charlotte Brodie related to biomass and solar energy for the proposed project. The additional information you've provided adequately address my questions.

In regard to sourcing of biomass, the department regularly reviews harvest notifications for both Burlington Electric Department McNeill generation plant and Ryegate Associates generation plant as part of the Public Service Board section 248 permit requirements for each facility. My question regarding VAEL was intended to bring the option of sourcing sustainable woodchips to your attention if the option had not been raised previously. From your letter it appears that BGS does include this option in the bidding process. Thank you for providing some background on this, however the Department of Forests and Parks would be a better resource to assist in strengthening inclusion of procuring wood products from certified sustainably managed forests. I'm happy to help connect you with the appropriate person in FPR, if you're interested.

Regarding potential solar energy development, I understand from your letter that no final decision has been reached regarding VAEL. From my perspective as the Vermont Fish and Wildlife Department main point of contact for evaluation of solar energy projects , either the array over the parking area or on the building roof provide the least potential for impacts and result in minimal review time for the department. Should the decision be made to go with an off-site array I will eventually review that as an independent project.

Thanks again for providing additional information. I find no issues of concern in regard to the VAEL Environmental Assessment. Please feel free to contact me with any further questions.

Sincerely,

Noel Dodge, *Wildlife Biologist*
Regulatory Review Biologist
802-689-0000 [mobile]
noel.dodge@vermont.gov

C: Charlotte Brodie
Sandra Vitzthum
John Austin

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Code: 05E1NE00-2016-SLI-0884 February 02, 2016 Event
Code: 05E1NE00-2016-E-01203
Project Name: Vermont Agricultural and Environmental Lab

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Vermont Agricultural and Environmental Lab

Official Species List

Provided by:

New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
(603) 223-2541
http://www.fws.gov/newengland

Consultation Code: 05E1NE00-2016-SLI-0884
Event Code: 05E1NE00-2016-E-01203

Project Type: DEVELOPMENT

Project Name: Vermont Agricultural and Environmental Lab
Project Description: New laboratory building with associated ancillary structures

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

United States Department of Interior
Fish and Wildlife Service

Project name: Vermont Agricultural and Environmental Lab

Project Location Map:

Project Coordinates: MULTIPOLYGON (((-72.60422229766846 43.940891850568235, -72.60456562042236 43.94234420112998, -72.60319232940674 43.94249870442095, -72.60289192199707 43.941015456252636, -72.60422229766846 43.940891850568235)))

Project Counties: Orange, VT

United States Department of Interior
Fish and Wildlife Service

Project name: Vermont Agricultural and Environmental Lab

Endangered Species Act Species List

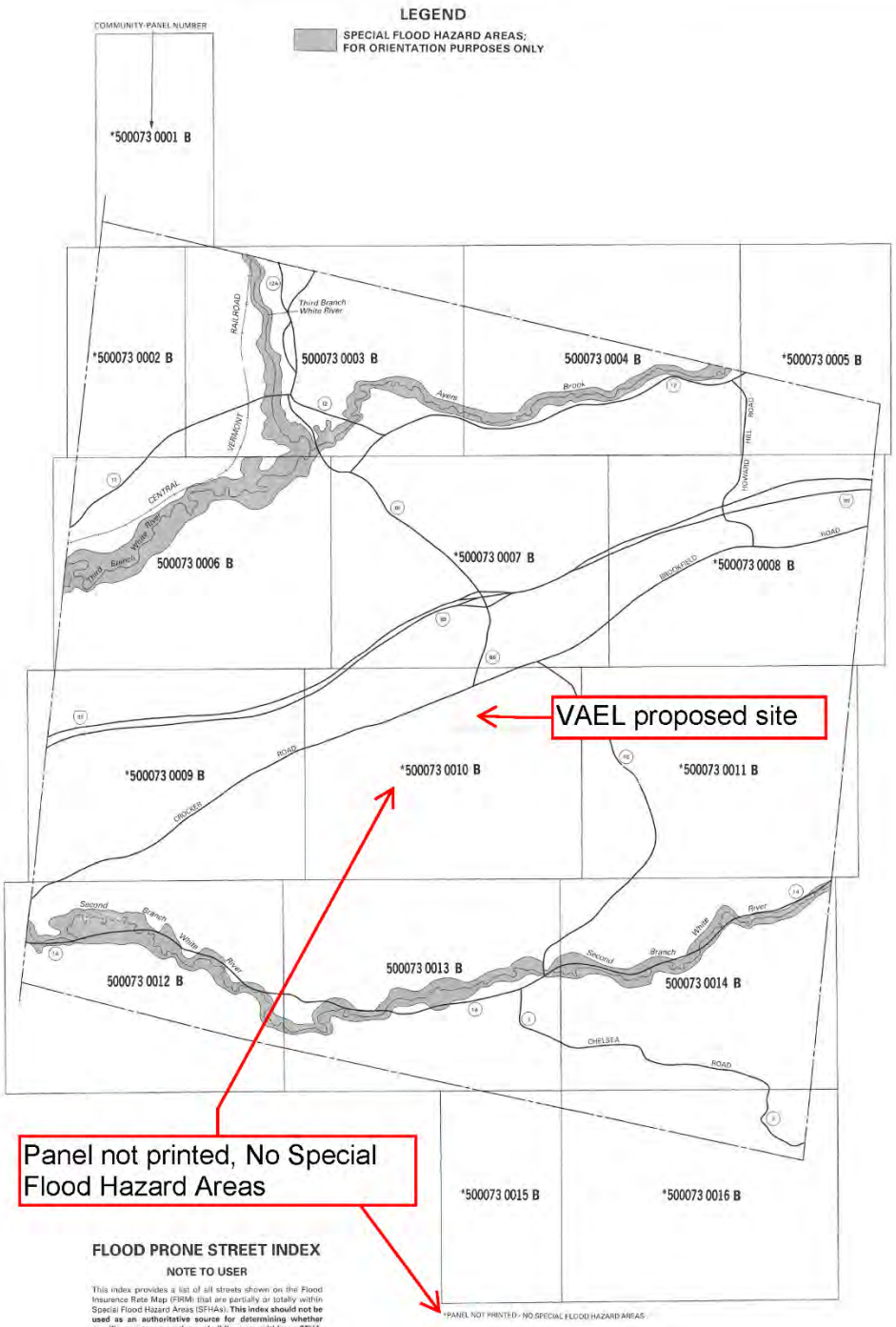
There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	**Status**	**Has Critical Habitat**	**Condition(s)**
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		

Critical habitats that lie within **your project area**

There are no critical habitats within your project area.

C-17, F.I.R.M. Map Index



VAEL proposed site

Panel not printed, No Special Flood Hazard Areas

FLOOD PRONE STREET INDEX

NOTE TO USER

This index provides a list of all streets shown on the Flood Insurance Rate Map (FIRM) that are partially or totally within Special Flood Hazard Areas (SFHAs). **This index should not be used as an authoritative source for determining whether specific streets, properties, or buildings are within an SFHA. The appropriate FIRM panel must be consulted for these purposes.** This index is intended to be used only as a guide for determining which FIRM panel displays the street in question and the relative location of the street on the FIRM panel.

KEY

BAKER STREET 00/5 (A2)

street name ..... panel number grid location

NAMED STREETS

DYGWAY ROAD	0012 (H4)
HYDE ROAD	0013 (B6)
KINGSBURY ROAD	0012 (B2)
PETH ROAD	0004 (D4)
PRINCE STREET	0003 (D5)
RIDING CLUB ROAD	0004 (B5)
STATE ROUTE 12	0003 (D4), 0004 (A5)
STATE ROUTE 12A	0003 (D3)
STATE ROUTE 14	0012 (A2), 0013 (A4), 0014 (A3)
STATE ROUTE 66	0003 (E6), 0013 (L3)

MAP REPOSITORY

Town Clerks' Vault, Randolph, Vermont, 03060 (Maps available for reference only, not for distribution)

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
RANDOLPH, VERMONT
ORANGE COUNTY

MAP INDEX
and
STREET INDEX

PANELS PRINTED: 3, 4, 6, 12, 13,14

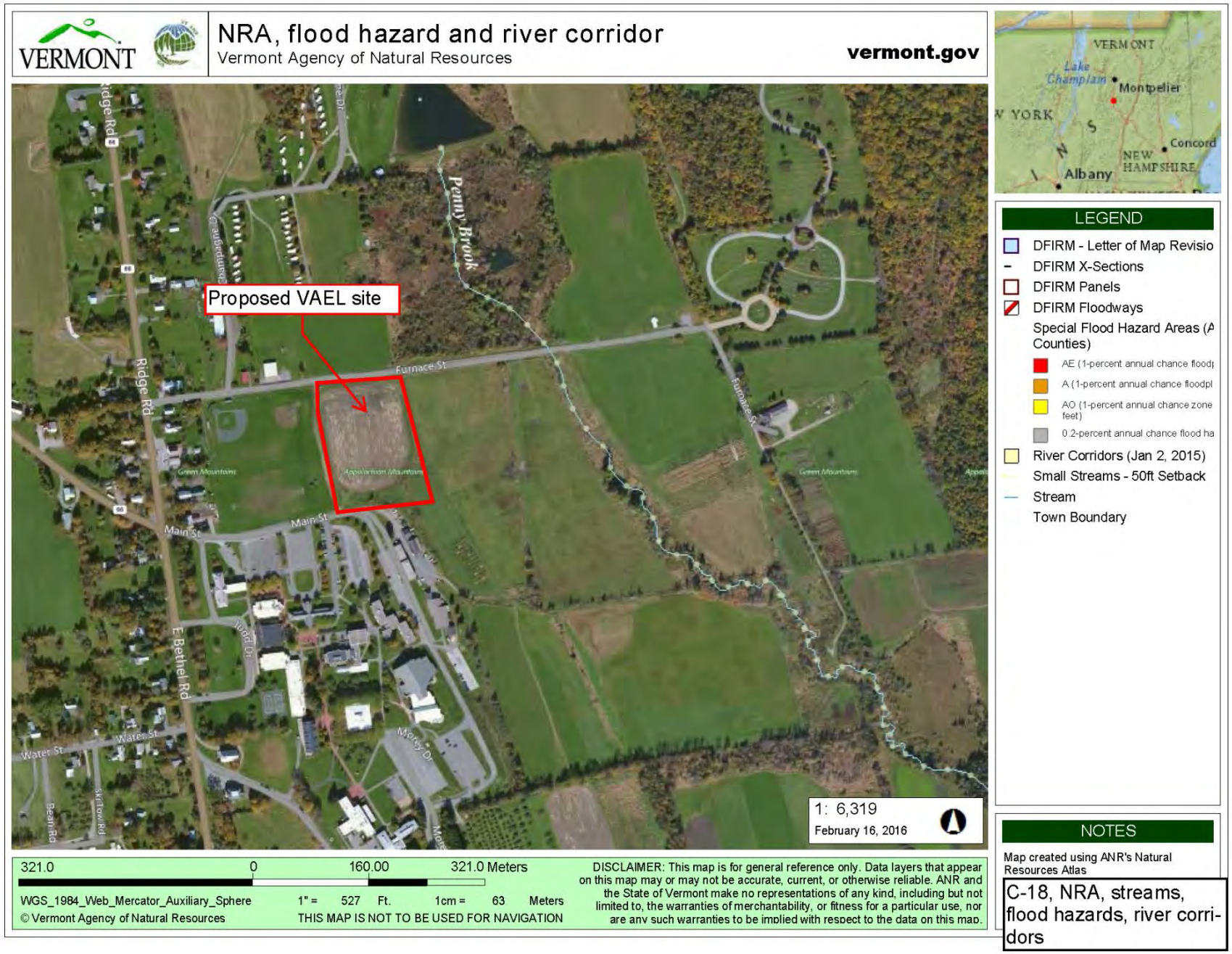
COMMUNITY-PANEL NUMBERS
500073 0001-0016

EFFECTIVE DATE:
JULY 16, 1991

Federal Emergency Management Agency

C-17, F.I.R.M. Map Index

C-18, N.R.A. Map showing Flood Hazards and River Corridors



C-19, U.S.F.W.S. Wetlands Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

VAEL

Feb 16, 2016

Wetlands

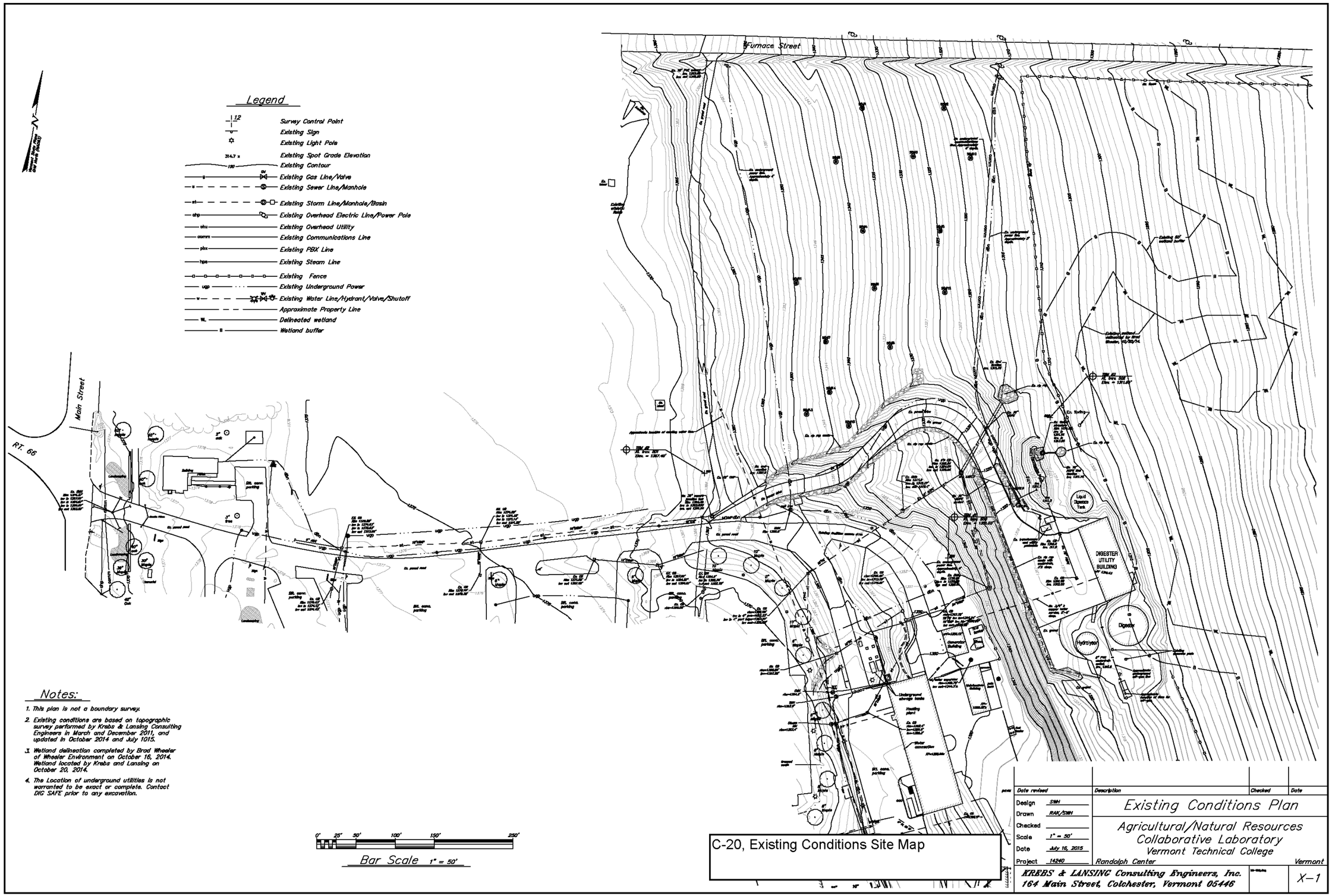
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

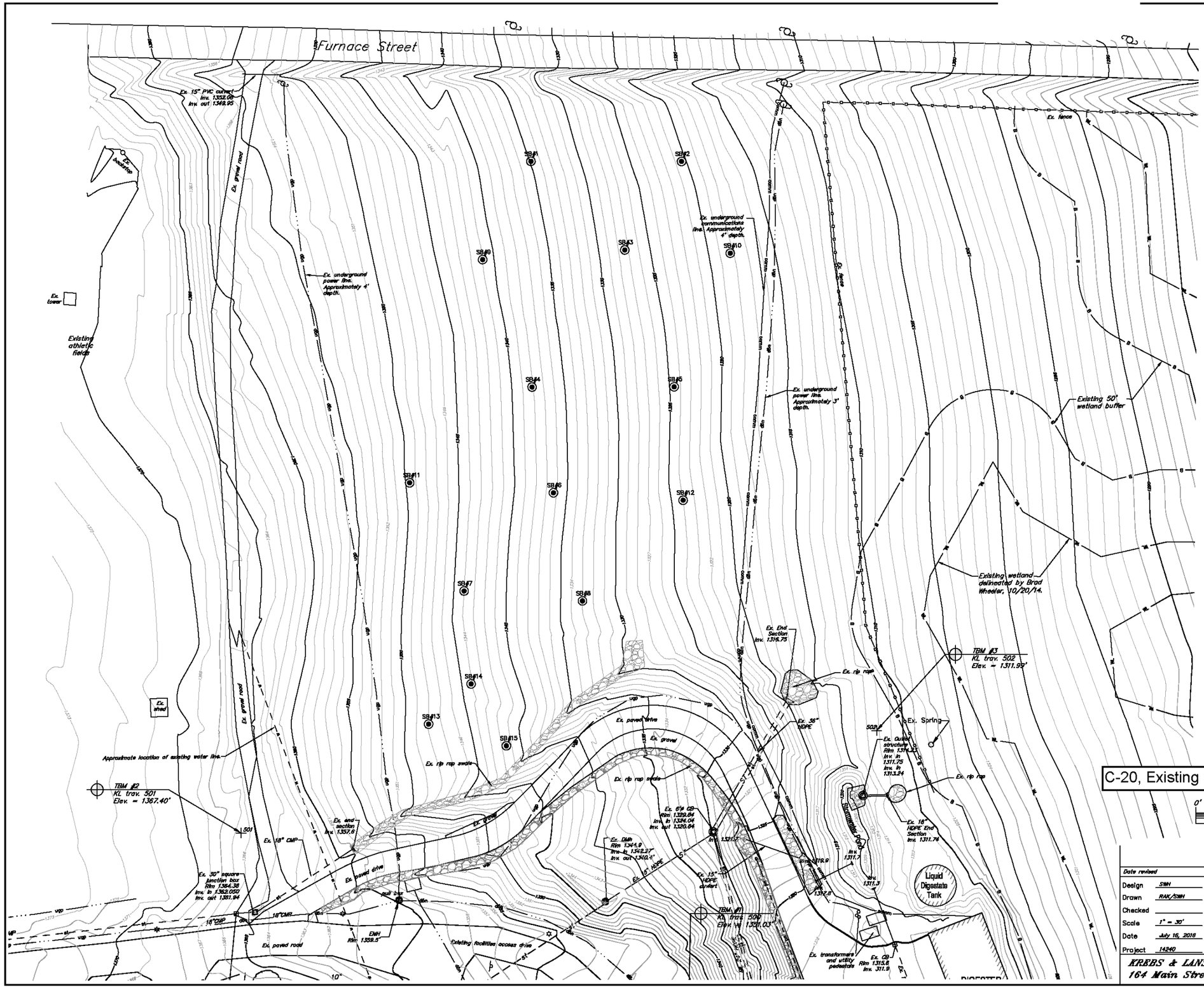
User Remarks:

C-19, U.S.F.W.S. Wetlands Map

C-20, Existing Conditions Site Maps.



C-20, Existing Conditions Site Map



Notes:

1. This plan is not a boundary survey.
2. Existing conditions are based on topographic survey performed by Krebs & Lansing Consulting Engineers in March and December 2011, and updated in October 2014 and July 2015.
3. Wetland delineation completed by Brad Wheeler of Wheeler Environment on October 16, 2014. Wetland located by Krebs and Lansing on October 20, 2014..
4. The Location of underground utilities is not warranted to be exact or complete. Contact DIG SAFE prior to any excavation.

Legend

- Survey Control Point
- Existing Sign
- Existing Light Pole
- Existing Spot Grade Elevation
- Existing Contour
- Existing Gas Line/Valve
- Existing Sewer Line/Manhole
- Existing Storm Line/Manhole/Basin
- Existing Overhead Electric Line/Power Pole
- Existing Overhead Utility
- Existing Communications Line
- Existing PBX Line
- Existing Steam Line
- Existing Fence
- Existing Underground Power
- Existing Water Line/Hydrant/Valve/Shutoff
- Approximate Property Line
- Delineated wetland
- Wetland buffer

C-20, Existing Conditions Site Map

0' 30' 60' 120' 180'

Bar Scale 1" = 30'

Date revised	Description	Checked	Date

Design	SWH
Drawn	RAK/SWH
Checked	
Scale	1" = 30'
Date	July 16, 2016
Project	14240

Existing Conditions Plan

Agricultural/Natural Resources Collaborative Laboratory
Vermont Technical College
Randolph Center Vermont

KREBS & LANSING Consulting Engineers, Inc.
164 Main Street, Colchester, Vermont 05446

X-2

Notes:

1. This plan is not a boundary survey.
2. Existing conditions are based on topographic survey performed by Krebs & Lansing Consulting Engineers in March and December 2011, and updated in October 2014 and July 2015.
3. Wetland delineation completed by Brad Wheeler of Wheeler Environment on October 16, 2014. Wetland located by Krebs and Lansing on October 20, 2014..
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Legend

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- Existing Sign
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- Existing Storm Line/Manhole/Basin
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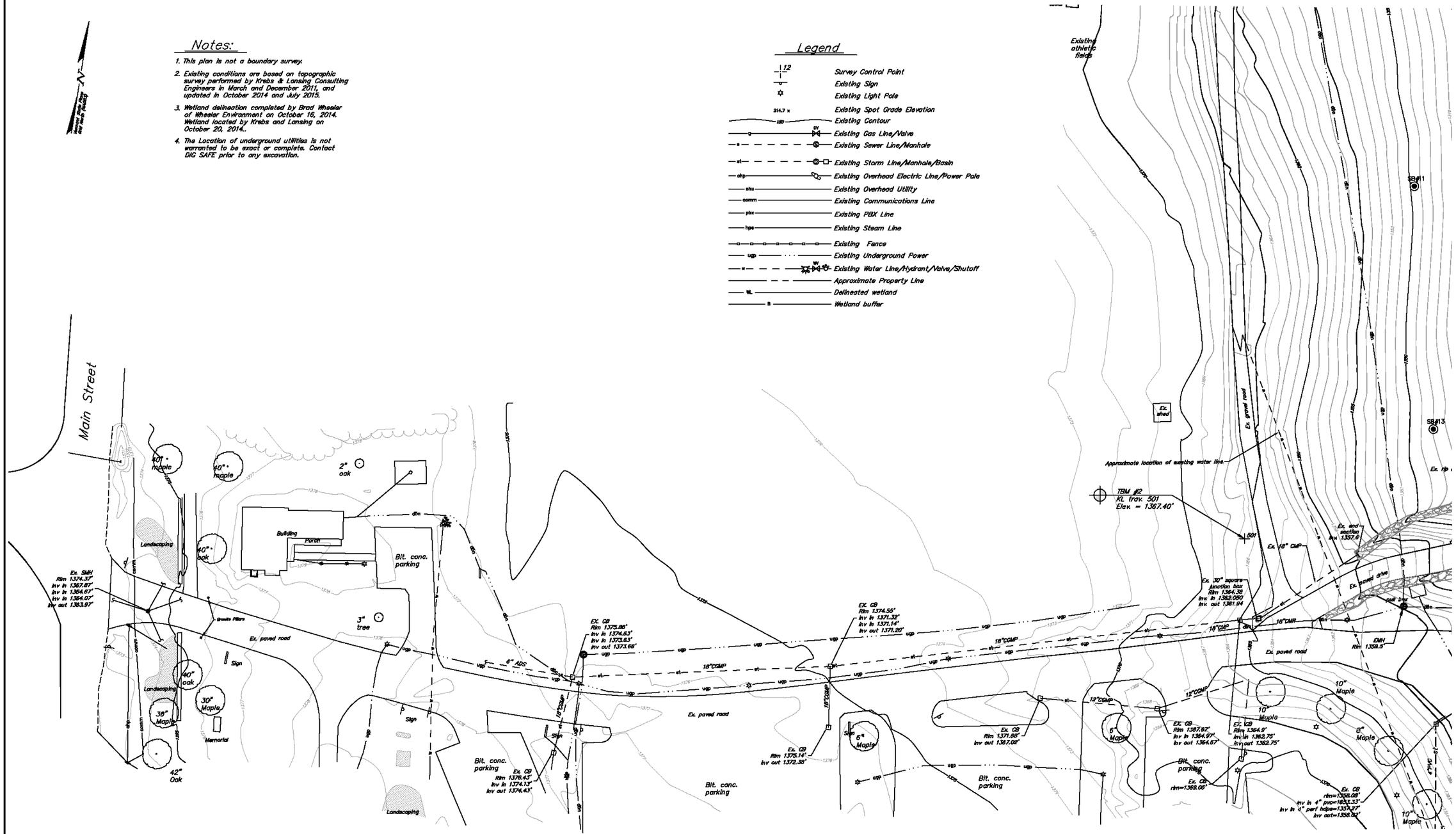


C-20, Existing Conditions Site Map

0' 30' 60' 120' 180'

Bar Scale 1" = 30'

Date revised	Description	Checked	Date

Design SWH
Drawn RAK/SWH
Checked
Scale 1" = 30'
Date July 16, 2015
Project 14240

Existing Conditions Plan

Agricultural/Natural Resources Collaborative Laboratory
Vermont Technical College
Randolph Center Vermont

KREBS & LANSING Consulting Engineers, Inc.
164 Main Street, Colchester, Vermont 05446

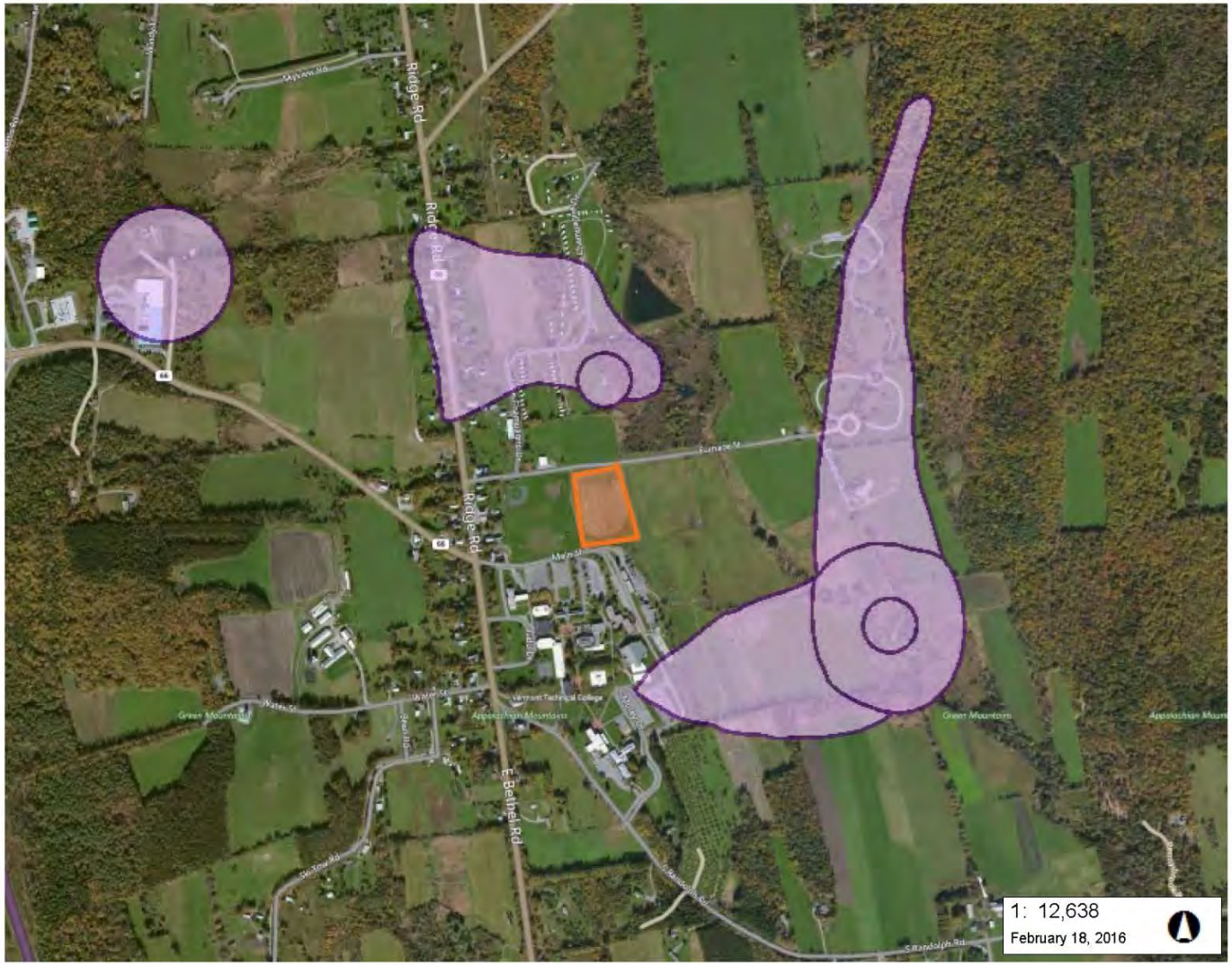
X-3

C-21, N.R.A. Map of Groundwater Source Protection Areas

VERMONT

Natural Resources Atlas
Vermont Agency of Natural Resources

vermont.gov



LEGEND

Ground Water SPA
- Active
- Proposed
- Inactive

Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas
Groundwater Source Protection Areas

C-21, Groundwater Source Protection Areas

642.0 0 321.00 642.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 1053 Ft. 1cm = 126 Meters

© Vermont Agency of Natural Resources

THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

C-22, SHPO Concurrence

VERMONT

State of Vermont
Division for Historic Preservation
One National Life Drive, Floor 6
Montpelier, VT 05620-0501
www.HistoricVermont.org

[phone] 802-828-3211
[division fax] 802-828-3206

Agency of Commerce and Community Development

January 22, 2015

Sandra Vitzthum
Department of Buildings and General Services 2
Governor Aikin Drive
Montpelier, VT 05633-5801

Re: State of Vermont Agencies of Agriculture and Natural Resources Collaborative Laboratory Construction, Vermont Technical College, Furnace Street, Randolph Center, Vermont. Vermont Historic Preservation Act, Act 250 Land Use Permit # 3R0581 Amendment, and U.S. Department of Homeland Security Federal Emergency Management Agency Section 106 Review.

Dear Ms. Vitzthum:

Thank you for the opportunity to comment on the above-referenced project.

The following comments will assist the State of Vermont Department of Buildings and General Services, the District #3 Environmental Commission, and the U.S. Department of Homeland Security Federal Emergency Management Agency (FEMA) in their review responsibilities under 22 V.S.A 14, Act 250, and Section 106 of the National Historic Preservation Act. The Division for Historic Preservation (Division) is providing FEMA and any other federal agency with the following comments pursuant to 36 CFR 800.4, regulations established by the Advisory Council on Historic Preservation to implement Section 106 of the National Historic Preservation Act. The Division is also reviewing this undertaking on behalf of the Vermont Advisory Council on Historic Preservation for the Vermont Historic Preservation Act, and for purposes of Criterion 8, 10 V.S.A. Chapter 151 (Act 250). The purpose of the Division's review for Act 250 is to provide the District # 3 Environmental Commission with the necessary information for them to make a positive finding under the "historic sites" aspect of Criterion 8.

In all cases, project review consists of identifying the projects potential impacts to historic buildings, structures, historic districts, historic landscapes and settings, and known or potential archeological resources.

The proposed project consists of the construction of a new laboratory facility within a 5.0 acre parcel of land located south of Furnace Street on the Vermont Technical College campus in Randolph, Vermont. The new facility is to replace the Agricultural Laboratory formerly located at the Waterbury State Office Complex that was damaged during Tropical Storm Irene. The new building footprint will utilize about a 0.5 acre section of the leased parcel. Related infrastructure will include a new access and parking and will occupy an additional 3 acres of land.

The Division conducted a site visit to the proposed development area on October 7, 2014. The overall parcel is situated on a sloping hillside to the west of Penny Brook, an upper tributary of the Second Branch of the White River, and is currently used as a cornfield. No archaeologically sensitive areas were identified in the project area during the field visit. In addition, desk review of the proposed project plans and building elevations indicates that the project will have no indirect adverse effect on the Langevin

House, a State Register listed property located at the end of Furnace Street to the east, or on the National Register-listed Randolph Center Historic District to the west of the proposed facility.
Based on these considerations, the Division concludes that the Collaborative Laboratory Project will have **No Effect** on any historic properties that are listed in or eligible for inclusion in the State or National Registers of Historic Places. Thank you for your cooperation in protecting Vermont's irreplaceable archaeological and historic heritage. R. Scott Dillon reviewed this project and prepared this letter. I concur with the findings and conclusions described above.

Sincerely:
VERMONT DIVISION FOR HISTORIC PRESERVATION

Laura Trieschmann
State Historic Preservation Officer

C-23, Stockbridge-Munsee Tribe Correspondence

Tate, Marcus

From: Bonney Hartley Bonney.Hartley@mohican-nsn.gov>
Sent: Wednesday, February 10, 2016 3:50 PM
To: Kachadoorian, Lydia
Cc: Robbins, David; Tate, Marcus
Subject: RE: FEMA S106 CONSULT REQUEST: Ag Lab in Randolph, VT

Hello Lydia,
Thank you for the consultation request. I have reviewed and determined the Ag Lab project in Randolph, Vermont is in fact out of our area of interest and we do not need to consult.
Kind regards,
Bonney

Bonney Hartley
Tribal Historic Preservation Officer
Stockbridge-Munsee Mohican Tribal Historic Preservation
New York Office
65 1st Street
Troy, NY 12180

(518) 244-3164
Bonney.Hartley@mohican-nsn.gov
www.mohican-nsn.gov
Physical Address: 37 1st Street

From: Kachadoorian, Lydia [mailto:Lydia.KaLydia.Kachadoorian@fema.dhs.gov]
Sent: Monday, February 01, 2016 2:54 PM
To: Bonney Hartley
Cc: Robbins, David; Tate, Marcus
Subject: FEMA S106 CONSULT REQUEST: Ag Lab in Randolph, VT

Hello Bonney,

I hope this email finds you well. I've attached a Section 106 consultation request to this email. It is for a project in Orange County Vermont even though your tribe hasn't identified Orange County as a geographic area of interest. We are consulting you out of an abundance of caution since Orange County is next to Addison County, an area of interest that you've identified to us in the past. Please let me know if this is unnecessary, I apologize for any inconvenience this presents.

Do you want me to mail a paper copy of this consultation request to you or will this email & digital file be sufficient?

Thank you in advance and please don't hesitate to contact me or Marcus Tate if you have any questions.

Take care,

Lydia Kachadoorian, RPA
Deputy Regional Environmental Officer (DREO)

FEMA Region I, Mitigation Division
Environmental & Historic Preservation Office (EHP)
99 High St., 6th Floor
Boston, MA 02110

Desk: 617-956-7610
Cell: 857-205-2860
FAX: 617-956-7574
Email: Lydia.Kachadoorian@fema.dhs.gov

From: Bonney Hartley [mailto:Bonney.Hartley@mohican-nsn.gov]
Sent: Thursday, August 20, 2015 1:08 PM
Subject: Mohican THPO Change of Address

Dear Colleagues:

I'm pleased to share that the Stockbridge-Munsee Mohican Tribal Historic Preservation Office's satellite office in upstate New York has moved to a new location on the Sage College Campus in Troy, NY.

With the move, kindly take note of the new mailing address & phone number below and update your distribution lists for sending Section 106 reviews. This address can accept all mail including UPS/FEDEX. The previous PO Box and phone number will be phased out over the next two months.

Email remains the same.

Thank you!
Bonney

Bonney Hartley
Tribal Historic Preservation Officer
Stockbridge-Munsee Mohican Tribal Historic Preservation
New York Office
65 1st Street
Troy, NY 12180
(518) 244-3164
Physical Address: 37 1st Street

C-24, V.T.C. Ability to Serve Letter

VERMONT TECH

Dean of Administration
PO Box 500
Randolph Center, Vermont 05061

Tel: 802-728-1639
Fax: 802-728-1508
Email: ltyler@vtc.edu

March 24, 2016

Sandra Vitzthum, LEED AP
Project Manager II
Department of Buildings and General Services
2 Governor Aiken Avenue
Montpelier, VT 05633-5801

Dear Sandra,

As per our recent discussions, Vermont Technical College (VTC) will be able to supply potable water to the State for operating the proposed State of Vermont Lab building. Under normal operating conditions, VTC will be able to supply your requested 630 gallons per day, at 50 psi. Please be reminded to have a water meter designed into the project and installed prior to occupancy.

Sincerely,

Littleton Tyler
Dean of Administration

ENGINEERING | PLANNING | DEVELOPMENT | MANAGEMENT

Memorandum

To: Sandra Vitzhum, LEED AP
From: Lucy Gibson, P.E.
Date: Revised December 10, 2015
Re: Traffic Impact Review for the VAEL

This memorandum describes the analyzes the existing conditions and potential changes in traffic safety and congestion for the Vermont Agricultural and Environmental Laboratory (VAEL) that is proposed for a site on Administration Drive, adjacent to the campus of Vermont Technical College (VTC).

Proposed Project

The VAEL was previously located in Waterbury, and was destroyed in tropical storm Irene in 2011. Since that time, the laboratories functions (i.e. forest biology, environmental chemistry, fish and wildlife analysis, air quality, animal pathology) have been dispersed at different locations around the state. The proposed project will construct a new laboratory on VTC's campus, and reunite the laboratory services in one location. Have the operations all in one location will provide substantial efficiencies, and also provide students at VTC with opportunities for hands-on learning and research.

Review size and operations

The proposed laboratory is approximately 36,000 square feet in size, and is planned to have 32 full time employees on site. In addition, it is estimated that an additional 21 state employees will use laboratory facilities on a part time basis, and an additional 18 temporary/seasonal employees will work at the laboratory. The site plan will provide up to 55 parking spaces, with many of these reserved for state vehicles for air quality monitoring, fish and wildlife investigations, or agricultural testing, for example. Bicycle racks are also planned, particularly to serve student interns at the laboratory.

Review site location

The project site is located on Administration Drive in Randolph Center on land that is owned by Vermont State Colleges, as part of the VTC campus. The site design provides a roadway connection between the laboratory and the VTC's main campus area, so that parking can be shared between uses in overflow situations. Pedestrian walkways are provided on site, although the public streets in the area generally do not have sidewalks.

Review projected traffic operations

The projected traffic that would be generated by the laboratory has been estimated using the Institute for Transportation Engineers (ITE) Trip Generation, 9th edition. The Land use code 760, Research and Development Center, was the closest land use category to the proposed laboratory. The peak hour trip rates are provided per employee, allowing the calculation of trips based on the projected employment at the laboratory. The table below shows the calculations of daily, morning and afternoon peak hours trips, assuming the maximum number of employees of 71, which includes part time and season employees.

	Trip Rate	Employees	Vehicle trips
Daily	2.77	71	197
Morning peak	0.43	71	31
Afternoon peak	0.41	71	30

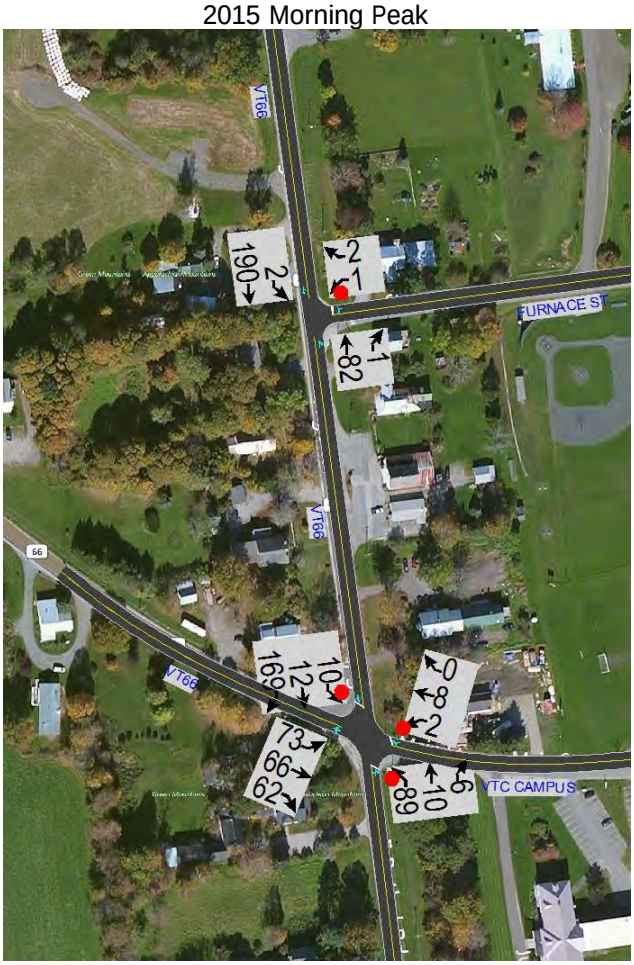
VTrans Traffic Impact Study guidelines require an analysis of traffic impact for any projects that generate 75 or more peak hour trips. The proposed laboratory is expect to generate less than half of this number, so the discussion herein will be focused on an evaluation of pre-existing safety and congestion issues.

Project Area Transportation Conditions

Traffic volumes

DuBois & King conducted turning movement traffic counts at the intersection of Route 66/VTC Campus and East Bethel Road on Thursday, October 22, from 7:00 a.m. to 9:00 a.m. and 3:30 p.m. to 5:30 p.m. The existing turning movement traffic counts are shown in the diagram below for morning and afternoon peak hours.

2015 Morning Peak

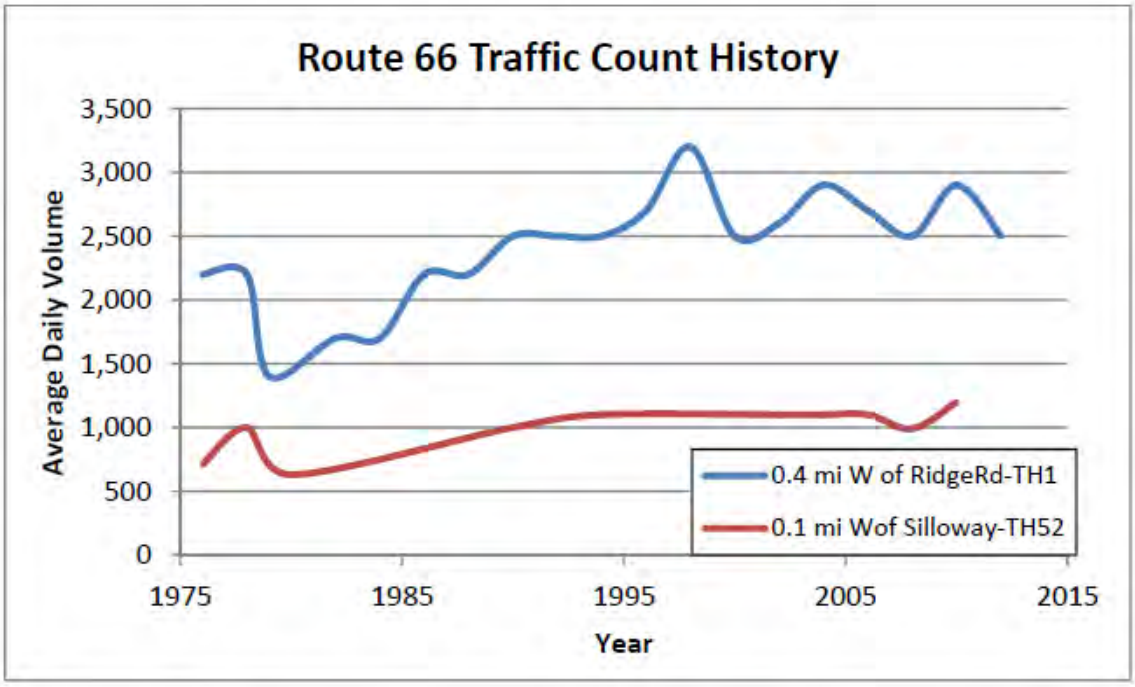


2015 Afternoon Peak

Bicycles and pedestrians were also counted, with 0 bicycles and 5 pedestrians during the morning count period, and 4 bicycles and 10 pedestrians during the afternoon count period. The weather conditions were rainy during the morning count, and clear during the afternoon count.

Traffic Growth

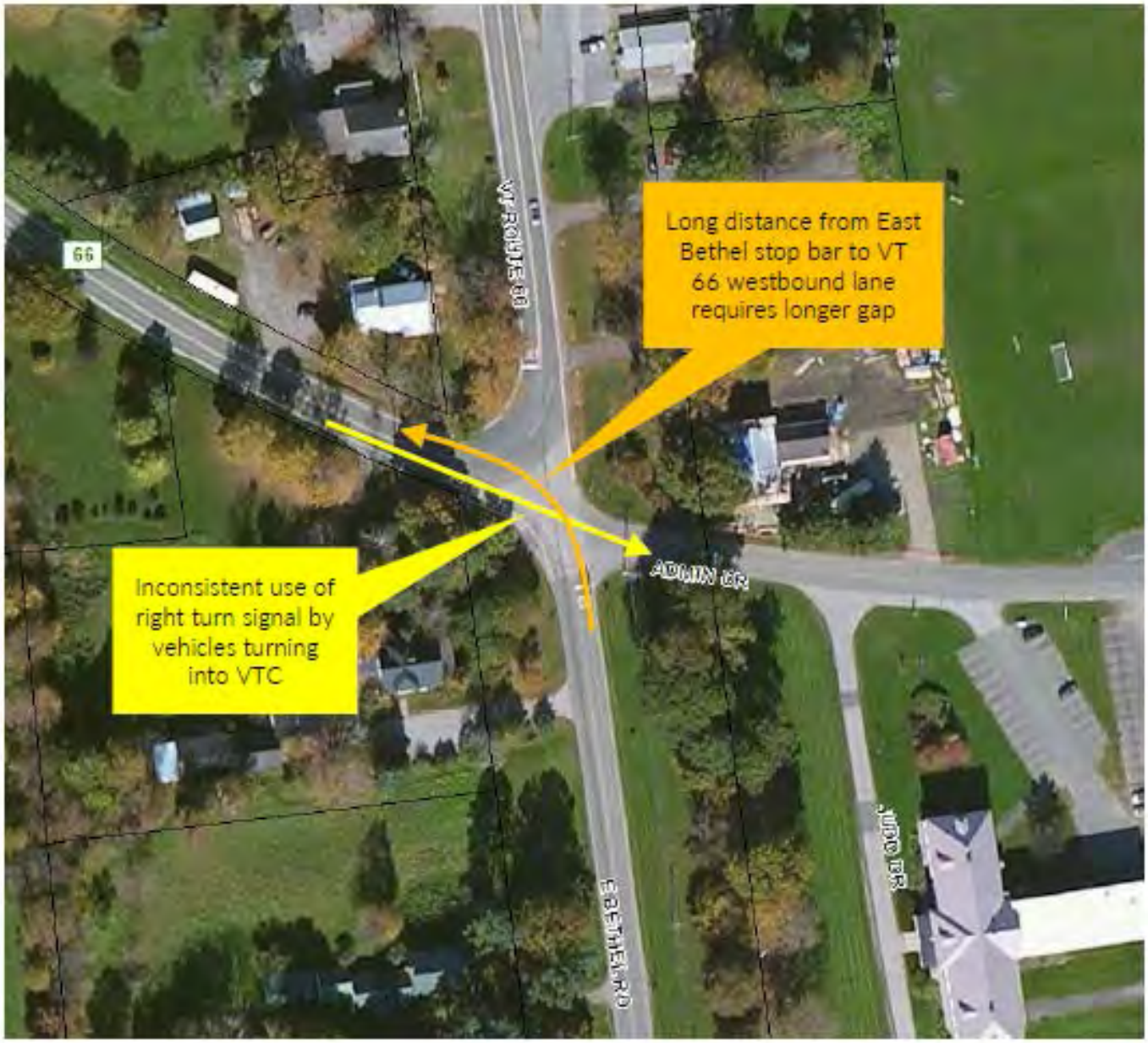
While there has been some development activity on and near VTC's campus, traffic volumes have not been significantly affected, and the count history shows a generally flat pattern over the last 20 years, based on VTrans Automatic Traffic Recorder (ATR) data. The chart below plots the average daily traffic volumes on Route 66. The line in blude shows the closest station, between the VTC entrance and Ridge Road.



The VTrans regression data also shows a five year projection for no growth for rural highways such as Route66.

Intersection Operations

Observations of traffic operations, queuing, congestion, and safety at the VT 66/ East Bethel/VTC intersection were conducted on October 27, 2015, and indicated that the unusual geometry of the intersection of the VT 66/VTC/East Bethel Road results in uncertainty for drivers and observed "near misses." The most common issue is that if a vehicle traveling east on VT 66 as their right turn signal on, vehicles waiting at East Bethel Road are not certain if the oncoming vehicle is turning into East Bethel Road or into the VTC entrance. The skewed intersection geometry makes it challenging for vehicles entering from East Bethel Road, as a much longer gap in traffic is required than typical for an unsignalized intersection. Further, the intersection's control with 3 stopped approaches in unusual, so drivers that are new to the area may be confused. The photo on the following page shows a closer aerial view of the intersection.



DuBois & King analyzed the operations of this intersection under existing conditions with Synchro software, and found that average delays were less than 10 seconds per vehicle for all approaches, with peak hour levels of service of A.LOS worksheets area attached to this report.

Crash History

Despite the observations of many near misses and the intersection's unusual geometry, only one crash has occurred at this intersection in past 5 years according to VTrans records. This was caused by westbound VT 66 driver (i.e. traveling southbound approaching the intersection), who was unfamiliar with the intersection, running straight through stop sign and colliding with an eastbound VT66 vehicle.

Recent and upcoming developments

The Randolph Center area has seen active development projects and proposals in recent years:

- Gifford Hillside Senior Community has completed phase I, which provides homes with skilled nursing care. Phase 2, for independent living, is expected to be completed within 2 years. Traffic from both phases of development is projected to be 170 vehicles per day, which is also far below the threshold requiring a traffic impact study.

- A proposed major development in lands around I-89 Exit 4 has received local approval, and is currently undergoing Act 250 review. This project will generate a significant amount of traffic, but the vast majority will either use the interstate exit or head to or from downtown Randolph. The traffic study completed for this development has estimated 136 morning peak hour trips and 151 afternoon peak hour trips traveling through the VT66/East Bethel/VTC intersection. The permitting process is ongoing, and the development program and estimated traffic impact is subject to change.

Conclusions

The proposed VAEL facility is expected to generate 197 trips per day, 31 during the morning peak hour, and 30 during the afternoon peak with the maximum seasonal levels of employment (71 employees). This volume can easily be accommodated by the surrounding roadway network without resulting in any traffic congestion of safety impacts. The site plan will also accommodate bicycling and walking on site, although the surrounding roadway network does not provide separated facilities for biking or walking. The intersection of VT 66/VTC/East Bethel Road has skewed geometry and atypical traffic control, with 3 stopped approaches. While this intersection can be confusing, it does not have a crash history that indicates it is unsafe. Based on the foregoing analysis, no traffic impacts of any time are anticipated from the full proposed operation of the Vermont Agricultural and Environmental Laboratory.

Attachments

- Traffic Counts: Conducted Thursday, October 22, 2015
    - Morning peak 7:00 to 9:00 a.m.
    - Afternoon peak 3:30 to 5:30
- Synchro Level of Service worksheets.

Turn Count Summary

Location: at VT 66/VTC/East Bethel
GPS Coordinates:
Date: 2015-10-22
Day of week: Thursday
Weather: Rainy
Analyst: BMB
Peak hour: 07:15 - 08:15

Total vehicle traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00	0	2	49	0	1	0	14	1	0	11	3	6	87
7:15	2	1	30	0	1	0	20	1	2	21	4	5	87
7:30	0	3	67	0	2	0	22	2	1	13	16	17	143
7:45	3	4	42	2	3	0	29	7	0	28	19	17	154
8:00	5	4	30	0	2	0	18	0	3	11	27	23	123
8:15	2	3	17	0	3	0	10	1	3	11	15	10	75
8:30	1	3	34	1	2	0	11	0	1	26	30	9	118
8:45	5	5	25	1	12	0	20	2	6	27	28	12	143

Car traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00	0	2	44	0	1	0	14	1	0	9	3	6	80
7:15	2	1	30	0	1	0	19	1	2	20	4	5	85
7:30	0	2	64	0	1	0	22	2	1	13	15	17	137
7:45	3	4	42	2	3	0	29	6	0	19	19	15	142
8:00	5	4	29	0	2	0	18	0	2	10	26	23	119
8:15	2	3	16	0	2	0	10	1	3	9	15	10	71
8:30	1	2	33	1	2	0	11	0	1	23	30	9	113
8:45	5	4	22	0	11	0	19	2	6	26	28	12	135

Truck traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00	0	0	5	0	0	0	0	0	0	2	0	0	7
7:15	0	0	0	0	0	0	1	0	0	1	0	0	2
7:30	0	1	3	0	1	0	0	0	0	0	1	0	6
7:45	0	0	0	0	0	0	0	1	0	9	0	2	12
8:00	0	0	1	0	0	0	0	0	1	1	1	0	4
8:15	0	0	1	0	1	0	0	0	0	2	0	0	4
8:30	0	1	1	0	0	0	0	0	0	3	0	0	5
8:45	0	1	3	1	1	0	1	0	0	1	0	0	8

Bicycle traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	1	0	0	0	0	0	0	0	0	0	1
7:30	0	1	1	0	0	0	0	0	0	0	1	1	2
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	2	2	2

Intersection Peak Hour

	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	10	12	169	2	8	0	89	10	6	73	66	62	507
Factor	0.5	0.75	0.63	0.25	0.67	0	0.77	0.36	0.5	0.65	0.61	0.67	0.82
Approach Factor			0.68			0.5			0.73			0.79	

Peak Hour Vehicle Summary

Vehicle	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	10	11	163	2	5	0	84	9	5	61	64	59	473
Truck	0	1	4	0	1	0	1	1	1	11	2	2	24
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0

Turn Count Summary

Location: at VT 66/VTC/East Bethel
GPS Coordinates:
Date: 2015-10-22
Day of week: Thursday
Weather: Clear
Analyst: BMB
Peak hour: 16:15 - 17:15

Total vehicle traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:30	1	3	43	1	11	0	16	5	0	26	2	8	116
15:45	0	2	36	0	9	1	20	5	1	29	10	18	131
16:00	0	2	30	3	12	0	13	3	0	33	7	15	118
16:15	0	3	26	1	35	5	23	2	0	34	6	12	147
16:30	0	4	23	1	31	2	25	0	1	32	3	21	143
16:45	1	2	37	1	27	4	29	6	2	25	4	23	161
17:00	1	6	18	1	13	2	27	1	0	40	6	20	135
17:15	0	3	19	0	9	6	9	3	2	51	8	27	137

Car traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:30	1	2	42	1	11	0	16	4	0	25	2	8	112
15:45	0	1	34	0	9	1	20	3	1	29	10	18	126
16:00	0	1	28	3	12	0	13	3	0	33	6	15	114
16:15	0	3	26	1	34	5	23	1	0	34	6	12	145
16:30	0	4	23	1	31	2	25	0	1	31	3	21	142
16:45	1	2	37	1	26	4	29	6	2	25	4	23	160
17:00	1	5	18	1	13	2	27	1	0	40	6	20	134
17:15	0	3	19	0	9	6	9	3	2	50	7	27	135

Truck traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:30	0	1	1	0	0	0	0	1	0	1	0	0	4
15:45	0	0	2	0	0	0	0	1	0	0	0	0	3
16:00	0	1	2	0	0	0	0	0	0	0	1	0	4
16:15	0	0	0	0	1	0	0	1	0	0	0	0	2
16:30	0	0	0	0	0	0	0	0	0	1	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	1	0	1

Bicycle traffic

Interval starts	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	1	0	0	0	0	0	1	0	0	0	0	2
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	1	0	0	1

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	3	0	3	0	0	0	0	0	0	0	1	1	4
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	4	4	4
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	2	0	2	0	0	0	0	0	0	0	0	0	2

Intersection Peak Hour

	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	2	15	104	4	106	13	104	9	3	131	19	76	586
Factor	0.5	0.62	0.7	1	0.76	0.65	0.9	0.38	0.38	0.82	0.79	0.83	0.91
Approach Factor			0.76			0.75			0.78			0.86	

Peak Hour Vehicle Summary

Vehicle	Southbound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	2	14	104	4	104	13	104	8	3	130	19	76	581
Truck	0	1	0	0	1	0	0	1	0	1	0	0	4
Bicycle	0	0	0	0	1	0	0	0	0	0	0	0	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Stop			Stop			Stop	
Volume (vph)	73	66	62	2	8	0	89	10	6	10	12	169
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	79	72	67	2	9	0	97	11	7	11	13	184

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	218	11	114	208
Volume Left (vph)	79	2	97	11
Volume Right (vph)	67	0	7	184
Hadj (s)	0.01	0.22	0.18	-0.48
Departure Headway (s)	4.7	5.1	4.9	4.1
Degree Utilization, x	0.28	0.02	0.15	0.24
Capacity (veh/h)	725	634	694	818
Control Delay (s)	9.5	8.2	8.8	8.4
Approach Delay (s)	9.5	8.2	8.8	8.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.9		
Level of Service		A		
Intersection Capacity Utilization		45.4%	ICU Level of Service	A
Analysis Period (min)		15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Stop			Stop			Stop	
Volume (vph)	131	19	76	4	106	13	104	9	3	2	15	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	142	21	83	4	115	14	113	10	3	2	16	113

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	246	134	126	132
Volume Left (vph)	142	4	113	2
Volume Right (vph)	83	14	3	113
Hadj (s)	-0.08	-0.04	0.18	-0.50
Departure Headway (s)	4.6	4.8	5.2	4.5
Degree Utilization, x	0.32	0.18	0.18	0.16
Capacity (veh/h)	728	693	641	723
Control Delay (s)	9.8	8.9	9.3	8.4
Approach Delay (s)	9.8	8.9	9.3	8.4
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

Charlotte Brode <cbrodie@dubois-king.com>

FW: 2015-11-18 DEC AG lab air permit applicability

Vitzthum, Sandra <Sandra.Vitzthum@vermont.gov> Mon, Feb 8, 2016 at 1:40 PM

To: Chartotte Brodie cbrodie@dubois-king.com

From: Elliott, Doug
Sent Wednesday, November 18, 2015 1:26 PM
To: Vitzthum, Sandra <Sandra.Vitzthum@vermont.gov>
Cc: Whitney, Ben <Ben.Whitney@vermont.gov>; Martin, Trey <Trey.Martin@vermont.gov>; Desch, George <George.Desch@vermont.gov>
Subject: 2015-11-18 DEC AG lab air permit applicability

Ms. Vitzthum -

Thanks for the information on the proposed fuel and size of the heating plant for the proposed DEC/AG Laboratory to be located at the VTC campus in Randolph. As noted below the proposed heating plant will be a stand-alone system fired with wood chips with a backup fuel of No. 2 fuel oil. The unit will be rated at 2 million BTU per hour {output) and 60 boiler horsepower. As currently proposed the unit will not require an air pollution control permit. The air permit threshold for wood fired boilers is 90 boiler horsepower, which is calculated slightly different than the 60 horsepower rating provided below but regardless the proposed unit is below the permitting threshold. The air permit threshold for fuel oil fired boilers is 10 million BTU per hour.

Regarding the laboratory operations themselves the Air Program's primary concern with laboratories is methylene chloride emissions from commercial scale analysis using methylene chloride extraction. The anticipated usage of methylene chloride at the proposed lab will be minimal, if at all, and therefore an air pollution control permit is not required for those operations. We recently reviewed all existing laboratories in the state following federal EPA action against several laboratories in New England and determined Vermont has only one laboratory with significant emissions of methylene chloride and the proposed DECAG laboratory is much smaller.

Please note that even though an air pollution control permit is not required for the wood chip heating system, the unit is still subject to visible smoke emission limits. The unit will need to be properly designed, sized, installed, operated and maintained in order to ensure it complies with the visible smoke limits. Had the proposed wood chip system been 90 boiler horsepower or greater we would have required the unit be equipped with an advanced particulate emission control device such as an Electrostatic Precipitator (ESP) or a fabric filter. We have several units in the state currently operating with such a control device. There is also at least one unit below the 90 horsepower threshold that voluntarily installed the emission control device. Special attention should also be placed on locating the unit and the exhaust stack so it does not impact the building air intakes or negatively impact neighbors. The stack height should be tall enough to avoid downwash impacts caused by the wind pulling the exhaust downward on the backside of the building as the wind blows over it. The stack should also not be equipped with a raincap of a design that impedes the upward flow of the exhaust. Failure to consider these issues in the design could result in complaints and problems down the road.

Finally, the new wood/oil boiler will be subject to a recent federal regulation that covers most new boilers and will require that unit complete a tune-up every two years. The frequency can be extended if the unit has an oxygen trim system to automatically adjust the combustion air. The rule also requires notification to the EPA. The boiler vender should be familiar with these requirements.

If you have any questions please feel free to contact me.

VERMONT

Douglas Elliott, Section Chief

Air Permitting & Engineering Section

[phone] 802-377-5939

[email] doug.elliott@vermont.gov

[website] http://www.anr.state.vt.us/air/

Agency of Natural Resources

Department of Environmental Conservation

Air Quality and Climate Division

Davis 2, One National Life Drive

Montpelier, VT 05620-3802

Please note that effective July, 27, 2015 my email address has changed to doug.elliot@vermont.gov
The old address doug.elliott@state.vt.us will continue to work until July 1, 2016.

C-27 N.R.A. Hazardous Waste Map

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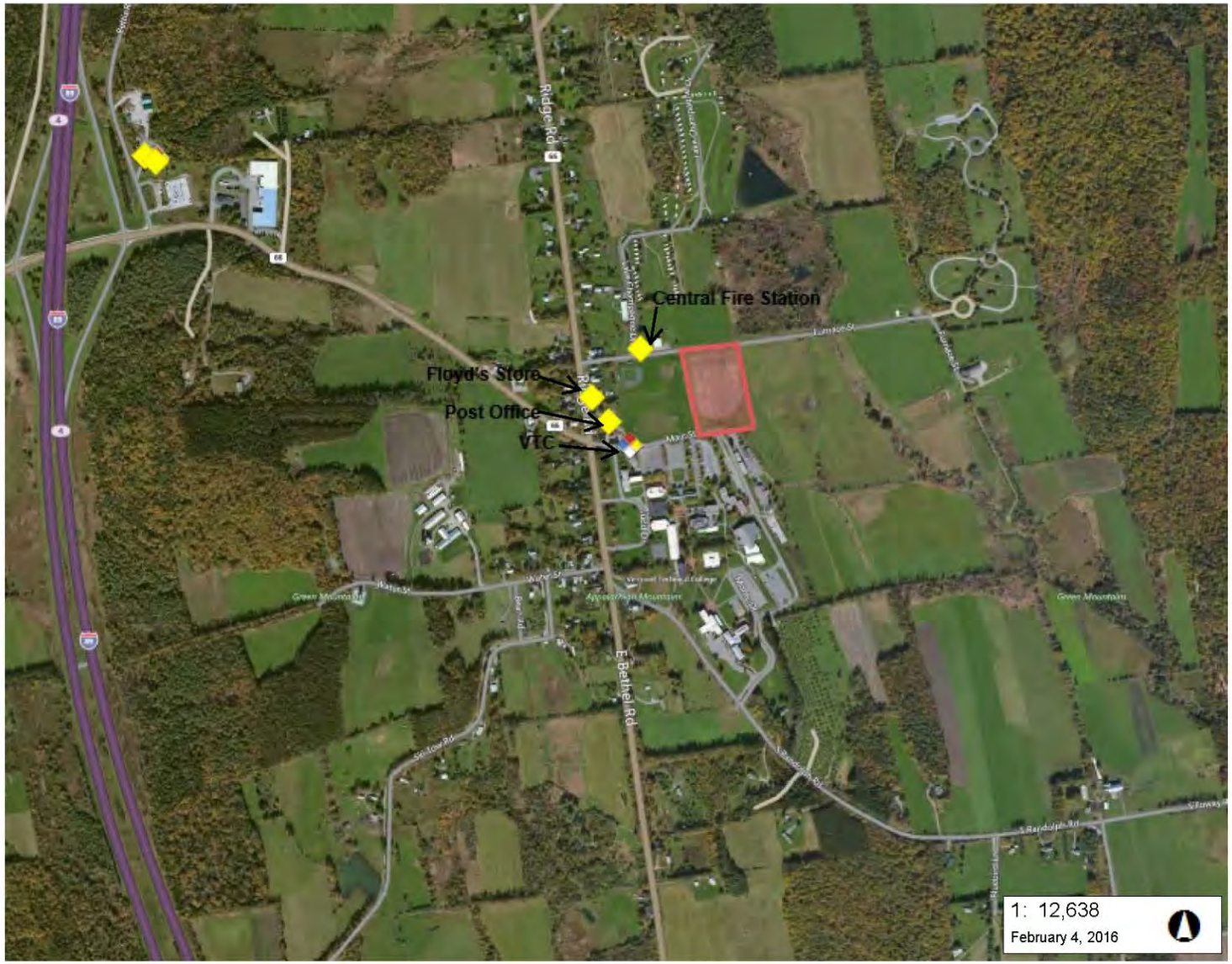
Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

Landfills
- OPERATING
- CLOSED

Land Use Restrictions
- Class IV GW Reclass
- Deed Restriction
- Easement
- Land Record Notice
- Other

- Hazardous Site
- Hazardous Waste Generators
- Brownfields
- Salvage Yard
- Underground Storage Tank (w
- Solid Waste Management Dist
- Town Boundary

642.0 0 321.00 642.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 1053 Ft. 1cm = 126 Meters

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

NOTES

Map created using ANR's Natural Resources Atlas
Hazardous Waste Layer, 02.04.16

C-27, N.R.A. Haz-ardous Waste Map

C-28 V.W.M.D Underground Storage Tank Data

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  - Brownfield Sites
  - Spills
  - UST
  - Hazardous Waste
  - Solid Waste
  - Salvage Yards
  - AST
- Watershed
  - Stormwater
  - Wetlands

VT DEC

Underground Storage Tanks Help

Unable to connect to the remote server

Enter the search criteria below and click the [Search] button when done. (Search will display a maximum of 500 results)

Facility ID Facility Name

Town

Search Search Tips

Facility Detail

Facility Name	Randolph Center Fire Station
Facility ID	5556942
Site ID#	
DEC Pin#	
Address	107 Furnace Road
Town	Randolph
Permit Issued	
Permit Starts	
Permit Expires	
View Map	Click to view map

Facility Tank Status

Tank ID	Tank Status	CAT	Capacity	Year Installed	Year Removed	Pulled Condition	Compartment ID	Compartment Substance	Compartment Capacity
1964-1	PULLED		1000	1964	2010	GOOD	A	Fuel Oil #2 or #4	1000

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  - AST
- Watershed
  - Stormwater
  - Wetlands

VT DEC

Underground Storage Tanks Help

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Enter the search criteria below and click the [Search] button when done. (Search will display a maximum of 500 results)

Facility ID Facility Name

Town

Search Search Tips

Facility Detail

Facility Name	Floyd's Store
Facility ID	1110557
Site ID#	880243
DEC Pin#	
Address	Route 66
Town	Randolph
Permit Issued	
Permit Starts	
Permit Expires	
View Map	Click to view map

Facility Tank Status

Tank ID	Tank Status	CAT	Capacity	Year Installed	Year Removed	Pulled Condition	Compartment ID	Compartment Substance	Compartment Capacity
1976-1	PULLED		750	1976	1988		A	Gasoline	750
1976-2	PULLED		750	1976	1988		A	Gasoline	750
1976-3	PULLED		1000	1976	1988		A	Gasoline	1000
1976-4	PULLED		1000	1976	1988		A	Gasoline	1000

C-28, V.W.M.D. Underground Storage Tank Data

VERMONT

Agency of Natural Resources
Environmental Research Tool

Vermont.gov | DEC Home | Sites Mgt | Disclaimer | Please send us your feedback

- Search All Programs
- Waste Management
  - Hazardous Sites
  - Brownfield Sites
  - Spills
  - UST
  - Hazardous Waste
  - Solid Waste
  - Salvage Yards
  - AST
- Watershed
  - Stormwater
  - Wetlands

VT DEC

Underground Storage Tanks Help

Unable to connect to the remote server

Enter the search criteria below and click the [Search] button when done. (Search will display a maximum of 500 results)

Facility ID Facility Name

Town

Search Search Tips

Facility Detail

Facility Name	Randolph Center Post Office
Facility ID	9999814
Site ID#	962005
DEC Pin#	
Address	Main Street
Town	Randolph
Permit Issued	
Permit Starts	
Permit Expires	
View Map	Click to view map

Facility Tank Status

Tank ID	Tank Status	CAT	Capacity	Year Installed	Year Removed	Pulled Condition	Compartment ID	Compartment Substance	Compartment Capaci
-1-1	PULLED		2000	-1-1	1996		A	Fuel Oil #2 or #4	2000

C-28, V.W.M.D. Underground Storage Tank Data

C-29, V.A.E.L. Lab Director Memo

VERMONT

Vermont Agriculture and Environmental Laboratory
Vermont Agency of Agriculture, Food and Markets

105 Carrigan Drive, University of Vermont
Burlington, VT 05405

Telephone: 802-585-4441
www.agriculture.vermont.gov

Re: Overview of Laboratory Quality and Safety Systems.

To whom it may concern,

The Vermont Agriculture and Environmental Laboratory (VAEL) operates under a set of detailed guidelines that describe accepted laboratory practices. These guidelines are required in order for the lab to maintain its accreditation by the National Environmental Laboratory Accreditation Conference (NELAC). These guidelines are described in the following manuals maintained by the lab:

- Quality Systems Manual
- Chemical Hygiene Plan
- Hazardous Chemical Waste Management Plan

These documents are updated at least annually to reflect changes in the lab's operations. The Quality Systems Manual is also being revised to meet increasingly robust accreditation standards; the lab is currently planning steps towards implementation of ISO 17025 standards, which require that the lab is making continual improvements to its quality management systems. The lab's two staff supervisors currently fill the roles of quality assurance and safety officers, insuring that accreditation criteria are met, including:

- That the entire lab staff and other frequent lab users have received appropriate training and read and signed the lab's quality and safety documents annually, as required by NELAC.
- That each method's standard operating procedure (SOP) is regularly reviewed and updated.
- That copies of SOPs are carefully managed to avoid working from out of date versions.
- Performing monthly safety inspections for each room in the laboratory.
- Insuring that preventive maintenance is completed regularly for lab instrumentation.
- Managing the documentation and labeling for hazardous waste disposal.

In Randolph these roles will be shared by a third managerial/administrative position, yet to be hired.

NELAC certification requires that the laboratory be inspected every three years. NELAC inspectors carefully review the laboratory's guidance manuals, SOPs, signage and labeling throughout the lab. Monthly lab room checklists are also carefully reviewed.

VAEL has a laboratory information management (LIM) system that is used to manage critical functions of the lab:

- To prepare sampling kits for clients and customers.
- To log samples into the lab's LIM system.
- To create worksheets for the chemists and molecular biologists.
- To receive, process and store analytical data and provide a tool for data validation.
- To provide test reports in a wide range of formats, depending on clients' needs.
- To maintain and update the lab's chemical inventory database.

The lab's entire chemical inventory is kept within restricted access rooms. The lab uses solvents to dissolve trace amounts of chemicals to be analyzed (analytes), like pesticide residuals, from contaminated materials submitted for analysis, such as fruits and vegetables, clothing, and soil. The solvents are also used to pump analytes through our laboratory instruments, so the amount of contaminating chemicals can be measured. Acids are used to preserve certain samples and are also used like solvents to dissolve metal contaminants, such as arsenic and lead, so that they can be measured. The laboratory maintains a collection of chemical standards, pure chemicals that are used as references for the identification and quantitation of sample contaminants. These standards are kept within a locked cabinet within a restricted lab room. At the Randolph site, all lab rooms will require a card key for entry.

Biowaste will be generated and will be disposed of on at least a monthly basis. The laboratory is permitted to handle only Biosafety Level I and II wastes, the least infectious categories. The Vermont Department of Health Laboratory, not VAEL, handles any samples that may contain agents that are highly infectious to humans. VAEL laboratories may work with diseased animal carcasses, including livestock and fish, and plant material, including crops and forest materials. These materials, if suspected of containing agents infectious to non-human species, will be appropriately labeled, containerized, and disposed of as 'infectious waste' through a contracted biowaste hauler. Animal carcasses are to be handled in a room specially constructed for complete disinfection. Non-infectious biowaste is generated during analysis of dairy products, fish, insects and plants, and will be disposed of similarly, but will be categorized as medical waste and primarily contains used plastic ware such as pipette tips, petri dishes and plastic gloves. On a daily basis these wastes will be bagged, boxed and stored in a climate-controlled room until pick-up by a certified waste handler, like Clean Harbors (Norwell, MA). Chemical wastes are collected and stored in closed containers labeled to identify their contents. On a monthly basis, or more frequently, if needed, VAEL staff remove waste containers from labs and move them to a waste storage room. VAEL currently contracts with the University of Vermont to provide chemical disposal services, inspections and training. Similarly, the lab once relocated to Randolph will contract with Vermont Technical College and existing local accredited hazardous waste management services to provide disposal, audits and third party inspections and training.

The lab currently holds a Hazardous Waste Handler Site ID and has submitted the request for a new site ID for the location in Randolph. The lab holds an air pollution permit, limiting the chemicals released while conducting analyses to trace amounts. VAEL will contract with a third party service to work alongside BG&S inspecting the newly constructed premises to obtain an occupancy permit.

The laboratory director's role in quality assurance is manifold, including:

- acting as a general editor for all documentation,
- guiding the management of contracts with third party service providers,
- working closely with the laboratory supervisors and staff to address lab issues promptly,
- provide regular reports to the deputy secretaries of the Agency of Agriculture, Food and Markets and the Agency of Natural Resources on the lab's performance.

Ultimately my role is to accept responsibility for the safe and successful functioning of the laboratory.
Sincerely,

T. Guy Roberts, PhD

Director, VAEL
(802) 522-3502
guy.roberts@vermont.gov

Charlotte Brodie <cbrodie@dubois-king.com>

Update on VAEL site plan

Vitzthum, Sandra <Sandra.Vitzthum@vermont.gov> Wed, Jan 20, 2016 at 12:43 PM
To: " Vitzthum, Sandra" < Sandra.Vitzthum@vermont.gov >
Cc: "Kuhn, Mike" <mike.kuhn@vermont.gov>

Dear neighbor,

Last month I sent a short update with the traffic study. In response to some good questions from the community, the study was revised. If you didn't get that, and v.1sh to have a copy, please let me know.

The architects have started the next phase of design (Design Development Phase}. They have incorporated a stand-alone wood chip plant for the laboratory because, after 12 months' effort from the State Treasurer down, we were not able to team up with VTC on a shared plant. The landscape architect has proposed that the chip plant be on the north end of the site because it is smaller in mass than the laboratory. I have attached her proposed site plan, along with a drawing showing other locations explored.

We will begin permitting hearings in February, but the Town has offered to let us present this preliminary site plan to the public at their next ORB meeting, which starts at 1pm, January 26, at the Town Offices. There are two projects ahead of us on the agenda, but we have been given some time after Gifford.

We are continuing to work on this proposed site plan for that presentation, and we hope to have a massing perspective to share by then also.

Thank you for your continued interest in the State's new laboratory.

Sandy Vi1zthum

Sandra Vitzthum, LEED AP

Project Manager II

Department of Buildings and General Services

2 Governor Aiken Drive

Montpelier, VT 05633-5801

NEW EMAIL ADDRESS, effective immediately:

sandra.vitzthum@vermont.gov

802-505-3389 –mobile

802-828-3533 –fax

---

2 attachments

heat plant options explored.pdf
1797K

VAEL site plan 1-19-16.pdf
222K

Charlotte Brodie <cbrodie@dubois-king.com>

FW: revised VAEL traffic study

Vitzthum, Sandra <Sandra.Vitzthum@vermont.gov> Thu, Feb 11, 2016 at 2:12 PM
To: Charlotte Brodie <cbrodie@dubois-king.com>

From: Vitzthum, Sandra
Sent: Friday, December 11, 2015, 1:22 PM
To: Vitzthum, Sandra < Sandra.Vitzthum@vermont.gov; 'Melvin Adams' <MAdams@randolphvt.org>; Smith,Daniel P.<DSmith5@vtc.vsc.edu>;Peter G. Gregory <pgregory@trorc.org>;Marshia,Kevin <Kevin.Marshia@vermont.gov>; jwoodin@giffordmed.org; Kevin Geiger <kgeiger@trorc.org>; Doug B.Pfohl <dpfohl@GiffordMed.org>;Alincoln@giffordmed.org;Paterson,John W. <JPaterson@vtc.vsc.edu>;Patsy Or Patrick French <p_french@myfairpoint.net>; Marjorie Ryerson <MRyerson@leg.state.vt.us>; senatormark@aol.com
Cc: Laclair, Jolinda <Jolinda.LaClair@vermont.gov>; Martin,Trey <Trey.Martin@vermont.gov>; LeLand, Jim <Jim.Leland@vermont.gov>; Desch, George <George.Desch@vermont.gov>; Roberts, Guy <Guy.Roberts@vermont.gov>; Kuhn, Mike <Mike.Kuhn@vermont.gov>; Obuchowski,Mike <Mike.Obuchowski@vermont.gov>; Rea, Bob <Bob.Bob.Rea@vermont.gov
Subject: revised VAEL traffic study

Hello all,

In response to questions raised, DuBois & King has added some information to their original traffic study report. Specifically, these additions:

1) Explain when the traffic counts were conducted;

2) include synchro worksheets;

3) discuss traffic growth;

4) and provide more information about the intersection of Rte 66 and East Bethel Road.

We look forward to attending the forum on village transportation that VTC is organizing for January.

Best regards,

Sandy

Sandra Vitzthum, LEED AP

Project Manager II

Department of Buildings and General Services

2 Governor Aiken Drive

Montpelier, VT 05633-5801

NEW EMAIL ADDRESS, effective immediately:

sandra.vitzthum@vermont.gov

802-505-3389 - mobile

802-828-3533 - fax

---

revised report 121015.pdf
2153K

Charlotte Brodie <cbrodie@dubois-king.com>

FW: traffic study for the newlab and for the intersection of Rte 66 and East Bethel Road

Vitzthum, Sandra <Sandra.Vitzthum@vermont.gov> Fri, Feb 19, 2016 at 1:19 PM

To: Charlotte Brodie <cbrodie@dubois-king.com>

From: Vitzthum, Sandra
Sent: Monday, December 07, 2015 2:10 PM
To: Vitzthum, Sandra <Sandra.Vitzthum@vermont.gov>
Subject: traffic study for the new lab and for the intersection of Rte 66 and East Bethel Road

Hi all,

It has been some time since we last communicated; I hope everyone on this contact list is well. Mike and I are still working on the lab project despite some distractions. We seem to be on track to begin construction next year.

After VTC's semester began, Dubois & King conducted a traffic study for the laboratory. The final report is attached. As expected, our project's impact is minimal. But as promised, we also asked Dubois & King to study the troublesome intersection of Rte 66 and East Bethel Road. We hope this data will be useful to the Randolph Center Community, the Town, and other stakeholders as the future of this historic village is discussed.

Regarding our laboratory, we are still waiting to modify the site plan as discussed at the last (third) community meeting. Access to the lab will be from Administration Drive, and we are pushing the building as far south as possible. After siting is finalized, we will begin the permitting process. Public notification regarding permitting will follow Town, State and federal regulations.

Best regards,

Sandy

Sandra Vitztnum, LEED AP

Project Manager II

Department of Buildings and General Services

2 Govemor Aiken Drive

Montpelier, VT 05633-5801

NEW EMAIL ADDRESS, effective immediately:

sandra.vitzthum@vermont.gov

802-505-3389 - mobile

802-828-3533 - fax

Dubois King report.pdf
1808K

APPENDIX D

PERMIT REQUIREMENTS

Vermont Agricultural and Environmental Laboratory
Randolph, Vermont

PERMITS and APPROVALS REQUIRED

Local

- Randolph Zoning Permit
- Randolph Development Review Board Approval
- Randolph Sewer Allocation
- Randolph Curb Cut Permit

State

- Wastewater System and Potable Water Supply Permit
- Stormwater Discharge Permit
- Construction General Permit 3-9020
- Multi-Sector General Permit
- Act 250 amendment
- Department of Public Safety Construction Permit
- Division of Fire Safety Tank Permit
- Fire Safety Storage and Use Plan for generator diesel tank
- Hazardous Waste Handler Site ID

APPENDIX E

PUBLIC NOTICE

Public Notice in The Times
Argus Thursday, May5, 2016

Vermont State Agricultural and Environmental Laboratory
Randolph, Vermont
FEMA Region I
Public Notice May 2016

FEMA PUBLIC NOTICE

The Federal Emergency Management Agency (FEMA) proposes to assist the State of Vermonts Department of Buildings and General Services (BGS) with construction of a new two-story Vermont Agriculture and Environmental Laboratory (VAEL) with 37,995 square feet of floor space, along with a vehicle storage area and wood chip plant. The total site development will total approximately 2.2 acres. The proposed building location is at the northern edge of the existing Vermont Technical College (VTC) campus between Furnace Street and Administration Drive. The facility would replace facility space lost at the Waterbury State Office Complex as a result of damage from Tropical Storm Irene in 2011. The new facility will provide collaborative laboratory space for the State Agency of Agriculture, Food and Markets and the State Agency of Natural Resources. The design includes a wood chip heat plant, 70 parking spaces and a roadway connection between the laboratory and VTCs main campus area, allowing the sharing of parking in overflow situations.

To meet the requirements of the National Environmental Policy Act (NEPA), FEMA has prepared a Draft Environmental Assessment (EA) to identify and evaluate human, historic, and environmental resources that might be affected by proposed construction of the new VAEL facility. FEMA invites the public to review and comment on the Draft EA and to provide FEMA with information it may not have considered in its review. If FEMA finds that the Proposed Alternative, as defined in the EA, will have no significant impact on the natural or human environment after the public comment period, a Finding of No Significant Impact (FONSI) will be issued by FEMAs Deputy Regional Environmental Officer, Lydia Kachadoorian. However, if a change in the scope of work occurs, FEMA must be notified to evaluate if the proposed change would alter the potential impacts on the environment.

Beginning on May 5, 2016, the Draft EA and the Draft FONSI will be available for online viewing on the BGS website at http://bgs.vermont.gov/sites/bgs/files/environmentalassessement.pdf and FEMAs website at http://www.fema.gov/resource-document-library, and in person at the Randolph Town Clerks office located at 7 Summer Street, Randolph, Vermont, Monday through Friday 8:00AM-4:30 PM. The comment period will last for 15 days, ending on May 20, 2016 at 5:00 pm.

Comments on the Draft EA can be submitted by mailing Lydia Kachadoorian, Deputy Regional Environmental Officer at, FEMA Region 1, 99 High Street 6th Floor, Boston, Massachusetts 02110, by emailing Lydia.Kachadoorian@fema.dhs.gov, or by sending a fax to 617-956-7574.

Public Notice in *The Times Argus*
Saturday, May7, 2016

Vermont State Agricultural and Environmental Laboratory
Randolph, Vermont
FEMA Region I
Public Notice May 2016

PUBLIC NOTICE

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Public Notice in *The Times Argus*
Thursday, May12, 2016

Vermont State Agricultural and Environmental Laboratory
Randolph, Vermont
FEMA Region I
Public Notice May 2016

FEMA PUBLIC NOTICE

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Public Notice in *The Herald*
Thursday, May 5, 2016

time of the sale. Inquiries to auctioneer or mortgagee's counsel.

Sale to be conducted by Vermont licensed auctioneer.

By: Elizabeth A. Glynn, Esq.
Ryan Smith & Carbine, Ltd.
PO Box 310
Rutland, VT 05702
(802) 786-1000
Attorney for Mortgagee/Plaintiff
or

FEMA PUBLIC NOTICE
Vermont State Agricultural and Environmental Laboratory
Randolph, Vermont
FEMA Region I
May 2016

The Federal Emergency Management Agency (FEMA) proposes to assist the State of Vermont's Department of Buildings and General Services (BGS) with construction of a new two-story Vermont Agriculture and Environmental Laboratory (VAEL) with 37,995 square feet of floor space, along with a vehicle storage area and wood chip plant. The total site development will total approximately 2.2 acres. The proposed building location is at the northern edge of the existing Vermont Technical College (VTC) campus between Furnace Street and Administration Drive. The facility would replace facility space lost at the Waterbury State Office Complex as a result of damage from Tropical Storm Irene in 2011. The new facility will provide collaborative laboratory space for the State Agency of Agriculture, Food and Markets and the State Agency of Natural Resources. The design includes a wood chip heat plant, 70 parking spaces and a roadway connection between the laboratory and VTC's main campus area, allowing the sharing of parking in overflow situations.

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rs

ORANGE SOUTHWEST SUPERVISORY UNION

Regular Board Meeting, Monday,

Public Notice in *The Herald*
Thursday, May12, 2016

Legal Notices

FEMA PUBLIC NOTICE
Vermont State Agricultural and Environmental Laboratory
Randolph, Vermont
FEMA Region I
May 2016

The Federal Emergency Management Agency (FEMA) proposes to assist the State of Vermont's Department of Buildings and General Services (BGS) with construction of a new two-story Vermont Agriculture and Environmental Laboratory (VAEL) with 37,995 square feet of floor space, along with a vehicle storage area and wood chip plant. The total site development will total approximately 2.2 acres. The proposed building location is at the northern edge of the existing Vermont Technical College (VTC) campus between Furnace Street and Administration Drive. The facility would replace facility space lost at the Waterbury State Office Complex as a result of damage from Tropical Storm Irene in 2011. The new facility will provide collaborative laboratory space for the State Agency of Agriculture, Food and Markets and the State Agency of Natural Resources. The design includes a wood chip heat plant, 70 parking spaces and a roadway connection between the laboratory and VTC's main campus area, allowing the sharing of parking in overflow situations.

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rs

RANDOLPH DEVELOPMENT REVIEW BOARD
MEETING MINUTES
Tuesday, January 26, 2016
Randolph Town Hall – 7 Summer Street

Present: Members Joel Tillberg, John Becker, Thomas Malanchuck, Michael Hildenbrand, Christopher Recchia and David Miles, (Trini Brassard was absent), Zoning Administrator Mardee Sanchez and Members of the Public: Barbara Quealy (Gifford Medical Center), Alastair and Heidi Gee, Bill and Trudy DeFloria, Jay Patterson (Vermont Technical College), Dave Farnham, Michael Kuhn, Donna Stepien, Linda Minsinger (GMC), George Mowery, John Doss, David Roy, David Frothingham, Doug Pfohl (GMC), Milo Cutler, Diane McElhiney, Sandy Vitzhum, Guy Roberts, Kevin Doering and Sandy Vondrasek (The Herald).

Chair Tillberg called the meeting to order at 7:03 PM

1. Public to be heard – None.

2. Donna Stepien – Conditional use and site plan reviews for a 3-unit multi-family dwelling at 250 Harlow Hill Road. The property is in the RU5 District.

Donna Stepien and Alastair Gee were the only participants.

Becker/Malanchuk moved to approve the site plan as presented and amended. The vote was 6-0-0.

3. Gifford Medical Center – Conditional use, site plan and local Act 250 reviews for and expansion of a health care facility complex Wicker Drive. The property is in the RU2-20 District.

Participants were the applicant's representatives David Frothingham, Doug Pfohl and David Roy and members of the public Kevin Doering and Milo Cutler.

Recchia/Malanchuk moved to close the hearing and discuss the application in a deliberative session. The vote was 6-0-0.

4. Approval of minutes

Miles/Becker moved to approve the minutes of December 8, 2015 as written. The vote was 4-0-2, with Hildenbrand and Malanchuk abstaining.

5. Old/new business

A. Meetings were scheduled for March 22nd and April 26th, 2016

B. Informal presentation of Vermont Agricultural and Environmental Laboratory on the Vermont Technical College campus – Michael Kuhn and Sandy Vitzhum from Buildings and General Services, and Guy Roberts, Director of the Vermont Agricultural and Environmental Lab gave the presentation. Member Recchia left partway through.

6. Adjournment

Malanchuk/Miles moved to adjourn. The vote was 5-0-0 and the meeting adjourned at 9:35 PM.

Respectfully submitted,

Mardee Sánchez

Approved ☐ as written ☐ as edited

on _____

RANDOLPH DEVELOPMENT REVIEW BOARD
MEETING MINUTES
Tuesday, January 26, 2016
Randolph Town Hall – 7 Summer Street

Present: Members Joel Tillberg, John Becker, Matthew Murswski, Michael Hildenbrand, Christopher Recchia, Trini Brassard and David Miles, Zoning Administrator Mardeee Sanchez and Members of the Public: Michael Kuhn, Bob Rea, Jeff Lively, Guy Roberts and Sandy Vitzhum from the State (mostly BGS), Sandy Vondrasek (The Herald), Pierre LaFrance, Ryan Cane, Les Blomberg, Dan LaLumia, Nancy Rice, Cindy Norton and, from VTC, Michelle Sama, dan Smith, Ted Manazir, Chris Reilly, Charles Dana, Zina Dana, Phil Petty, Dwight Cross, Jay Paterson, Brad Pellegrino, Jeff Higgins, Brad Miller and Amanda Chaulk.

Chair Tillberg called the meeting to order at 7:04 PM.

1. Public to be heard – None

2. State of Vermont – Continuation of site plan, conditional use and local Act 250 reviews for agricultural and environmental laboratory on the Vermont Technical College campus between Furnace Street and Administration Drive. The project is in RES & RU5 Districts of the existing regulations and in the RCV District of the proposed Land Use Regulations. As this application was received after the public notice for the Selectboard's public hearing on the proposed Land Use Regulations, it will be reviewed under – and will need to conform to –both the existing and proposed regulations. Local review is limited per 24 VSA §4413.

The Board first addressed potential conflicts of interest with Members Tillberg, Hildenbrand, Brassard, Recchia and Becker. Members of the public Dan Lalumia, Pierre LaFrance and Ryan Cane, on behalf of Mr. LaFrance, expressed their concerns about conflicts of interests with some or all of these members. In the end, it was the consensus of the Board that none of the members had conflicts of interest.

Participants in the proceeding for the application were applicant's representatives Sandra Vitzhum, Mike Kuhn, Guy Roberts, Jeff Lively and Bob Rea and member of the public Pierre Lafrance and his representatives Ryan Cane and Les Blomberg, Dan Lalumia and Michelle Sama.

Recchia/Brassard moved to close the hearing and move to a deliberative session. The vote was 7-0-0.

3. Approval of minutes

Brassard/Miles moved to approve the minutes of February 23, 2016 as written. The vote was 5-0-0 (Recchia and Murawski were not in the room for this motion and vote).

4. Old/new business

A hearing date was scheduled for June 21st, 2016.

B. Adjournment

Brassard/Hildenbrand moved to adjourn. The vote was 7-0-0 and the meeting adjourned at 10:07 PM.

Respectfully submitted,

Mardee Sánchez

Approved ☐ as written ☐ as edited

on _____

APPENDIX F

FINDING OF NO SIGNIFICANT IMPACT (F.O.N.S.I.)

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VERMONT STATE AGRICULTURE AND ENVIRONMENTAL LABORATORY (V.A.E.L), RANDOLPH, ORANGE COUNTY, VT

4022-DR-VT, PUBLIC ASSISTANCE (P.A.) GRANT PROGRAM JUNE 20, 2016

As a result of damages caused by Tropical Storm Irene (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 F.E.M.A.-4022-DR-VT, authorizes the Federal Emergency Management Agency (F.E.M.A.) to provide Public Assistance to local governments, state agencies and eligible private non-profit organizations in Vermont.

The State of Vermont's Department of Buildings and General Services (B.G.S.) applied to the FEMA Public Assistance (P.A.) program for aid as a result of damages sustained to the Waterbury State Office Complex (W.S.O.C.), which housed the Vermont State Agriculture and Environmental laboratories (V.A.E.L.). The State determined that the public welfare would not be best served by restoring the damaged facility to restore space lost to the V.A.E.L. Instead, the State determined to fund an alternate project to build a permanent facility on the northern edge of the Vermont Technical College campus in Randolph, Vermont to host services provided by the V.A.E.L.

The new two-story, 37,995 square foot floor space facility design with vehicle storage, a wood chip boiler, parking and roadways are all the subject of this Environmental Assessment (E.A.).

In accordance with the National Environmental Policy Act (N.E.P.A.) of 1969, the President's Council on Environmental Quality (CEQ) regulations implementing N.E.P.A. (40 CFR Parts 1500-1508) and F.E.M.A. regulations for N.E.P.A. compliance (44 CFR Part 10), F.E.M.A. prepared an E.A. to meet their responsibilities under N.E.P.A. to fully understand and consider the environmental consequences of actions proposed for federal funding. The purpose of the E.A. is to analyze potential environmental impacts from the proposed project, and to determine whether to prepare an Environmental Impact Statement (E.I.S.) or a Finding of No Significant Impact (F.O.N.S.I.). In the E.A. process, four alternatives were considered: the No Action Alternative, the Proposed Alternative of building a new facility at the Vermont Technical College (V.T.C.) Campus Northern Site, the return of the V.A.E.L. to the W.S.O.C., and construction of a new facility at twenty-two additional alternate sites (in addition to the V.T.C. Campus Northern Site).

F.E.M.A. evaluated the proposed project for any potential significant adverse impacts to existing terrestrial & biological resources, aquatic resources, cultural resources, land use & zoning, infrastruture, potential hazards, environmental justice, climate change, and cumulative impacts.

The draft E.A. was made available for viewing online at http://bgs.vermont.gov/sites/bgs and http://www.fema.gov/resource-document-library, and in person at the Randolph Town Clerk's office located at 7 Summer Street, Randolph, Vermont, Monday through Friday 8:00AM-4:30 PM. On May 5, 2016 the State of Vermont notified the public of the availability of the draft documents through publication of a notice in two local papers, *The Times Argus* and *The Herald* of Randolph. The public comment period for these documents lasted for a period of 15 days from May 5, 2016 until May 20, 2016. F.E.M.A. received no comments from the public on the content of the draft E.A. and determined that impacts created by the project could be sufficiently mitigated through compliance with proscribed construction designs, best management practices, reasonable and prudent measures, terms, and specials conditions.

CONDITIONS

The State of Vermont's Department of Buildings and General Services (B.G.S.) shall comply with all prescribed conditions set forth in the E.A., including, but not limited to the following conditions. Failure to comply with these conditions may jeopardize the receipt of federal funding.

1. B.G.S. and/or its designees are responsible for obtaining and complying with all required local, state, and federal permits and approvals. Examples include, but are not necessarily limited to the following:

    a. B.G.S. will mitigate for impacted farmland as required by the Vermont Land Use District Commission through the Act 250 permit (E.A. section 3.1).

    b. B.G.S. will obtain a Vermont Stormwater Construction General Permit, Vermont Stormwater Discharge Permit, and develop an approved Stormwater Management Plan that will include best management practices including pervious pavers, a bioretention area, underground chamber systems, and stormwater system outlet to an existing stabilized drainage outfall (E.A. section 3.1.2 and 3.5.3).

    c. Sourcing for biomass will be in conformance with the Vermont Department of Forests, Parks and Recreation's "Voluntary Harvesting Guidelines for Landowners in Vermont" (E.A. section 3.1.4).

    d. B.G.S. shall provide for alternate bidding for wood chips from certified sustainable forests (E.A. section 3.1.4).

    e. The V.A.E.L. Director shall develop a spill prevention plan per National Environmental Laboratory Accreditation Conference (N.E.L.A.C.) guidelines (E.A. Section 3.2.3 and 3.6.4).

    f. The project shall comply with the Town of Randolph Zoning Ordinances (E.A. section 3.4.2).

g. Construction (dust) and boiler operation (emissions opacity) shall comply with a Vermont Air Pollution Control regulations, and conditions of the Vermont Act 250 Land Use Permit and Stormwater Construction General Permit (E.A. section 3.6.1).

h. Construction and operation of the facility shall be in compliance with Town of Randolph Development Review Board restrictions in regards to noise, and all equipment will meet local, state, and federal noise regulations. Idling time shall be limited onsite (E.A. section 3.6.2)

i. B.G.S. shall manage and dispose of excavated soils and waste materials in accordance with applicable local, state, and federal regulations, including the State of Vermont Waste Management Division's Solid Waste Rules. If hazardous/contaminated materials are discovered during construction, the work shall cease until B.G.S. can implement appropriate procedures and secure additional permits if needed. A waste reduction plan will be developed in compliance with Vermont Land Use Permit conditions and U.S.G.B. and L.E.E.D. Gold criteria (E.A. section 3.6.3).

j. A tank permit and for the generator's diesel belly tank will be obtained from the Vermont Division of Fire Safety (V.D.F.S.) (E.A. section 3.6.3).

k. A Hazardous Materials Storage and Use Plan will be filed with the V.D.F.S. (E.A. section 3.6.4).

l. A Hazardous Waste Handler Site I.D. shall be obtained, and N.E.L.A.C. accreditation shall be maintained to include an emergency management plan, monthly safety inspections, etc. (E.A. section 3.6.4).

2. In the event of the discovery of archaeological materials and/or human remains, B.G.S. and their contractor shall immediately stop all work in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. B.G.S. and their contractor shall secure all human remains discoveries and restrict access to discovery sites. B.G.S. and their contractor shall follow the provisions of applicable state laws, including 13 V.SA. 3761 (Unauthorized Removal of Human Remains), 13 V.S.A. 3764 (Cemeteries and Monuments – Grave markers and historic tablets) and 18 V.S.A. 5212 (Permit to Remove Dead Bodies) or any amendments or supplanting laws and regulations. Violation of state law will jeopardize F.E.M.A. funding for this project. B.G.S. will inform the Office of the Chief Medical Examiner (802-863-7320), the State Archaeologist (Jess Robinson, 802 - 272-2509), Vermont Department of Emergency Management and Homeland Security (D.E.M.H.S.) (Ben Rose, (802) 585-4719), and the F.E.M.A. Deputy Regional Environmental Officer (Lydia Kachadoorian, 857-205-2860). F.E.M.A. will consult with the S.H.P.O. and Tribes, if remains are of tribal origin. Work in sensitive areas may not resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act. The State shall notify F.E.M.A. and D.E.M.H.S. should the scope of work change, including substantial design changes, additional ground disturbance, further vegetation removal, or other unanticipated changes to the physical environment (E.A. section 3.3.1).

3. A water meter shall be installed on the facility prior to occupancy (E.A. section 3.5.1).

4. The building design will meet at least United States Green Building (U.S.G.B.) Leadership in Energy and Environmental Design (L.E.E.D.) Gold criteria (E.A. section 1.1; 3.1.2; 3.5.3; and 3.8.2).

5. All construction activities will be performed using qualified personnel and in accordance with the safety and health standards specified in Occupational Safety and Health Administration (O.S.H.A.) regulations. Appropriate signage will be posted onsite and in the vicinity.

6. B.G.S shall notify F.E.M.A. and D.E.M.H.S. should the scope of work change, including substantial design changes, additional ground disturbance, further vegetation removal, or other unanticipated changes to the physical environment.

FINDINGS

Based on input and consultation with agencies, identified sources documented in the E.A., coordination with B.G.S. officials, and in accordance with the F.E.M.A. regulations for environmental considerations and Executive Orders on Floodplains, Wetlands, and Environmental Justice, F.E.M.A. finds that the Proposed Alternative, as defined in the E.A., will have no significant impact on the natural or human environment. As a result of this Finding of No Significant Impact, an E.I.S. will not be prepared (44 CFR Part 10.8) and the proposed project with prescribed conditions may proceed. If a change in the scope of work occurs, D.E.M.H.S. and F.E.M.A. must be notified to evaluate if the proposed change would alter the potential impacts on the environment. Under most situations, however, the modification or addition of one or more elements of the construction plan will not alter the findings of this E.A.

APPROVED:

Digitally signed by LYDIA A KACHADOORIAN
DN: c=US, o=U.S. Government, ou=Department of Homeland Security, ou=FEMA, ou=People, cn=LYDIA A KACHADOORIAN, 0.9.2342.19200300.100.1.1=0512249664.FEMA
Date: 2016.06.20 17:40:03 -04'00'

Lydia Kachadoorian Date
Deputy Regional Environmental Officer
FEMA Region I, Mitigation Division
Environmental & Historic Preservation Office (EHP)
99 High St., 6th Floor,
Boston, MA 02110