

THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS



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Commissioner

Arthur Goodhind  
Natick Public Works  
75 West Street  
Natick MA 01760

January 13, 2020

Re: Notice of Approval of VMP pursuant to 333 CMR 11.05(5)(c)

Dear Mr. Goodhind:

Pursuant to 333 CMR 11.05(5)(c), notice is hereby given that the **Vegetation Management Plan (VMP), Town of Natick as modified and recommended for approval by the ROW Advisory Panel has been approved.**

This approval is subject to the Massachusetts Pesticide Control Act, M.G.L. c. 132B, and all provisions of 333 CMR 11.00. It will remain in effect beginning from the date of this approval through December 31, 2023, unless suspended, revoked, or modified prior to this date.

Please be advised that any violations of M.G.L., c.132B or the regulations promulgated thereunder, 333 CMR 1.00 through 14.00, may subject the responsible party or parties to legal action as set forth in M.G.L., c.132B.

Please contact Clayton L. Edwards, ROW Coordinator, with any questions. Thank you.

Sincerely,

John Lebeaux  
Commissioner

# **Town of Natick, MA 2020-2024**

## **VEGETATION MANAGEMENT PLAN**

This Vegetation Management Plan submitted to the Department of Agricultural Resources pursuant to the Rights of Way Management Regulations (333 CMR 11.00), has been reviewed and is recommended for adoption in the named municipality. The undersigned hereby acknowledges to adopt and comply with the conditions of the Vegetation Management Plan. The Vegetation Management Plan will be effective for five years unless sooner modified or revoked by the Department.

**MUNICIPALITY: Town of Natick**

**PLAN TYPE: Vegetation Management Plan VMP**

**PLAN AUTHOR: Arthur Goodhind, Supervisor**

**DEPARTMENT: Department of Public Works**

**ADDRESS: 75 West Street Natick, MA 01760**

**PHONE NUMBER: 508-647-6558**

**FAX: 508-647-6560**

A copy of this document should be kept on file in the municipality offices. Please send the original to the Massachusetts Department of Food and Agriculture with the submitted Vegetation Management Plan. Massachusetts Department of Food and Agriculture, Pesticide Bureau, Rights of Way Program, 251 Causeway Street Suite 500, Boston, Massachusetts 02114-2151.

The Conservation Commission, Board of Health and chief elected official in the community must receive a copy of this signed page and the entire Vegetation Management Plan.

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# **VEGETATION MANAGEMENT PLAN**

## **INTRODUCTION**

The Town of Natick plans to follow an Integrated Vegetation Management (IVM) program to reduce reliance on herbicides. The Town of Natick has never previously developed a Vegetation Management Plan (VMP) and plans to submit this VMP to become compliant with applicable laws. Integrated Vegetation Management for Rights of Way (ROW) maintenance includes multiple techniques to control unwanted vegetation in a manner which considers the sensitivity of the environment and follows best management practices. Natick plans to implement this IVM program for the care and control of 128 miles of public roadway, 140 miles of public sidewalk and three and one half miles of the Cochituate Rail Trail. The implementation of an IVM program will reduce the reliance of herbicides by implementing best management practices to reduce unwanted vegetation and promote a beneficial plant community by cultural control. Herbicide applications will be minimized through application timing to maximize efficacy, avoidance of a fixed application schedule and will be applied in a manner to protect non-target organisms and environmentally sensitive areas.

## **GOALS AND OBJECTIVES**

The VMP is written to establish a five-year plan to control vegetation within and along the boundaries of Rights of Way (ROW) within of Natick Massachusetts in compliance with the Massachusetts Rights of Way Management Regulations (333 CMR 11.00).

Vegetation management along and within the boundaries of ROW is necessary to control unwanted vegetation that deteriorates public ways, creates a public nuisance, or creates a condition that obstructs pedestrian or vehicular travel. The objective of this VMP is to assure that the vegetation management practices performed along and within the boundaries of ROW are conducted in a manner consistent with best management practices to reduce the reliance on herbicides. The objective will be met by the Natick Department of Public Works by the use of cultural, mechanical and chemical controls to manage undesirable vegetation in a manner consistent with best management practices which consider environmental sensitivity.

## **IVM PROTOCOL**

This VMP will consist of the following actions.

Monitoring- ROW will be surveyed prior to any action. Monitoring will be conducted by the Department of Public Works Land Facilities and Natural Resources Supervisor.

Maintenance- All roadways within ROW will be cleaned using a street sweeper. Cracked asphalt within ROW will be repaired. Desirable ground cover will be encouraged where appropriate to prevent undesirable target vegetation growth.

Record Keeping- Records of surveyed areas will be kept for future planning and reference purposes. Areas maintained by physical repair, mechanical or chemical control will be recorded by the Department of Public Works.

(IVM PROTOCOL continued)

Control Methods- Vegetation control decisions will depend on site-specific conditions. The selected control decision will consider best management practices and the environmental sensitivity of the site.

## **IDENTIFICATION OF TARGET VEGETATION**

Target Vegetation within and along the boundaries of ROW is vegetation that creates a public health nuisance such as nuisance woody plants, grass and broadleaf weeds, and vegetation which creates a risk condition.

### Public Health Nuisance Vegetation

Public health nuisance vegetation includes vegetation that grows within or along the boundaries of ROW which could cause an allergic or other health related problem. Poison Ivy (*Toxicodendron radicans*) is likely the most common public health nuisance vegetation target. This VMP will consider all species with similar risk as Poison Ivy growing within ten feet of the ROW boundary to be target vegetation.

### Nuisance Woody Plants, Grass and Broadleaf Weeds

Where appropriate beneficial vegetation should be encouraged and maintained within and along the boundaries of the ROW. Conditions may be encountered where woody plants, grass and broadleaf weeds are found in areas requiring action. These areas include cracks in asphalt, brick, concrete, planting beds and along guiderails. Within this condition, woody plants, grass and broadleaf weeds will become target vegetation when the stem density and height impacts established plants, impedes movement, reduces visibility, or the roots undermine asphalt, brick, concrete or other surface used for pedestrian and/or vehicular travel.

### Vegetation Which Creates a Risk Condition

Vegetation creates a risk condition when the vegetation creates a condition of public nuisance, obstructs pedestrian or vehicular travel, obstructs visibility, or reduces to a degree the ability of pedestrians to see vehicles, vehicles to see pedestrians and vehicles to see other vehicles.

## **METHODS OF VEGETATION MANAGEMENT**

ROW vegetation management will consist of three method categories.

### **Cultural Control**

Mulching- Mulching of planting beds and ROW boundaries where appropriate to reduce undesirable vegetation.

Street Sweeping- Street Sweeping with a mechanical street sweeper to remove soils on edges of curbing and roadside berms. This action reduces the likelihood of target vegetation germination and establishment.

Crack Sealing- Crack sealing will be performed when possible to limit target vegetation growth by filling in cracks with sealer.

(Methods of Vegetation Management continued)

### **Mechanical Control**

Selective Trimming- Selective trimming consists of mechanical pruning of woody plant material that may obstruct, hinder, or incommode travelers within the ROW.

Hand Cutting- Hand cutting consists of mechanical cutting of targeted woody plant material as close to the ground as practical. Hand cutting is used to protect environmentally sensitive sites or non-target vegetation.

Hand Pulling- Hand pulling consists of pulling targeted grass and broadleaf weeds by hand.

Mowing- Mowing consists of the use of mechanical cutting of target vegetation using machines such as a power trimmer, push mower, riding mower or other similar equipment.

### **Chemical Control**

Herbicide Application- Herbicide application consists of using herbicides where and when such use is most appropriate according to applicable law and this VMP. Herbicide applications will be made in accordance with applicable law and by following the manufacturer label.

Cut Stem- The cut stem process consists of cutting target vegetation immediately followed by an herbicide application. Herbicide applications will be made in accordance with applicable law and by following the manufacturer label.

## SUMMARY OF APPLICATIONS AND CONTROL METHODS

Target	Techniques	Comments
Poison Ivy	Herbicide Application	May be growing within 10 feet of ROW. Application will be excluded within no spray zones and sensitive areas
Grass and Broadleaf Weeds	Mulching	Preventative measures for planting beds
	Mowing	In most cases
	Hand pulling	When warranted
	Herbicide Application	Spot treatment of grass growing along guiderails or in cracks where mowing or cutting is not practical or safe
Low Growth	Mulching	Woodchips as a preventative measure along ROW boundary
	Mowing	In most cases, option for sensitive areas
	Herbicide Application	When and where appropriate
	Hand Cutting	Terrain prevents mowing and re-sprouting is not a concern, option for sensitive areas
Tall Growth	Selective trimming	For risk conditions
	Hand cutting	For risk conditions
	Cut stem treatment	For species less than 12 feet in height that are capable of re-sprouting

## **JUSTIFICATION FOR HERBICIDE USE**

The objective of vegetation management within and along the boundaries of ROW is to prevent or reduce defects that obstruct, hinder or incommode travelers within the ROW. Mechanical cutting and mowing of most conditions will achieve the objective, however, there are conditions that will require action by herbicide application.

### Public Health Nuisance Vegetation

The control of public health nuisance vegetation within and along the ROW is a key objective of this IVM plan. Due to the low growing nature of some plants and stoloniferous growth habits, such as poison ivy, cultivation, hand pulling or mowing are not effective. Herbicide applications will be made in accordance with applicable laws, this VMP and manufacturer label.

### Nuisance Woody Plants, Grass and Broadleaf Weeds

At times factors such as growth habit, terrain and location of target vegetation may require herbicide applications. Herbicide applications will be made in accordance with applicable laws, this VMP and manufacturer label.

### Vegetation Which Creates a Risk Condition

At times factors such as growth habit, terrain and location of target vegetation may require herbicide applications. Herbicide applications will be made in accordance with applicable laws, this VMP and manufacturer label.

## **PROCESS, REFERENCES AND SOURCES FOR IDENTIFYING SENSITIVE AREAS AND CONTROL STRATEGIES PROPOSED FOR SENSITIVE AREAS**

### Identifying Sensitive Areas

333 CMR 11.04 defines sensitive areas as "...any areas within Rights of Way, including No-Spray and Limited Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects."

### **Sensitive Areas regulated by 333 CMR 11.00 include**

#### Water Supplies

Zone I

Zone II

IWPA (Interim Wellhead Protection Area)

Class A Surface Water Source

Tributaries to a Class A Surface Water Source

Class B Drinking Water Intakes

Private Wells

#### Surface Waters

Wetlands

Water Over Wetlands

The Mean Annual High Water Line of a River

The Outer Boundary of a Riverfront Area

Certified Vernal Pools



(Process, References and Sources for Identifying Sensitive Areas and Control Strategies Proposed for Sensitive Areas continued)

Cultural Sites

Agriculture Areas

Inhabited Areas

Wildlife Areas

Certified Vernal Pool Habitat

Priority Habitat

**Identification Methods**

Identification of Sensitive Areas defined in 333 CMR 11.04

*Readily identifiable in the field and Not readily identifiable in the field.*

Readily identifiable in the field areas will be treated, identified and when appropriate, marked according to all applicable restrictions listed in 333 CMR 11.00. Not readily identifiable in the field areas will likewise be treated and marked when appropriate, but they are identified by the use of data marked on maps and collected in the Yearly Operational Plan and notification processes before the time of treatment.

The individuals assigned the task of identifying and treating sensitive areas in the field will use the appropriate sources and methods from the following list.

- Massachusetts Department of Environmental Protection (DEP) Watershed Maps delineate the perimeter of public watersheds and the location of public wells.
- Massachusetts DEP Wetland Conservancy Maps
- Municipal maps and records, Board of Health, Conservation Commission, and Natick Water Department Mapping
- Regional Planning Agencies maps and records
- Town of Natick Geographic Information System (GIS)
- A Copy of the Yearly Operation Plan (YOP) and Vegetation Management Plan (VMP)
- Correspondence, meetings, and input within the forty-five day YOP twenty-one day municipal ROW notification letter review and comment periods and the forty-eight hour newspaper notification. (333 CMR 11.06 and 11.07 and Chapter 85 of the Acts of 2000)
- U.S. Fish and Wildlife Service National Wetlands Inventory Maps, available from the University of Massachusetts, Cartographic Information Research Services, Amherst

The following is a description of how the sensitive areas will be identified for required protection.

- Consult the appropriate reference materials and sources to determine the location of such areas
- Place the boundaries of these sensitive areas on U.S. Geological Survey (USGS) topographical maps
- Prior to herbicide application the applicator will be provided the topographical map with sensitive areas for flagging boundaries
- Sensitive area boundaries and/or the boundaries of the appropriate buffer zone will be flagged prior to herbicide application

(Process, References and Sources for Identifying Sensitive Areas and Control Strategies Proposed for Sensitive Areas continued)

Sensitive Areas readily identifiable in the field include surface waters, inhabited areas and agricultural areas. The method utilized to identify these sensitive areas is as follows.

- Consult USGS topographic maps to locate sensitive areas
- Prior to herbicide application the applicator will be provided the topographical map with sensitive areas for flagging boundaries
- Applicator will visually survey the area to be treated for any sensitive areas
- Applicator will locate sensitive areas prior to herbicide application and flag appropriate buffer zone
- Municipal Maps and records, Board of Health, Conservation Commission, and Natick Water Department maps

#### **Sensitive Area Restrictions (333 CMR 11.04)**

In any sensitive area

- The minimum labeled rate of herbicide for the appropriate site, targeted pest, and application method shall be applied
- Herbicides shall be applied selectively by low pressure foliar techniques or stem application only or other method approved for use by The Department of Agricultural Resources

Treatments in the limited spray areas require the use of herbicides from the Sensitive Area Materials List available at <https://www.mass.gov/service-details/rights-of-way-sensitive-area-materials-list>

#### **Sensitive Area Restriction Guide (333 CMR 11.04)**

<b>Sensitive Area</b>	<b>No Spray Zone</b>	<b>Limited Use Area</b>	<b>Where Identified</b>
Water Over Wetlands	Within 10 feet	10-100 feet 12 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps and identify on site
Certified Vernal Pool	Within 10 feet	10 feet to the outer boundary of any Certified Vernal Pool Habitat 12 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps and identify on site

**Sensitive Area Restriction Guide (333 CMR 11.04) CONTINUED**

<b>Sensitive Area</b>	<b>No Spray Zone</b>	<b>Limited Use Area</b>	<b>Where Identified</b>
Public Ground Water Supply	Within 400 feet (Zone 1)	Zone II or IWPA (Primary Recharge Area) 24 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps
Public Surface Water Supply	Within 100 feet of any Class A public surface water source	100 feet to the outer boundary of the Zone A 24 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps
Public Surface Water Supply	Within 10 feet of any tributary or associated surface water body located outside of the Zone A	10 feet to the outer boundary of the Zone A 24 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps
Public Surface Water Supply	Within a lateral distance off 100 feet or 400 feet upstream of any Class B Drinking Water Intake	Within a lateral distance of between 100-200 feet or 400 feet upstream of intake 24 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps
Private Water Supply	Within 50 Feet	50-100 feet 24 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Well List and identify on site
Surface Waters	Within 10 feet from mean annual high water line	10 feet from the mean annual high water line and the outer boundary of the Riverfront Area 12 months must elapse between applications Selective low pressure, using foliar techniques or cut stem applications	YOP Maps and identify on site

**Sensitive Area Restriction Guide (333 CMR 11.04) CONTINUED**

<b>Sensitive Area</b>	<b>No Spray Zone</b>	<b>Limited Use Area</b>	<b>Where Identified</b>
Agricultural and Inhabited Areas	N/A	0-100 feet 12 months must elapse between applications Selective low pressure, using foliar techniques or cut stem	Identify on site
State Listed Species Habitat	No application within habitat area except in accordance with a Yearly Operational Plan approved in writing by the Division of Fisheries and Wildlife	N/A	YOP Maps

**APPROVED REGISTERED HERBICIDES FOR USE WITHIN SENSITIVE AREAS WITHIN OR ALONG THE BOUNDARIES OF RIGHTS OF WAY**Rights of Way Sensitive Area Material List

Herbicide applications within sensitive areas shall comply with the Rights of Way Sensitive Area Material List as published by the Massachusetts Department of Agricultural Resources (MDAR).

<https://www.mass.gov/service-details/rights-of-way-sensitive-area-materials-list>

**OPERATIONAL GUIDELINES FOR APPLICATORS AND HERBICIDE USE**Massachusetts Pesticide Control Act and 333 CMR 11.00

All applicators and herbicide applications shall abide by Massachusetts General Law Chapter 132B (Massachusetts Pesticide Control Act) and 333 CMR 11.00.

Manufacturer Label, Best Management Practices, Weather

All herbicide applications shall follow label instructions in a manner consistent with best management practices.

Calibration

Application equipment shall be calibrated in accordance with manufactures recommendation and best management practices. Application equipment shall be calibrated to maintain an operating pressure not to exceed sixty pounds per square inch and nozzles shall be adjusted to exclude drift and avoid run off.

(Operational Guidelines for Applicators and Herbicide Use continued)

Cleaning

Equipment used for the purpose of herbicide application shall be cleaned in an appropriate location which avoids sensitive areas.

Vehicles used in application operations shall be equipped with a bag of absorbent, activated charcoal, leak-proof containers, a broom and a shovel in case of minor spills.

A log of herbicides on vehicle will be kept within the vehicle

Product labels, fact sheets, this VMP, current YOP, and Herbicide Spill Check List will be carried on site by the applicator.

Private Property

In General, the Natick Department of Public Works does not trespass or enter upon land to perform work on private property with the exception of eliminating a Public Nuisance.

Notifications

The Natick Department of Public Works shall notify the Board of Selectmen, the Board of Health, and the Natick Water Department at least twenty-one days in advance of the application of herbicides to ROW. The notice shall include the approximate date when the application will occur and the application shall occur no later than ten days after approximate date reported. The notice shall also include a copy of the MDAR approved product fact sheet for the active ingredient, name or names of applicators, or the name of the company contracted to conduct the application.

Linear spot treatment of ROW will be posted with an 8.5" by 11" caution sign with a white background and red lettering. The signs will include the date of application, name of product applied, product Environmental Protection Agency (EPA) registration number, and the phone number of the Natick Department of Public Works. Signs will be posted in the most visible locations by staking, attaching to posts, or other similar means. Signs shall be posted twenty-four hours before and after application and no less than every 200 feet along the treated ROW.

Remedial Plan/Spills and Related Incidents

All mixing and loading will be performed in a manner consistent with the manufacturer label and best management practices in a location to protect sensitive areas.

In the event of an incident such as a spill, immediate action will be taken to contain the spill and protect the surrounding area. The cause of the spill must be identified and secured. Spill containment should include covering the spill with adsorptive clay or other similar material. For larger spills clay or soil dikes should be built to impede spill progress. Until the spill is completely cleaned, protection of the spill area should include barriers, flagging, or stationed crew members. If a fire occurs, care shall be taken to avoid breathing fumes.

(Operational Guidelines for Applicators and Herbicide Use continued)

Clean up of minor spills may be accomplished by soaking up the spill with adsorptive clay or other material and placing the material in a leak proof container for proper disposal. All contaminated soil should be placed in leak proof containers, removed from site and disposed of properly. Any minor spill will be reported to the Pesticide Bureau within twenty-four hours.

Major spills are defined by the Department of Environmental Protection (DEP) as reportable quantities of a hazardous material that are managed by 333 CMR. Any major spill should be evaluated under the reporting requirements of the Massachusetts Contingency Plan (MCP) 310 CMR 40.00. Major spills should be handled in the same manner as minor spills. More equipment and materials may be needed for cleanup and certain notifications are required. If the spill is too large for the application crew to clean up, then, after containment and site protection is secured, a hazardous waste cleanup company should be contacted immediately and directed to the site. The Natick Department of Public Works, MDAR (as per 333 CMR 10.15 (4) Record Keeping Requirements), DEP, and any other persons or agency required by applicable law will be notified.

In the event of a spill or incident, information on safety precautions and procedures can be found from the following sources.

- Product Label
- Product Safety Data Sheet
- Product Manufacturer
  - Corteva Agriscience (800) 992 5994
  - Bayer Crop Science (201) 307 9700
  - NuFarm (708) 377 1330
  - BASF (973) 245 6000
  - Rainbow Tree Care (952) 922 3810
- Massachusetts Pesticide Bureau (617) 626 1781
- Massachusetts Department of Environmental Protection Incident Response Unit (617) 556 1133 or (888) 304 1133
- Massachusetts Department of Public Health, Bureau of Environmental Health's Environmental Toxicology Program (617) 339 8351
- Chem Trec (800) 424 9300 or Clean Harbors (800) OIL TANK
- Natick Police and Fire Department 911 or (508) 647 9500
- Massachusetts Poison Information Centers (800) 682 9211
- Pesticide Hotline (800) 858 7378
- National Animal Poison Control Center (888) 426 4435

## **INTEGRATED VEGETATION MANAGEMENT AND OTHER TECHNIQUES AND PROGRAMS TO MINIMIZE AMOUNT AND FREQUENCY OF HERBICIDE APPLICATIONS**

### Monitoring

All ROW will be scouted prior to any action or herbicide application. Monitoring will be performed by the Natick Department of Public Works, Supervisor of Land Facilities and Natural Resources.

### Record Keeping

All maintenance practices performed by the Natick Department of Public Works or contractor within and along the boundaries of ROW will be recorded and a log of areas surveyed will be kept for future planning and reference. The purpose of this record is to reduce the amount of herbicide used. This record will be kept in addition to the requirements described within Massachusetts General Law Chapter 132B and 333 CMR 11.00.

### Encouragement of Desirable Vegetation

Whenever possible the vegetation management actions should be performed in a manner to promote the establishment and growth of desirable vegetation that will not require future herbicide application. When possible desirable species should be planted or re-planted.

### Physical Controls

Physical controls used to reduce herbicide use include selective pruning, hand cutting, and mowing

### Chemical Controls

Herbicides shall be applied in a manner consistent with best management practices such as the use of low volume back pack sprayers and cut stem techniques. Applications shall follow the manufacturer label.

## **ALTERNATIVE LAND USE/REASONABLE REQUEST MADE BY INDIVIDUAL**

Alternative land use options should be considered if the action meets the objective outlined in this VMP. An example of an alternative land use is a moderately maintained roadside lawn area. An alternative land use option such as a moderately maintained roadside lawn area likely would not require the use of herbicides to achieve the objectives outlined in this VMP.

## **QUALIFICATIONS OF INDIVIDUAL DEVELOPING THIS VMP**

Arthur Goodhind is the Supervisor of Land Facilities and Natural Resources, Tree Warden for the Town of Natick Department of Public Works. Arthur Goodhind holds an Associate of Science in Turfgrass Management from the Stockbridge School of Agriculture at the University of Massachusetts Amherst, a Bachelor of Science from the University of Massachusetts Amherst and a Master of Business Administration from Bentley University. Arthur Goodhind is a Massachusetts Certified Arborist, a Massachusetts Qualified Tree Warden and holds a Commercial Pesticide Certification Category 37 from the Massachusetts Department of Agricultural Resources. Arthur Goodhind's experience includes product application and management experience for private industry, golf courses, colleges/universities, and municipalities. Arthur Goodhind serves as Treasurer and Trustee of the New England Sports Turf Managers Association, Vice President of the Massachusetts Tree Wardens' and Foresters' Association and the Massachusetts State Liaison for the Society of Municipal Arborists.

This VMP was drafted with assistance from James M. MacArthur, owner and business manager of Professional Environmental Services, LLC.