



VTrans Fall 2022 Transportation Alternatives (TA) Grant Application

Thoroughly read the ***Vermont Transportation Alternatives Fall 2022 Application Guide*** before you begin your application. It includes important program information and step-by-step instructions. Pay particular attention to the application process requirements. **Applications are due in hand or by e-mail by December 14, 2022.** Please e-mail the completed application to: Scott.robertson@vermont.gov

Newark, VT Sand/Salt Shed
(Project Name/Title)

802-535-4664
(Phone)

Mark Ellingwood
(Municipality contact person responsible for the management of this project)

maellingwood@gmail.com
(e-mail address)

Newark
(Town)

\$ 520,641.83
Amount of **Federal Funds requested** (no more than 80% of the project cost estimate).

05871
(Zip Code)

\$130,160.45
Amount of Local Match. Example:
Federal Award = \$300,000 (80% of total)
Local Match = \$75,000 (20% of total)
Total Project Cost = \$375,000 (100% of the total)

1336 Newark Street
(Mailing Address)

County: Caledonia

Town/Village/City: Newark, Vermont

Specific location, street, or road: 1558 Newark Street (Town Garage and Fire Dept)

Regional Planning Commission: NVDA

If a linear project, what is the length in feet? N/A

Is the project on or intersecting to a State maintained highway? Yes No

- *Note: If yes, be sure to include documentation that you have notified the VTrans District Transportation Administrator of the intent to apply for TA funding and have provided them with a brief (one paragraph) description of the proposed project.*

Project type being applied for: Scoping Design/Construction

The municipality understands that a typical construction project utilizing Transportation Alternatives Program funds will take roughly three years (min.) in the Design and ROW phases prior to going to construction (as pointed out in the TA Program Application Guide)? Yes No

Does this project have a previously completed scoping or feasibility study? Yes No

Note:

Attach a map(s) of the project area and clearly show the limits of the project as well as surrounding benefits from the proposed improvement. If the project is within or adjacent to a designated downtown, village or growth center, clearly indicate the relationship of the proposed project to the boundary of the designated area. Color photos of the area are also recommended.

A map taken from Vermont’s Natural Resources Atlas is attached and shows the location of the Newark Town Garage / Fire Department as well as the Newark Street School and the location of the proposed sand/salt building is attached.

Fiscal Information:

Accounting System Automated Manual Combination

SAM Unique Identifier # HQVDLL9D5374

Fiscal Year End Month 12

Property Ownership:

If the proposed project is on private property that will need to be acquired by the Municipality through purchase, easement, or eminent domain (includes temporary construction rights) in accordance with the “Uniform Act”, then the municipality is committed to exercising its right of **eminent domain** to acquire the rights to construct the project if necessary. Yes No

Funding:

Does this project already have existing funding? If so, please describe. Yes No

[Click here to enter text.](#)

Will you accept an award less than you applied for? Yes No

- If yes, please indicate whether local funds will be used to make up the shortfall, or if the project scope will be reduced. If the project scope is to be reduced, describe what part of the project (please be specific) you would accept partial funding for.
Local funds will be used to make up any shortfalls associated with this project.

A support letter from the governing body of the applicant municipality or organization and an acknowledgement and source of the local match and commitment to future maintenance responsibility for construction projects is required (must be dated within 1 year of the application). Is a letter of support attached?

Yes No

Regional Planning Commission Letter of Support:

In order to apply, the project must have a letter of support from the regional planning commission. Is a letter of support attached?

Yes No

Application Scoring Criteria:

- 1. Please give a brief description of the project (be sure to indicate the primary facility type being applied for and be concise). (10 points max.)**

Presently Newark’s Sand/Salt pile is located offsite approx. 1 mile from our Town Garage. It is uncovered and contains salt to prevent it freezing. There is a residence directly across the road from it and we are concerned about the salt leaching into their water supply. When the Town Garage was built in 1986 we had the pile at the garage until it was determined by the State that the salt from the pile was leaching into the Newark Street School’s well which is on an adjacent lot from the Town Garage. This caused the relocation of the sand/salt pile to its present location on Schoolhouse Road. This project is for the construction of an enclosed sand/ salt storage building which will be located back on the Town Garage property and will completely contain any possible unwanted runoff toward the school or other adjoining properties. The desired building will be a dome-style building with a metal frame and a fabric roof.

- 2. What is the feasibility of this project? Feasibility (or Scoping) study applications will not be scored on this criterion. Also, please describe the extent of project development completed to date. (10 points max.)**

Newark is in need of a new Town Garage facility that includes a salt/sand storage building which will hold enough material to support our entire winter maintenance activities and fully contain this material from leaching into the surrounding soils. Presently we are working with Black River Design on new building alternatives which include a sand/salt storage building. Because the site of this new building will be on property already owned by the Town and we are already in the process of design with Black River Design, we feel we are in a good position to be able to complete this project without delays associated with land acquisition and inadequate planning.

- 3. Does this project address a need identified in a local or regional planning document? If so, please describe. (5 points max.)**

The Town of Newark has been working on renovation, expansion and or replacement plans for its combined Town Garage and Fire Department for a number of years. Presently we have contracted Black River Design to come up with designs and cost estimates to support this effort. Part of the project is to get the Town’s sand/salt pile back to the Town Garage where it was located originally. It was relocated offsite in 1987 because salt leached into the Newark Street school’s water supply. Attached is description taken from our most recent Town Plan describing the condition of this facility. While this excerpt doesn’t speak directly to the sand/salt pile specifically it outlines the condition of our present facility in general.

Page 42. 2016 Newark Town Plan

The Town Garage, constructed in 1986, is a heated 40' x 100', five-bay metal structure located just north of the Newark Street School. The garage houses both the town’s road equipment and the Newark Volunteer Fire Department’s equipment. The condition of the town garage is poor, and the jointly used space is inadequate. A Town Building Committee was formed in spring 2016 to investigate replacement or repair options for the Town Garage, fire station, and Town Clerk’s Office

4. Does this project benefit a State Designated Center per the link below (i.e., downtowns, villages, or neighborhood growth centers recognized by the Vermont Department of Economic, Housing and Community Development)? (10 Points Max.)

<http://maps.vermont.gov/ACCD/PlanningAtlas/index.html?viewer=PlanningAtlas>

While Newark is very rural and sparsely populated, the present location of its uncovered sand / salt pile is in a residential area close to an existing residence. By constructing a new sand/salt shed we will be able to relocate the sand/salt back to our Highway Garage site negating noise and environmental concerns.

5. Provide a project cost estimate below (project costs below include both federal dollars and local dollars). Projects will be scored based on whether the cost appears realistic for the size and scope of the project. For scoping studies, use PE and Local Project Management lines only.

Note: If you are applying for additional funds for an existing project, show the amount being requested for this grant in the PE, ROW, Construction, Construction Engineering, and Municipal Project Management rows below. Also, be clear regarding total project cost and other funding amounts and sources in the additional funding comments box below. (10 points max.)

Preliminary Engineering (PE) <i>(Engineering, Surveying, Permitting)</i>	\$ <u>20,919.97</u>
Right-of-way / Acquisition (ROW) <i>(appraisals, land acquisition and legal fees)</i>	\$ <u>0</u>
Construction <i>(construction costs with reasonable contingency)</i>	\$ <u>564,809</u>
Construction Engineering <i>(cost to provide inspection during construction)</i>	\$ <u>6,973.32</u>
<i>Municipal Project Management Costs (minimum of 10% of total PE, ROW and Construction Phases).</i>	\$ <u>58,800.00</u>
Total Project Cost	\$ <u>650,802.29</u>

Addition Funding Comments: (ex. Total and additional funding for existing projects)

The additional funding required to complete this project will be made up by additional grant funding, our Highway fund budget and or incorporated into the overall project funding for our new Town Garage and Fire Department.

6. Select the eligibility category below (A, B, C or D) that best fits your project and answer the corresponding questions for that category (choose only one category). 10 bonus points will be awarded to projects that are primarily Bicycle or Pedestrian facilities.

C. Environmental Mitigation Activity Related to Stormwater and Highways

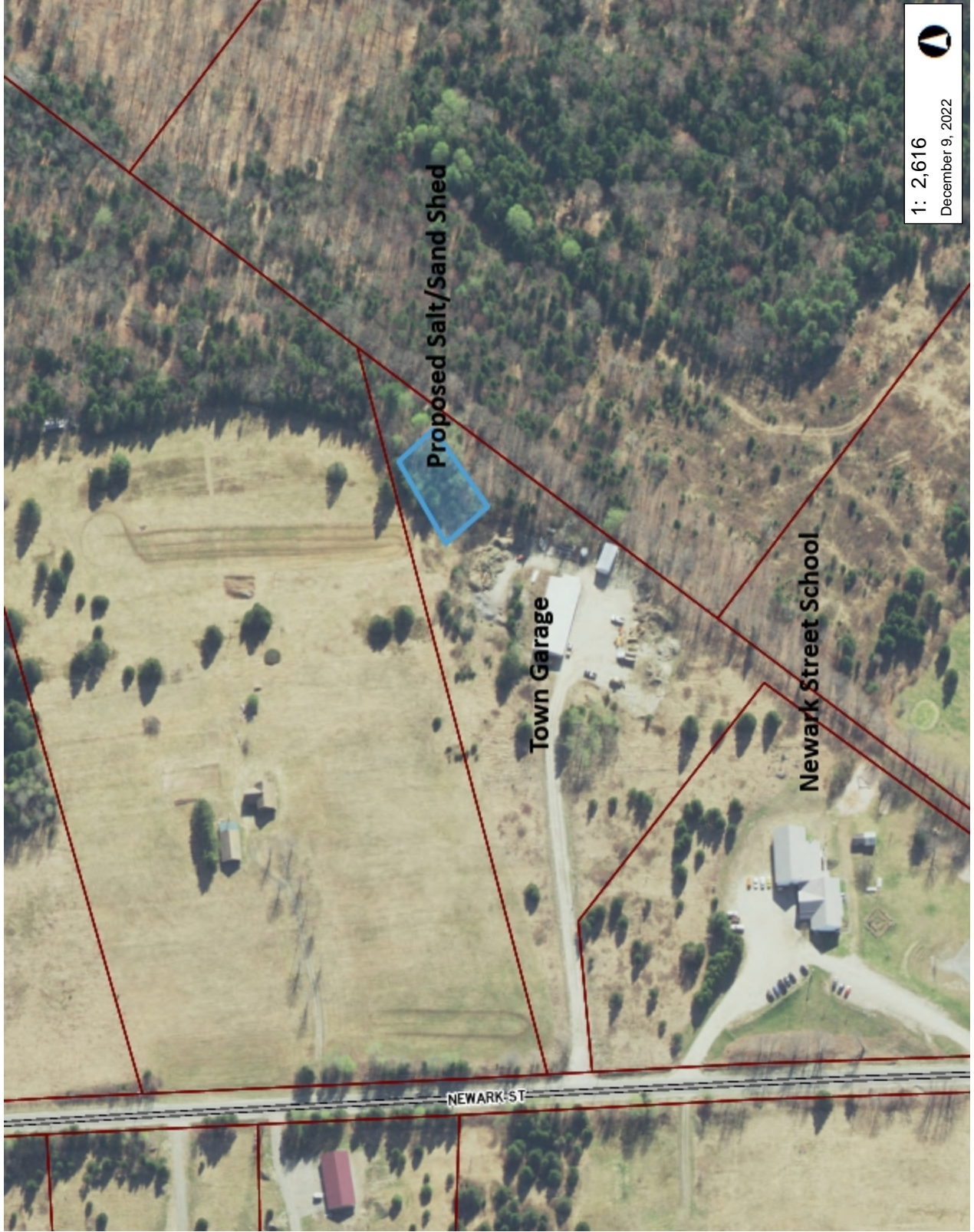
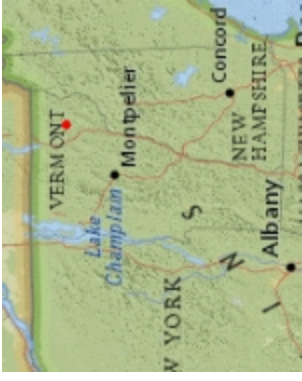
- i. Please describe how this application provides environmental mitigation relating to stormwater and highways. **(10 points max.)**
This project will allow Newark to relocate its uncovered sand/salt pile back to the Town Garage where it was originally. In 1987 the pile had to be moved offsite to mitigate a leaching problem in the Newark Street School's water supply. (See Department of Health letter dated May 28, 1987, which outlines the situation and offers mitigation solutions, attached.)
- ii. What information or data is provided to substantiate the current stormwater problem and associated environmental impacts? **(10 points max.)**
May 28, 1987 Department of Health letter.
- iii. What substantiating data or information is provided to show that the proposed application is an effective and maintainable solution to the problem? **(10 points max.)**
Recommendation in 1987 letter stating "The sand/salt storage pile should be isolated from the groundwater environment. This can be accomplished by housing or covering the sand/salt pile and by constructing an impermeable liner of concrete or plastic beneath the pile."



Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

Parcels (standardized)

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/River

- Stream
- Intermittent Stream

Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

1: 2,616
December 9, 2022

133.0 0 66.00 133.0 Meters

1" = 218 Ft. 1cm = 26 Meters

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.

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WGS_1984_Web_Mercator_Auxiliary_Sphere

Town of Newark
1336 Newark Street
Newark, Vermont
Phone 802-467-3336
newarktownclerk@gmail.com

December 6, 2022

Re: VTrans TAP Grant


To Whom It May Concern,

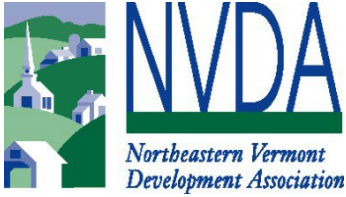
The Newark Selectboard is in full support of the enclosed TAP Grant Application for a sand/salt shed for our Highway Department. We acknowledge our responsibility for the maintenance of this structure upon completion. The funding source for the Town's match will come from the Highway Budget.

Newark Selectboard


John Lewandoski


Nancy McDermott


Mark Ellingwood



December 12, 2022

Scott Robertson, P.E. - Municipal Assistance Section
Vermont Agency of Transportation
Barre City Place
219 North Main St. – 4th flr.
Barre, VT 05641

RE: FY 23 Transportation Alternatives Grant Application for the Town of Newark

Dear Scott,

I am writing in support of an application for a Transportation Alternatives Grant for the construction of a Sand and Salt Shed for the Town of Newark. This project will provide a single structure to contain the Sand and Salt plies for the town and will greatly reduce salt contaminated runoff. The Town is making this improvement after much study and planning to improve water quality and has prepared a new location that provides sufficient distance from adjacent waters to mitigate any runoff. The current location has been a longstanding issue for the town with regards to water quality impacts and is representative of the exact kind of legacy municipal facility that this grant is trying to address.

NVDA strongly supports the selection of this project for funding through the Transportation Alternatives Grant Program

Sincerely,

--

Douglas C. Morton
Senior Transportation Planner
Northeastern Vermont Development Association
P.O. Box 630
36 Eastern Ave
St Johnsbury VT 05819
802-748-1221
dmorton@nvda.net

Eagle Associates of Cazenovia, LLC

P.O. Box 322, Cazenovia, NY 13035

P(315) 655-0644 F(315)655-0353



QUOTE

Date:	12/12/2022	Building Type	Magnum
To:	Jesse Remick	Building Dimensions	66L16 x 96
Town of Newark, VT 802-279-4210		Snow Load Capacity	60
		Wind Capacity	115
		Site Condition	C (open terrain)
		Fabric Type	Non FR
		Occupancy Category	Cat II (Normal)
Email: jesse@blackriverdesign.com		Foundation Height	2'
		Foundation Type	concrete pier
		Truss Spacing	mixed

Supply and Install Britespan Magnum Series 66'L16 x 96' with 1 endwall including mesh vents
 Supply and Install 16' Tall T-walls on 2 sides and back wall
 Engineered drawings for both the components of the building and the foundation included

FREIGHT	Included
MATERIALS COST	Included
Does NOT Include Tax if Applicable	
Precast Foundation COST	Included
Cost Based on Information Provided, Eagle Associates Not Liable If Specs Change	
Total BUDGET	\$450,000.00

NOTES: Owner to prepare site for precast concrete installation, site to be level and have stone base

EXCLUSIONS: prevailing wage, earthwork, taxes, 3rd party testing

Prices Good For 30 Days

PAYMENT TERMS: 35% deposit, 35% at foundation completion, 30% upon project completion

ACCEPTED BY:

ACCEPTED BY:

Name

Eagle Associates of Cazenovia, LLC

Date

Date



STATE OF VERMONT
AGENCY OF HUMAN SERVICES

DEPARTMENT OF HEALTH
60 MAIN STREET
P.O. BOX 70
BURLINGTON, VERMONT 05402
May 28, 1987

Town of Newark Selectboard
Newark Town Clerk's Office
RD #1
West Burke, VT 05871

Dear Selectfolk:

Re: Salt sand storage/school
well

This letter summarizes observations made during a site visit to the Newark Street School and the Newark Town Garage. I was accompanied on the site visit by Sally Newell, Newark Health Officer and Jim Bicknell, School Board Member. The Division of Environmental Health was contacted in regard to the potential adverse impact to the school well by leaching of the sand/salt pile at the Newark Town Garage.

Observations compiled during the site visit have been used to prepare recommendations regarding sand/salt storage practices.

Observations

- The new town garage is located approximately 300' upgradient and to the north-northeast of the school well. Bulldozed land associated with the Town Garage reaches within 150' of the school well. The sand/salt pile occurs to the north of the new garage structure, hence, the garage is between the sand pile and the well.
- Several private drinking water wells are located downgradient of the sand/silt pile. The particulars of these wells are unknown.
- Both the town garage and the school are located on the south facing slope of a domal hill (See Figure #1). Groundwater drainage in the surficial aquifer is likely to occur in a radial pattern from the apex of this hill. This would tend to move waters from the area of the town garage to the vicinity of the school well and further downgradient.
- Groundwater transport in the bedrock aquifer is related to the orientation of fractures. No evidence of large scale fracture traces was observed from aerial stereo photographs. Hence, the school well derives its water from pumping along smaller scale fractures that are not discernable from the surface. The orientation of these fractures remain unknown. When the well is pumping it may draw water along fractures from a distance.

- The sand/salt storage pile to the north of the garage is visibly laden with halite (rock salt). Sporadic chunks of aggregate salt were found interspersed throughout the sand. Additionally, white salty encrustations were observed on the surface of the sand. This indicates that salt is being dissolved from the sand, later to be precipitated out at the surface as this moisture evaporates. Of course, most of this water does not evaporate but is carried downward into the ground.
- The area around the garage is comprised of a medium to coarse pea gravelly sand. Sands of this texture are highly porous and permeable and readily transmit groundwaters.
- The sandy area in front of the garage (facing south) has visible stains of petroleum products.
- An above ground fuel storage tank immediately outside of the eastern wall of the garage is surrounded by petroleum stained ground. The tank shows evidence of drips and spills on its outer surface. Apparently this is the result of normal filling operations.
- The garage has a "dirt" floor. Heavy equipment parked inside of the garage appeared to be leaking petroleum onto the ground.
- Records on file at the Department of Water Resources in Waterbury indicate the following well logs for the Newark School.

Well #1 drilled 8/26/71	yield: 1 gpm
298' deep	6" casing 31' long
0-20' sand	
20-29' soft brown rotten ledge	
29-298' grey-light grey granite	
Well #2 drilled 3/25/80	yield: 7 gpm
225' deep	6" casing 30' long
0-2' frost	
2-23' sand & gravel	
23-225' schist	

Only one well was observed during the field visit. Because the casing and the well cap appeared to be in relatively good shape, I would interpret this to be the 1980 well.

- The storage of sand/salt piles and the distribution of salts as de-icing compounds are widely recognized as sources of groundwater pollution; primarily from excess sodium.

Sodium is an essential element in human metabolism and is present in all natural waters. Excess sodium, however, has been demonstrated to induce age-related increases in blood pressure that can result in

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hypertension (high blood pressure) in genetically susceptible individuals. Persons with restricted sodium diets require a daily sodium intake of 500 milligrams per day or less. These individuals can reduce sodium related risks by drinking water that contains less than 20 milligrams per liter (parts per million) of sodium. Although children are generally at low risk from sodium excess, school employees and residents served by downgradient wells may be in higher risk categories. (That sodium can migrate long distances in groundwater is well known.)

Because the salt in the sand/salt pile can be (and is being) readily dissolved, it can percolate with rainwater into the shallow sand aquifer. Increasing the concentration of sodium and chloride makes groundwater a strong electrolyte that can induce changes in the geochemical balance of natural weathering processes in rock and soil. Such changes may lead to the liberation of other contaminants as well as making the water more corrosive.

Recommendations:

The most cost effective mechanism for dealing with groundwater compromise is to avoid and prevent it. With this tenet in mind the Division of Environmental Health recommends the following:

- 1) The sand/salt storage pile should be isolated from the groundwater environment. This can be accomplished by housing or covering the sand/salt pile and by constructing an impermeable liner of concrete or plastic beneath the pile.
- 2) The floor of the garage should be lined with an impermeable substance (concrete or clay). There should be no floor drains. Leaking equipment should be fixed to prevent fluid loss. If leaks persist, some sort of catchment containers should be devised to prevent contact with the ground.
- 3) Protection of the aquifer from other contaminant sources can be accomplished by prohibiting on-site disposal of fuels, oils, solvents, degreasers, detergents, anti-freeze etc. Storage of fuel should be in an above ground tank with an impermeable catchment basin (concrete or bermed clay) beneath and surrounding it. The catchment basin should be designed to contain the entire contents of the storage tank (with some room to spare for precipitation) in the event of accidental rupture. Normal tank loading and unloading operations should emphasize that care be taken to avoid spillage.

These observations and recommendations are forwarded in the interest of safeguarding the quality of groundwater drinking supplies in Newark. It is often easy to forget where drinking water comes from. The result of such forgetfulness may, at some point in the future, pose a threat to health and safety.

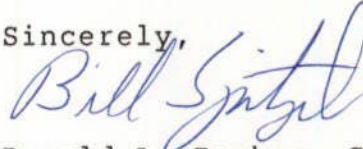
The situation at the Newark Town Garage is not severe or extreme. Recommended precautionary measures are offered here as preventative

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maintenance to ensure that the situation remains this way on into the future.

If you have any comments or questions, please feel free to contact me at 863-7326.

Sincerely,



(for)

Ronald L. Parker, Geologist
Div. of Environmental Health

RLP/blm

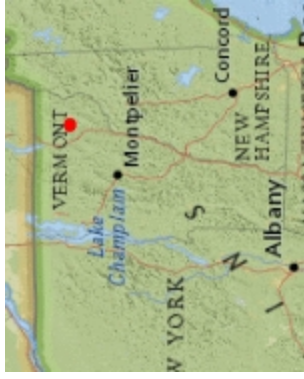
cc: Sally Newell
Jim Bicknell
Bernard Allard
Ken Bannister
Mike Gates
Newark Private File



Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov

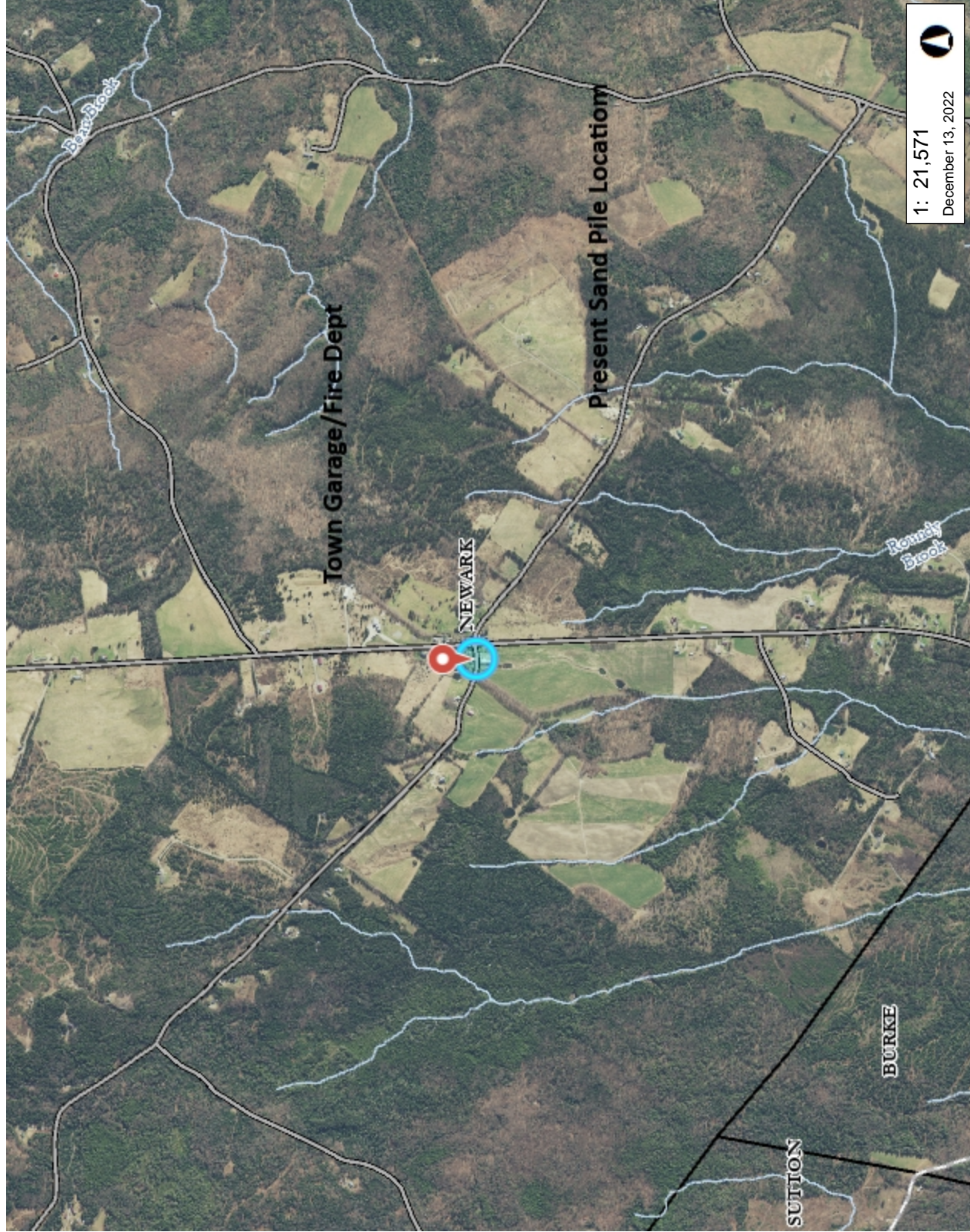


LEGEND

- 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/River**
- Stream
 - Intermittent Stream
- Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas



1: 21,571
December 13, 2022

1,096.0 **0** **548.00** **1,096.0 Meters**

1" = 1798 Ft. 1cm = 216 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

Sand/Salt Pile Location

Current sand/salt pile location is 1.2 miles from Highway Garage.

Newark Highway Garage / Fire Dept

Newark Volunteer Fire Department

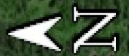
Newark School

Granddad's Invitational GC

Pleasant View Cemetery

Greener Horse Rd

Present Sand/Salt Pile Location



1000 ft





