

State of Vermont
Agency of Natural Resources
Department of Environmental Conservation
Notice of Determination of Eligibility for Categorical Exclusion

Richford Water System, WSID #VT0005126
Town of Richford, VT
Golf Course Waterline and Booster Pump Station Project
DWSRF Loan RF3-Pending

^{DS}


In accordance with Section VII of the Department's Environmental Review Procedures for projects funded through the Drinking Water State Revolving Fund (DWSRF) Program, the Richford Water System, located in Richford, VT has requested its proposed Golf Course Waterline and Booster Pump Station Project be evaluated for eligibility for a Categorical Exclusion (CATEX) exempting the project from detailed environmental procedures required for projects having a significant environmental impact.

Project Scope: Construction of 1,100 linear feet of watermain along Golf Course Road to replace existing 4-inch diameter pipe with 8-inch diameter pipe; replace existing fire hydrants; construction of a booster pump station to address pressure issues; and construction of 1,200 linear feet of 4-inch diameter water main from the booster pump station.

Our consideration of Richford Water System's request included reviewing environmental information and documentation completed and submitted by their engineering consultant, Aldrich + Elliott. At the completion of this independent evaluation, the Department has determined the project meets the criteria for receiving a CATEX. The project will correct water system deficiencies and does not meet any of the criteria resulting in denial of an Exclusion. Should the proposed work be altered to expand beyond the current scope of work and/or APE, further review will be required due to potential cultural sensitivity of undisturbed areas. The Richford Water System and all contractors on their behalf are directed to follow the Stockbridge-Munsee Community Band of Mohican Indians Policy for Treatment and Disposition of Human Remains and Cultural Items That May be discovered Inadvertently during Planned Activities. Required mitigation measures are detailed in the attached EID.

Further information on the project and this determination are available for inspection by contacting the DWSRF Program at (802) 585-4904. In addition to the applicant, a copy of this determination will be sent to a list of stakeholders and posted on the Water Infrastructure Financing Program's [Environmental Review Determination Notice](#) page.

Agency of Natural Resources
Department of Environmental Conservation
Jason Batchelder, Commissioner

DocuSigned by:

By Eric Blatt
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Eric Blatt, P.E., Director of Engineering
Water Investment Division

Dated 9/11/2024

cc:

Amy Galford, Drinking Water Project Lead, VT DEC
Wayne Elliott, PE, Aldrich + Elliott



EnvRep-103

Water Investment Division

Appendix H

**Environmental Information Document
and Environmental Report**

Project Name Richford Golf Course Waterline & Booster Pump Station

Project Owner Town of Richford

Address 94 Main St, Richford, VT

Project Location Golf Course Road, Richford, VT

Drinking Water System Name Richford Water System

WSID No. VT0005126

State Assigned Drinking Water Revolving Loan (DWSRF) Number RF3- Pending loan number.

Wastewater and/or Stormwater System Name _____

List Existing Permit Numbers: _____

State Assigned Clean Water Revolving Loan (CWSRF) Number RF1- _____

All Projects: USEPA Grant (STAG) Number _____

Federal Fiscal Years (s) of USEPA Grant Appropriation _____

Applicants are strongly encouraged to consult early and frequently with our staff to ensure that all environmental issues are described, evaluated, and impacts appropriately considered and mitigated, in order to expedite the application process and SRF review and approval of a proposed project

SRF design review staff will independently evaluate and verify accuracy of information supplied in the project environmental report, and issue the CATEX, FONSI or ROD determination.

If an SRF determination is made that an Environmental Assessment or an Environmental Impact Statement is required, for projects with a greater complexity of impacts and mitigation, the SRF staff will be responsible for initiating the preparation of this document internally or by a third party.

The EIS will result in a Record of Decision determination, instead of a CATEX or FONSI.

Through a memorandum of understanding between United States Department of Agriculture-Rural Development and the Vermont Agency of Natural Resources, this environmental report format is acceptable to both funding agencies.

Please note that Environmental Review Determination eligibility, public comment, and public notice requirements may differ among the funding agencies.

Provide the “need of project” statement:	The Drinking Water Division during a Sanitary Survey identified deficient fire flows and inadequate pressure on Golf Course Road.
Provide the “purpose of project” statement:	This project will serve to improve fire flows and pressure to Golf Course Road waterlines.
Provide a brief description of the project scope and design as detailed in the Preliminary Engineering Report:	1,100 ft of waterlines along Golf Course Rd will be replaced and increased in size (4" to 8" diameter). The hydrants will also be replaced. To increase pressure, a booster pump station will be constructed and housed in a small building. A 4" waterline will be extended by approximately 1,200 ft from the booster pump station.
Highlight the project features that will likely have an environmental impact or impact to historical resources or involve environmental justice issues. The level of project detail should be in keeping with the scope and magnitude of the construction project.	This project may cause environmental disturbances during the installation and construction of the waterlines and pump station. The project will occur under or next to roads and previously cleared areas.

Program Loan	Information Request	YES	NO	WID
Projects requiring no Mitigation measures will qualify to proceed with a Categorical Exclusion (CATEX) process. Projects requiring Mitigation may qualify for a Finding of No Significant Impact (FONSI).				
CWSRF and DWSRF	Is the Project likely to have no or very minimal effects?	☐	☐	☒
CWSRF and DWSRF	Does the project require mitigation measures?	☐	☐	☒
CWSRF and DWSRF	Does the authorized project representative make a written request for a Categorical Exclusion, for Projects likely to have no or very minimal effects (included)?	☐	☐	☒
Projects of greater complexity and impact will require an Environmental Impact Statement (EIS) and result in a Record of Decision (ROD)				
CWSRF and DWSRF	Does the project involve greater complexity and impact or controversy ¹ ?	☐	☐	☒
CWSRF and DWSRF	Attach additional information such as a qualified consultant assessment or determination letters, permits from regulatory authorities, and mapping	☐	☐	☒
Projects limited to the existing footprint of a building (e.g., a UV disinfection project)				
CWSRF and DWSRF	No Impact Certification Statement, submitted?	☐	☐	☒
CWSRF and DWSRF	The project is restricted to the footprint of the existing building:	☐	☐	☒
Project Scope				
DWSRF	Will the project expand capacity to serve more than 500 additional users or a 30% increase in the existing population, whichever is greater?	☐	☐	☒
CWSRF	Will the project increase hydraulic (flow) treatment capacity by more than 20%	☐	☐	☒
CWSRF	Percent increase in hydraulic capacity	0%		
CWSRF	Will the project increase influent 5-day biochemical oxygen demand (BOD5) organic treatment capacity by more than 30% ?	☐	☐	☒
CWSRF	Percent increase in BOD5 capacity	0%		☐
CWSRF	Existing hydraulic capacities		gal.	☐
CWSRF	Existing organic capacities		mg/l	☐
CWSRF	Proposed hydraulic capacities		gal.	☐
CWSRF	Proposed organic capacities		mg/l	☐
Sole Source Aquifer				
DWSRF and CWSRF	Will the project take place in an area designated by the Environmental Protection Agency as a "Sole Source Aquifer"?	☐	☐	☒
New Project Features				
DWSRF	Does the project call for a jurisdictionally new withdrawal of groundwater or of surface water (10 V.S.A. § 1042(b))?	☐	☐	☒
CWSRF	Does the project include a new discharge to surface water or groundwater?	☐	☐	☒
DWSRF	Will the project result in a 30% increase in groundwater or surface water withdrawal at an existing site?	☐	☐	☒
DWSRF	Percent increase in groundwater/surface water withdrawal	0.00%		☒
Mitigation				
DWSRF and CWSRF	Do you believe your project qualifies for a Categorical Exclusion in accordance with the <u>Environmental Review Procedures</u> for projects funded through the Vermont/EPA Drinking Water Revolving Loan Program and/or the <u>Vermont/EPA Clean Water Revolving Loan Program</u> , based on the environmental information and documentation, presented in the attached form?	☐	☐	☒
DWSRF and CWSRF	With your applicant's signature below, do you request a Categorical Exclusion for your project?	☐	☐	☒
DWSRF and CWSRF	If "No" above (Not a CATEX project), you must fill out all affected environmental and historical considerations below. If you answer "Yes" you will also need to provide the mitigation measures or an alternative action plan			

See below.

¹ Environmental controversy. Controversy includes not only scientific disagreement about the mitigation's effectiveness, but also public interest or debate. Controversy is an unresolved group opposition, disagreement or concern to the proposed project within the affected community
Vermont CW & DW SRF EID 12/06/2023

Environmental Resource and Archeological Checklist

WID

1. Environmental Justice Considerations

Considerations	Yes or No	Basis for Determination and Documentation	
The WID uses this form to establish compliance with NEPA requirements. The WID determination of NEPA compliance does not extend to other permitting by other agencies. The intention of the WID review/determination is to establish that the project development takes into account all direct and indirect aggregated environmental impacts of the project. Sensitive Communities include persons who: may have reduced mobility; persons who reside in hospitals, nursing homes, convalescent homes, intermediate care facilities, board and care facilities, and retirement service centers; communities disenfranchised due to economic condition; communities disenfranchised by minority status, such as ethnic, religious, race, color or sexual identity. Sensitive communities includes children and elderly individuals within each of the definitions above.			
Will the project adversely affect a sensitive population? Present a map produced using the online EJSCREEN tool, showing the project perimeter.	☐ Yes ☒ No	Printed Materials: No, as this project will improve on existing water infrastructure.	☒
Will the project affect sensitive populations? Project characteristics that may result in effects on sensitive populations include: Measures to avoid loss of life or injury during flood or storm events; construction or operation dust, odor or noise control measures; storage of hazardous chemicals in areas of sensitive communities; limitations on transportation access etc.	☐ Yes ☒ No	Printed Materials: There will be no affect to sensitive population.	☒
Is the project known or expected to have a significant negative effect on the quality of the human environment? Consider the cumulative and also the long term effects of the project on the community. Provide a narrative of anticipated effects.	☐ Yes ☒ No	Printed Materials: This project will not negatively affect the human environment. Short term affects, such as an increase in noises, may occur due to construction in roadways and near some residential homes.	☒
Will the project contribute to significant changes to the socioeconomic makeup of the area?	☐ Yes ☒ No	Printed Materials: This project will not affect the socioeconomic makeup of the area.	☒
Is the project unaffordable? Provide an evaluation of the projected effect on user rates versus the affordability analysis.	☐ Yes ☒ No	The Town has passed a bond vote and is eligible for a disadvantaged subsidy, reducing impacts to water rates.	☒
Has the project undergone an alternatives analysis evaluating practicable alternatives to address the pollutant or pollutants of concern (Criterion 9 of Chapter 2)?	☐ Yes ☒ No	No, an alternatives analysis is not applicable here.	☒
Does the project implement the least cost alternative based upon a Life Cycle Cost Analysis (Criterion 9 of Chapter 2)?	☒ Yes ☐ No	Contributor Experience: Yes	☒
Does the project implement the least cost alternative of the Long-Term Cost Effectiveness Analysis per (Criterion 9 of Chapter 2)?	☐ Yes ☒ No	Contributor Experience: Yes	☒
Does the project impact an "existing use" contact recreational activity (on or after November 28, 1975) such as a swimming hole listed in a published Tactical Basin Plan?	☐ Yes ☒ No	Field Observation: No, the project will not impact an existing use contact recreational activity.	☒

2. Cultural, Historic and Archaeological Resources

Considerations	Yes or No	Basis for Determination and Documentation	WID	
Projects shall protect cultural, historical and archaeological resources as they are of value to the community. Qualified consultants will assist and coordinate with WID and SHPO staff in making determinations and concurring with project applicant.				
Historic Sites Act: Will the project adversely affect a federal [16 U.S.C. sec. 461-467, (1935)] historic site?	☐	☒	Printed Materials: There are no federal historic sites within a 0.5 mi radius of the project area	☒
Will the project adversely affect a state Vermont historic preservation act historic site? (Please include copies of the historic resources assessment or archeological reports and subsequent phases as needed. List the qualified consultant, agencies and groups consulted.)	☐	☒	Special Study: Crown Consulting Archaeology, LLC., identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment.	☒
National Historic Preservation Act [16 U.S.C. §470 et. seq. (1966)]: Will the project adversely affect historic buildings, over 50 years old, or listed in the National Register of Historic Places? https://www.nps.gov/subjects/nationalregister/database-research.htm Provide a list of any listed buildings, buildings over 50 years old, in the project area, and photos of each building, or a report by a qualified ACCD listed consultant .	☐	☒	Special Study: Crown Consulting Archaeology, LLC., identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment.	☒
Vermont listed historic preservation resource: Will the project adversely affect a Vermont listed historic resource? https://accd.vermont.gov/historic-preservation/identifying-resources Provide a list of any listed buildings, buildings over 50 years old, in the project area, and photos of each building, or a report by a qualified ACCD listed consultant .	☐	☒	Special Study: Crown Consulting Archaeology, LLC., identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment.	☒
Archaeological and Historic Preservation Act: Will the project adversely affect cultural resources? [16 U.S.C. §469a-1 (1974)] current 54 U.S.C. chapter 3125	☐	☒	Special Study: Crown Consulting Archaeology, LLC., identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment.	☒
Vermont archaeological and historic preservation: Does the project adversely affect a Vermont listed cultural archaeological or historic resource? https://accd.vermont.gov/historic-preservation/resources-rules https://accd.vermont.gov/historic-preservation/identifying-resources Provide documentation that the project perimeter has been evaluated for presence of these resources.	☐	☒	Special Study: Crown Consulting Archaeology, LLC., identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment.	☒
Executive Order 11593: Will the project adversely affect cultural resources "Protection and Enhancement of the Cultural Environment" https://www.archives.gov/federal-register/codification/executive-order/11593.html	☐	☒	Special Study: Crown Consulting Archaeology, LLC., identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment.	☒

ARA sent to ACCD for more than 30-days without comment. Per MOU presumed concurrence.

3. Land Use

Considerations	Yes or No	Basis for Determination and Documentation	WID	
Project applicant should identify related General Land Use features such as: a) Existing zoning ordinances, land use plans, development plans, etc.; b) Total land area required and/or proposed for purchase and the area that will be disturbed by construction for and operation of the proposed project; c) Current land uses in the area affected by the proposal, such as residential, commercial, agricultural, rangeland, forest land, recreational, etc; d) Compatibility of the proposed project with existing, if any: local, regional or state land use plans or controls; e) Any necessary mitigation measures.				
Does the project directly or indirectly adversely affect existing current land use? Provide mapping and information from local, regional, and state planning documents. Provide documentation of consultation with local and regional planning officials.	☐	☒	Contributor Experience: No, The project will take place along side roadways and will serve existing water customers. The booster pump station will be built in an existing cleared area.	☒
Will the project convert federally classified Agricultural Soils to non-agricultural uses? Present a map showing the project along with Natural Resources Conservation Service (NRCS) soil classifications. <u>[NRCS soil mapping survey]</u> <u>Farmland Protection Policy Act:</u> Present a completed AD-1006 Farmland Conversion Impact Rating <u>form</u> . [7 U.S.C. §4201 et. seq. (1981)] Submit a determination by the federal Natural Resources Conservation Service List agencies and groups consulted.	☐	☒	Printed Materials: The project will not convert agricultural soils to non-agricultural uses. The project will occur along existing roadways and residential areas.	☒ ☒ ☐ ☐
Does the project involve new impacts to identified primary agricultural soils, that may require mitigation of such impacts, to comply with Vermont Statute Act 250 Criterion 9(B)? State primary agricultural soils are defined: <u>[10 V.S.A. Section 6001(15)]</u> Refer to the online <u>NRCS soil mapping survey</u> and submit a map showing the project tract along with NRCS soil classifications [focused on rated Prime, Statewide, or Local soils of agricultural value group 1-7]. Provide a pre-application review letter from the Vermont Agency of Agriculture, Food & Markets. If offsite mitigation is anticipated to be proposed, please review the online " <u>Fee Memo</u> " indicating the current year estimated cost of offsite farmland mitigation acres (subject to annual revision), to present an estimated fee. Please note that all mitigation is subject to approval by the District Commission, and a proposed use of off-site mitigation outside a designated area would be subject to the Commission's findings as to appropriate circumstances. See 10 V.S.A. Section 6093.	☐	☒	Printed Materials: The project will not create new impacts to primary agricultural soils. The project will occur along existing roadways and residential areas. The underlying agriculturally important soil types are Statewide and Statewide (b). Estimate Mitigation Fee \$ 0.00	☒ ☒ ☐ ☐
Is Land Use and Development review and approval under Act 250 necessary? Attach a copy of the ANR Project Review Sheet, or Permit Navigator output, including the District Environmental Commission determination on Act 250 permit requirements. <i>List agencies and groups consulted.</i>	☐	☒	No, a request for a PRS has been submitted and will be attached.	☒

Does the project contribute to sprawl growth outside of <u>Designated Growth Centers</u>? Present a map showing the project in relation to the Designated Growth Center. Attach copies of the Town Plan. Discuss using the Growth Center and Growth Management Document. List agencies and groups consulted.	☐ ☒	Contributor Experience: No, the project will not contribute to sprawl growth outside of a designated growth center.	WID ☒
Will the project cause other significant environmental impacts, including secondary impacts? List agencies and groups consulted.	☐ ☒	Contributor Experience: The project is unlikely to cause other significant environmental impacts.	☒
Does the project alter or affect Formally Classified Lands (properties that are administered by either Federal, State, or local agencies)? Present a project area map, identifying each of the administered lands, from resources below as applicable. Federally Administered: <u>Federal Tribal Lands BIA</u> (download geospatial data) <u>Surface Management Agency DoI</u> (downloadable polygon) <u>U.S. Forest Service (USFS)</u> <u>U.S. National Park Service (NPS)</u> <u>Nationwide Rivers Inventory</u> <u>Nat. Bureau Land Management BLM</u> <u>National Parks Conservation Association</u> <u>US Wildlife Refuges (USFWS)</u> State and local land management and planning agencies: parks, and other state-owned and <u>state administered lands</u> (State Game Refuges, State Conservation Camps, State Fishing Access Areas, State Wildlife Management Areas etc.)	☐ ☒	Printed Materials: The project will occur along existing roadways and residential areas.	☒

4. Intergovernmental Review of Federal Programs

Considerations	Yes or No	Basis for Determination and Documentation	
Does the project coordinate local government concerns in the review of proposed Federal financial assistance and direct Federal development? <u>Executive Order 12372</u>, Intergovernmental Review of Federal Programs	☒ ☐	Contributor Experience: Yes.	☒

5. Wetlands, floodplains, coastal zones, wild and scenic rivers

Considerations	Yes or No	Basis for Determination and Documentation	
A qualified wetland professional is responsible for mapping lands meeting the definition of a wetland and its buffer area, to ensure proper continued function. The project applicant must demonstrate viability of the project without deterioration of wetland function.			
Will there be construction in a wetland or wetland buffer? <u>Executive Order 11990</u>, "Protection of Wetlands;" as amended by Executive Order No. 12608 (1997) A wetland buffer perimeter compliant with <u>Vermont Wetland Rules</u> applies A qualified consultant's assessment and/or the regulatory authority's determination must be attached for any construction in wetlands.	☐ ☒	Printed Materials: No, the project area will not take place in a wetland or wetland buffer.	☒

For any new construction please provide the wetlands classification delineation. List agencies and groups consulted. Indicate if a State permit or US Army Corps of Engineers permit is required. Qualified consultants are listed at: https://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list Present a printout of the map for the project location using: https://anrmaps.vermont.gov/websites/WetlandProjects/default.html The map should show the perimeter of the project, the wetlands in the project area and their corresponding buffer zone.	☐ ☒	Printed Materials: A map from the VT ANR Wetland Inventory Map tool is provided.	☒
<u>Floodplain and Floodway hazard considerations.</u> A detailed description of floodplain construction and a qualified consultant's assessment and/or the regulatory authority's determination must be attached. Show locations of all utility infrastructure on the Flood Insurance Rate Map (FIRM). Flood map available from <u>Flood Insurance Rate Map</u>. Refer to the SRF Guidance Document 37 on Floodplain management for additional information. Caution: ANR ATLAS (<u>floodready</u>) contains digital DFIRM mapping for 6 of the 14 Vermont counties: (Bennington, Chittenden, Rutland, Washington, Windham and Windsor County) and seven communities: (Bradford Village, Hardwick, Jay, Montgomery, Newbury, Stowe, and Wolcott). "About half of the flood hazard data in Vermont has been officially digitized". Note: TR-16 and other standard require that Critical Infrastructure is expected to be protected from a 500-year flood event. List agencies and groups consulted. All projects must comply with EO 11988 as amended by EO 13690 and reinstated by EO 14030.			
Will the project involve construction in a floodway? Publicly funded infrastructure should not be located within the floodway. Linear projects may have to cross a floodway but must be vertically located sufficiently above or below to avoid impacts. Include floodway boundaries on site plans and profiles.	☐ ☒	Printed Materials: No, construction does not occur in a floodway.	☒
Will the project involve construction in a 100-year floodplain? Executive Order 11988, "Floodplain Management," as amended by Executive Order 12148 (1979) Publicly funded infrastructure should not be located within the 100-year floodplain. Linear projects may have to cross a 100-year floodplain, but must be vertically located sufficiently above or below to avoid impacts. All efforts to be made to locate critical infrastructure outside of floodplains to avoid impacts, however where unavoidable infrastructure shall be protected in accordance with the Executive Order and accepted standards. Include 100-year floodplain boundaries on site plans and profiles. Consult state guidance documents: https://floodtraining.vermont.gov/sites/floodtraining/files/documents/Accessory-Structures-Checklist.pdf	☐ ☒	Printed Materials: No construction occurs in a 100-year flood plain.	☒
Will the project involve construction in a 500 year floodplain? Publicly funded infrastructure should not be located within the 500-year floodplain (24 CFR §55.2(3)(i)&(4)). Linear projects may have to cross a 500-year floodplain, but may be vertically located sufficiently above or below to avoid impacts. All efforts to be made to locate critical infrastructure outside of floodplains to avoid impacts, however where unavoidable infrastructure shall be protected in accordance with accepted	☐ ☒	Printed Materials: No construction occurs in a 100-year flood plain.	☒

standards. Include 500-year floodplain boundaries on site plans and profiles.			WID
Will the project involve construction in a <u>Vermont River Corridor</u>? Provide a map created using the River Corridor layer of the ANR ATLAS, showing the perimeter of the project. Publicly funded infrastructure should not be located in the river corridor, as defined by the Vermont "Flood Hazard Area and River Corridor Protection Procedure" wherever practicable.	☐	☒	Printed Materials: No, the project will not involve construction in a VT River Corridor.
Is a local zoning permit required for work in the flood hazard zone? Present copies of correspondence with local zoning official.	☐	☒	Contributor Experience: Not applicable because no work is occurring in a flood hazard zone.
Does the project require a hydraulic hydrologic study to comply with <u>Act 250 Criterion 1(D)</u> ? Attach the hydraulic study as an appendix to the application.	☐	☒	
Coastal Zone Management Act; <u>[16 U.S.C. § 1451 et. seq. (1972)]</u> Vermont does not participate in the Coastal Zone Management program.	NO	☒	
Coastal Barriers Resources Act; <u>[16 U.S.C. §3501 et. seq. (1982)]</u> Vermont waters are not affected by tidal action, therefore the Coastal Barrier Resource Act of 1982 does not apply.	NO	☒	
Will the project impact a wild, scenic or recreational river area and create conditions inconsistent with the character of the river? Discuss if the project is within a quarter-mile of a river on the National Park Service's Nationwide Rivers Inventory. A listing of rivers on the Nationwide Rivers Inventory is available at: <u>Wild and Scenic Rivers Act</u> ; [16 U.S.C. §1271 et. seq. (1968)] <i>List agencies and groups consulted.</i>	☐	☒	Contributor Experience: From the closest point in the project area to the river, the project area is over 0.6 miles away from a the Missiquoi River. This river segment is designated as a recreational river. However this project will not affect the river.
Will the project involve construction in a stream? A qualified consultant's assessment and/or the regulatory authority's permit for <u>stream alteration</u> determination must be attached for construction in streams. List agencies and groups consulted.	☐	☒	Field Observation: No, the project will not involve construction in a stream.
Will the project involve: directional drilling under a stream, or an aerial crossing over a stream? Explain how the project was designed to address flood resiliency. List agencies and groups consulted (<u>VTDEC Rivers Program</u> , <u>VTRANS</u>).	☐	☒	Field Observation: No, the project will not involve construction under or over a stream.
Does the project involve earthen impoundment of more than 500,000 CF (4 MG) of wastewater (<u>Vermont Dam Safety Rule §37-108</u>)? Explain if the impoundment is a Dam under the jurisdiction of the VT-ANR and what additional engineering and design standards apply.	☐	☒	Field Observation: No, the project will not involve impoundments of wastewater.

6. Fish and wildlife, and endangered species.

Considerations	Yes or No	Basis for Determination and Documentation	WID
The preservation of Vermont's natural fauna is an objective of all CWSRF funded projects. The EID related efforts should ensure that affected species are not identified by name , to protect their habitat.			
Will the project affect coastal fishing? Magnuson-Stevens Act (<u>Rule at Fed. Reg. 85 FR 44220</u>) and Essential Fish Habitat Consultation Process [as amended <u>16 U.S.C. §1801 et. seq (1996)</u>]	No ☒	Vermont does not have Exclusive Economic Zones.	☒
Will the project: impound, divert, or otherwise control or modify the waters of any stream or body of water of the State? Fish and Wildlife Coordination Act [<u>16 U.S.C. 661-667e (1934)</u> ; as amended 1936, 1946, 1947, 1948, 1949, 1958, 1965] Identify the affected waters of the state. Provide citation and/or ANR Atlas map. Detail how many gallons will be impounded, what controls will be implemented, and the engineering and design standards applied, as well as any additional permitting, monitoring and reporting.	☐ ☒	Contributor Experience: No, the project will not impound, divert, or effect a stream or body of water.	☒
Is the project likely to adversely affect birds covered by the <u>Migratory Bird Treaty Act</u> (MBTA) [(16 U.S.C. 703-712 (1918))] All Vermont birds are listed and migratory and will affect consideration of proposed project designs. Involuntary "take" of birds should be identified in the project definition.	☐ ☒	Contributor Experience: No, the project will not likely affect migratory birds as it includes a buried waterline mostly within the roadway.	☒
Does the project affect an eagle habitat or nest? <u>Bald and Golden Eagle Protection Act</u>	☐ ☒	Contributor Experience: No, the project will take place along a roadway in an existing residential	☒
Is the project likely to adversely affect an federally endangered or threatened species? Endangered Species Act [<u>16 U.S.C. §1531 et. seq. (1973)</u>] <i>A qualified consultant's assessment and/or the regulatory authority's determination must be attached demonstrating compliance with US Fish & Wildlife guidance. List agencies and groups consulted. Submit IPaC summary.</i>	☐ ☒	Printed Materials: No, the project is not likely to adversely affect a federally listed endangered or threatened species.	☒
Is the project likely to adversely affect a Vermont state listed rare, threatened or endangered species? https://legislature.vermont.gov/statutes/section/10/123/05406 <i>A qualified consultant's assessment and/or the regulatory authority's determination must be attached</i>	☐ ☒	Printed Materials: No, the project is not likely to adversely affect a state listed rare, endangered, or threatened species.	☒
Is the project likely to adversely affect an ubiquitous statewide bat population? (area of tree removal) <i>VTrans Ind Bat and Northern Long Eared Tree Cutting Guidance by Region.pdf (vermont.gov)</i>	☐ ☒	Printed Materials: No, the project is not likely to adversely affect a statewide bat population. The project will not involve any tree removal, or the removal or disturbance of bat habitats.	☐
	☐ ☐		☐

7. Drinking water and Groundwater Protection

Considerations	Yes or No	Basis for Determination and Documentation	
Project Objectives shall safeguard the sources of drinking water and be protective of the groundwaters of the state, which are held in public trust. The Safe Drinking Water Act - 42 U.S.C. 300f et. seq. as amended in 1976, 1986, and 1996, and the State of Vermont Groundwater Protection Rules provide a framework for these objectives.			WID
Are there Sole Source Aquifers in the project area? Present a map showing the project perimeter area using the EPA online map "EPA Sole Source Aquifers": and indicate any "sole source aquifers". https://geopub.epa.gov/DWWidgetApp/	☐ ☒	(As of August 2022, Vermont has no identified sole source aquifers).	☒
Will there be negative direct impacts to <u>groundwater quality or quantity</u>? Discuss positive and negatives impacts to nutrients, groundwater, existing drinking water supplies	☐ ☒	Contributor Experience: Groundwater flow may be disrupted during construction from excavation and replacement of waterlines. Significant, long-term effects are not expected.	☒
Subsurface Contamination and Constituents of Concern			
Has the desktop review of reasonably available information identified a need for a workplan submittal for approval by SMS to address recognized environmental conditions (RECs), contamination or suspected contamination? Links to guidance: 1) "Linear Construction Projects Guidance Document" for projects that take place within a public or private roadway, railroad, utility line, or rights-of-way (ROW). 2) "Guidance For Construction of Public Works Projects in Areas Where Contamination is Suspected or Known" 3) Resources: ANR ATLAS layers- Hazardous Sites Hazardous Waste Generators Brownfields Salvage Yard Aboveground Storage Tank Underground Storage Tank Additional ANR ATLAS layers: Dry Cleaners – verify PFAS results – where known Urban Soil Background Areas Land use restrictions status Others as needed	☐ ☒	Summarize Findings: Special Study: A work plan is likely not needed but the following 2 hazardous sites are near the project area: 1) Tatro Residence (921306) Low concentrations of 1,1,1-Trichlorethane was recorded in the near residential home. It is designated with a priority of "No Further Action Planned and is located up-gradient of the project area. 2) Blue Seal Feeds (890336) This hazardous site was closed in 1990 after the DEC determined that the groundwater contamination is not migrating off-site and hazardous materials were not found in a significant concentration. It is located down-gradient of the project area. The following site types were not found within 0.25mi of the project area: - Brownfields - Salvage Yards, Storage Tanks - Dry Cleaners - PFAS Results - Urban Soil Background Areas	☒
4) Does the desktop review identify any potential Emerging Contaminants?	☐ ☒	No, no potential emerging contaminants were identified	☒

8. Air Quality, Noise and Emissions

Considerations	Yes or No	Basis for Determination and Documentation	
Construction, related to the installation and upgrade of infrastructure, and operation of water and wastewater facilities can potentially have emissions and may be required to meet federal and state air emission thresholds. Air Quality - Clean Air Act, as amended in 1990. [42 U.S.C. §7401 et. seq.]			WID
Will there be any changes to air quality (VTDEC Air Control Regulations)?	☐ ☒	Contributor Experience: Any changes to air quality will be temporary during construction.	☒
Is an Air Pollution Control Permit required? Note: Emergency generators/pumps are only subject to limited requirements provided they are used strictly for emergency purposes (includes limited emergency demand response programs) and do not participate in peak shaving programs.	☐ ☒		☒
Will there be any changes in emissions?	☐ ☒	No, there will be no changes in emissions.	☒
Is your digester unequipped and operated without a flare?	☐ ☒	N/A	☒
Are there any other non-emergency combustion devices at your facility, including but not limited to: stationary internal combustion engines such as diesel generators/ pumps, boilers or space heaters greater than 3 million BTU, or combustion turbines and/or boilers?	☐ ☒	Contributor Experience: No, the project will not involve non-emergency combustion devices.	☒
Will there be any changes in noise levels?	☒ ☐	Contributor Experience: There will be an increase c	☒
Will there be any changes in atmospheric dust levels?	☒ ☐	Contributor Experience: There will be an increase c	☒
Will there be any explosive dust generation?	☐ ☒	Contributor Experience: No, There will not be explc	☒
Will there be any odor generation?	☒ ☐	Contributor Experience: There may be odor genera	☒

9. NEPA Related Considerations

Considerations	Yes or No	Basis for Determination and Documentation	
Project planning and development should consider both direct and indirect impacts of the project on archaeological, cultural, and environmental site features. These are further defined in the federal <u>NEPA language</u> .			WID
Is there a controversy ² with respect to environmental effects of the project based on reasonable and substantial issues?	☐ ☒	Contributor Experience; No, there is not a controversy related to environmental concerns from the project. The project will serve to provide	☒
Is the project significantly greater (<u>requiring a new Act 250 permit, or permit amendment</u>) in scope than normal projects for the area?	☐ ☒	Contributor Experience: No, the project area is limited to a 2300' of roadway.	☒
Does the project have significant unusual characteristics (defined at <u>23 CFR 771.117 (b)</u>)?	☐ ☒	Contributor Experience: The project does not have unusual characteristics.	☒
Does the project establish a precedent for future action or represent a decision in principle about future actions with potentially <u>significant environmental effects</u> (cumulative impact based on current information)?	☐ ☐	Contributor Experience: No, the project does not establish a precedent. It serves to replace existing infrastructure and install a pump station for standard improvements.	☒
Does the project have significant adverse direct or indirect effects on federal or state parkland, other public lands, or areas of recognized Scenic or recreational value?	☐ ☐	Contributor Experience: The project area does not occur in or near federal or state parkland, or other public lands recognized to have scenic or <u>recreational value</u> .	☒
<u>Cumulative Impacts</u> : Will the project cause other significant environmental impacts, including secondary impacts? <i>List agencies and groups consulted.</i>	☐ ☐	Contributor Experience: The project will not cause significant environmental impacts.	☒
Will the project provide new drinking water facilities to serve a population greater than 2,000 persons, using population metrics consistent with the Public Water System regulatory program?	☐ ☒	Current DW Population New DW Population	☒

² Environmental controversy. Controversy includes not only scientific disagreement about the mitigation's effectiveness, but also public interest or debate. Controversy is an unresolved group opposition, disagreement or concern to the proposed project within the affected community.

10. Mitigation Measures and/or Alternative Plans of Action

Mitigation measures are applicable, to minimize adverse effects. Explain how mitigation measures will be achieved and monitored (Special Grant Condition or review of Plans and Specifications). Remember to consider structural and non-structural methods.	
<u>Affected Environmental or Archeological Resources</u>	<u>Mitigation Measures or Alternative Plan of Action</u>
A.) Air Quality	Temporary dust controls will be used.
B.)	
C.)	
D.)	

Potential Mitigation Measure Decisions, must evaluate consider the following:

The adverse effect must have a **reasonable chance of occurring** in the foreseeable future; mitigation measures are only useful and appropriate when there is a compelling reason to address an identified impact. If an adverse effect has a low expectancy in the foreseeable future, mitigation is not likely necessary.

Mitigation measures must be **reasonable and enforceable**. There must be a reasonable expectation that the measure can be implemented and have the desired outcome.

The WID often relies on other federal state and local permitting entities to **monitor and enforce implementation**; environmental regulatory or natural resource agencies are technically in the best position to accomplish this. As much as possible, the WID will work with applicants to ensure mitigation follow-up. This may require a brief mitigation plan or need to be detailed in loan agreements.

Measures must balance the potential for impact on a resource and the resource's relative environmental value. Potential impacts on unique or scarce resources, for example, may require a strong mitigation measure (e.g. restrictive measure).

10. Mitigation Measures and/or Alternative Plans of Action continued

Mitigation measures are applicable, to minimize adverse effects. Explain how mitigation measures will be achieved and monitored (Special Grant Condition or review of Plans and Specifications). Remember to consider structural and non-structural methods.	
<u>Affected Environmental or Archeological Resources</u>	<u>Mitigation Measures or Alternative Plan of Action</u>
E.)	
F.)	
G.)	
H.)	

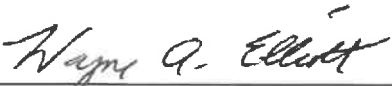
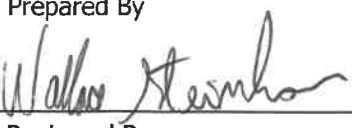
Potential Mitigation Measure Decisions, must evaluate consider the following:

The adverse effect must have a **reasonable chance of occurring** in the foreseeable future; mitigation measures are only useful and appropriate when there is a compelling reason to address an identified impact. If an adverse effect has a low expectancy in the foreseeable future, mitigation is not likely necessary.

Mitigation measures must be **reasonable and enforceable**. There must be a reasonable expectation that the measure can be implemented and have the desired outcome.

The WID often relies on other federal state and local permitting entities to **monitor and enforce implementation**; environmental regulatory or natural resource agencies are technically in the best position to accomplish this. As much as possible, the WID will work with applicants to ensure mitigation follow-up. This may require a brief mitigation plan or need to be detailed in loan agreements.

Measures must balance the potential for impact on a resource and the resource's relative environmental value. Potential impacts on unique or scarce resources, for example, may require a strong mitigation measure (e.g. restrictive measure).

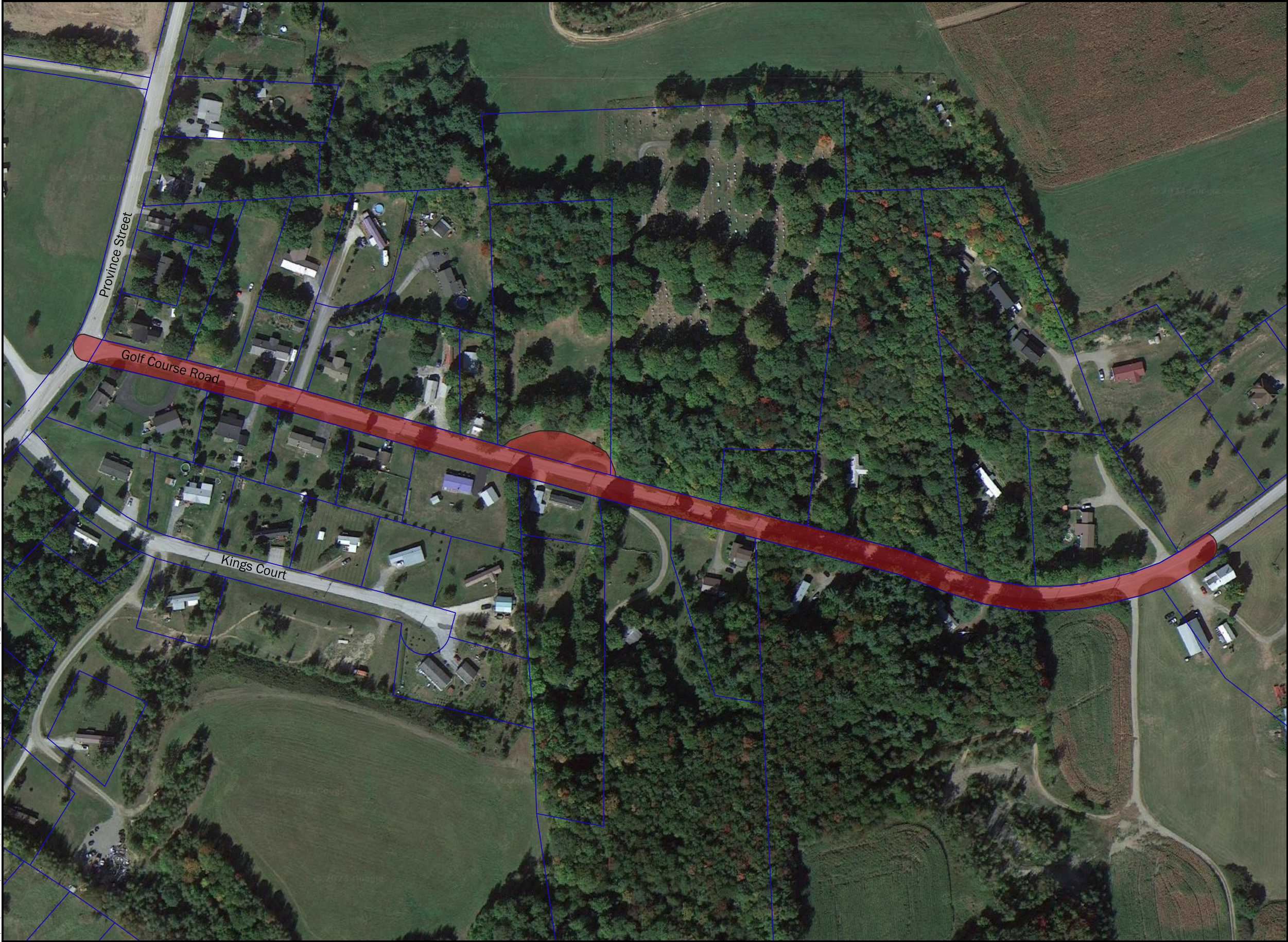
	07/08/24	Senior Vice President
Prepared By	Date	Title
	7/26/24	Select Board Chair
Reviewed By	Date	Authorized Representative

***Basis for Determination and Documentation**

The basis for determination and documentation information must be traceable and establish the factual data to support the response to each question. Any environmental concerns that are raised by federal, state, or local agencies or the public must be addressed as completely as possible and resolved before the environmental report will be considered complete. All supporting documentation (e.g., correspondence and exhibits) should be attached and easily cross-referenced back into the main body of the environmental report. Types of information to be included in this column are outlined below.

1. **FIELD OBSERVATION:** A site visit that does not usually involve any testing or measurements. FIELD OBSERVATION is an important method for initial screening of the issues, but for some of the categories it may be inadequate for final evaluation. Support documentation should include date of the site visit and by whom.
2. **PERSONAL CONTACT:** Personal contacts are useful when the individual contacted is an accepted authority on the subject(s) and the interview is documented. Supporting documentation should include the name, organization, and title of the person contacted and the date of the conversation. *Copies of written site inspection reports and determinations by regulatory authorities on applicability of regulations and permit requirements should be attached.*
3. **PRINTED MATERIALS:** These are useful sources of detailed information, materials such as comprehensive land use plans, maps, statistical surveys, and studies. Information must be current, i.e., not so old that changing conditions make them irrelevant and must represent accepted methodologies. Citations for the material should include enough information so that an outside reviewer can locate the specific reference.
4. **SPECIAL STUDY:** This is a study conducted for an individual factor or resource, and should be performed by a qualified person using accepted methodologies. Some tests are relatively simple to perform but others may require elaborate equipment or personnel with additional expertise. The preparer is responsible for obtaining assistance from others in order to have the appropriate test or studies conducted. Copy of the study must be appended or referenced as for Printed Materials.
5. **CONTRIBUTOR EXPERIENCE:** The professional judgment of the persons contributing to this environmental report can be useful provided their expertise is relevant. The contributor may have previous knowledge from familiarity with the area, or may have professional background to make judgments about a specific factor. Provide information of the person's qualification in addition to name, organization and position.

Appendix A – Project Area of Potential Affect



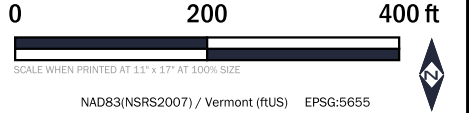
AREA OF POTENTIAL AFFECT

GOLF COURSE RD WATERLINE &
PUMP STATION

TOWN OF RICHFORD,
VERMONT

LEGEND

- Parcel Boundaries
- Area of Potential Affect/Project Area



AE Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452

P: 802.879.7733 AEengineers.com

DESIGNED	—
DRAWN	MJ
CHECKED (PE)	—
CHECKED (PM)	—
SCALE	1 : 2,400
DATE	JUL. 2024

PROJECT NO.	20034
FIGURE NO.	

Appendix B – EJScreen Community Report



EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Richford, VT

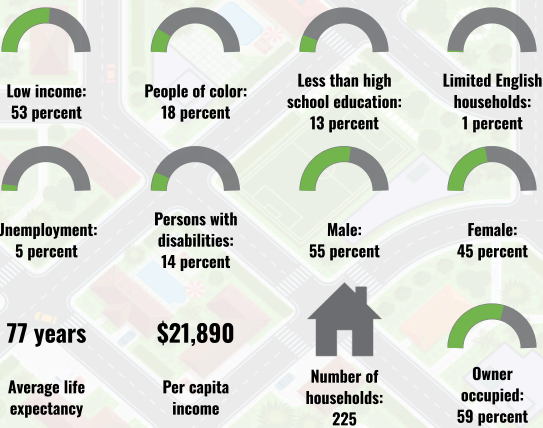
0.5 miles Ring around the Area
Population: 536
Area in square miles: 1.25

Dynamic map initially showing the user-selected area

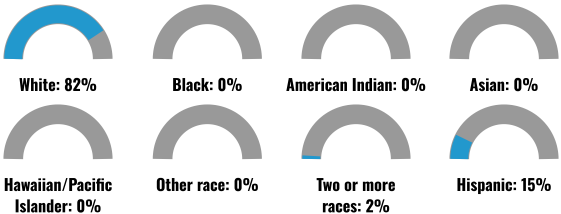
LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
No language data available.	

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

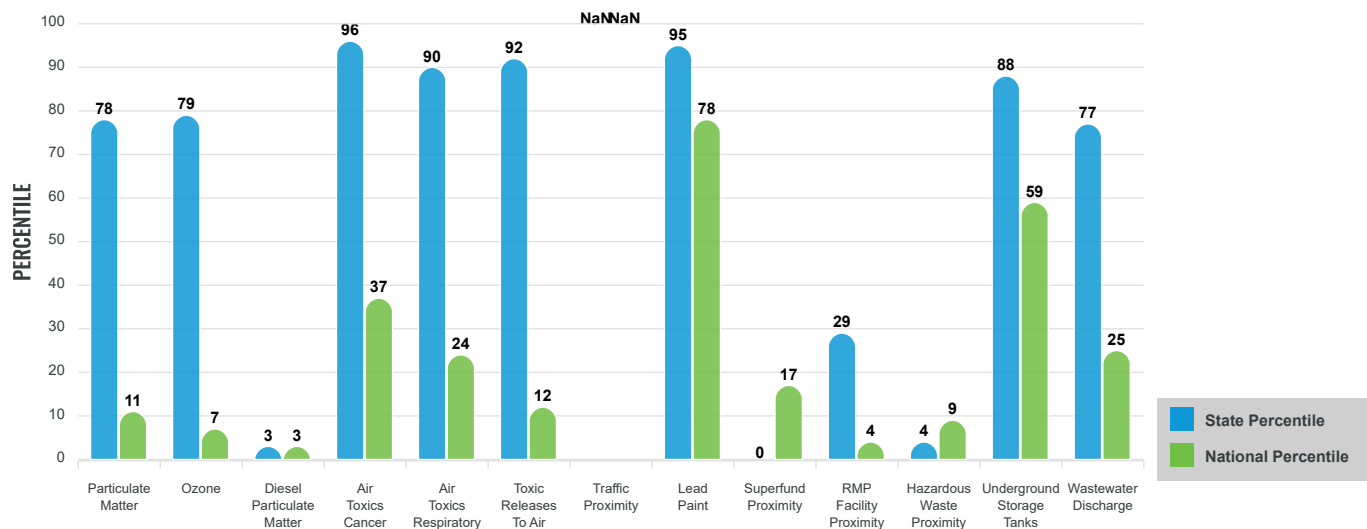
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

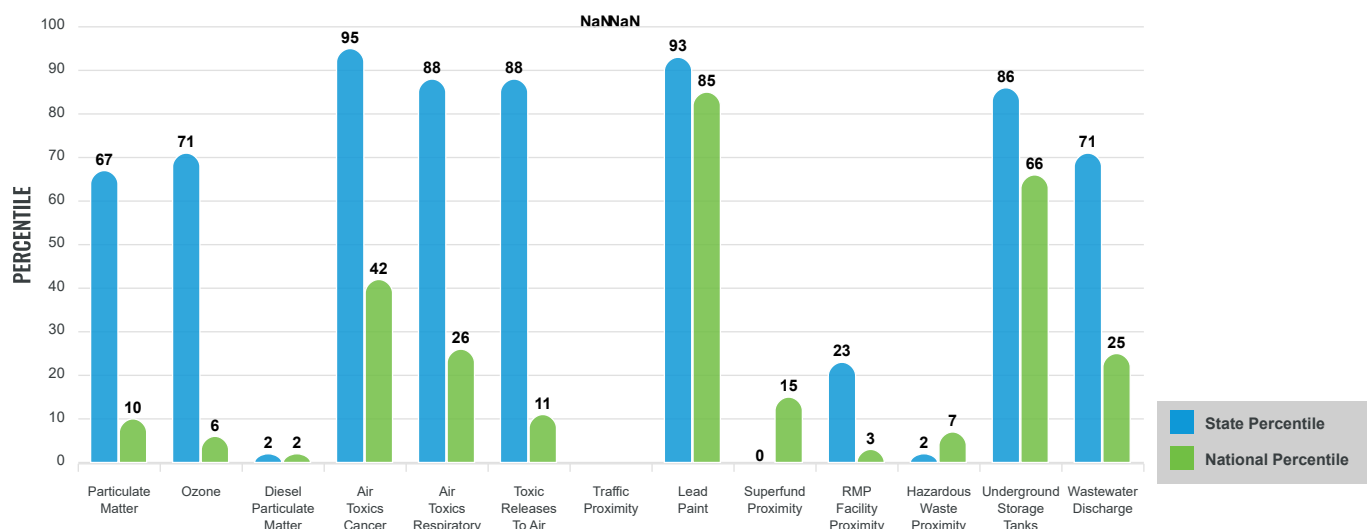
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 0.5 miles Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	5.41	5.7	35	8.08	5
Ozone (ppb)	51.3	51.8	35	61.6	3
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.0282	0.0795	1	0.261	1
Air Toxics Cancer Risk* (lifetime risk per million)	20	18	23	25	5
Air Toxics Respiratory HI*	0.2	0.19	20	0.31	4
Toxic Releases to Air	4.6	15	56	4,600	6
Traffic Proximity (daily traffic count/distance to road)	NaN	46	NaN	210	NaN
Lead Paint (% Pre-1960 Housing)	0.59	0.37	82	0.3	79
Superfund Proximity (site count/km distance)	0.014	0.14	0	0.13	9
RMP Facility Proximity (facility count/km distance)	0.024	0.12	11	0.43	2
Hazardous Waste Proximity (facility count/km distance)	0.028	0.72	1	1.9	4
Underground Storage Tanks (count/km ²)	0.86	4	59	3.9	45
Wastewater Discharge (toxicity-weighted concentration/m distance)	5E-06	0.054	37	22	14
SOCIOECONOMIC INDICATORS					
Demographic Index	36%	17%	95	35%	59
Supplemental Demographic Index	19%	11%	94	14%	74
People of Color	18%	8%	91	39%	35
Low Income	53%	26%	94	31%	83
Unemployment Rate	5%	4%	69	6%	55
Limited English Speaking Households	1%	1%	88	5%	60
Less Than High School Education	13%	6%	91	12%	67
Under Age 5	10%	4%	94	6%	84
Over Age 64	11%	21%	14	17%	32
Low Life Expectancy	21%	17%	86	20%	64

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	0
Air Pollution	1
Brownfields	0
Toxic Release Inventory	1

Other community features within defined area:

Schools	0
Hospitals	0
Places of Worship	0

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for 0.5 miles Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	17%	86	20%	64
Heart Disease	8.2	6.1	98	6.1	86
Asthma	11.2	10.2	92	10	82
Cancer	7	6.9	44	6.1	69
Persons with Disabilities	15.9%	14.5%	69	13.4%	70

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	13%	15%	51	12%	76
Wildfire Risk	0%	0%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	26%	16%	86	14%	84
Lack of Health Insurance	5%	4%	77	9%	40
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 0.5 miles Ring around the Area

Appendix C – Archaeological Resource Assessment

Crown Consulting Archaeology, LLC

PO Box 358
50 Main Street
Winooski, VT 05404-0358

July 3, 2024

Wayne A. Elliott, PE
President
Aldrich + Elliott, PC
Water Resource Engineers
6 Market Place, Suite 2
Essex Junction, VT 05452

RE: Archaeological Resources Assessment for the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont

Dear Wayne,

Attached, please find an Archaeological Resources Assessment (ARA) for the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

Crown Consulting Archaeology, LLC., conducted an ARA of the proposed project area and identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment. The entire alignment will be contained within the existing roadbed, or where it veers outside of the roadbed, will be located on steep slope or in a wide, deep road prism. As a result, the proposed project will not impact areas of archaeological sensitivity and no additional archaeological study is recommended as part of the Section 106 permitting process.

Thank you for your interest in working with us on this project. Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Charles Knight', with a stylized flourish at the end.

Charles Knight, Ph.D.
Principal Investigator

**Archaeological Resources Assessment Report for the proposed
Richford Golf Course Road Waterline, Richford, Franklin County, Vermont**

Submitted to:

**Wayne A. Elliott, PE
President
Aldrich + Elliott, PC
Water Resource Engineers
6 Market Place, Suite 2
Essex Junction, VT 05452**

Submitted by:

**Charles Knight, Ph.D.
Crown Consulting Archaeology, LLC
PO Box 358
50 Main Street
Winooski, VT 05404-0358**

July 3, 2024

**CCA Report
No. 2024-024**

Archaeological Resources Assessment Report for the proposed Richford Golf Course Road Waterline, Richford, County, Vermont

Project Description

The Town of Richford, with assistance from Aldrich + Elliot, PC proposes the Richford Golf Course Road Waterline Richford, Franklin County, Vermont (Figure 1). The proposed project will assess the feasibility of constructing 2200 feet of waterline, replacing an existing system, along Golf Course Road in Richford, Vermont (Figure 2). The proposed project will start at the intersection of Golf Course Road and Rte. 139/Province Street, and extend east (Figures 3-6). In addition, a new booster pump station building will be constructed adjacent to the cemetery and pavilion at about #40 Golf Course Road (Figure 7). This Archaeological Resources Assessment (ARA) is being carried out as part of the Section 106 permitting process.

The Archaeological Resources Assessment (ARA)

The goal of an ARA (or “review”) is to identify portions of a specific project’s Area of Potential Effects (APE) that have the potential for containing pre-Contact and/or historic sites. An ARA is to be accomplished through a “background search” and a “field inspection” of the project area. For this study, reference materials were reviewed following established guidelines. Resources examined included the National Register of Historic Places (NRHP) files; the Historic Sites and Structures Survey; and the USGS master archaeological maps that accompany the Vermont Archaeological Inventory (VAI). Relevant town histories and nineteenth-century maps also were consulted. Based on the background research, general contexts were derived for pre-Contact and historic resources in the study area.

Archaeological Site Potential

There are no known archaeological sites within or adjacent to the proposed project area. The closest known archaeological site is site VT-FR-157, located 750 m to the southwest from the western end of the proposed waterline. Site VT-FR-157 was identified from the recovery of two quartzite flakes, and over 20 potential quartz artifacts from a location on the floodplain of the Missisquoi River through an archaeological survey. Another archaeological site, VT-FR-156, is located 1.8 km south of the project alignment, again on the floodplain of the Missisquoi River. This site was identified from a chert projectile point, and several chert and quartzite flakes from 3 clusters found through archaeological Phase I excavation.

In regard to historic period resources, the historic 1857 Wallings map (Figure 8) and the historic 1871 Beers Atlas (Figure 9) depict numerous structures along the south side of Golf Course Road within the alignment of the proposed project. These structures are still in existence, and therefore do not represent potential historic period archaeological sites. No sites within or immediately adjacent to the proposed project have been listed on either the National or State Registers of Historic Places. The Downton Richford Historic District, which is listed on the both the National and State

Registers of Historic Places, is concentrated on the intersection of Main and River Streets and therefore, well southwest of the proposed project alignment. For these reasons, no historic period sites are expected along, or immediately adjacent to the proposed project alignment.

Desk Review

As part of the desk review, the Vermont Division of Historic Preservation's (VDHP) 2015 predictive model matrix for identifying pre-Contact Native American archaeological sites is employed for the project area. As stated in the VDHP Guidelines: "The predictive model is intended to identify areas with a high potential for containing significant precontact Native American sites." A completed matrix for the proposed project is presented in Figure 10. As can be seen, the Richford Golf Course Road Waterline Project area scores 28 on the Predictive Model, due to it being located within 180 m of an unnamed tributary of the Missisquoi River (6), within 90 m of a head-of-draw (8), and crosses a drainage divide (12). The soils in the project area are a mix of Colton gravelly sand loam and Windsor loamy fine sand.

Site Visit

A field inspection of the project area was carried out on July 3, 2024 by Charles Knight, Principal Investigator of Crown Consulting Archaeology, LLC. Knight walked the entire project alignment along Golf Course Road. The alignment can be divided into two general parts, the eastern steep hill section, and the western lower slopes section, with the entrance of the Hillside Cemetery demarking this divide, since the steep hill section begins roughly at the entrance to the Hillside Cemetery. The alignment rises sharply and continues until the curve that veers northeast (Figure 11, and see Figure 4). The rise of the slope also corresponds with a movement of the proposed waterline several feet north outside of the roadbed (see Figure 4). The waterline alignment continues just outside of the northern edge of the roadbed until the end of the project, beyond the crest of the hill (Figures 12 & 13). However, the waterline will be kept within the substantial road prism along the north side of the road at this point (see Figures 12 & 13). Considering the slope throughout this section, and the large road prism, this eastern section of the proposed alignment is not considered to be archaeologically sensitive.

The proposed water pump station will be located at the foot of the slope of the Hillside Cemetery, between the cemetery access road and the existing pavilion (Figure 14, and see Figure 4). This area is marked by a very steep, north-south trending slope that has been levelled out to accommodate Golf Course Road. The cut in the natural toe-of-slope bank just east of the cemetery entrance can be seen in the Lidar map of the project area (Figure 15). In addition, the pump station area is not near any archaeological sensitivity factors. As a result, the pump station area is not considered archaeologically sensitive.

Finally, the western section sits upon a slight westerly slope down from the steep hill in the west (Figure 16). Although the road prism is not as pronounced as in the eastern half, it is still substantial. Nonetheless, the alignment of the proposed waterline

in this western half of the proposed project, will be kept completely within the limits of the roadbed and therefore will not impact intact soils (see Figures 3 & 4). The alignment begins at the intersection of Golf Course Road and Province Street in the center of the road (Figure 17). Due to the alignment in this western section being kept entirely within the limits of the existing roadway, it is not considered to be archaeologically sensitive. A Lidar map of the proposed alignment reveals the lack of water courses and elevated landforms within or adjacent to the proposed project (see Figure 15).

Conclusions

The Town of Richford proposes the Richford Golf Course Road Waterline Richford, Franklin County, Vermont. Crown Consulting Archaeology, LLC., conducted an Archaeological Resources Assessment of the proposed project area and identified no areas of archaeological sensitivity along, or immediately adjacent to the proposed project's alignment. The entire alignment will be contained within the existing roadbed, or where it veers outside of the roadbed, will be located on steep slope or in a wide, deep road prism. Also, the general area does not cross sufficient archaeological sensitivity factors to be considered archaeologically sensitive. The pump station, which is located outside the right-of-way, will be located at the toe-of-slope that has been cut to accommodate Golf Course Road, and is not near any sensitivity factors. For these reasons, the proposed project will not impact areas of archaeological sensitivity and as a result, no additional archaeological study is recommended as part of the Section 106 permitting process.

Thank you for working with us on this project. Please let me know if you have any questions or comments.

Charles Knight, Ph.D.
Principal Investigator

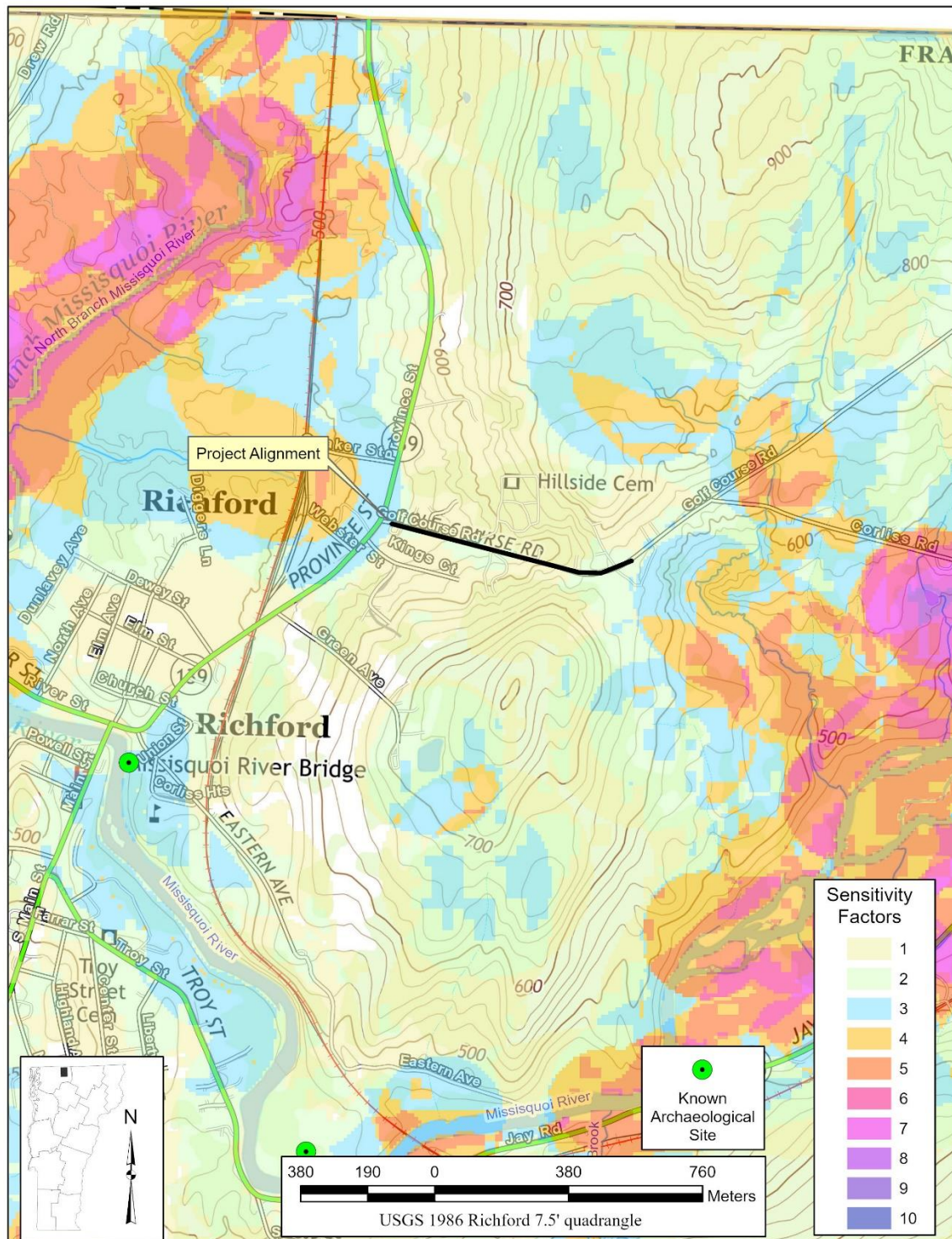


Figure 1. Map showing the location of the proposed Richford Golf Course Road Waterline, in relation to known archaeological sites and archaeological sensitivity factors, Richford, Franklin County, Vermont.

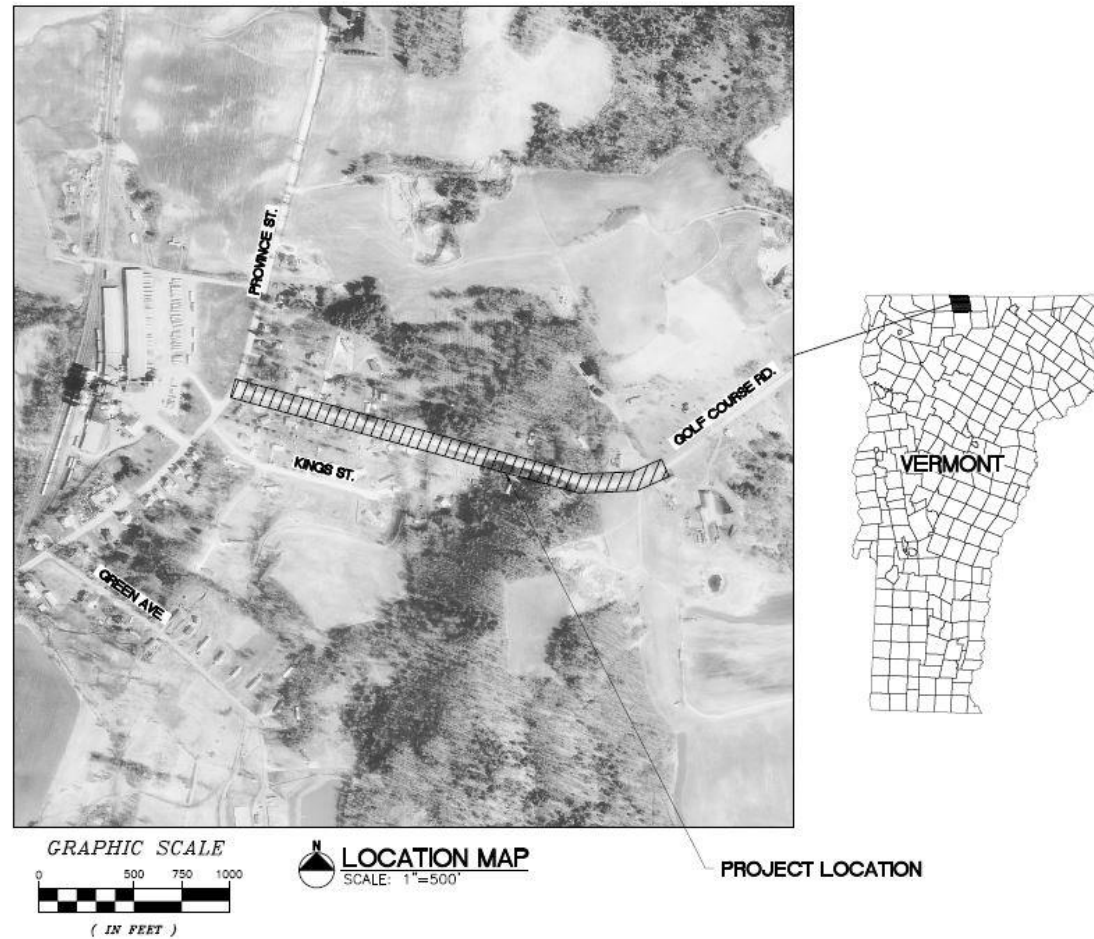


Figure 2. Engineering drawing of the overall site plan of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

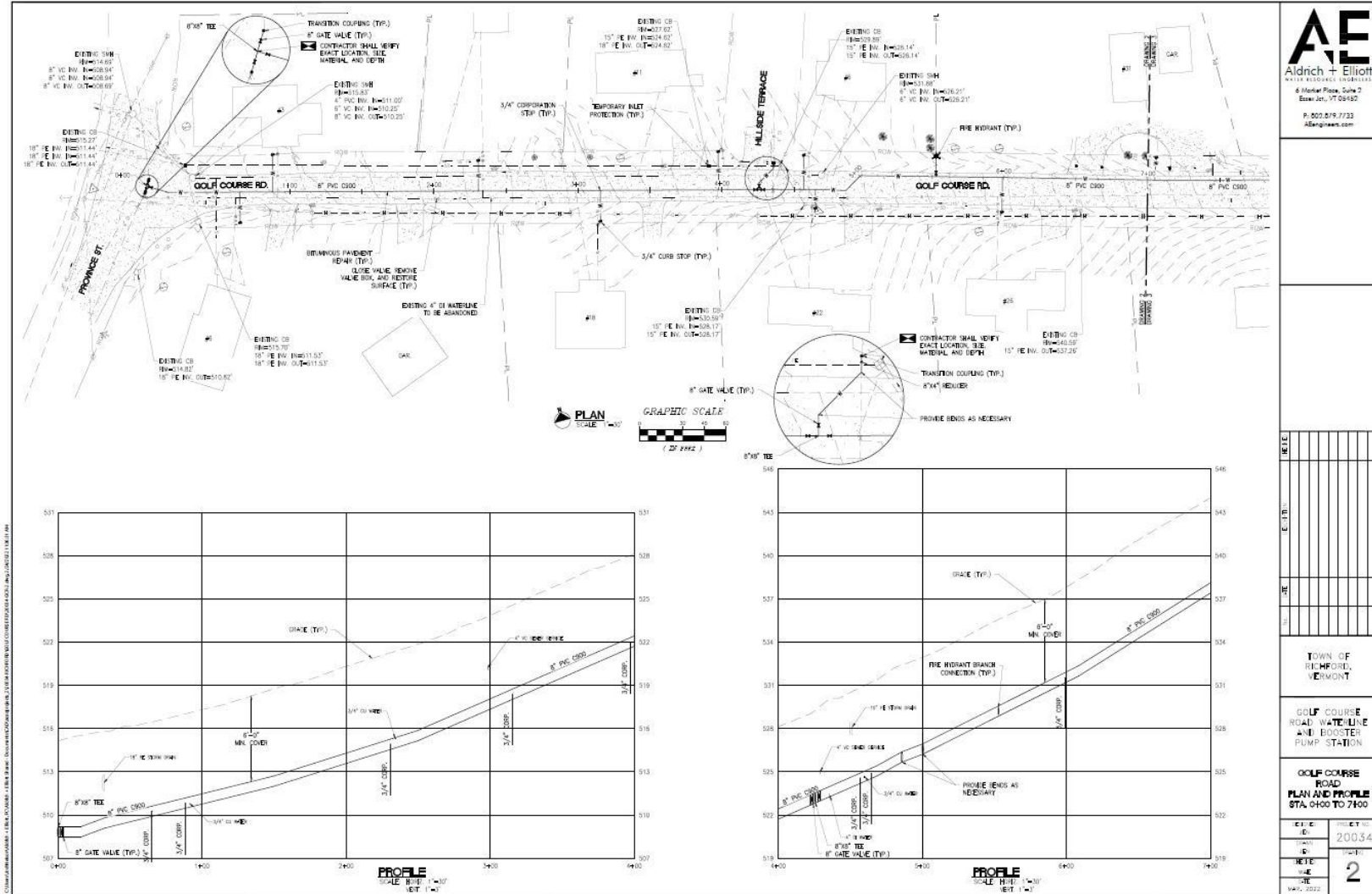


Figure 3. Engineering drawing of the western end of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

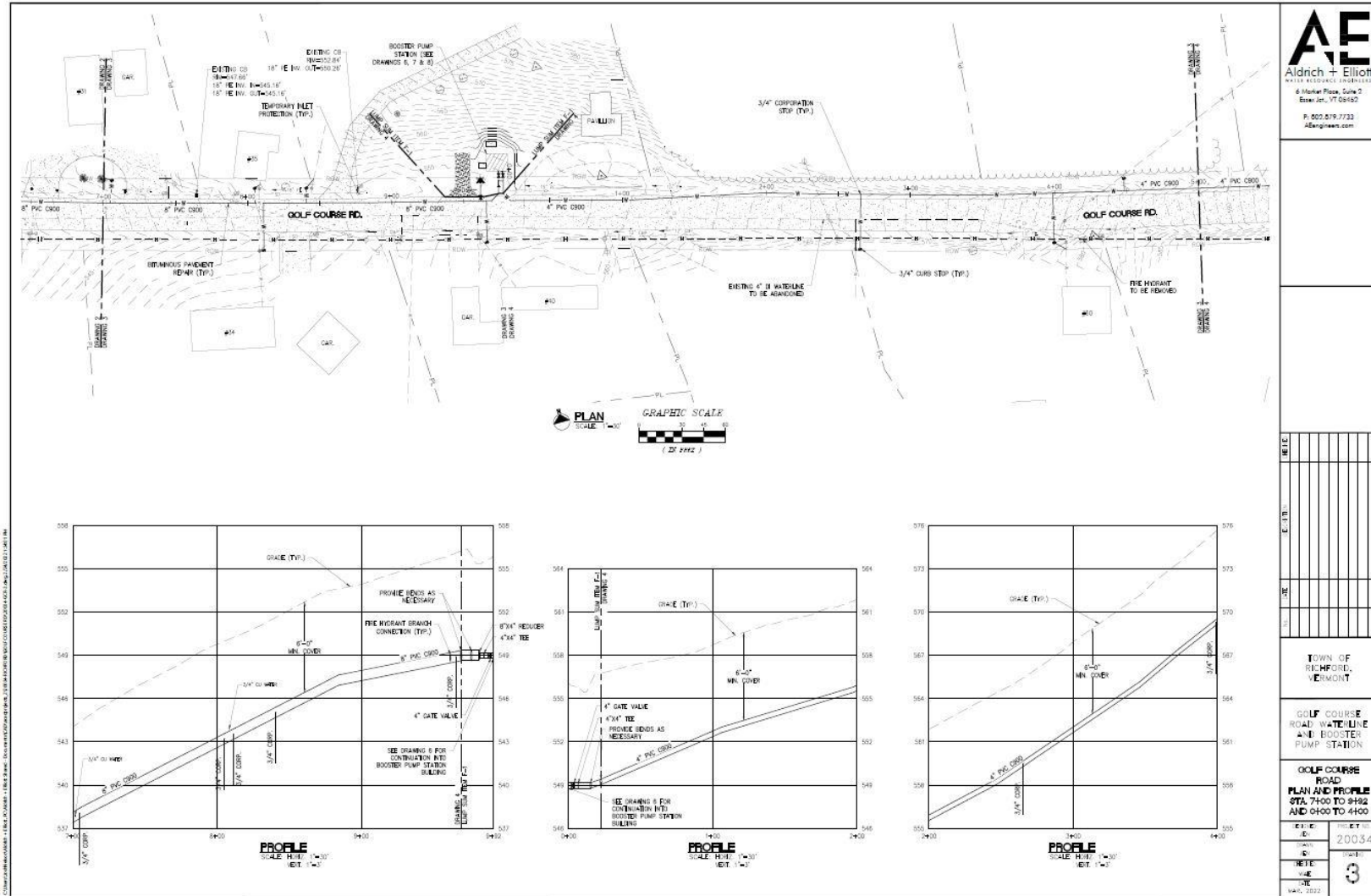


Figure 4. Engineering drawing of the central portion of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

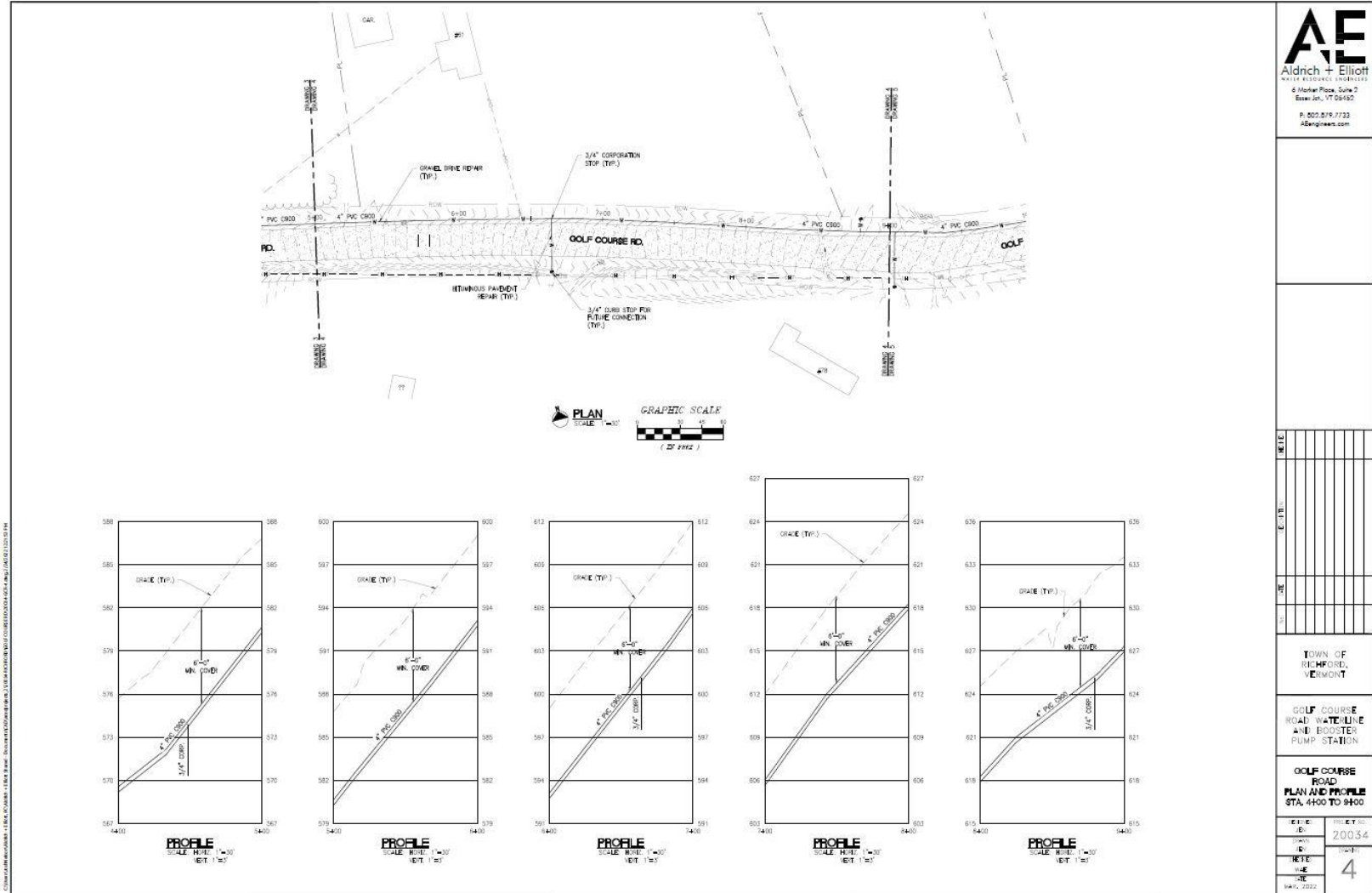


Figure 5. Engineering drawing of the central-eastern end of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

10

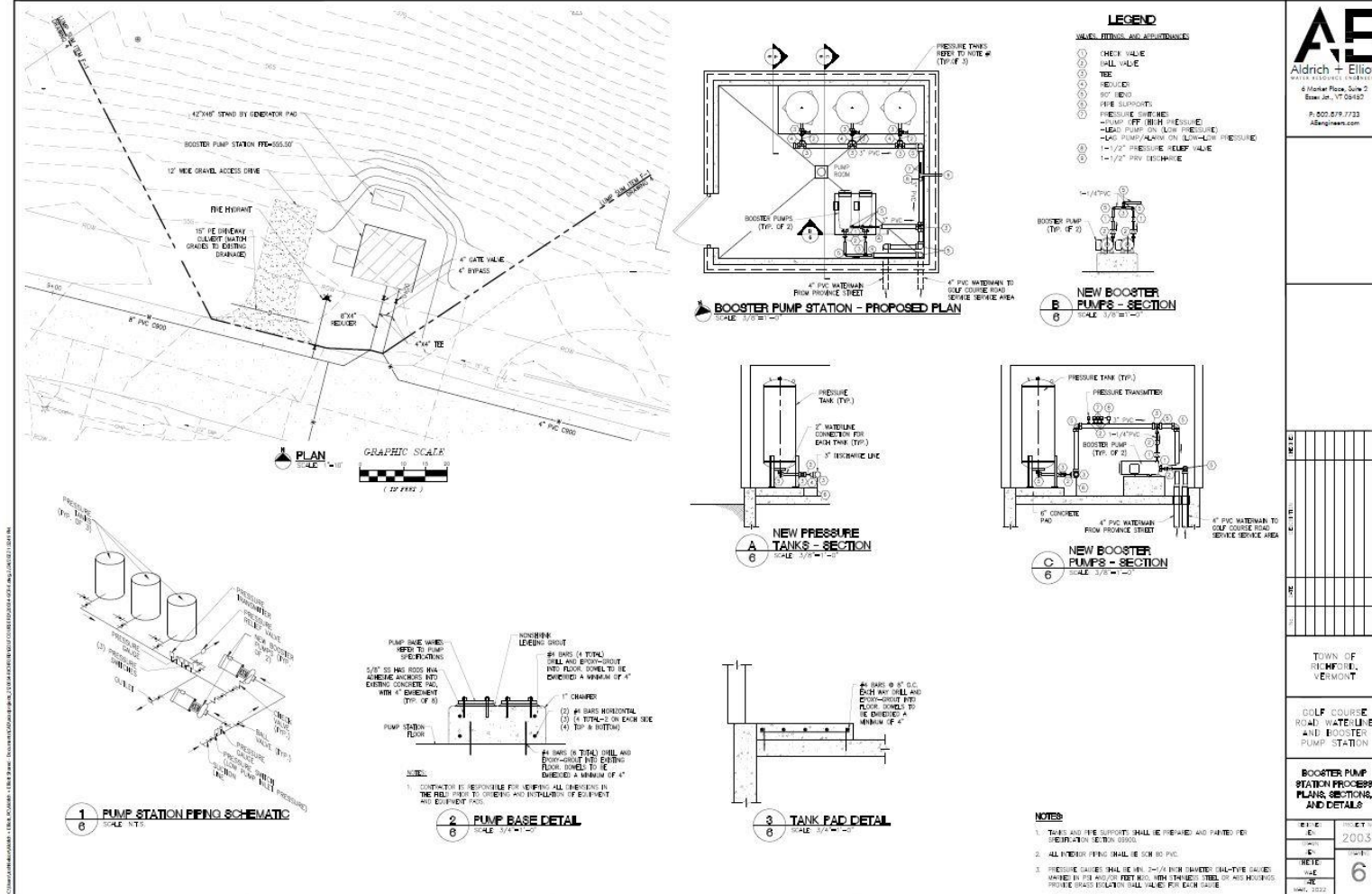


Figure 7. Engineering drawing of the pump station for the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

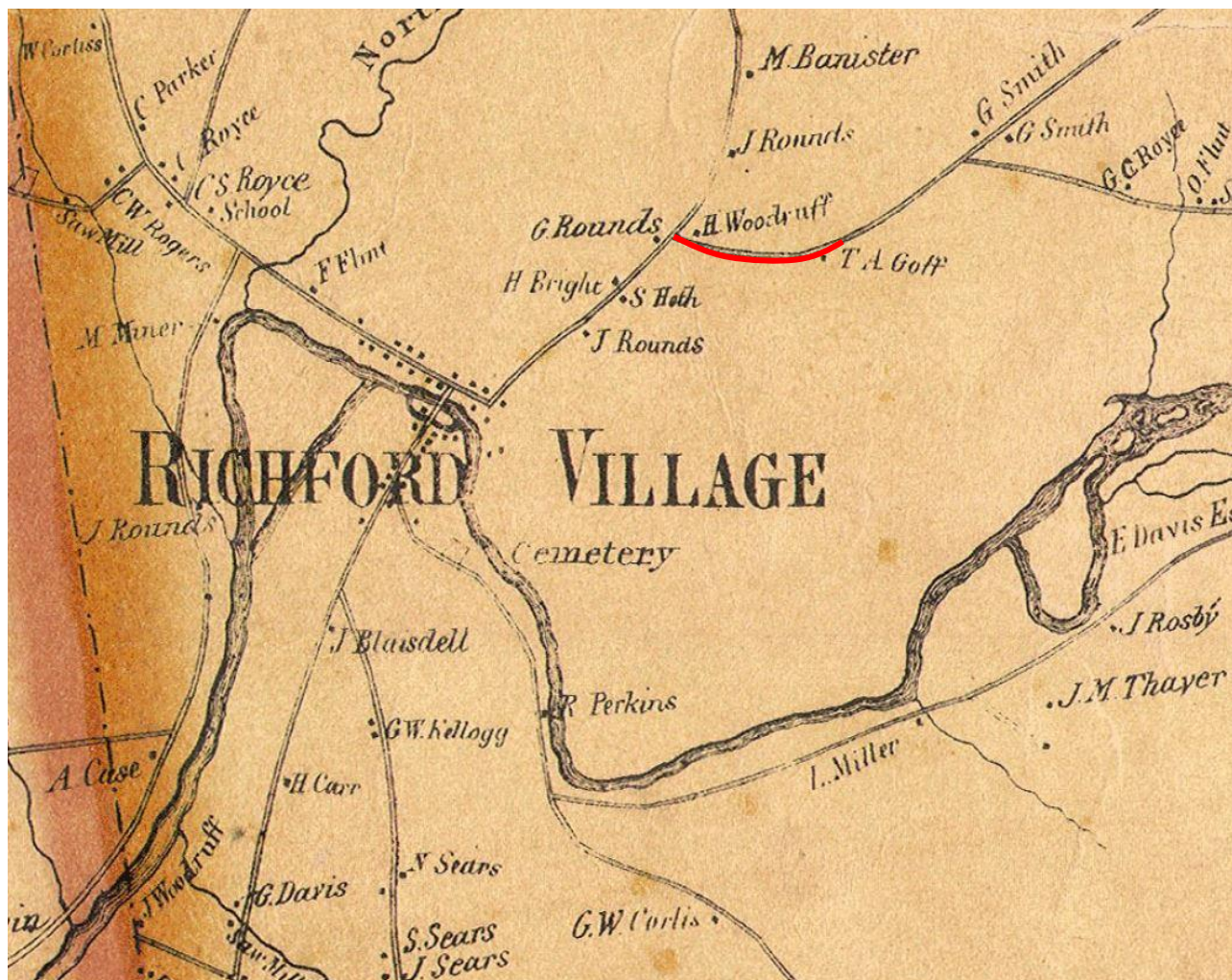


Figure 8. Historic 1857 Wallings map showing the location of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

13

VERMONT DIVISION FOR HISTORIC PRESERVATION
Environmental Predictive Model for Locating Pre-contact Archaeological Sites

Project Name **Golf Course Rd Water** County **Franklin** Town **Richford**
DHP No. Map No. Staff Init. Date **7/3/24**

Additional Information

Environmental Variable	Proximity	Value	Assigned Score
A. RIVERS and STREAMS (EXISTING or RELICT):			
1) Distance to River or Permanent Stream (measured from top of bank)	0- 90 m	12	6
	90- 180 m	6	
2) Distance to Intermittent Stream	0- 90 m	8	
	90-180 m	4	
3) Confluence of River/River or River/Stream	0-90 m	12	
	90 –180 m	6	
4) Confluence of Intermittent Streams	0 – 90 m	8	
	90 – 180 m	4	
5) Falls or Rapids	0 – 90 m	8	
	90 – 180 m	4	
6) Head of Draw	0 – 90 m	8	8
	90 – 180 m	4	
7) Major Floodplain/Alluvial Terrace		32	
8) Knoll or swamp island		32	
9) Stable Riverine Island		32	
B. LAKES and PONDS (EXISTING or RELICT):			
10) Distance to Pond or Lake	0- 90 m	12	
	90 -180 m	6	
11) Confluence of River or Stream	0-90 m	12	
	90 –180 m	6	
12) Lake Cove/Peninsula/Head of Bay		12	
C. WETLANDS:			
13) Distance to Wetland (wetland > one acre in size)	0- 90 m	12	
	90 -180 m	6	
14) Knoll or swamp island		32	
D. VALLEY EDGE and GLACIAL LAND FORMS:			
15) High elevated landform such as Knoll Top/Ridge Crest/ Promontory		12	
16) Valley edge features such as Kame/Outwash Terrace**		12	

17) Marine/Lake Delta Complex**		12	
18) Champlain Sea or Glacial Lake Shore Line**		32	
E. OTHER ENVIRONMENTAL FACTORS:			
19) Caves /Rockshelters		32	
20) ☐ Natural Travel Corridor			
☐ Sole or important access to another drainage			
☒ Drainage divide		12	12
21) Existing or Relict Spring	0 – 90 m	8	
	90 – 180 m	4	
22) Potential or Apparent Prehistoric Quarry for stone procurement	0 – 180 m	32	
23)) Special Environmental or Natural Area, such as Milton aquifer, mountain top, etc. (these may be historic or prehistoric sacred or traditional site locations and prehistoric site types as well)		32	
F. OTHER HIGH SENSITIVITY FACTORS:			
24) High Likelihood of Burials		32	
25) High Recorded Site Density		32	
26) High likelihood of containing significant site based on recorded or archival data or oral tradition		32	
G. NEGATIVE FACTORS:			
27) Excessive Slope (>15%) or Steep Erosional Slope (>20)		- 32	
28) Previously disturbed land as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)		- 32	
** refer to 1970 Surficial Geological Map of Vermont			
Total Score:			26
Other Comments :			
0- 31 = Archeologically Non- Sensitive 32+ = Archeologically Sensitive			

April 8, 2015

Figure 10. Completed VDHP predictive model matrix of the APE for the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.



a



b

Figure 11. Photos looking east (a & b) at the eastern half of the proposed alignment as it climbs a steep hill, of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.



a



b

Figure 12. Photos looking east at the crest of the hill (a), and northeast just beyond the crest (b) at the eastern end of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.



a



b

Figure 13. Photos looking southwest at the crest of the hill from the eastern end (a), and west down the top of hill (b), of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.



a



b

Figure 14. Photos looking northwest at the pump house location and existing pavilion (a), and northeast at the area between the cemetery entrance and the pavilion (b), of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

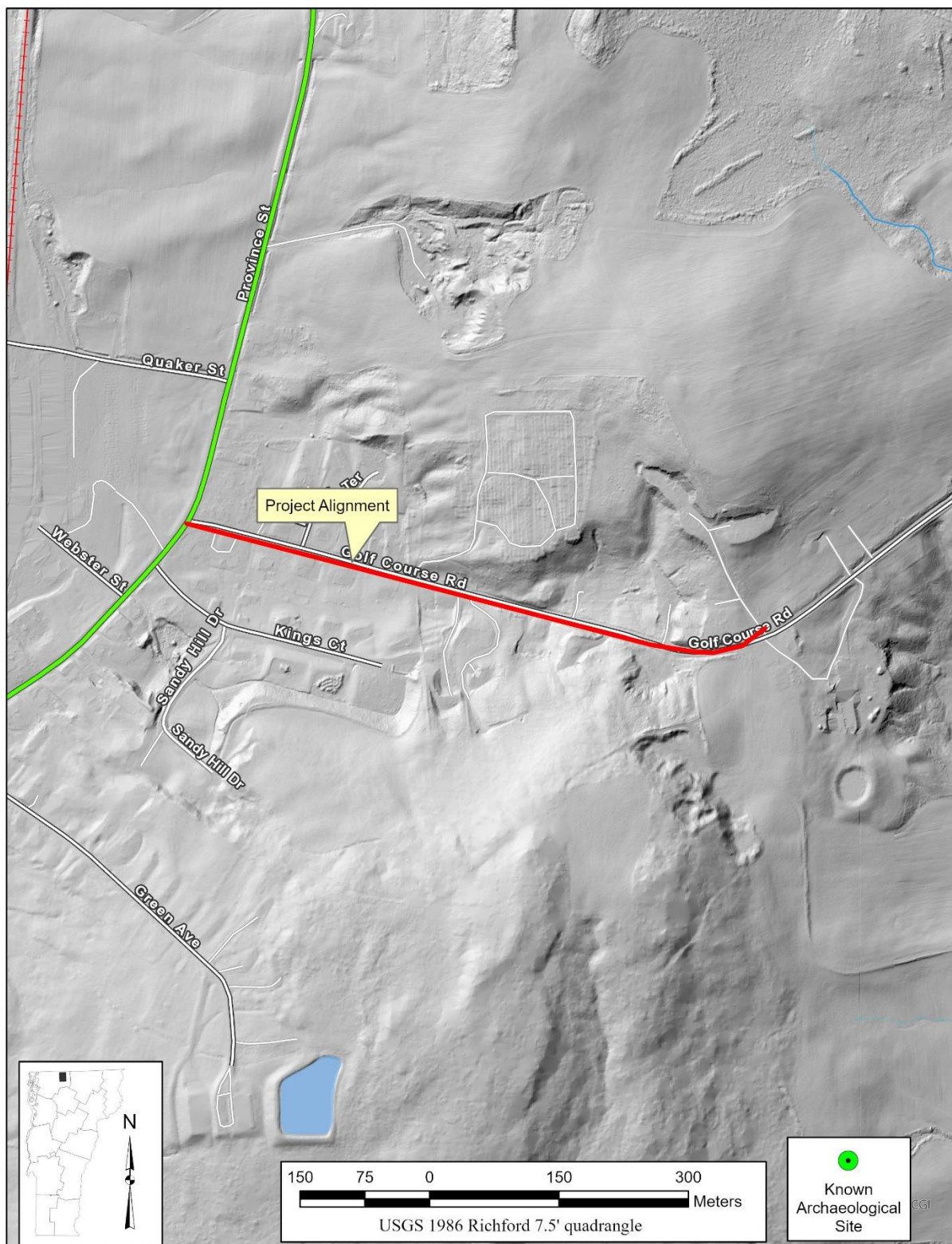


Figure 15. Lidar map showing the location of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.



a



b

Figure 16. Photos looking west (a), and east (b) along the relatively level, western half of the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.



a



b

Figure 17. Photos looking west (a), and east (b) at the intersection of Golf Course Road and Province Street for the proposed Richford Golf Course Road Waterline, Richford, Franklin County, Vermont.

Appendix D – Historic Places



HISTORIC PLACES

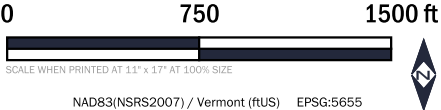
GOLF COURSE RD
WATERLINE & PS

TOWN OF RICHFORD,
VERMONT

LEGEND

- Area of Potential Affect/Project Area
- VT State Register Historic Districts
- National Register of Historic Districts
- National Register of Historic Places

Note: Does not include VT State Registered
Historic Points



NAD83(NSRS2007) / Vermont (ftUS) EPSG:5655

AE Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452

P: 802.879.7733 AEengineers.com

DESIGNED
—
DRAWN
MJ
CHECKED (PE)
—
CHECKED (PM)
—
SCALE
1 : 9,000
DATE
JUL. 2024

PROJECT NO.
20034
FIGURE NO.

Appendix E – Agricultural Soils & NRCS Classification



Appendix F – Project Review Sheet



Department of Environmental Conservation & Natural Resources Board

THIS IS NOT A PERMIT

Project Review Sheet

Date Initiated	7/9/2024	ANR PIN#		WW Project#		Pre-application Review	☒
----------------	---------------------------------------	----------	----------------------	-------------	----------------------	------------------------	-------------------------------------

Project Information

General Information

PROJECT NAME (if applicable) Richford Golf Course Road Waterline and Booster Pump Station		PROJECT TOWN Richford	
PROJECT LOCATION (911 address if available) 37 Golf Course Road		SPAN(S) (if available)	

Contact(s)

CONTACT TYPE Landowner	NAME Kiley Deuso, Town Clerk	ORGANIZATION NAME (if applicable) Town of Richford		
ADDRESS PO Box 236		TOWN Richford	STATE VT	ZIP 05476
PHONE (802) 848-7751	CELL PHONE	EMAIL townclerk@richfordvt.org		
CONTACT TYPE Consultant	NAME Wayne A. Elliott	ORGANIZATION NAME (if applicable) Aldrich + Elliott, PC		
ADDRESS 6 Market Place, Suite 2		TOWN Essex	STATE VT	ZIP 05452
PHONE 802.879.7733 x103	CELL PHONE 802.922.2649	EMAIL welliott@aeengineers.com		

Project Description

ENTERED BY Jeffrey McMahon	INFORMATION SOURCE Individual	DATE ENTERED 7/10/2024 12:12 PM
--------------------------------------	---	---

PROJECT DESCRIPTION
A Town project to replace 2300 linear feet of waterline constructed along Golf Course Road beginning at the intersection of Province Street. A new booster pump station will be constructed to increase pressure and ensure water supply delivery. Most of the construction will be replacing existing waterline within the roadway and right of way and there will be approximately 1100 linear feet of 8 inch diameter line and approximately 1200 linear feet of 4 inch diameter line.

DEC Prior Permits

PERMIT TYPE	PERMIT NUMBER
-------------	---------------

*Jurisdictional Opinion(s) for permits that may be needed from the District Environmental Office **PRIOR TO COMMENCEMENT OF CONSTRUCTION***

Act 250 Jurisdictional Opinion

This is a jurisdictional opinion issued pursuant to 10 V.S.A. § 6007(c) and Act 250 Rule 3(A). Reconsideration requests are governed by Act 250 Rule 3(B) and should be directed to the district coordinator at the above address. Effective May 31, 2016, any appeal of this decision must be filed with the Superior Court, Environmental Division (32 Cherry Street, 2nd Floor, Ste. 303, Burlington, VT 05401) within 30 days of the date the decision was issued, pursuant to 10 V.S.A. Chapter 220. The Notice of Appeal must comply with the Vermont Rules for Environmental Court Proceedings (VRECP). The appellant must file with the Notice of Appeal the entry fee required by 32 V.S.A. § 1431, which is \$295.00. The appellant also must serve a copy of the Notice of Appeal on the Natural Resources Board, 10 Baldwin Street, Montpelier, VT 05633-3201, and on other parties in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings.

PERSON REQUESTING JURISDICTIONAL OPINION Jeffrey McMahon	REQUESTOR TYPE Permit Specialist	ACT 250 PERMIT NUMBER (if any) No Permit(s) Found	HAS THE LANDOWNER SUBDIVIDED BEFORE? ☐ Yes ☐ No
--	--	---	--



TYPE OF PROJECT (check all that apply)	
☐ Commercial	☐ Residential
☐ Agricultural	☒ Municipal
☐ State	☐ Federal
IS AN ACT 250 PERMIT REQUIRED?	
☐ Yes	☒ No
COPIES SENT TO STATUTORY PARTIES?	
☐ Yes	☐ No
BASIS FOR DECISION	
As a project to serve municipal purposes, the project as proposed does not constitute a "development" pursuant to 10 V.S.A. § 6001(3)(A)(v) and Act 250 Rule 2(C)(5)(b), therefore an Act 250 permit is not required.	
DISTRICT COORDINATOR SIGNATURE	
	2024.07.09 12:51:38 -04'00'
Josh Donabedian, Districts 6 & 9 Coordinator  VERMONT [phone] 802-261-1945 [email] joshua.donabedian@vermont.gov Natural Resources Board Districts 6 and 9 Environmental Commissions 10 Baldwin Street, Montpelier, VT 05633-3201	

Wastewater System & Potable Water Supply Permit Jurisdictional Opinion

IS A WASTEWATER SYSTEM & POTABLE WATER SUPPLY PERMIT/APPROVAL REQUIRED?		PERMIT NOT REQUIRED?	
☒ Yes	☐ Permit application currently under review	☐ Boundary Line Adjustment	☐ Home Occupation
☐ No	☐ Permit issued on _____	☐ Clean Slate	☐ Notice of Permit Requirement
BASIS FOR DECISION			
Unless project complies with 1-304 (12) and/or (14) of the Wastewater System and Potable Water Supply Rules.			
REGIONAL OFFICE STAFF SIGNATURE		Allison Lowry, Assistant Regional Engineer  VERMONT	
	2024.07.10 11:35:23 -04'00'	[phone] 802-557-7532 [email] allison.lowry@vermont.gov Department of Environmental Conservation Drinking Water & Groundwater Protection Division - Essex Regional Office 111 West Street, Essex Junction, VT 05452	

The following are preliminary, non-binding determinations made by DEC Permit Specialists identifying other permits that may be needed
PRIOR TO COMMENCEMENT OF CONSTRUCTION

SPECIAL WETLANDS DISCLAIMER

A desktop review cannot definitively confirm the presence or absence of a wetland in or within fifty feet of your project site. This review sheet is the result of a desktop review that included reviewing the project site with these mapping tools available at <https://anr.vermont.gov/maps>. Many wetlands do not appear on these maps. You are advised to review the site on the ground for wetlands, regardless of whether this box is checked or not (<https://dec.vermont.gov/watershed/wetlands/what/guide>). To confirm the presence/absence of wetlands, contact a qualified environmental consultant (<https://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list>) or the State Wetlands Program (<https://dec.vermont.gov/watershed/wetlands>).

Preliminary, Non-binding Determination of the Applicability of Other State Permits

Note: Fact Sheet numbers below refer to permit fact sheets available at: <http://dec.vermont.gov/permits/handbook/info-sheets>

Agency of Natural Resources - Department of Environmental Conservation	
WATER INVESTMENT DIVISION	
☒ State-Funded Municipal Water/Sewer Extensions/Upgrades and Pollution Control Systems	Contact: Lynnette Claudon Email: lynnette.claudon@vermont.gov Phone: 802-490-6226
DRINKING WATER & GROUNDWATER PROTECTION DIVISION	
☒ Construction Permit - Public Drinking Water Systems [Fact Sheet #22]	Contact: Allison Murphy, P.E. Email: allison.murphy@vermont.gov Phone: 802-272-2449
WATERSHED MANAGEMENT DIVISION	
☒ Stormwater: Developments [Fact Sheets #6.2 & 6.3] [See Stormwater District Contacts Map]	
Department of Public Safety	
☒ Construction Permit Fire Prevention, Electrical, Plumbing, Accessibility (ADA) [Fact Sheets #49, 50, 50.1, & 50.2]	☒ Williston: 802-879-2300
Agency of Transportation	
☒ Construction within State Highway Right-of-Way (Utilities, Grading, etc.) [Fact Sheet #66]	



Contact: Craig Keller		Email: craig.keller@vermont.gov	Phone: 802-279-1152
Local Permits			
☒ See your Town Clerk, Zoning Administrator, Planning Commission or Public Works			
Other			
☒ Other approvals or comments			
Stormwater Construction: Thomas Benoit Sr (802) 490-6164 Thomas.Benoit@vermont.gov			
PERMIT SPECIALIST SIGNATURE		Jeff McMahon, Permit Specialist [phone] 802-477-2241 [email] jeff.mcmahon@vermont.gov Department of Environmental Conservation Environmental Assistance Office - Essex Regional Office 111 West Street, Essex Junction, VT 05452	
		2024.07.09 10:45:14 -04'00'	

Appendix G – Fish & Wildlife



Golf Course Road Waterline & Pump Station



LEGEND

- Uncommon Species and other features
- Plant
 - Animal
 - Natural Community
- Rare Threatened and Endangered Spe
- RTE Animal
 - RTE Plant
- Significant Natural Communities
- Amphibian and Reptile Crossings
- Confirmed
 - Potential
- Deer Wintering Areas
- Roads
- Interstate
 - US Highway; 1
 - State Highway
 - Town Highway (Class 1)
 - Town Highway (Class 2,3)
 - Town Highway (Class 4)
 - State Forest Trail
 - National Forest Trail
 - Legal Trail
 - Private Road/Driveway
 - Proposed Roads

1: 13,851

1in = 1154 ft.
1cm = 139 meters

NOTES

Map created using ANR's Natural Resources Atlas

Appendix H – River Corridors & Streams



Golf Course Road Waterline & Pump Station



LEGEND

- River Corridors (Aug 27, 2019)
- .5 - 2 sqmi.
- .25-.5 sqmi.
- Roads
 - Interstate
 - US Highway; 1
 - State Highway
 - Town Highway (Class 1)
 - Town Highway (Class 2,3)
 - Town Highway (Class 4)
 - State Forest Trail
 - National Forest Trail
 - Legal Trail
 - Private Road/Driveway
 - Proposed Roads

1: 10,000

1in = 833 ft.
1cm = 100 meters

NOTES

508.0 0 254.00 508.0 Meters

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.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Appendix I – Significant Wetlands



Wetlands Inventory Map

Vermont Agency of Natural Resources

Golf Course Rd Wetlands & Endangered Species

vermont.gov



LEGEND

- Wetland
- Wetlands - VSWI**
 - Class 1 Wetland
 - Class 2 Wetland
 - Buffer
- Wetlands - VSWI Advisory Layer**
- Soils - Hydric**
 - Hydric - Obligate (OBW)
 - Hydric - Facultative Wetland Plants (FACW)
 - Hydric - Other Wetland Indicator
 - Hydric
 - Not Rated
- Roads**
 - Interstate
 - US Highway; 1
 - State Highway
 - Town Highway (Class 1)
 - Town Highway (Class 2,3)
 - Town Highway (Class 4)
 - State Forest Trail
 - National Forest Trail
 - Legal Trail
 - Private Road/Driveway
 - Proposed Roads
- Stream**
 - Stream
 - Intermittent Stream

IMPORTANT!: The Wetlands Viewer is designed to help the public research wetland locations and features. Only a qualified wetland scientist may determine the absence or presence of a wetland and the boundaries. Not all wetlands are mapped. Wetlands not mapped on the Vermont Significant Wetland Inventory may still be considered significant.

1: 10,000
1in = 833 ft.
1cm = 100 meters

NOTES

Map created using ANR's Wetlands Inventory Map

508.0 0 254.00 508.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
© Vermont Agency of Natural Resources. June 21, 2024

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