



SUPPORTING VERMONT MUNICIPALITIES THROUGH ASH TREE MANAGEMENT

Grant Application

Funding: minimum \$5,000, maximum \$15,000

SECTION 1: Applicant Information

MUNICIPALITY OR ORGANIZATION: Richmond, VT

ADDRESS: 203 Bridge St., Richmond, VT 05477

PROJECT CONTACT PERSON: Caitlin Littlefield

PHONE: 978-807-1494

EMAIL: clittlef@gmail.com

D-U-N-S NUMBER*: 019 336 999

FINANCIAL CONTACT PERSON: Connie Bona

PHONE: 802-434-2221

EMAIL: cbona@richmondvt.gov

SECTION 2: Project Information

PROJECT TITLE: Richmond Village Emerald Ash Borer Response Project

SUMMARY OF PROJECT (*2 sentences maximum*):

The Emerald Ash Borer has just been detected in Richmond, and we are deeply committed to maintaining the beauty, character, and shady canopy cover of our village and major recreation corridors while ensuring public safety and the myriad ecological functions that healthy, diverse trees afford. Our EAB Taskforce, which includes our tree warden and other town officials, has analyzed its town-wide ash inventory and, in particular, we aim to treat the most prominent ash within the historic village and replace smaller or less healthy trees with a diversity of native species.

GRANT FUNDING REQUESTED: \$15,000

TOTAL PROJECT COST: \$22,379

SECTION 3: Statement of Need

Explain your municipality's current situation regarding ash tree management on municipally owned or municipally managed land. Provide a succinct statement of need for funding, identifying the opportunities and desired outcomes of this municipal initiative. Include any information about your ash tree population (e.g. inventory or survey results), your municipality's management strategy, and who has been or would like to be involved in making decisions about EAB management. Show that your town's tree warden is active in the community through a letter of support or other documented input into the application.

The Richmond Conservation Commission (RCC), town officials, and volunteers have been preparing for the arrival of EAB for the past year. These preparedness efforts have proved timely: EAB was just detected in Richmond this fall 2020. We—the Richmond EAB Taskforce—are now finalizing our preparedness plan and are committed to proactively treating or replacing and continuing to monitor our municipal ash trees.

Our vision is to maintain the beauty, character, and shady canopy cover of our town's historic village and major recreation corridors while ensuring public safety and the myriad ecological functions that healthy, diverse trees afford. In particular, we aim to treat the most prominent ash within the village, around the iconic Round Church, and at the entrance to our recently acquired town forest (Andrews Community Forest, ACF) and replace smaller or less healthy trees with a diversity of native species (see attached map). We now seek funding from Vermont's Urban and Community Forestry Program (UCF) to support us in this objective.

During spring 2020, RCC volunteers inventoried 874 trees on over 20 miles of Richmond's roads (there are approximately 40 miles total). A summary of this inventory (including future plans) is attached. Also attached are next steps we will take in finalizing our preparedness plan.

Individuals who have been and will be involved in developing the town's preparedness plan bring a breadth of skills and experience to bear. The specific roles and responsibilities of these named individuals are detailed below in Section 5.

Richmond's EAB Taskforce

- Caitlin Littlefield – EAB Taskforce coordinator, forest ecologist, member of the Richmond Conservation Commission and ACF committee
- Matt Leonetti – Richmond's tree warden (see specific role and input from Leonetti in Sections 5 and 6)
- Judy Rosovsky – Vermont's entomologist, chair of the Richmond Conservation Commission
- Ethan Tapper – Chittenden County Forester who drafted Andrews Community Forest management plan and is overseeing current harvest
- Jon Kart – Vermont Fish and Wildlife biologist, leader of Richmond's riparian forest restoration efforts
- Pete Gosselin – Richmond's Highway Foreman
- Josh Arneson – Richmond's Town Manager
- John Hamerslough – Richmond ash inventory volunteer

Other inventory volunteers know they are very welcome to participate in this EAB Taskforce. Town residents and the Selectboard have been and will continue to be kept apprised of these EAB preparedness efforts through brief updates during public meetings as well as via Front Porch Forum posts. By December 2020, the EAB Taskforce will present a finalized plan to the Selectboard.

SECTION 4: What do you plan on doing and how will you do it?

In table format, provide a list of what your municipality plans on doing, describe how it will be done, and list the measurable results. All project work must be completed by January 15, 2022.

Questions that should be answered in this section include, as applicable:

- How many public ash trees do you estimate will be removed through the project, what approximate size are they, and where are they located?
- How many replacement trees will be planted, where, and of what size and species?
- What will happen to the ash wood, both from the public right-of-way if it is rejected by the landowner and from municipally owned ash trees? Will any person or organization partner with the grantee or to distribute or utilize ash wood?
- What planning or management goals will you address in high use areas of town forests or other municipally owned trails or parking areas?

Action	How will it be done?	Measureable Results	Timeline
Remove: Within 0.5 square miles of Richmond’s historic village, remove seven trees along forested stretches of road or otherwise in clumps of trees	Town will hire an ISA-certified tree service provider to remove selected trees, chip tops and unusable wood, and store usable wood at town garage until used (see “products” below).	<ul style="list-style-type: none"> • Removal of five 8-12” dbh trees along Church St, Burnett Ct, Jericho Rd; • Removal of two 12-16” trees along Cochran Rd. and Burnett Ct 	Removals completed before leaf-out and during non-flight season in April-May 2021.
Remove & Replace: Within 0.5 square miles of village, remove and replace 18 trees, many of which are unhealthy, interfere with overhead lines, or otherwise do not substantially contribute to village character. All replacements will be native species.	Town will hire an ISA-certified tree service providers (e.g., Heritage Tree Care in Essex or Limbwalker in Shelburne) to remove selected trees, chip tops and unusable wood, store usable wood at town garage, and plant new trees.	<ul style="list-style-type: none"> • Removal of two 16-20” trees in park in front of Round Church and replacement with two 2” caliper sugar maples; • Removal of four 12-16” trees in front of library, on Depot St Ext, along Jericho Rd, and at entrance to Camel’s Hump Middle School and replacement with four 15-gal red maples and river birch; • Removal of twelve 8-12” trees along Church St development and replacement with twelve 15-gal red maples, river birch, swamp white oak, black walnut 	Removals and plantings will be completed before leaf-out and during non-flight season in April-May 2021.
Treat: Within 0.5 square miles of village and at ACF kiosk, treat 16 healthy and prominent trees with emamectin benzoate, which is preferred over other alternatives, as it is	Members of EAB Taskforce who are certified pesticide applicators will treat trees with free of charge.	<ul style="list-style-type: none"> • Treatment of one 40” tree on Baker St; • Treatment of nine 16-20” trees along Bridge St within village and in front of Round Church; • Treatment of five 12-16” trees along Cochran Rd • Treatment of one 20-24” tree at ACF kiosk. 	Injections will occur after leaf-out in late-May – early June 2021.

Release Date: August 6, 2020

Proposal Due Date: October 30, 2020

Action	How will it be done?	Measureable Results	Timeline
<p>derived from a naturally occurring soil bacterium and breaks down more rapidly by microbial activity and sunlight than other insecticides.</p>			
<p>Products. Put removed wood to use for benefit of existing town riparian restoration projects and households in the community</p>	<p>Tops and unusable wood will be chipped and applied as mulch trees planted in 2020 along river in Volunteers Green Park by EAB Taskforce members. Useable sawlogs and roundwood will be processed per APHIS recommendations and VT mandates at local mill. EAB Taskforce will identify local furniture makers and woodworkers. Any labor costs will be covered by wood these individuals may use for their own purposes.</p>	<ul style="list-style-type: none"> • Mulching around the approximately 400 trees planted for riparian restoration; • Locally crafted chairs (precise number TBD) for Town Center conference room that already features an elm table made from a village tree; • Locally crafted bowls (precise number TBD) to be donated or raffled to households in the community. 	<ul style="list-style-type: none"> • Processing and transport of wood will occur during non-flight season in April 2021 • Solicitation of local furniture makers and woodworkers will commence in Jan 2021.
<p>Monitoring. Monitoring and maintenance of planted trees</p>	<p>EAB Taskforce members, particularly tree warden Leonetti, will monitor planted trees and water as necessary.</p>	<p>Health and survival of 18 newly planted trees</p>	<p>Ongoing, after planting in spring 2021</p>

SECTION 5: Who will carry out the plan?

In concert with the action items entered above, identify who will be involved in the project and their role including services provided, financial contributions, and product donations. Consider the various municipal staff, boards and commissions, citizens, professionals, and non-governmental organizations (NGOs) that can be called upon as partners to support your efforts. If municipal staff will be performing ash tree removals, provide details about their qualifications and experience. Additionally, describe how the municipal tree warden will be involved in the project. Questions that should be answered (as applicable) in this section include:

- 1. Who will coordinate tree removal efforts, including contacting and securing a contractor?**
Gosselin (highway foreman) and Leonetti (tree warden) will coordinate tree removal efforts, with the assistance of Littlefield (EAB Taskforce lead). We will seek bids from only ISA-certified tree service professionals (e.g., Heritage Tree Care in Essex or Limbwalker in Shelburne) to remove trees.
- 2. Who will coordinate tree planting efforts and ensure proper planting, protection, and maintenance of these trees?** Leonetti, Littlefield, Kart (F&W biologist), and Hamerslough (inventory volunteer) will coordinate tree planting efforts, protection, and maintenance of trees. As a former landscaping-business owner, Leonetti has planted and tended countless trees, and is confident he may be able to leverage existing relationships to reduce estimated replacement tree costs. Kart has led the riparian restoration project in Richmond, which entailed planting over 400 trees. Littlefield assisted in this effort. We will purchase trees locally (nursey TBD) and have them delivered. In the case of larger trees (e.g., two 2" caliper sugar maples), we will seek equipment assistance from the highway department. Trees watering bags will be replaced and regularly filled by Leonetti, Littlefield, Kart, and Hamerslough. We have access to a water pump by which we can fill a moveable tank with water from the Winooski River to do so.
- 3. Who will coordinate insecticide treatment of trees?** Rosovsky (RCC chair, state entomologist) is a certified pesticide applicator and will carry out the treatment of select trees.
- 4. Who will manage the distribution of ash wood and, if applicable, the record of its innovative use in the community?** The Richmond Conservation Commission (RCC), Littlefield, and Tapper (county forester) will manage the distribution of ash wood and record its innovative use. Tops and unusable wood will be chipped (by hired contractor, identified in item 1 above) and used to mulch trees recently planted in the riparian restoration project on Volunteer Green. Will we seek equipment assistance from the highway department to transport chips. Tapper will coordinate delivery of useable wood to a local mill for processing, to be completed by the end of the non-flight season. The RCC and Littlefield will identify local furniture makers and woodworkers to create chairs for the Town Center conference room and turn wooden bowls, to be donated or raffled-off to Richmond town residents. Labor for these products will be compensated in the equivalent volume of ash wood. The RCC and Littlefield will document these uses.
- 5. Who will assess specific sites within town forests or other municipally owned lands for the impact of potential ash management in these areas?** Tapper will assess ash trees within the Andrews Community Forest; the ACF committee, including Tapper, is currently determining if we will modify an ongoing harvest to include more ash. Littlefield, and Hamerslough will continue to inventory trees along trails on other municipal lands.
- 6. Who will communicate the project to the public and record information for future budget planning or land use planning efforts?** The RCC, Littlefield, and Tapper will continue to communicate this project to the public. We have done so already through Front Porch Forum posts and signage. In particular, we will be in direct communication with landowners on whose land (in the public ROW) ash trees will be replaced or treated. Arneson, Gosselin, and Littlefield are already projecting future budgetary needs to address all ash trees within the public ROW and have been keeping the Selectboard apprised of these anticipated costs.

Section 6: Budget				
A Project Component	B Grant Request	C		D Total Project Cost
		Cash	In-Kind/ Donations	
Personnel (salary and fringe)	\$0	\$0	Most members of the EAB Taskforce are volunteering their time and skillsets.	\$0
Materials/Supplies	\$3,400	\$4,544	n/a	\$7,944
Equipment (purchases of \$5,000 or more)	\$0	\$635	n/a	\$635
Services	\$11,600	\$2,200	Replanting, wood products, insecticide application	\$13,800
Travel	\$0	\$0	n/a	
Other	\$0	\$0	n/a	
Total	\$15,000	\$7,379	Services	\$22,379
Budget Explanation: Provide additional information that will help clarify your budget request. For example, partner contributions or details on expected expenditures.	<p><u>Materials and supplies:</u> Costs include \$2,780 for insecticide at \$10/in dbh for approximately 278" total; \$4840 for 2x2" caliper sugar maples at \$500 each; 16x15-gal red males, river birch, swamp white oak, black walnut at \$240 each; \$324 for 18x25-gal tree watering bags at \$18 each. As a former landscaper, tree warden Leonetti is confident he may be able to leverage existing relationships to reduce estimated replacement tree costs. <i>We will put \$3,400 from the UCF grant towards these costs and will seek to cover the balance with funds from Richmond's Conservation Reserve Fund.</i></p> <p><u>Equipment:</u> \$635 for Wedgle Direct-Inject tree injection system. <i>We will not apply any of the UCF grant towards this cost but will seek to cover it with funds from Richmond's Conservation Reserve Fund.</i></p> <p><u>Services:</u> An estimate of \$11,600 for removals is based on costs from other VT towns and accounts for the fact that many of the trees to be removed will likely require heavier equipment as they are near to town buildings and along fairly busy sections of road. On the other hand, approximately 12 trees slated for removal are quite small. We estimate a conservative \$2,200 for wood processing, with the acknowledgement that this value will depend on allocation to products and whether or not landowners where public ROW removals occur desire to keep wood. We anticipate compensating furniture makers' and woodworkers' labor with comparable volumes of ash wood. Replanting will be carried out by tree warden Leonetti and others on EAB Taskforce. Insecticide treatment will be carried out by RCC chair and certified applicator Rosovsky. <i>We will put \$11,600 from the UCF grant towards removals.</i></p>			
<p>Note: The Total Grant Request (bottom of Column B) must be at least 50% of Total Project Cost, bottom of column D. Remaining balance of Total Project Cost is Applicant Match and may be divided in any way between cash and in-kind/ donations.</p>				

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Additional Requirements and Attachments

We understand and commit to the following additional requirements of this Ash Tree Management Grant program:

- X Grant of permission for VT UCF to take and publish photographs of project work;
- X At the request of VT UCF, at least one site visit with staff to removal and replanting sites and/or a pre- or post-grant review to support information sharing among communities;

Required attachments for a complete proposal package:

<https://vtcommunityforestry.org/programs-0/financial-assistance/eab-management-grants>

- X Completed Risk Assessment Questionnaire;
- X Municipality Insurance Certificate, refer to FPR Insurance Guidance for coverage minimums;
- X Ash inventory or survey results or summary; and
- X Emerald ash borer management plan, draft plan, or documented management strategy.

Changes resulting from delays or complications due to COVID-19:

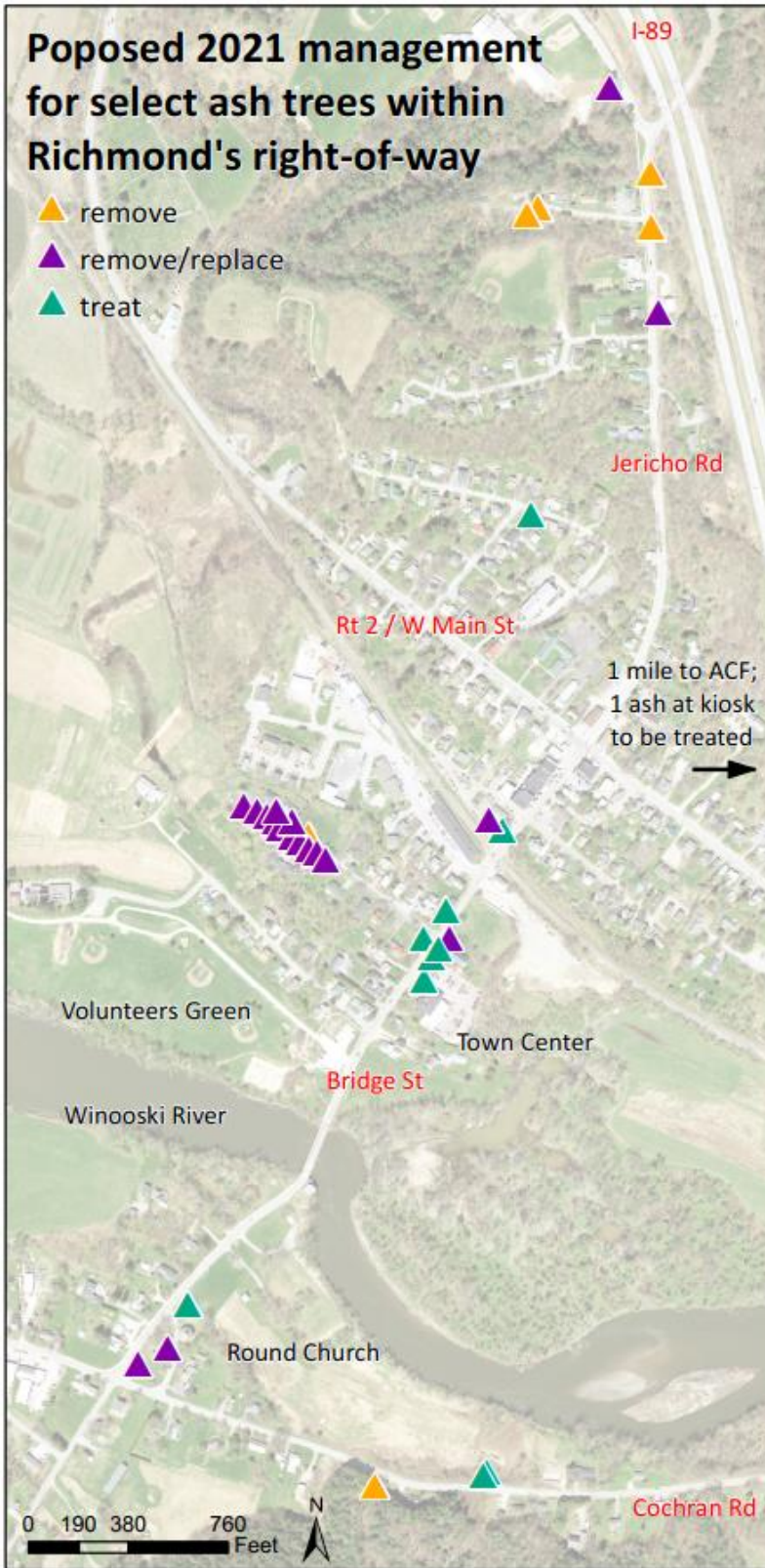
Restrictions put in place by the State of Vermont in response to COVID-19 may alter the proposed timeline of awarded grants. Work start dates and any subsequent deliverable dates in grant agreements are subject to change. It is the responsibility of the municipality to ensure that any work conducted under this grant complies with State of Vermont Executive Orders.

Send completed proposal packet to:

Vermont Department of Forests, Parks and Recreation
Urban & Community Forestry Program
1 National Life Drive, Davis 2
Montpelier, VT 05620
jenny.lauer@vermont.gov

PROPOSALS DUE:

electronically, by close of business Friday, October 30th, 2020
by mail, postmarked by Friday, October 30th, 2020



Large, healthy tree on Baker St to be treated.



A dozen small ash planted at the same time that Church St neighborhood was developed will be replaced.



Healthy ash outside Town Center will be treated

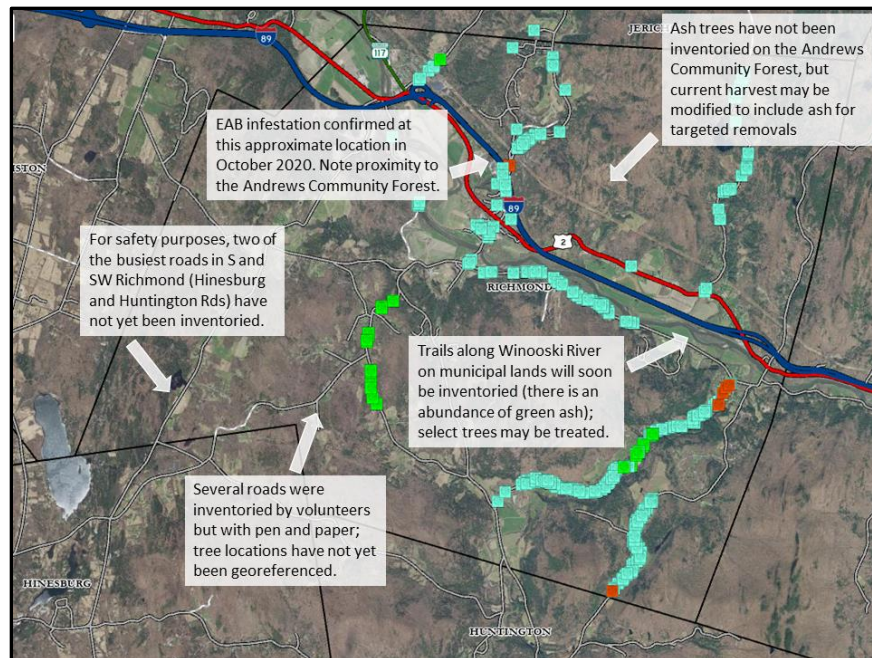
Richmond Public Right-of-Way and Public Lands Ash Tree Inventory Preliminary Results and Future Plans, October 2020

During spring 2020, seven volunteers received remote training from UCF's Joanne Garton and proceeded to inventory ash on over 20 miles of Richmond's roads using the ArcGIS Collector app. Ash tree density varies widely: some upland areas have 95-125 ash trees per road mile, while other stretches, particularly along fields and pastures have far fewer. Of the 874 trees inventoried, approximately 215 are 12-24" in diameter and 45 exceed 24" in diameter.

In addition to conducting the inventory, several volunteers set and monitored four EAB traps during summer 2020. One non-EAB *Agrilus* beetle was found on the traps. The infestation was subsequently detected by Vermont's Forest Health Specialist Joshua Halman on one of the primary roads into town (not on a trap).

Finally, on the recently-acquired Andrews Community Forest, ash is a modest component of one stand (approximately 13% by basal area). Though relatively small (43 acres), this stand is traversed by multiple trails that town residents enjoy. In light of the recent EAB discovery, potential modifications to a timber harvest currently underway at ACF are being considered by the ACF committee.

As for upcoming inventory priorities, we plan to inventory public trails along the Winooski River, along which there are many green ash. We are also evaluating options for completing the public right-of-way inventory on all roads, which we will likely pursue through a tree service bidding process, as we anticipate fairly widespread and necessary ROW removals over the next decade.



Map from Vermont's Agency of Natural Resources GIS portal shows locations of inventoried ash trees in Richmond. Red markers are trees identified as leaning into the road. Management for teal trees is yet to be determined, except for those in the village center. (That is the case for green trees, as well, which were labeled mistakenly).

Richmond EAB Preparedness Plan

Outline of future steps (*final plan to be completed December 2020*)

Planning for the continued invasion of EAB into Richmond's ash trees is well underway. Members of the task force, other town officials, and the community at large are all grateful for the inventory that has already been completed. This project, the *Richmond Village Emerald Ash Borer Response Project*, represents the next step in our preparedness actions. This project in particular is designed with the vision to maintain the beauty, character, and shady canopy cover of our town's historic village and major recreation corridors while ensuring public safety.

Of course, there are hundreds, even thousands, of other ash trees in the town—along public ROWs, on municipal lands, on non-municipal lands—that are not expressly covered in this proposal. The EAB Taskforce is currently finalizing a plan for managing—or educating landowners about managing—those trees, too. In doing so, we will take into consideration aesthetics, public safety, ecological function, habitat, and the economic value of ash in our forested areas.

Major next steps in the plan are laid out below. As we finalize the full preparedness plan, we will likely seek feedback from UCF. We are aiming to present the plan to the Selectboard by the end of December 2020, seeking their approval. At that point we will share the final plan with UCF.

1) Trees along trails within Richmond.

- a. Continue inventorying trees along trails, especially on municipal lands (e.g., River Trails along the Winooski).
- b. For trails not on municipal lands but widely used by public, engage landowners (e.g., the River Trails run through lands owned by The Nature Conservancy and Richmond Land Trust)
- c. Identify healthiest trees to be treated.
- d. Fold anticipated costs of treating those trees into existing request for Richmond Conservation Reserve Funds (to cover the balance of the project at hand) or pursue cost-share with landowners.

2) Trees within Andrews Community Forest (ACF).

- a. Tapper and others on ACF committee to determine if harvest currently underway should be adjusted to include ash trees, particularly those along highly trafficked trails.
- b. Ash removals may be bucked and split at landing to be used by community members for firewood.

3) Educate the public and landowners.

- a. Continue public outreach efforts through webinars (e.g., Tapper's recent webinar on EAB management at the ACF).
- b. Continue to post signage at trailheads throughout town.
- c. Consider more explicit demonstrations at ACF, including "tree traps" through girdling and peeling.
- d. Compile guidance (e.g., from UCF and Forest Stewards Guild) for private landowners and share via Front Porch Forum or possibly mailed fliers. Guidance to address both ash trees within forests and those in yards and along roads/driveways.

4) Management of remaining trees in public ROW.

- a. Issue RFP for tree service providers to provide estimates and bids for removal of all remaining trees along Richmond ROW.
- b. Confer with Green Mountain Power and Vermont Electric Company regarding management of trees under and near to power lines, encouraging their proactive management of those trees to reduce cost to town.
- c. Incorporate estimated costs into town budget, anticipating approximately 10% removals per year, following the experience of other municipalities.

RISK ASSESSMENT QUESTIONNAIRE

The purpose of the risk assessment is to determine whether a potential grantee has sound financial management and if the agency uses accounting systems that are adequate to meet the State of Vermont administrative requirements. Please complete the following questionnaire and have it signed by the Executive Director or Fiscal Officer (as applicable) for your organization.

Name of Entity Completing Questionnaire: Town of Richmond

Question	Yes	No	N/A
1. Does your agency maintain documentation to substantiate the value of in-kind contributions (match)?	X		
2. Does your agency use an electronic accounting software system (as opposed to manual)?	X		
3. Has your agency recently implemented any new or substantially changed systems, for example, financial management or accounting systems? (If yes, please explain by typing here or in attachment.)		X	
4. Does the accounting system track receipts and disbursements by funding source?	X		
5. Does your agency have written internal control policies including Accounting, Fraud, or Financial Reporting that contain separation of duties?	X		
6. Does your agency have a written Personnel policy (to include travel reimbursement, fringe benefits, etc.)?	X		
7. Does your agency have a Financial Director, Financial Manager, Treasurer or equivalent? (If no, please identify the name and position of the employee(s) who is responsible for supervising the quality of accounting and financial reporting of an organization.)	X		
8. Does your agency regularly monitor budgeted versus actual expenditures to ensure that cost categories aren't over-spent or under-spent?	X		
9. Does your agency have written procurement procedures indicating which individuals are authorized to initiate a purchase request, the flow of documents, and the requested levels of approval?	X		
10. Does the agency have a system to track staff time spent on various grants/projects, for those employees whose salaries are allocated to more than one contract/grant?	X		
11. Does your agency have a Policy and Procedures Manual that is made available and accessible to all employees?	X		
12. Has your agency executed any grants, contracts or MOU's with any other governmental or non-governmental agencies in the past three years?		X	

I hereby certify that to the best of my knowledge and belief, the information provided in response to the foregoing questions is true and accurate.


 Chief Officer Signature

10/27/20
 Date


 Chief Fiscal Officer Signature (if applicable)

10/26/20
 Date



Issue Date: 01/01/2020

Policy Number: P5382020

CERTIFICATE OF COVERAGE

Company Affording Coverage

Named Member
 Town of Richmond
 Attn: Joshua Arneson
 PO Box 285
 Richmond, VT 05477

VLCT Property & Casualty Intermunicipal Fund, Inc.
 89 Main Street Suite 4
 Montpelier, VT 05602

Type of Coverage	Term	Limits of Liability
Commercial General Liability Coverage Includes: Premises/Operations Products/Completed Operations Personal Injury Contractual Independent Contractors Broad Form Property Damage	01/01/2020 - 01/01/2021	\$10,000,000 Per Occurrence
Automobile Liability Any Auto Hired Autos Non-Owned Autos Comprehensive/Collision	01/01/2020 - 01/01/2021	\$10,000,000 Per Occurrence ACV
Workers Compensation And Employers Liability	01/01/2020 - 01/01/2021	Statutory \$5,000,000 Per Occurrence and in the Aggregate
Property	01/01/2020 - 01/01/2021	\$20,000,000 Per Occurrence
Other: The State of Vermont and its officers and employees are included as an additional covered party (additional insured), but only in respect to operations by or on behalf of the Named Member, as respects the grant.		
Certificate Holder: State of Vermont	<p>This Certificate is issued as a matter of information only and confers no rights upon the Certificate Holder. This Certificate does not amend, extend or alter the coverage afforded by the policies above.</p> <p>Should any of the above described policies be cancelled before the expiration date thereof, the issuing insurer will endeavor to mail 30 days written notice to the Certificate Holder named to the left, but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents, or representatives.</p>	

Authorized Representative: _____