

**Sidewalk and Roadway**  
**Vegetation Management Plan (YOP)**  
Town of Millbury, MA  
2013

Prepared By:

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## **Yearly Operational Plan**

In compliance with 333 CMR 11, Rights of Way Management, a yearly operational plan (YOP) must be submitted to the Department of Agricultural Resources (Department) every year herbicides are intended for use to maintain municipal rights-of-way (ROW) that include streets, road, sidewalks and paths. The YOP provides a detailed program for vegetation management for the year. A five year Vegetation Management Plan (2013-2017) (VMP) was approved by the Department and is available for review at the office of the DPW, Board of Health, Conservation Commission, and the Town Manager's office.

Upon receipt of this YOP, the Department publishes a notice in the Environmental Monitor. The Town must provide a copy of the proposed YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and the Town Manager's office for the Town of Millbury. The Department allows a 45-day comment period on the proposed YOP beginning with the publication of the notice and receipt of the YOP and Environmental Monitor notice by the Town. A notice is also sent to all public water suppliers.

Public notification of herbicide application is made at least 21 days in advance of the treatment by a separate notice. Notice is made to the Department of Agricultural Resources, Town Manager's Office, Board of Health, the Conservation Commission and Aquarion Water.

Any comments on this YOP should be made to the person designated herein as the person supervising the YOP or the person performing the treatment.

## Licensed Applicators

The Town of Millbury will perform the herbicide treatments and will hire licensed private contractors to perform the herbicide treatments. All applicators will hold the appropriate pesticide licenses including all treatments will have an individual on site with a category 40 (ROW) license.

Vegetation Control Services  
2342 Main Street  
Athol, MA 01331  
Telephone Number: (978) 249-5348  
Fax: (978) 249-4784

## Herbicides

<b>Herbicides &amp; Adjuvants</b>	<b>Active Ingredient</b>	<b>EPA Registration Number(s)</b>	<b>Mix Concentration (per 100 gals water or per acre, as designated)</b>
Rodeo or Roundup Pro*	Glyphosate	62719-324 524-475	1-5%
Oust Extra+	Sulfometuron Methyl and Metsulfuron-Methyl	352-622	2-3 oz per acre
Induce, Clean Cut, or equivalent surfactant	not applicable	n.a.	0.125%-1%
Point Blank, Stay Put Plus or equivalent drift retardant	n.a.	n.a.	4-16 oz.

\*Use only Rodeo or Roundup Pro for Poison Ivy or other foliar treatments.

+For pre-emergent treatments only as described below, i.e. not for use in all foliar treatments.

Manufacturer's herbicide labels and the fact sheets for the above listed herbicides are attached to this YOP. Equivalent surfactants and drift retardants will be used if those listed are no longer available or more effective alternatives become available.

# Herbicide Application Techniques and Alternative Control Procedures

Sidewalk and roadway vegetation management will involve mechanical methods (hand cutting, mowing, selective trimming) and chemical treatments (foliar herbicide treatments and cut stump treatments):

## Herbicide Applications

1. **Foliar Treatments:** Foliar treatments involve the selective application of herbicide diluted in water, to the foliage and stems of the target vegetation. The treatment will be made using hand held equipment including squirt bottles, manual pumps or truck mounted hydraulic application equipment. This treatment will use low pressure, below 60 psi at the nozzle, for application. The herbicide solution is applied to lightly wet the target plant. Foliar treatments are particularly effective for control of “Public Health Nuisance” vegetation, particularly Poison Ivy. Foliar applications will take place when plants are in full leaf and actively growing, and in accordance with the manufacturer’s recommendations.
2. **Pre-emergent Treatments:** the use of pre-emergent herbicides using the same equipment described in the foliar treatments above. Pre-emergent applications are used where season long vegetation control requires “vegetation-free conditions” such as along curbing, sidewalks, under guiderails/guardrails and on paved traffic islands. Usually, pre-emergent treatments are used in conjunction with foliar applications, unless the goal is to prevent the growth of vegetation in the spring, to reduce the amount of applied herbicides and applications. This method is used from the early spring to early fall.
3. **Cut Stump Treatments:** Cut stump treatments consist of the mechanical cutting of target species using chain saws immediately followed by a herbicide treatment applied with a squirt bottle or painted on the freshly cut surface of the stump. This type of treatment would only be done if stump grinding is not practical and for concern that stump sprouts would out compete more desirable vegetation. This may be done any time of year.

## Alternative Control Procedures

The alternative control procedures are the Town of Millbury’s primary vegetation control methods:

1. **Mulching:** Proper mulching techniques will be applied to planting beds and roadside areas to prevent undesirable weeds. This is done in the spring.
2. **Selective Trimming:** Selective trimming consists of the mechanical pruning of the tops of encroaching limbs of tall trees that may hamper access to the roadway. This trimming will be accomplished using aerial lifts mounted on trucks or

tractors or, if terrain or obstructions prevent equipment access, by climbing crews. This is done all year.

3. **Hand Cutting:** Hand cutting consists of the mechanical cutting of targeted woody species using chain saws and brush saws. Targeted species are cut as close to the ground as practical. Hand cutting is used to protect environmentally sensitive sites or on target woody vegetation greater than 12 feet tall. Hand cutting is used on those restricted sites where terrain, site size or sensitivity renders mowing impossible or impractical. Hand cutting may be used at any time of the year.
4. **Hand Pulling:** Hand pulling will consist of pulling targeted grass and weeds by hand, when economically feasible in planting beds on town traffic islands. This will be done during the summer.
5. **Mowing:** Mowing is the mechanical cutting of target vegetation using machines. Depending upon the resources available, mechanical cutting may be made using a power trimmer, push mower, riding mower, or a tractor/skidsteer driven brush hog or flail mower. Selection of specific equipment is based on terrain, target vegetation size and equipment availability. Mowing will be used in most areas where herbicide use is prohibited by regulation. Mowing will be the principal vegetation control measure and may be used at any time of the year, except when deep snow precludes operations.
6. **Foliar Treatments**

Foliar treatments involve the selective application of herbicide diluted in water, to the foliage and stems of the target vegetation. The foliar treatments will be made using ready to use products, squirt bottles or manual pump application equipment. This treatment will use low pressure, below 60 psi at the nozzle, for application. The herbicide solution is applied to lightly wet the target plant.

Foliar applications will take place when plants are in full leaf and actively growing, and in accordance with the manufacturer's recommendations. Treatment uses low pressure, below 60psi at the nozzle, for applications.
7. **Pre-emergent Treatments:** the use of pre-emergent herbicides using the same equipment described in the foliar treatments above. Pre-emergent applications are used where season long vegetation control requires "vegetation-free conditions" such as along curbing, sidewalks, under guiderails/guardrails and on paved traffic islands. Usually, pre-emergent treatments are used in conjunction with foliar applications, unless the goal is to prevent the growth of vegetation in the spring, to reduce the amount of applied herbicides and applications. This method is used from the early spring to early fall.
8. **Street Sweeping:** The Town will regularly sweep streets with a mechanical street sweeper to remove soils built up at the edges of the asphalt berm thereby removing a place for weeds to germinate. Weather permitting sweeping will be done all year.
9. **Crack Sealing:** Crack sealing will be done whenever possible to limit weed growth by filling in the cracks with a suitable sealer. This is done in the summer.



## **Identification of Target Vegetation**

Target vegetation along sidewalks and roadways is public health nuisance vegetation, nuisance grass, weeds and vegetation posing a risk to safety.

### **Public Health Nuisance Vegetation**

Public health nuisance vegetation includes vegetation that grows along public roads and sidewalks, which could cause allergic or other problems. The overwhelming majority of plant material to be controlled is poison ivy “*Toxicodendron radicans*”. Under this YOP, poison ivy and other “poisonous” vegetation growing within 10 feet of the ROW is considered target vegetation.

### **Nuisance Grass & Weeds**

Along the shoulders of roads, grass growth will be encouraged and maintained through mechanical mowing. However in some instances, grasses and weeds may grow in areas where control is limited to the use of herbicides. These areas include cracks in asphalt, brick, concrete, planting beds and along guardrails. In these instances, grass will become target vegetation if the stem density and height impacts established plantings, impedes movement, hampers visibility and/or if the roots undermine asphalt, brick, concrete or other surface material used for pedestrian and vehicle travel.

### **Vegetation Posing a Risk to Safety**

Vegetation that hampers visibility or impedes movement along sidewalks and roads is considered posing a risk to public safety. M.G.L. Chapter 87, section 5 authorizes the tree wardens to have control of all “public shade trees, shrubs and growths” along public ROWs. Plants interfering with traffic and visibility will be controlled by removing and/or hand cutting. However, due to topography, rate of growth, or physical characteristics, certain plant species may require control by herbicides.

Targeted vegetation includes tall growing woody species including trees. Hardwood and softwood species that are capable of interfering with pedestrians and traffic safety are either selectively pruned or ground cut. Occasionally conditions will not allow the use of a stump grinder and require treatment of these cut stumps with an herbicide. Note: when planting trees in the ROW species that are unlikely to interfere with the ROW will be selected.

## 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 or other method approved for use by the Department.
- Treatment in the limited spray areas require the use of herbicides from the Sensitive Area Materials list available at:

<http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-sensitive-area-materials-list.html>

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

Sensitive Area	Limited Spray or No-Spray Areas (feet)	Control Method	Time Between Treatment(s)
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2 mile radius	Mechanical, Approved Herbicides*	24 months
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Approved Herbicides	24 months
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Approved Herbicides	24 months
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Approved Herbicides	24 months
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Approved Herbicides	24 months
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Approved Herbicides	24 months
Surface Waters	10'	Mechanical Only	None
	10'-100'	Approved Herbicides	12 months
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Approved Herbicides	12 months
Wetlands	10'	Mechanical Only	None
	100' or with approved Wetlands Determination 10'-100' [per 310 CMR 0.05(3)(a) & 310 CMR 0.03(6)(b)]	Low-pressure Foliar, CST, Basal, Approved Herbicides	24 months
Inhabited Areas	100'	Approved Herbicides	12 months
Agricultural Area (Crops, Fruits, Pastures)	100'	Approved Herbicides	12 months
Certified Vernal Pools	10'	Mechanical Only when water is present	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	No treatment without approval	
Priority Habitat	No treatment outside the 4 foot paved road exemption without approval of the Natural Heritage Endangered Species Program (NHESP)		

\*Massachusetts Approved herbicides for sensitive sites

## **Procedures for Handling/Loading of Herbicides**

All mixing and loading of herbicides will be conducted at the Town of Millbury central facility or the contractor's facility where the herbicides are stored. Mixing only the amount of herbicide necessary to carry out the vegetation control, based on the monitoring results, will ensure that there will be no waste and minimize potential problems. The vehicle carrying out the spray operation will be equipped with a bag of absorbent, activated charcoal, leak-proof containers, a broom and a shovel in case of minor spills. A clipboard log of herbicides in the vehicle will be kept in the vehicle. Herbicide labels and fact sheets should be carried on-site by the applicator.

As soon as any spill is observed, immediate action will be taken to contain the spill and protect the spill area. The cause of the spill must be identified and secured. Spill containment will be accomplished by covering the spill with adsorptive clay or other adsorptive material, or, for large spills, building clay or soil dikes to impede spill progress. Until completely clean, protection of the spill area will be accomplished by placing barriers, flagging or crewmembers at strategic locations. If a fire is involved, care will be taken to avoid breathing fumes from any burning chemicals.

In the event of a spill, information on safety precautions and clean up procedures will be gathered from the following sources, as applicable:

## **Emergency Contacts**

- Massachusetts Pesticide Bureau 617 626-1781
- Massachusetts Department of Public Health 617-624-5757
- Massachusetts Department of Environmental  
Emergency Response Section 888-304-1133
- Chem Trec 800-424-9300
- Millbury Fire Department 508-865-3521
- Millbury Police Department 508-865-3521
- Millbury Health Department 508-865-4754
- Pesticide Hotline 800-858-7378
- Clean Harbors 800 OIL-TANK
- Massachusetts Poison Information Centers 800-682-9211