





Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

# WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
078-767  
MassDEP File #

West Newbury  
City/Town

## A. General Information (cont.)

Latitude and Longitude, if known: \_\_\_\_\_  
d. Latitude (in decimal) e. Longitude (in decimal)

Note: If the Ecological Restoration Project involves work on a stream crossing, baseline photo-points that capture longitudinal views of the crossing inlet, the crossing outlet and the upstream and downstream channel beds during low flow conditions. The latitude and longitude coordinates of the photo-points shall be included in the baseline data.

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):  
See Attachment 1

a. County \_\_\_\_\_ b. Certificate Number (if registered land) \_\_\_\_\_

c. Book \_\_\_\_\_ d. Page \_\_\_\_\_

7. Dates: 07/13/2023 9/6/2023 9/8/2023  
a. Date Ecological Restoration NOI Filed b. Date Public Hearing Closed c. Issuance Date

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Aerial Maps: "Cherry Hill Conservation Land" 8/14/2023, "Field at corner of Middle St and Indian Hill St" 8/15/2023, and "Riverbend and Tupelo Trails" 8/15/2023

NHESP Letter dated 8/3/2023 File No.: 23-8414  
c. Signed and Stamped by \_\_\_\_\_

"Ecological Land Management Invasives Plant Control Proposal" dated 5/31/2023  
e. Scale \_\_\_\_\_

f. Additional Plan or Document Title \_\_\_\_\_ g. Date \_\_\_\_\_

## B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the Ecological Restoration Notice of Intent described in Section A and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a.  Public Water Supply
- b.  Private Water Supply
- c.  Groundwater Supply
- d.  Flood Control
- e.  Storm Damage Prevention
- f.  Prevention of Pollution
- g.  Land Containing Shellfish
- h.  Fisheries
- i.  Wildlife Habitat



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West Newbury

City/Town

#### B. Findings (cont.)

2. This Commission hereby finds the project, as proposed, is an Ecological Restoration Project for: *invasive plant management*

- Dam Removal
- Freshwater Stream Crossing Repair and Replacement
- Stream Daylighting
- Tidal Restoration
- Rare Species Habitat Restoration
- Restoring Fish Passageways

#### Approved subject to:

The following conditions are required in accordance with the Ecological Restoration eligibility criteria 310 CMR 10.13 (1) through (7) and performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Ecological Restoration Notice of Intent for the project described in Section A. The General Conditions in Section C and Special Conditions checked in Section D are incorporated into this Restoration Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Ecological Restoration Notice of Intent, these conditions shall control.

#### Denied because:

The proposed work does not meet the eligibility criteria in 310 CMR 10.13(1) through (7). Therefore, work on this project may not go forward unless and until a new Notice of Intent (WPA Form 3 or 3A) is submitted and a Final Order of Conditions (WPA Form 5 or 5A) has been issued. The Commission has determined that following the eligibility criteria have NOT been met.

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MassDEP File #

West Newbury

City/Town

### B. Findings (cont.)

**Inland Resource Area Impacts:** Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	~14,000 (temp)	~14,000 (temp) b. square feet	0 c. square feet	0 d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	a. square feet e. c/y dredged	b. square feet f. c/y dredged	c. square feet	d. square feet
7. <input type="checkbox"/> Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. <input checked="" type="checkbox"/> Riverfront Area	~242,000 (temp)	~242,000 b. total sq. feet		
Sq ft within 100 ft	~242,000 (temp)	~242,000 (temp)	0 e. square feet	0 f. square feet
Sq ft between 100-200 ft			i. square feet	j. square feet

**Coastal Resource Area Impacts:** Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input type="checkbox"/> Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	<b>Note:</b> No armoring of a Coastal Dune or Barrier Beach is permitted. Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input type="checkbox"/> Coastal Beaches	a. square feet	b. square feet	c. nourishment c/y	d. nourishment c/y



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 078-767  
 MassDEP File #

West Newbury  
 City/Town

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**B. Findings (cont.)**

14.  Coastal Dunes
- |                |                |  |  |
|----------------|----------------|--|--|
| a. square feet | b. square feet | c. $\frac{\text{c/y}}{\text{nourishment}}$ | d. $\frac{\text{c/y}}{\text{nourishment}}$ |
|----------------|----------------|--|--|

**Note:** No armoring of a Coastal Dune or Barrier Beach is permitted.

15.  Coastal Banks
- |                |                |
|----------------|----------------|
| a. linear feet | b. linear feet |
|----------------|----------------|
16.  Rocky Intertidal Shores
- |                |                |
|----------------|----------------|
| a. square feet | b. square feet |
|----------------|----------------|
17.  Salt Marshes
- |                |                |                |                |
|----------------|----------------|----------------|----------------|
| a. square feet | b. square feet | c. square feet | d. square feet |
|----------------|----------------|----------------|----------------|
18.  Land Under Salt Ponds
- |                |                |
|----------------|----------------|
| a. square feet | b. square feet |
|----------------|----------------|

19.  Land Containing Shellfish
- |                |                |                |                |
|----------------|----------------|----------------|----------------|
| a. square feet | b. square feet | c. square feet | d. square feet |
|----------------|----------------|----------------|----------------|

20.  Fish Runs
- Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above

a. c/y dredged	b. c/y dredged
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21.  Land Subject to Coastal Storm Flowage
- |                |                |
|----------------|----------------|
| a. square feet | b. square feet |
|----------------|----------------|

\* If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here

22.  Riverfront Area
- |                          |                   |                |                |
|--------------------------|-------------------|----------------|----------------|
| a. total sq. feet        | b. total sq. feet |                |                |
| Sq ft within 100 ft      |                   |                |                |
| c. square feet           | d. square feet    | e. square feet | f. square feet |
| Sq ft between 100-200 ft |                   |                |                |
| g. square feet           | h. square feet    | i. square feet | j. square feet |

23.  Restoration/Enhancement \*: *invasive plant removal in BVW i. Riverfront*
- |                       |                              |  |
|-----------------------|------------------------------|--|
| <u>~14,000</u>        |                              | <u>~242,000 (100' inner riparian)</u>          |
| a. square feet of BVW | b. square feet of salt marsh | c. square feet of other wetland resource areas |

24.  Stream Crossing(s):
- |                                   |   |
|-----------------------------------|---|
| a. number of new stream crossings | b. number of replacement stream crossings |
|-----------------------------------|---|



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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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MassDEP File #

West Newbury

City/Town

### C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Restoration Order of
2. The Restoration Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Restoration Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Restoration Order unless either of the following apply:
  - a. the work is a maintenance dredging project as provided for in the Act; or
  - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Restoration Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Restoration Order.
5. This Restoration Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Restoration Order.
6. If this Restoration Order constitutes an Amended Restoration Order of Conditions, this Amended Restoration Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Restoration Order will expire on \_\_\_\_\_ unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Restoration Order is not final until all administrative appeal periods from this Restoration Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Restoration Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Restoration Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Restoration Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Restoration Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.



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Bureau of Resource Protection - Wetlands

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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078-767  
MassDEP File #

West Newbury  
City/Town

### C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,
 

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]  
"File Number            78-767 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Restoration Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Restoration Order at reasonable hours to evaluate compliance with the conditions stated in this Restoration Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Restoration Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Restoration Order and to any contractor or other person performing work conditioned by this Restoration Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Restoration Order.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

## WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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078-767

MassDEP File #

West Newbury

City/Town

### C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

#### General Conditions for all Ecological Restoration Projects

19. The project shall be conducted in accordance with any preliminary written determination obtained from the Natural Heritage and Endangered Species Program as set forth in 310 CMR 10.11(2) and any time of year restrictions or other conditions recommended in writing by the Division of Marine Fisheries (for projects in coastal Resource Areas) and the Division of Fisheries and Wildlife (for projects in inland Resource Areas) as set forth in 310 CMR 10.11(3), (4) and (5).
20. The applicant shall implement the plan submitted with the Notice of Intent as approved by the Issuing Authority to prevent and control invasive species.
21. If the project involves the dredging of 100 cubic yards or more in a Resource Area or dredging of any amount in an Outstanding Resource Water, the dredging and Dredged Material management shall be performed in accordance with the Water Quality Certification submitted with the Notice of Intent.
22. If the project involves infrastructure, the owner shall operate and maintain the infrastructure in accordance with the operation and maintenance plan submitted with the Notice of Intent as approved by the Issuing Authority. Implementation of the operation and maintenance plan as approved by the Issuing Authority shall be a continuing condition that shall be set forth in the Certificate of Compliance.
23. The work associated with this Order (the "Project")
  - (1)  is subject to the Massachusetts Stormwater Standards
  - (2)  is NOT subject to the Massachusetts Stormwater Standards

**If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:**

a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:

*i.* all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;

*- No construction  
- No Drainage Pattern Changes  
- No Soil Disturbance*





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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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078-767

MassDEP File #

West Newbury

City/Town

### C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
  - iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;
  - iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;
  - v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.
- c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:
- i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and
  - ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.
- d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.
- e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Restoration Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

## WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

078-767

MassDEP File #

West Newbury

City/Town

### C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.
- g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
  2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
  3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Restoration Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.



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Bureau of Resource Protection - Wetlands

## WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

078-767

MassDEP File #

West Newbury

City/Town

### D. Special Conditions for Ecological Restoration Projects

\* See attached 3 pages of special conditions \*

**Dam Removal**

This project involves dam removal and the following special conditions shall apply in addition to the general conditions set forth in 310 CMR 10.14(1):

- a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plan and construction specifications approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the dam removal.
- b) The applicant shall monitor the dam removal site during the first two years following completion of the dam removal. Said monitoring shall include a topographic survey of the longitudinal profile and stream cross-sections from downstream of the former dam through the upstream end of the former impoundment. The survey reference point shall comprise a permanent marker or recoverable survey point with known coordinates, such as a fixed point shown on the as-built plan, an existing bench mark, or a new benchmark. That marker should be identified or referenced on the plans and on the as-built plans. The applicant shall establish at least two photo-points for pre- and post-restoration monitoring at the dam removal site. At least one photo-point location shall be chosen to document a view of the dam pre-restoration and to document the same site after the dam is removed. A second location shall be chosen to document a view of the impoundment pre- and post-restoration. Photos shall be taken for two years after the dam removal is completed.
- c) The applicant shall submit a report detailing the results of this monitoring within six months of the completion of the two year post-construction monitoring period, or within 30 months after the dam removal is complete whichever is sooner. The report shall include a comparison of post-restoration survey data with pre-restoration survey data as illustrated by the photos taken during the monitoring period.

**Freshwater Stream Crossing Repair and Replacement Projects**

The project involves one or more freshwater crossing repair or replacement and the following special conditions in addition to the general conditions apply:

- a) An as-built plan and/or a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plans and construction specifications approved in the Restoration Order of Conditions shall be completed within 90 days of completion of construction. The as-built plan shall include the dimensions of the structure, the invert elevation of the upstream and downstream ends of the structure and the road or other surface elevation above the structure.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands  
**WPA Form 5A – Restoration Order of  
Conditions**

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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MassDEP File #

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City/Town

**D. Special Conditions for Ecological Restoration Projects (cont.)**

- b) The applicant shall monitor the site by collecting sufficient data within 12 months after construction is complete to evaluate the effect of the structure. At a minimum, when a Certificate of Compliance is requested, the applicant shall provide post-construction photo-points that capture longitudinal views of the crossing inlet, the crossing outlet and the upstream and downstream channel beds during low flow conditions. The photo-points shall be located at the same geographic photo-point latitude and longitude coordinates as required in the Notice of Intent per 310 CMR 10.12(1)(n). The applicant shall submit a report to the Issuing Authority detailing the results of this monitoring within 18 months after construction is complete. The report shall include a comparison of the post-restoration data with pre-restoration data.

**Stream Daylighting**

The project involves stream daylighting and the following special conditions in addition to the general conditions apply:

- a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plan and construction specifications approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the project. At a minimum, when a Certificate of Compliance is requested, the applicant shall provide post-construction photo-points that capture longitudinal views of the upstream and downstream channel beds of the daylighted reach during low flow conditions.
- b) The applicant shall conduct photo-point monitoring by establishing at least three photo-points for pre- and post-restoration monitoring at the stream daylighting site. One photo-point location shall be chosen to document the upstream end of the site and one photo-point location shall be chosen to document the downstream end of the site. A third photo-point shall be chosen to document conditions in the restored channel. Photos shall be taken during high flow and low (summer) flow of each year during the two years following completion of the project.
- c) Within 30 months after the completion of the project, the applicant shall submit a report describing the ecological changes observed at the project site during the two years following completion of the project, as illustrated by the photos.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

## WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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MassDEP File #

West Newbury  
City/Town

### D. Special Conditions for Ecological Restoration Projects (cont.)

**Tidal Restoration Projects**

The project involves restoration of tidal influence and the following special conditions in addition to the general conditions apply:

- a) If the project is a culvert or bridge replacement or repair project, an as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plans and construction specifications approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of construction. The as-built plan shall include the dimensions of the structure, the invert elevation of the upstream and downstream ends of the structure and the road or other surface elevation above the structure.
- b) The applicant shall monitor pre- and post-construction tidal conditions upstream and downstream of the tidal restriction with water level readings measured at an interval no greater than every 10 minutes over a minimum of a one-week period that includes a spring tide. Pre- and post-construction water level readings shall be taken at approximately the same locations and shall be referenced to the same vertical elevation datum. The applicant shall prepare a report detailing the results of this monitoring within 12 months after construction is complete. The report shall include and compare pre- and post-construction tidal elevation monitoring data to assess attainment of the project's predicted post-restoration tidal conditions.

**Rare Species Habitat Restoration**

The project is a Rare Species Habitat Restoration Project and in addition to the general conditions the following special conditions apply:

- a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plan, construction specifications, and the Habitat Management Plan submitted with the Notice of Intent as approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the project.
- b) The applicant shall establish at least two photo-points for pre- and post-restoration monitoring at the project site. Photos shall be taken for two years after construction is complete. Within 30 months of completion of the project, the applicant shall submit to the Issuing Authority a report describing the ecological changes observed at the project site as illustrated by the photos.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands  
**WPA Form 5A – Restoration Order of  
Conditions**

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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West Newbury  
City/Town

**D. Special Conditions for Ecological Restoration Projects (cont.)**

**Fish Passageway Restoration**

The project involves the repair or replacement of a fish passageway and in addition to the general conditions the following special conditions:

- a) The property owner is responsible for maintaining and repairing the fishway in good condition so that it will support safe and efficient fish passage in accordance with an operation and maintenance plan approved by the Division of Marine Fisheries. This requirement is a continuing condition that shall be set forth in the Certificate of Compliance.
- b) a post-construction project summary using surveys, a narrative and photographs as needed, that confirm the fishway slope and entrance and exit elevations shall be submitted to and approved by the Division of Marine Fisheries, prior to submittal of a request for a Certificate of Compliance.

**SPECIAL CONDITIONS**

**DEP #78-0767**

**Invasive plant management at Cherry Hill, Indian Hill Street/Middle Street Field,  
and Riverbend & Tupelo Trails**

**GENERAL CONDITIONS**

1. All work shall conform to the following: Aerial Maps: "Cherry Hill Conservation Land" dated 8/14/2023, "Field at corner of Middle St and Indian Hill St" dated 8/15/2023, and "Riverbend and Tupelo Trails" dated 8/15/2023; NHESP exemption letter dated 8/3/2023 for NHESP File No.: 23-8414, and "Ecological Land Management Invasives Plant Control Proposal" dated 05/31/2023, all recorded herewith.
2. All federal, state, and local laws and regulations for controlling pollution of the environment shall be complied with when any work is done under this Order. All necessary precautions to prevent pollution of streams, wetlands, and ponds with fuels, oils, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter shall be taken when doing any work under this Order.
3. Any work done under this order shall only be done by those properly licensed, certified, and insured to work on Town owned lands.
4. The storage or disposal of fuels, oils, chemicals, or other harmful materials on any project sites or neighboring property is strictly prohibited.
5. All invasive plant management shall adhere to all best management practices (BMPs) and shall be done in a manner as to prevent damage to the site(s) and avoid damaging plant species not being managed as part of this Order and the Notice of Intent filing.
6. A weekly written record (log) shall be provided to the WNCC of all work done, including herbicide applications, with dates and times of application, names of applicators, weather conditions, volumes & concentrations of herbicide solutions used, volume of invasive plant material removed, method of invasive plant material disposal, data collected, observations, and locations treated.
7. The WNCC shall review all reports provided by the contractor and may provide additional guidance to ensure the work continues to be completed with the goals of the project in mind in accordance with this Order and any other issued permits.

**PRIOR TO WORK START**

8. Prior to the start of work and prior to the pre-work site meeting(s) the limit of work / limit of treatment area will be flagged by the town. These areas will be reviewed at the pre-work site visit(s) and treatment shall not expand beyond the limit of the flagged area(s) unless agreed upon by the Town, WNCC, and any person(s), entity/ies, contractor(s), and/or subcontractor(s) performing work under this Order.

9. A pre-work site meeting shall be attended by the Conservation Agent and any person(s), entity/ies, contractor(s), and/or subcontractor(s) performing work under this Order to review the sites prior to commencement of any work under this Order. The purpose of these meeting(s) will be to review the site(s), answer any questions, and ensure understanding of the proposed work by all parties.

## **HERBICIDES**

10. Only individuals appropriately licensed and certified by the Massachusetts Department of Agricultural Resources (MDAR) will be allowed to apply herbicides. Proof of licensure is required to be submitted to the WNCC prior to the start of any work.
11. Herbicide applications must comply with all applicable local, state, and federal regulations and label requirements. The WNCC must review all herbicides and surfactants prior to their application.
12. Herbicides will not be applied during the following adverse weather conditions:
  - a) High wind velocities greater than 10 mph (for foliar applications).
  - b) Periods of dense fog or moderate to heavy rainfall (for foliar applications).
  - c) Periods of high temperatures and low humidity, per label specifications (for foliar applications).
  - d) When rain is forecast within the four (4) hour period after any scheduled application.
13. When applying herbicides, all labeled restrictions shall be followed. All plant control treatments will be done following all applicable federal and state laws and regulations and adhere to any Conditions, restrictions, or limitations of this Order and any other issued Permits.
14. To prevent overtreatment with herbicide and to aid in any monitoring, when applying herbicides to cut stumps, dye shall be used to indicate that the stump has been treated.
15. The WNCC shall be provided with copies of any forms/reports filed regarding herbicide applications covered under this contract.
16. Signs shall be posted no more than 50 ft. apart warning the public when herbicides are used within 25 ft. of a trail or roadway. Signs shall remain posted until any danger of exposure for the public is past, and then removed.
17. In areas of phragmites treatment that are not within 25 ft. of a trail or roadway, signs shall be posted no more than 50 ft. apart along the perimeter of the treated area warning the public when herbicides are used. Signs shall remain posted until any danger of exposure for the public is past, and then removed.



**WOODY INVASIVE PLANT MANAGEMENT**

18. No pulling of invasives or removal of roots shall be done as treatment of woody invasives. Woody invasives shall only be treated by cutting the plant and treating the stump by painting the cut stump with an approved herbicide.
19. Materials from cutting the woody invasives may be left in place where they are cut however, material shall not be disposed of in any wetland, in any river or stream, or on any bank and shall not block any trail.

**POST WORK**

20. At the completion of work at each site, a post-work site meeting shall be attended by the Conservation Agent and the person(s), entity/ies, contractor(s), and/or subcontractor(s) who performed the work under this Order to review the site(s).
21. The areas treated for phragmites shall be reviewed by the WNCC at the beginning of the spring growing season immediately following treatment. If the area(s) do not show signs of natural revegetation, the area(s) shall be seeded with an appropriate native seed mix as approved by the WNCC prior to application.

Cherry Hill Conservation Land



**KEY:**

Property lines of town owned parcels

Approximate extent of BVW on town land (based on field observation and GIS review)

Approximate extent of phragmites population to be managed. The phragmites in this area is a dense population.

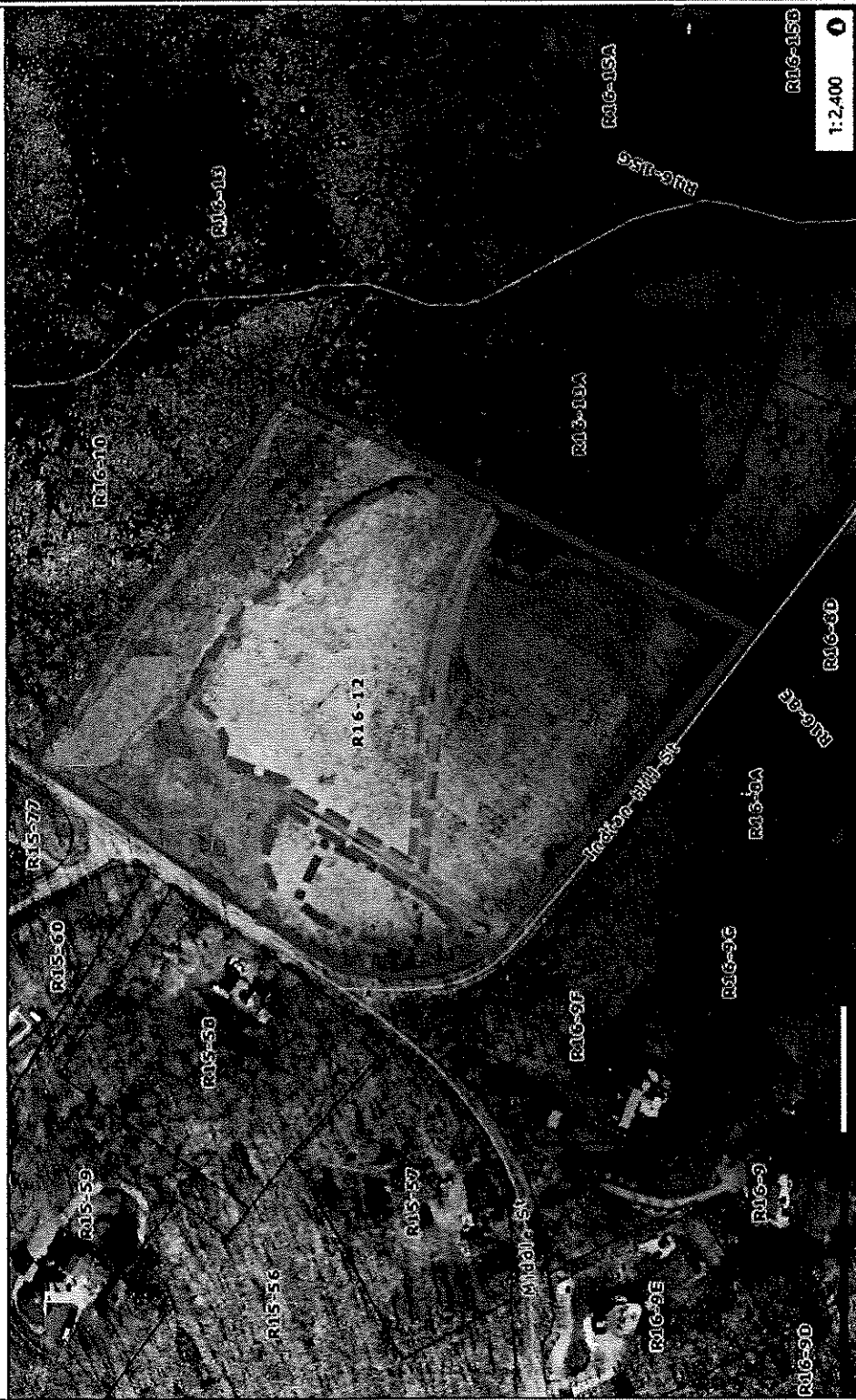
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© Massachusetts State Planning Commission

# Field at corner of Middle St and Indian Hill St

8/15/2023



1:2,400



MPPC Boundary  
 Town  
 Precinct  
 Comments  
 Abundant Streams  
 Interstate  
 Major Road  
 Local Road

This map is for informational purposes only. It is not intended to be used for any legal or financial purposes. The Town of Merrimack Valley Planning Commission is not responsible for any errors or omissions in this map. The user assumes all responsibility for the use of this map.

## KEY:

- Property lines of town owned parcels
- Approximate extent of BVW on town land (based on field observation and GIS review)
- Approximate extent of phragmites population to be managed. The phragmites population here is sparse growing in ruts that hold water created through years of agricultural use.

Riverbend and Tupelo Trails



**KEY:**

Approximate extent of BWV on town land (based on field observation and GIS review)

Area of woody invasive plant management. The management area is limited to within 5-10' of the town's Riverbend and Tupelo Trails

- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Natural Communities

Scale: 1:2,400  
 Date: 10/15/2023  
 Project: Riverbend and Tupelo Trails  
 Prepared by: [Name]  
 Checked by: [Name]  
 Approved by: [Name]



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MASSWILDLIFE

# DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581  
p: (508) 389-6300 | f: (508) 389-7890  
MASS.GOV/MASSWILDLIFE

August 03, 2023

Town of West Newbury  
381 Main Street  
West Newbury, Massachusetts 01985

W. Newbury Conservation Commission  
381 Main St  
West Newbury, MA 01985

RE: Applicant: Town of West Newbury  
Project Location: Cherry Hill Conservation Land, Riverbend and Tupelo Trail, Middle Street/Indian Hill Street Field  
Project Description: Invasive plant control  
DEP Wetlands File No.: -  
NHESP File No.: 23-8414

Dear Commissioners and Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent and a project narrative for Invasive Plant Control in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.58(4)(b), 10.59). The Project proposes to manage Invasive species using manual, mechanical and chemical means at multiple properties in West Newbury.

The Division has determined that this Project, as currently proposed, will occur within the actual habitat of the following species:

<u>Scientific Name</u>	<u>Common Name</u>	<u>Taxonomic Group</u>	<u>State Status</u>
<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	Fish	Endangered
<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	Fish	Endangered
<i>Bidens eatonii</i>	Eaton's Beggar-ticks	Plant	Endangered
<i>Erlocaulon parkeri</i>	Parker's Pipewort	Plant	Endangered
<i>Floridobia winkleyi</i>	New England Siltsnail	Snail	Special Concern
<i>Sagittaria montevidensis ssp.</i>	Estuary Arrowhead	Plant	Endangered

MASSWILDLIFE

*spongiosa*

State-listed species and their habitats are protected in accordance with the MESA and state-listed rare wetland wildlife habitat is protected pursuant to the rare wildlife provisions of the WPA. In addition, the two fishes are also listed as Endangered pursuant to the federal Endangered Species Act of 1973 and its implementing regulations (16 USCA§§1531-1544, 50 CFR§17 & 402) administered by the United States Fish and Wildlife Service.

**Wetlands Protection Act (WPA)**

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of rare wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

**Massachusetts Endangered Species Act (MESA)**

The MESA is administered by the Division, and prohibits the Take of state-listed species. The Take of state-listed species is defined as "In reference to animals...harm...kill...disrupt the nesting, breeding, feeding or migratory activity...and in reference to plants...collect, pick, kill, transplant, cut or process...Disruption of nesting, breeding, feeding, or migratory activity may result from, but is not limited to, the modification, degradation, or destruction of Habitat" of state-listed species (321 CMR 10.02).

The Division approves the Invasive Plant Control Plan provided that the attached conditions are met. Therefore, the proposed activities are exempt from MESA review pursuant to 321 CMR 10.14 which states: "[t]he following Projects and Activities shall be exempt from the requirements of 321 CMR 10.18 through 10.23...".

(15) The active management of State-listed Species habitat, including but not limited to mowing, cutting, burning, or pruning of vegetation, or removing exotic or invasive species, for the purpose of maintaining or enhancing the habitat for the benefit of rare species, provided that the management is carried out in accordance with a habitat management plan approved in writing by the Division"

Any changes to the proposed activities or any additional work beyond that described in the approved management plan may require a filing with the Division pursuant to MESA.

This approval is valid for five (5) years from the date of issuance. If you have any questions about this letter, please contact Alexandra Echandi at [alexandra.echandi@mass.gov](mailto:alexandra.echandi@mass.gov) or 617-903-7977.

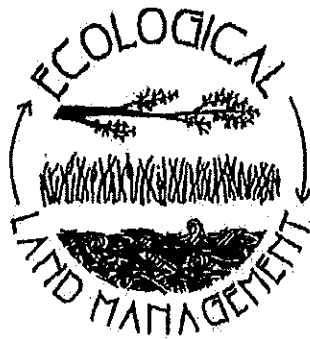
Sincerely,

A handwritten signature in black ink, appearing to read "Everose Schlüter". The signature is written in a cursive style with a large initial 'E'.

Everose Schlüter, Ph.D.  
Assistant Director

cc:

Attachment: List of Conditions



# Invasive Plant Control Proposal

for

Town of West Newbury  
RFP #2023-WN-005

Brian P. Collieran, MSo., Principal  
[www.ecologicalandmanagement.com](http://www.ecologicalandmanagement.com)  
293 High Road, Newbury, MA 01951  
978.558.1423





Michelle Greene, Conservation Agent  
381 Main Street  
West Newbury, MA  
01985

5/31/2023

RE: RFP #2023-WN-005

Chair Mizner, Members of the Conservation Commission, & Conservation Agent Greene,

Thank you for the opportunity to offer a Proposal in response to the request for proposal, RFP #2023-WN-005, for Professional Invasive Plant Management. We – Ecological Land Management, LLC (prime contractor), Matthew Verson Vegetation Management (subcontractor) and Native Arboriculture (subcontractor) – believe that we are presenting the town with a course of work that effectively utilizes all of the available funding, establishes an ecologically meaningful stepping stone for future work to build upon, and takes advantage of scientific knowledge to calendar the work to maximize success. Our three firms are all purpose driven, putting our knowledge and skills to their best use by offering them to those who, like the Town of West Newbury, have a challenge that requires a very specific combination of experience and education. We believe that combining our separate specialties provides a service that is greater than the sum of its parts. We look forward to hearing your response to our proposal.

Thank you,



Brian Collier, MS, CERP, PWS  
Principal  
Ecological Land Management, LLC  
(978) 358-1423

978.358.1423  
brian@ecologicalandmanagement.com



293 High Road, Newbury, MA 01951  
www.ecologicalandmanagement.com

### Key Personnel:

**Brian Collieran** is a Professional Wetland Scientist (PWS #2980) and Certified Ecological Restoration Practitioner (CERP #0173), possesses both the basic and advanced Field Botany certificates awarded by the Native Plant Trust (NPT) and is currently one of NPT's educators, is a graduate of the Massachusetts Association of Conservation Commission's (MACC) Fundamentals program, has been trained as an A level sawyer by the U.S. Forest Service, passed herbicide applicator tests in three states (MA. Pest. App. Lic. #AL-0053318), and has been a Conservation Commission Chair and Agent here in the Commonwealth. He has a long history in fluvial, riparian, and wetland projects; invasive species control work, and the regulation and management of natural areas. He has overseen a 100,000 dollar revegetation project along California's San Joaquin River; conducted controlled burns and fen restoration in Michigan, fuels management and reforestation in Nevada's High Sierra, and psychologically based desert restoration in Arizona; and led statewide efforts to control the spread of Itadori knotweed in the wake of Tropical Storm Irene in Vermont. His most recent project of similar scope and scale to what is proposed in RFP #2023-WN-005 was conducted at the Town of Lexington's Daisy Wilson Meadow, which began in 2021 and was completed in 2022. He recently completed service on a master's project committee for a University of New Hampshire master's students investigating the linkages between Itadori knotweed and erosion. This project was prompted by one of his four peer reviewed publications focused on Itadori knotweed: *Collieran B, Lutz S, Retamal MR (2020). Invasive Japanese knotweed (Reynoutria japonica Houtt.) and related knotweeds as catalysts for streambank erosion. River Research & Applications 36(9):1962-1969.* He is the Founder of, and Principal with, Ecological Land Management, LLC.

"*The machine enslaves, the hand sets free*" ~ Thomas Ayer has been in the green industry for over 10 years. Born and raised on the North Shore, he has done multiple large scale invasive plant management projects in the woods of Essex, Gloucester, and Rockport. From residential gardening he transitioned into arboriculture, where he developed his skill for identifying native and non native invasive species, and found his true passion for working in the woods. As his industry has been overtaken by larger equipment and high-tech machinery, he insists on staying low tech to maintain the human touch, preferring the use of hand tools to ensure his work is done carefully. When necessary, Thomas prefers to use equipment such as electric chainsaws, trimmers, and blowers to help reduce emissions, noise, and fatigue to ourselves, our customers, and the public. He encourages his customers to keep or spread any wood chips made to decompose naturally on site. The organic material can enrich soil while also removing the need to utilize less sustainable methods of waste disposal which create unnecessary emissions. He is the owner/operator of Native Arboriculture, in partnership with his wife Julia, who brings her own complementary suite of skills to any job they undertake.

"*I Wish You'd Called Me 5 Years Ago*" ~ Matt (MA. Pest. App. Lic. # AL-0049264) started Matthew Verson Vegetation Management (MVVM) in 2019 as the culmination of 20 years working in agriculture, horticulture, academia, and vegetation management. With several graduate degrees and certificates in Soils, Invasive Plant Control, Law, and Agroecology, Matt knows that most of New England's open spaces require active stewardship to bring about optimum wildlife function. Creating and Implementing a Vegetation Management Plan is a critical first step. As a licensed and insured pesticide applicator with the highest regard for native plants, MVVM is equipped to apply "subtractive landscape editing" for towns, farms, land trusts, HOA's, or private citizens seeking to steward their acreage. Matt has done invasive plant control for the towns of Northampton and Williamsburg, and has also worked to obtain WM04 permits and NOI approvals for private clients in the towns of Hadley and Monterey. Matt loves to hike, fish, botanize, and ski around New England with his children and wife.

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Garrett S Sanders (MA. Pest. App. Lic. # AL-0054959) is an employee of MVVM, and has been working closely with Matt in horticulture for 5 years. After taking his pesticide applicators exam and also the Certificate in Invasive Plant Management offered by UMass Extension, Garrett has been a licensed applicator for one year. When Garrett is not studying native plants or killing invasive ones, he is fueling his interests in Raku (wood fired pottery), or trying to be a better fly fisherman than Matt.

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Outline of Proposed Services in response to  
RFP #2023-WN-005:

This goal of the proposed work is to:

- Control phragmites populations at the Cherry & Indian Hill properties
- Establish the Riverbend Trail as demonstration area for invasive plant control, in a high visibility area, to help the Town build support for future land management efforts
- To prevent the loss of the Riverbend Trail due to encroachment by invasive flora, by controlling invasive flora between the trail and a rock wall running parallel with the trail, which appears to be ~10 – 15 feet from the trail, in most locations.
- To create a healthy buffer zone along the Merrimac River for fauna utilizing the rare wetland type as well as more upland habitats & reduce the negative impacts of an impaired buffer zone on a rare wetland type and its associated flora
- To expand grassland connectivity at Indian Hill

We are proposing that services outlined would require the appropriation of all available funds, and that Mr. Colleran be the primary point of contact for the Town / Prime Contractor. Mr. Verson & Mr. Sanders shall be primarily responsible for the herbicide work ("spray team"), while Mr. Colleran and Mr. Ayer will be primarily responsible for the other work ("cut/paint/chip"). Mr. Colleran will aid Mr. Verson with herbicide efforts if and when needed. Matthew Verson Vegetation Management & Native Arboriculture shall be considered as sub-contractors.

Scope of Services:

Cherry Hill & Indian Hill

*Phragmites, Estimated Work Time - 6 Hours:*

The stand of phragmites at the Cherry Hill property is estimated to be no closer than 470 feet to the Indian Hill Reservoir. This distance was determined by approximating the distance from the reservoir using the signs, trees, and fence posts along Moulton Street during a site visit, and using Massmapper to measure the distance of these landmarks to the Indian Hill Reservoir. Therefore, spraying this population, using a water safe glyphosate formulation (Roundup Custom; EPA Reg. No. 524-343) along with an aquatic approved surfactant and marker dye, will meet the regulatory thresholds set in 333 CMR 11.04, to not apply herbicides within 400 feet of a Class B drinking water uptake. Even so, all efforts will be taken to minimize the amount of herbicide utilized.

The population at the Indian Hill site is more dispersed, and with a less well-defined boundary. Even so, it is a relatively small population that can be meaningfully treated. Roundup Custom will also be used here, as this field has a series of wet ditches crisscrossing the property. Taken together, these stands appear to be manageable by Mr. Verson and Sanders in slightly more than a half day in the early autumn of 2023 by spraying after flower formation.

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### River Road Trail:

*Woody Invasives, Estimated Work Time – 32 hours cut/paint/chip & 22 hours herbicide application:*

#### Breakdown of Estimated Work According to Trail Landmarks:

##### *East of Bridge:*

Between the eastern parking area and the bridge over the Indian River the density of invasive plants is significant though not severe. We propose that Mr. Ayer, Mr. Collieran, and an assistant spend a day cutting and dabbing larger invasive specimens with small volumes of aquatic approved herbicide (Roundup Custom; EPA Reg. No. 524-343). Smaller plants will be left behind for later spraying with a dilute concentration, to take place after most native species are dormant. The goal of this spray timing would be to cut down on risks to native species, and increase the effectiveness of herbicide being translocated throughout the root system of the invasives.

- o 8 hour cut/paint/chip team
- o 6 hour day spray team

##### *Tupelo Trail Area:*

On both the north and south side of the trail, this area is the least infested. A handful of larger shrubs will require a cut stump treatment. The time estimate for this section is being rolled into the "West of Indian River Trail" time estimate, though the work may end up being completed at the same time as the work to the west of the bridge.

##### *High Tide Flood Area:*

A small patch of Itadori knotweed is present here. Mr. Collieran would inject these plants as circumstances allow, or spray them. This work would be done in both September/October of 2023, and May of 2024. If injected, the same Roundup Custom used elsewhere for this project will be utilized at full strength, rather than diluted. Regarding woody invasives, the time estimate for this section is being rolled into the "West of Indian River Trail" time estimate, though the work may end up being completed at the same time as the work to the west of the bridge.

##### *West of Indian River Trail:*

Between the high tide flood area and the Indian river trail, the infestation along the southern edge of the trail becomes extreme. Managing the space between the trail and the rock wall would be done with herbicide, by Mr. Verson's team. The goal would not be to completely eliminate invasive plants from this area (the seedbank is too full of invasive plants to realistically allow for such a goal), but rather to preserve the



openness of the trail and allow room for native shrubs such as Nannyberry and Sweet Pepperbush to be more successful. In the same area, between the trail and the river, invasive plants would be sprayed, excepting those large enough to require a cut stump treatment.

- o 8 hour cut/paint/chip team, and including the same work in the high tide flood area and Tupelo trail area
- o 6 hour spray team

#### *Between Indian River Trail and Riverbend Trail*

Between the two trails that lead away to the south, it is difficult to identify native plants in the understory. Managing the space between the trail and the rock wall would be done by Mr. Verson's team. The goal would not be to eliminate invasive plants from this area, but rather to preserve the openness of the trail. In the same area, between the trail and the river, invasive plants would be sprayed, excepting those large enough to require a cut stump treatment. This segment of the trail may consume the most time of any section as it contains many mature bittersweet vines. Bittersweet vines, once cut, will be left in the trees to decompose naturally.

- o 8 hour cut/paint/chip team
- o 6 hour spray team

#### *East of Riverbend Trail*

Managing the space between the trail and the rock wall would be done by Mr. Verson's team. The goal would not be to eliminate invasive plants from this area, but rather to preserve the openness of the trail. In the same area, between the trail and the river, invasive plants would be sprayed, excepting those large enough to require a cut stump treatment, and bittersweet vines.

- o 8 hour cut/paint/chip team
- o 6 hour spray team

#### **Options for the Commission:**

During the site walk, there was much discussion of whether or not to chip larger plants that are cut down in the course of a cut stump treatment regime. Our professional opinion is that there is little ecological difference between chipping or not. The area has a very large seed bank of invasive plants, so removal of this year's seeds from the premises will not have an ecological impact, nor would spreading invasive plant chips into the existing seedbank. Our proposal, however, is based on on-site chipping, and spreading the chip into the woods, for primarily aesthetic reasons.

We expect the Commission to have thoughts on the matter of what to do with cut trees, and we feel that this particular detail is plastic enough to accommodate alternative considerations. A primary point we expect to be broached is that the work of chipping will take up a significant amount of time that might be put to ecological rather than aesthetic uses. Should the Commission choose to pursue a more ecologically



oriented use of our services, we suggest that cut trees be allowed to remain where they fall. These fallen trees can be left to create ecological complexity in the understory, or perhaps removed by town staff, interns, or volunteers at a later date. It would also free up ~8 hours, or possibly more, for work that could be conducted elsewhere.

Alternatively, chips can be transported off site. However, depending on the time of year, taking any chipped seeds offsite does create potential for introducing seeds to new areas. In our professional opinions, we do not support this option primarily because it takes time away from the goal of managing the invasive flora.

Should the Commission decide against chipping, freeing the estimated 8 hours to be used elsewhere, we are proposing that a section of the Indian Hill property be treated with a cut stump methodology. This alternative work would be centered in the southern portion of the property, at the boundary of the R16-12 & R16-13A, as labeled in the RFP. It is here that the woodlands separating two grassy areas is thinnest, and where an ecologically meaningful connection could be made between these two habitats. Grasslands throughout the northeast are commonly broken up into smaller and smaller sections, and the opportunity to enlarge and connect these two would result in an ecologically meaningful result. As mentioned in ADDENDUM #1 to the RFP, the Town of West Newbury has begun utilizing controlled burns. Opening up this section of woodlands would create new opportunities for management using fire that were not previously available on this property.

#### Timeline:

**Woody Invasive Trees:** The cut/paint/chip, or cut/paint work, could take place at one of two timeframes, within, or outside of the growing season. We are proposing to do this work as early as possible in 2023. This will remove the larger trees which might act as an impediment to spraying. This is especially preferred if the Commission chooses not to chip downed invasive trees. Should the Commission choose to have us chip the trees, then winter cut/paint work would be preferable, as trees being taken out of the understory would be less likely to get caught up in other vegetation, which would slow the work significantly. Should this work be conducted outside of the growing season, some alterations to the chosen herbicide may be made, such as using a different aquatic approved herbicide for cut and paint work on bittersweet vines: Trycera (EPA Reg. No. 5905-580).

**Woody Invasive Shrubs:** Plants that are about the height of an herbicide applicator, or smaller, will be sprayed as late in the growing season as possible. Rather than stating the reasons for this, below please find an excerpt from the peer reviewed work - *Biol Invasions (2020) 22:3325-3337. Citizen scientist record novel leaf phenology of invasive shrubs in eastern U.S. forests. Maynard-Bean, Elynn et al.*

*"Similarly, leaf off has been found to range from 2 to 6 weeks later for invasive shrubs (Harrington et al. 1989; Fridley 20212; O'Connell and Savage 2020)... Invasive shrubs can maintain leaves 77 days longer in a growing season, on average using 22% more days of the year than natives at the lowest latitudes studied (e.g. northern Tennessee and North Carolina). The difference decreased linearly to about 30 days at the highest latitude (e.g. southern Maine, mid-Minnesota)... While at the highest latitudes two-thirds of the difference between native and invasive growing seasons occurs in the fall."*

Treating invasive shrubs with herbicide will therefore be done late in the growing season, after native shrubs have begun to lose their leaves. This will reduce the risk of spraying to other native shrubs.



A late/spring early summer of 2024 follow up spray of new plants, and individuals that may not have been fully impacted by the 2023 spray will also be conducted, to improve overall results. It is expected that this could be accomplished in 4-6 hours.

**Proposed Calendar for West Newbury Invasive Plant Control:**

2023

July	Initiate Contract, initiate cut & paint work
August	continue cut & paint work
September (late)	Weather & phenology dependent 1st herbicide treatment of shrubs & knotweed
October (early)	Weather & phenology dependent 1st herbicide treatment of shrubs & knotweed
November	No Activities
December	No Activities

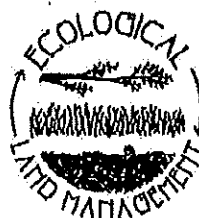
2024

January	No Activities
February	No Activities
March	No Activities
April	No Activities
May	No Activities
June	final herbicide treatment of newly grown plants, 2nd knotweed herbicide treatment /end of Contract
July	End of Contract

**Expectations:**

There is almost never a scenario where one intense treatment will rid an area of invasive vegetation. The most that can be guaranteed is 80% kill in year 1, and that is an optimistic scenario for some of the worst areas of the Riverbend Trail. In the second year, the progress made by 2023's work can be protected somewhat. However, future funding, labor, and likely both will be necessary to ensure that gains made by this work are not lost to the significant growth that we expect to see released from the on-site seedbank. Unless this work is actively continued, it is expected that invasive flora will quickly regain the locations they were eliminated from.

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[www.eecologicallandmanagement.com](http://www.eecologicallandmanagement.com)



**Additional Terms:**

- 1) The Town shall demarcate the southern extent of the work area south of the Riverbend Trail, generally utilizing the rock wall as a demarcation.
- 2) The Town shall be responsible for public outreach regarding when the herbicide work will be conducted, and if/when to limit public usage. Mr. Colletan will establish and communicate final work dates to all parties.
- 3) The Town will make the Riverbend Trail accessible to vehicles, for the purpose of bringing a truck towed chipper down the pathway, should invasive plants be chipped on site.
- 4) Signage: The Town of West Newbury shall allow the Prime & Sub Contractors to place a small sign at the work site with the Contractor's business name and contact information, for the duration of this contract.
- 5) Imagery: The Town of West Newbury shall allow the Prime & Sub Contractors and its assigns, licensees, and sublicensees, permission to use imagery obtained on the Town's property in any and all forms of media for commercial purposes, advertising, trade, personal use, or any and all other uses. Therefore, Contractors may use these images for presentations, on their websites, as well as associated social media accounts.

978.358.1423  
brianeecologicallandmanagement.com



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www.ecologicallandmanagement.com



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

# WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
078-767  
MassDEP File #

West Newbury  
City/Town

## E. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable?  Yes  No
2. The West Newbury hereby finds (check one that applies):  
Conservation Commission
  - a.  that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:
 

1. Municipal Ordinance or Bylaw	2. Citation
---------------------------------	-------------

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

- b.  that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:  
Fee bylaw only
 

1. Municipal Ordinance or Bylaw	2. Citation
---------------------------------	-------------
3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

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P10. invasive management - Riverbend,  
Cherry Hill,  
Indian / Middle field



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands  
**WPA Form 5<sup>A</sup> - Order of Conditions**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

78-767  
MassDEP File #

eDEP Transaction #

West Newbury  
City/Town

### E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

Please indicate the number of members who will sign this form. This Order must be signed by a majority of the Conservation Commission.

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

9/18/2023  
1. Date of Issuance  
4  
2. Number of Signers

Signature \_\_\_\_\_  
Signature \_\_\_\_\_  
Signature \_\_\_\_\_  
Signature \_\_\_\_\_

David Parrott  
Printed Name  
Margaret Hawkins  
Printed Name  
George Peble  
Printed Name  
John T. Haley Jr  
Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

by hand delivery on  
9/18/2023  
Date

by certified mail, return receipt requested, on  
Date



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

## WPA Form 5A – Restoration Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
078-767  
MassDEP File #

West Newbury  
City/Town

### G. Appeals

The applicant, the owner, any person aggrieved by this Restoration Order, any owner of land abutting the land subject to this Restoration Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Restoration Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Restoration Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Restoration Order of Conditions associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Restoration Order, or providing written information to the Department prior to issuance of a Superseding Restoration Order.

The request shall state clearly and concisely how the project permitted under the Restoration Order which is being appealed does or does not meet the eligibility criteria in 310 CMR 10.13(1) and the relevant provisions of 310 CMR 10.13(2) through (7). To the extent that the Restoration Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



Massachusetts Department of Environmental Protection  
 Bureau of Resource Protection - Wetlands  
**WPA Form 5A – Restoration Order of  
 Conditions**

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
 078-767  
 MassDEP File #

West Newbury  
 City/Town

### H. Recording Information

Prior to commencement of work, this Restoration Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Restoration Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Restoration Order. In the case of registered land, this Restoration Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Restoration Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

West Newbury

Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

West Newbury

Conservation Commission

Please be advised that the Restoration Order of Conditions for the Project at:

Various, professional invasive plant  
 management

078-767

MassDEP File Number

Has been recorded at the Registry of Deeds of:

Essex South

County

Book

Page

For

Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Restoration Order of Conditions issued on:

Date

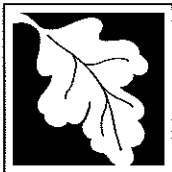
If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

**Request for Departmental Action Fee  
Transmittal Form**

DEP File Number:

38-767  
Provided by DEP

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**A. Request Information**

1. Location of Project

See attachment 1

a. Street Address \_\_\_\_\_ b. City/Town, Zip \_\_\_\_\_

c. Check number \_\_\_\_\_ d. Fee amount \_\_\_\_\_

2. Person or party making request (if appropriate, name the citizen group's representative):

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City/Town \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone Number \_\_\_\_\_ Fax Number (if applicable) \_\_\_\_\_

3. Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City/Town \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone Number \_\_\_\_\_ Fax Number (if applicable) \_\_\_\_\_

4. DEP File Number:

\_\_\_\_\_

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



**B. Instructions**

1. When the Departmental action request is for (check one):

- Superseding Order of Conditions – Fee: \$120.00 (single family house projects) or \$245 (all other projects)
- Superseding Determination of Applicability – Fee: \$120
- Superseding Order of Resource Area Delineation – Fee: \$120



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**Request for Departmental Action Fee**  
**Transmittal Form**

DEP File Number:

\_\_\_\_\_  
 Provided by DEP

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**B. Instructions (cont.)**

Send this form and check or money order, payable to the *Commonwealth of Massachusetts*, to:

Department of Environmental Protection  
 Box 4062  
 Boston, MA 02211

2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.
3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see <http://www.mass.gov/eea/agencies/massdep/about/contacts/>).
4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

## Attachment 1

This project is being done in 3 separate areas in town. The areas are commonly referred to the Cherry Hill Conservation Land, the Riverbend and Tupelo Trail, and the Middle Street / Indian Hill Street Field.

### **A. CHERRY HILL CONSERVATION LAND – 3 SEPARATE PARCELS MAKE UP THE AREA WHERE WORK WILL BE DONE**

#### **1: Project Location: Parcel 1**

- a. Street Address: 1 Cherry Hill Street (R17-6E)
- b. City/Town: West Newbury
- c. Zip Code: 01985
- d. Latitude: 42.78510
- e. Longitude: -70.95645
- f. Assessors Map/Plat Number: R17
- g. Parcel/Lot Number: 6E

#### **3. Property Owner**

- a. First Name: N/A
- b. Last Name: N/A
- c. Organization: Town of West Newbury
- d. Street Address: 381 Main Street
- e. City/Town: West Newbury
- f. State: MA
- g. Zip Code: 01985
- h. Phone Number: (978) 363-1100, ext. 111
- i. Fax: N/A
- j. Email Address: townmanager@wnewbury.org

#### **8: Property Recorded at the Registry of Deeds for:**

- a. County: Essex South
- b. Certificate #: N/A
- c. Book: 19407
- d. Page: 14

200  
Ref. →

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#### **1: Project Location: Parcel 2**

- a. Street Address: 3 Cherry Hill Street (R17-6D)
- b. City/Town: West Newbury
- c. Zip Code: 01985
- d. Latitude: 42.78524
- e. Longitude: -70.95612
- f. Assessors Map/Plat Number: R17
- g. Parcel/Lot Number: 6D

#### **3. Property Owner**

- a. First Name: N/A
- b. Last Name: N/A
- c. Organization: Town of West Newbury
- d. Street Address: 381 Main Street
- e. City/Town: West Newbury
- f. State: MA
- g. Zip Code: 01985



- h. Phone Number: (978) 363-1100, ext. 111
- i. Fax: N/A
- j. Email Address: townmanager@wnewbury.org

**8: Property Recorded at the Registry of Deeds for:**

- a. County: Essex South
- b. Certificate #: N/A
- c. Book: 19407
- d. Page: 14

**1: Project Location: Parcel 3**

- a. Street Address: 6 Moulton Street (R17-6F)
- b. City/Town: West Newbury
- c. Zip Code: 01985
- d. Latitude: 42.78497
- e. Longitude: -70.95575
- f. Assessors Map/Plat Number: R17
- g. Parcel/Lot Number: 6F

**3. Property Owner**

- a. First Name: N/A
- b. Last Name: N/A
- c. Organization: Town of West Newbury
- d. Street Address: 381 Main Street
- e. City/Town: West Newbury
- f. State: MA
- g. Zip Code: 01985
- h. Phone Number: (978) 363-1100, ext. 111
- i. Fax: N/A
- j. Email Address: townmanager@wnewbury.org

**8: Property Recorded at the Registry of Deeds for:**

- a. County: Essex South
- b. Certificate #: N/A
- c. Book: 19407
- d. Page: 16

**B. RIVERBEND – RIVERBEND TRAIL WHICH IS THE RIGHT-OF-WAY ALONG ABANDONED PORTION OF RIVER ROAD AND ALONG THE EDGE OF THE TUPELO TRAIL**

**1: Project Location: Riverbend**

- a. Street Address: Town owned right-of-way along the abandoned portion of River Road
- b. City/Town: West Newbury
- c. Zip Code: 01985
- d. Latitude: 42.81604
- e. Longitude: -70.96239
- f. Assessors Map/Plat Number: N/A
- g. Parcel/Lot Number: N/A

**3. Property Owner**

DOD Ref. →

DOD Ref. →

- a. First Name: N/A
- b. Last Name: N/A
- c. Organization: Town of West Newbury
- d. Street Address: 381 Main Street
- e. City/Town: West Newbury
- f. State: MA
- g. Zip Code: 01985
- h. Phone Number: (978) 363-1100, ext. 111
- i. Fax: N/A
- j. Email Address: townmanager@wnewbury.org

**8: Property Recorded at the Registry of Deeds for:**

- a. County: Essex South
- b. Certificate #: N/A
- c. Book:
- d. Page:

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**1: Project Location: Tupelo Trail**

- a. Street Address: Town of West Newbury
- b. City/Town: West Newbury
- c. Zip Code: 01985
- d. Latitude: 42.81543
- e. Longitude: -70.96213
- f. Assessors Map/Plat Number: R23
- g. Parcel/Lot Number: 23

**3. Property Owner**

- a. First Name: N/A
- b. Last Name: N/A
- c. Organization: Town of West Newbury
- d. Street Address: 381 Main Street
- e. City/Town: West Newbury
- f. State: MA
- g. Zip Code: 01985
- h. Phone Number: (978) 363-1100, ext. 111
- i. Fax: N/A
- j. Email Address: townmanager@wnewbury.org

**8: Property Recorded at the Registry of Deeds for:**

- a. County: Essex South
- b. Certificate #: N/A
- c. Book: 5874
- d. Page: 216

**C. MIDDLE STREET / INDIAN HILL STREET FIELD**

**1: Project Location**

- a. Street Address: 0 Middle Street
- b. City/Town: West Newbury
- c. Zip Code: 01985

200 Ref →

- d. Latitude: 42.793349
- e. Longitude: -70.95695
- f. Assessors Map/Plat Number: R16
- g. Parcel/Lot Number: 12

**3. Property Owner**

- a. First Name: N/A
- b. Last Name: N/A
- c. Organization: Board of Water Commissioners of the Town of West Newbury
- d. Street Address: 381 Main Street
- e. City/Town: West Newbury
- f. State: MA
- g. Zip Code: 01985
- h. Phone Number: (978) 363-1100, ext. 127
- i. Fax: N/A
- j. Email Address: wnwater@wnewbury.org

**8: Property Recorded at the Registry of Deeds for:**

- a. - County: Essex South
- b. - Certificate #: N/A
- c. - Book: 17284
- d. - Page: 420

Red  
Text. →