

Town of Sherborn

Tree Management Manual

PREFACE

The purpose of this manual is to set forth for Sherborn residents as well as town departments and employees, the procedures, practices and standards for the maintenance, removal and replacement of all public trees in the town of Sherborn.

GENERAL POLICY

The Town of Sherborn is committed to preserving and enhancing the rural character and the scenic beauty of its natural environment. It actively supports efforts to improve its community by planting and maintaining healthy public trees, which provide shade, produce oxygen, muffle noise and offer aesthetic beauty. The tree policy for the town of Sherborn shall be based on sound arboricultural practices. Arboricultural education will be an important component of the policy. Adequate budgeting for maintenance, removal and replacement of public trees should be an annual town priority.

GOALS

- To maximize the aesthetic values of Sherborn while maintaining a safe environment for travelers along Sherborn's roads.
- To preserve and maintain the historic trees along the rights of way.
- To maintain a healthy tree canopy and preserve other visual attributes of tree-lined roads.
- To pursue pruning and maintenance options before considering removal.
- To maintain the character of the shoulder of the road and its relationship to the edge of the travel way.
- To plant / replant with consideration given to hardiness, appropriateness and diversity of species; and to identify local conditions that will facilitate tree survival when selecting trees and planting locations.
- To promote selective natural regeneration of hardy native trees within the right of way.
- To cultivate an atmosphere in the Town that will support adequate funding for all phases of tree work on public lands, including, without limitation, maintenance, removals and replacement.
- To encourage private gifts for planting within the right of way consistent with the general policy of this document.

JURISDICTION

The following provisions of law regulate and affect the public trees in Sherborn on town ways. Other provisions of law, not restated below, concern state highways:

Massachusetts General Laws Chapter 87, Section 1: “All trees within a public way or on the boundaries thereof shall be public shade trees; and when it appears in any proceeding in which the ownership of or rights in a tree are material to the issue, that, from length of time or otherwise, the boundaries of the highway cannot be made certain by records or monuments, and that for that reason it is doubtful whether the tree is within the highway, it shall be taken to be within the highway and to be public property until the contrary is shown.”

Massachusetts General Laws Chapter 87, Section 2: “The tree warden of a town may appoint and remove deputy tree wardens . . . He shall have the care and control of all public shade trees, shrubs and growths in the town, except those within a state highway and those in public parks or open places under the jurisdiction of the park commissioners, and shall have care and control of the latter, if so requested in writing by the park commissioners, and shall enforce all the provision of law for the preservation of such trees, shrubs and growths. He shall expend all money appropriated for the setting out and maintenance of such trees, shrubs and growths, and no tree shall be planted within a public way without the approval of the tree warden, and in towns until a location therefore has been obtained from the selectmen or road commissioners. He may make regulations for the care and preservation of public shade trees and establish fines and forfeitures of not more than twenty dollars in any one case for violation thereof; which, when posted in one or more public places, and, in towns, when approved by the selectmen, shall have the effect of town by-laws.”

Massachusetts General Laws Chapter 87, Section 3: Public shade trees shall not be cut, trimmed or removed by any person without a permit from the tree warden or his deputy, even if the person owns the fee in the land, and may not be cut or removed by the tree warden or deputy or any other person without a public hearing. “Any person injured in his property by the action of the officers in charge of the public shade trees as to the trimming, cutting, removal or retention of any such tree, or as to the amount awarded to him for the same, may recover the damages, if any, which he has sustained, from the town.”

Massachusetts General Laws Chapter 87, Section 4: “Tree wardens shall not cut down or remove or grant a permit for the cutting down or removal of a public shade tree if, at or before a public hearing as provided in [Chapter 87, Section 3], objection in writing is made by one or more persons, unless such cutting or removal or permit to cut or remove is approved by the selectmen]”_

Massachusetts General Laws Chapter 87, Section 5: “Tree wardens and their deputies, but no other person, may, without a hearing, trim, cut down or remove trees, less than one and one half inches in diameter one foot from the ground, and bushes, standing in public ways; and if ordered by the . . . selectmen, . . . shall trim or cut down trees and bushes, if the same shall be deemed to obstruct, endanger, hinder or incommode persons travelling thereon or to obstruct buildings being moved. . . . Nothing contained in this chapter shall prevent the trimming, cutting or removal of any tree which endangers persons traveling on a highway, or the removal of any tree, if so ordered by the proper officers for the purpose of widening the highway and nothing herein shall interfere with the suppression of pests declared to be public nuisances. . . .”

Massachusetts General Laws Chapter 87, Section 6: Violations of sections 3, 4, or 5 above “shall be punished by forfeiture of not more than five hundred dollars to the use of the . . . town.”

Massachusetts General Laws Chapter 87, Section 7: “Towns may appropriate money to be expended by the tree warden in planting shade trees in the public ways, or, if he deems it expedient, upon adjoining land, at a distance not exceeding twenty feet from said public ways, for the purpose of improving, protecting, shading or ornamenting the same; provided, that the written consent of the owner of such adjoining land shall first be obtained.

Massachusetts General Laws Chapter 87, Section 9: “Whoever affixes to a tree in a public way or place a notice, sign, advertisement or other thing, whether in writing or otherwise, or cuts, paints or marks such tree, except for the purpose of protecting it or the public and under a written permit from the officer having the charge of such trees in a city or from the tree warden in a town, or from the department in the case of a state highway, shall be punished by a fine of not more than fifty dollars.”

Massachusetts General Laws Chapter 87, Section 12: “Whoever wantonly injures, defaces or destroys a shrub, plant or tree, or fixture of ornament or utility, in a public way or place or in any public enclosure, or negligently or willfully suffers an animal driven by or for him or belonging to him to injure, deface or destroy such shrub, plant, tree or fixture, shall be punished by a fine of not more than five hundred dollars, and shall in addition thereto be liable to the town or any person for all damages to its or his interest in said shrub, plant, tree or fixture caused by such act. Whoever by any other means negligently or willfully injures, defaces or destroys such a shrub, plant, tree or fixture shall likewise be liable to the town or any person for all damages to its or his interest in said shrub, plant, tree or fixture caused by such act.”

Town of Sherborn General Bylaws, Chapter 12, Section 1: “No person shall willfully remove, mar, destroy or damage any public tree, shrub, flower bed, grassy border, structure, sign or device.” Punishable by a fine of \$50.

Massachusetts General Laws, Chapter 40 Section 15C: Designation of scenic roads by vote of Town. “After a road has been designated as a scenic road any repair, maintenance, reconstruction, or paving work done with respect thereto shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls, or portions thereof, except with the prior written consent of the planning board” after a public hearing.

Sherborn Planning Board Rules and Regulations Governing the Administration of the Scenic Road Act. Establishes procedures for the administration of the scenic road act by the Sherborn Planning Board.

Town Meeting Vote of March 11, 1974: Designated the following roads as scenic roads subject to protection under MGL c. 40 sec. 15C: Apple Street, Ash Lane, Brush Hill Road, Cross Street, Curve Street, Farm Road, Forest Street, Goulding Street (from Forest Street to Main Street), Green Lane, Greenwood Street, Hollis Street, Hunting Lane, Lake Street, Maple Street, Mill Street, Nason Hill Road, Perry Street, Pleasant Street, Prospect Street, Rockwood Street, Snow Street, South Street, Western Avenue, Whitney Street, Woodland Street.

Town Meeting Vote of April 24th, 2001: Designated the following road as a scenic road subject to protection under MGL c. 40 sec. 15C: Goulding Street West.

DEFINITIONS

TREE: Any living, self-supporting, woody perennial plant which has a trunk caliper greater than or equal to 1-1/2 inches measured at a point twelve (12) inches above the ground and which normally attains a height of at least ten (10) feet at maturity usually with one (1) main stem or trunk and many branches.

DEAD TREE: A tree that no longer bears or renews any leaves or needles in season.

ENDANGERING TREE: A tree, whether living or dead, that by virtue of its condition and location poses such a substantial and imminent threat to life, limb or property such that, in the judgment of the Town Arborist, by reference to objective standards, (refer to Appendix A), removal must be accomplished within two weeks. An Endangering Tree could but will not necessarily be one that has been seriously damaged or downed by a snow or ice storm, high winds, fire, vehicle collision or other calamity.

LIVING TREE: A tree that bears or renews any leaves or needles in season.

PUBLIC TREE: Any tree within the right of way of any public way or Board of Selectmen controlled public grounds, including public shade trees.

PUBLIC SHADE TREE: All trees within or on the boundaries of a public way are public shade trees. If ownership is doubtful, the tree shall be deemed a public shade tree until the contrary is shown (MGL c.87 s.1).

SAPLING: Any single stemmed living self-supporting woody perennial plant which has a trunk caliper greater than or equal to 1-1/2 inches above the ground measured at a point twelve inches above the ground, and which if it survives will grow into a tree.

SCENIC ROAD: A designated road, which is protected under the Scenic Road Act, (M.G.L. c. 40, sec. 15C).

SELECTIVE NATURAL REGENERATION: The Restoration and enhancement of the roadside tree inventory through the identification and of healthy specimens of native tree species growing along roadsides which are marked for protection from cutting until they reach a trunk caliper of greater than or equal to 1 ½ inches measured at a point twelve (12) inches above the ground (at which point they are protected by law and this policy as Public Trees and Public Shade Trees).

SOUND ARBORICULTURAL PRACTICES: The planting and care of woody plants, especially trees, in order to promote normal health.

THREATENING TREE: A tree, whether living or dead, that by virtue of its condition and location poses a substantial threat to eventually obstruct, hinder or incommode travel on the public way or pose risk to life, limb or property, but which threat is not so immediate as to result in it being an Endangering Tree. (Refer to Appendix A.)

TOWN ARBORIST: A certified professional arborist appointed by the Selectmen and employed by or under contract to the Town and who along with the Tree Warden is responsible for implementing the policies and practices of this manual. The Town Arborist maybe the same person as the Tree Warden.

TREE WARDEN: The officer of the Town appointed by the Selectmen under authority of M.G.L. c. 41, sec. 106, and having the duties set forth at M.G.L. c. 87, sec. 13 who, along with the Town Arborist, is responsible for implementing the policies and practices of this manual. The Tree Warden maybe the same person as the Town Arborist.

SECTION I PRESERVATION

Preserving Healthy Mature Trees

The town of Sherborn is committed to preserving and maintaining all of its public trees that enhance the quality life and preserve the rural character for residents. To this end all public trees shall be inspected on a rotating basis of approximately five years, for evidence of injury, disease, decay or potential public hazard requiring pruning.

When the Tree Warden is notified by residents and public officials of trees requiring attention a Community Hazard Evaluation will be initiated (using USDA standard procedural guidelines, Appendix B) such that trees will be inspected and remedies determined within one week of notification.

As delineated in sections III, IV, and V, if there is an immediate hazard, the remedies shall be immediately effected, e.g. endangering limb or tree shall be removed; if a tree/limb is found to be threatening, the established guidelines shall be followed for removal or the tree will be placed on the list maintained by the Tree Warden for annual pruning and maintenance

Selective Natural Regeneration

1. The Town of Sherborn shall implement a program to promote the natural regeneration of species along public ways as a means of furthering the purposes of this policy at minimal cost to the public. This policy shall be implemented through identification and marking by the Tree Warden or deputies of selected hardy specimens of native species growing along the roadside within the setback set forth in Section II, Planting, and through the Town taking such measures as are necessary to avoid cutting or injuring such trees during mowing, brush clearing, and other road and roadside maintenance.
2. The Town's natural regeneration program shall involve at least the following components:

The Tree Warden shall identify and mark for protection at least 100 saplings less than 1 ½" in diameter along scenic roads within the public right of way each year and in addition;

For any public shade tree removed as a threatening or endangering tree, the Tree Warden will identify and mark for protection at least one sapling in the general vicinity of the removed tree for each six inches in trunk diameter of the removed tree; and

Consistent with this policy, the Tree Warden will also allow the regeneration of saplings within the public right of way on roads other than scenic roads.

SECTION II PLANTING

The town of Sherborn shall develop, fund and implement a public shade tree planting program to replace public shade trees that have been lost over the years to disease or natural deterioration.

This section provides guidance for identifying the locations, in relation to the street pavement edge, at which new and replacement trees should be planted and seedlings should be preserved for selective regeneration. The intent of this policy is to provide flexibility in allowing planting locations to be selected on a street by street basis to conform to the particular characteristics of the road or stretch of road in question, rather than having a rigid standard for all roads or roads of a certain type.

Trees should generally be planted or allowed to regenerate no closer than four feet from the edge of the road pavement (or traveled surface) to allow for the growth of the tree and to provide for a clear shoulder for safety and winter maintenance.

However, particularly on a scenic road, where an established or recently removed line of trees extends closer to the pavement or traveled way than four feet, or where there is not four feet between the edge of the right of way and the edge of the pavement (or traveled surface), trees may be planted or allowed to regenerate at locations that reinforce and enhance the established or historic pattern.

Public trees should be planted no further than 20 feet from the edge of the road pavement (or the edge of the traveled surface for unpaved roads). Where the public right of way extends less than 20 feet beyond the edge of the road pavement (or traveled surface), any trees purchased with public funds or in replacement of removed public shade trees shall be planted within the public right of way.

Where trees are planted or replaced, or selective regeneration is conducted in a pattern that creates or preserves a road shoulder, this setback shall not be construed as an invitation to widen the road pavement.

The Planning Board, in furtherance of its authority under the Scenic Roads by-law, and with the advice of the tree warden, should recommend to the Selectmen and tree warden planting locations on scenic roads.

The Selectmen, in accordance with their general authority over the public ways of the Town, and with the advice of the tree warden, should establish planting locations on other roads.

A. Tree Selection

1. Species of Trees selected for planting should be diversified, to enhance disease resistance and avoid monoculture. A list of suggested species is included as **Appendix C**.
2. Species shall be selected for their characteristics of hardiness, disease resistance, deep rooting, low maintenance, leaf canopy and distinctive beauty. Priority shall be given to native species.
3. Consideration shall be given to specific species selection for planting in areas beneath utility lines.
4. Trees to be planted or replanted should be healthy nursery stock at least 2” caliper.

B. Planting Locations - Approved by the Tree Warden in accordance with M.G.L. ch. 87. Section 2

1. Assess environmental factors that suggest a need to limit the size of the tree at maturity or select a species resistant to certain local adverse conditions.

Place trees where they will have the greatest positive impact on the appearance and shade of the street.

3. Maintain umbrella canopy where possible.
4. Priority shall be given to replacement of Public Shade trees that have fallen or been removed.
5. Placement of larger maturing trees should be adequate for the development of the tree and for the safe use of the street or sidewalk.
6. If a tree that has fallen or been removed was in a hazardous location, it should not be replaced in such a way as to perpetuate the potential hazard.
7. Planting shall be coordinated with future Community Development projects such as sidewalk construction or road reconstruction.

SECTION III MAINTENANCE

- A. All Public Shade Trees shall be pruned on a rotational basis of not more than five years. This involves pruning all Town owned trees at least once in this time period based on the “Minimum or Safety Prune” specifications in Section IV.
- B. The general health of Public Trees shall be promoted by providing whenever it is appropriate, insect and disease control, cabling, bracing and pruning.
- C. Public Trees shall be maintained in such a manner so as to not endanger, interfere with, or otherwise conflict with requirements of safe public use of an area.
- D. Where a Public Tree has become a hazard to public safety owing to its growth, disease or condition, reasonable efforts shall be made to correct the hazard through pruning, disease control, and other appropriate maintenance, prior to considering removal.
- E. Hanging limbs and branch growth on established trees shall be maintained 14’ above the street and 8’ above sidewalks.
- F. Attachment of Utility Wires:
 - 1. No electric cable or telephone wires may be attached to Public Shade Trees by any person or agency without the written consent of the Tree Warden.
 - 2. To reduce pruning for electric wires, the use of cable spacers is recommended.
- G. Construction Activities Affecting Public Shade Trees:

No person may prune roots or branches of a Public Shade Tree without the written consent of the Town Arborist. No person may cut or remove a living Public Shade Tree without a public hearing and written permission from the Tree Warden, and on a Scenic Road, the Planning Board.

No person may excavate ditches, tunnels or perform potentially damaging work within the drip line of a Public Shade Tree without first obtaining written consent from the Town Arborist; provided that the Town Arborist’s jurisdiction shall not be interpreted to prevent the installation, repair or replacement of vehicle access or utility service to or on a private lot.

When any project on public land, including without limitation highway, utility or municipal construction projects, requires the removal of Public Shade

Trees, the cost of tree replacement shall be included in the budget for the project as a separate line item.

Any construction project on municipal land shall incorporate construction best management practices for the preservation of the health of existing trees to be retained on the site including *Tree City USA Bulletins 7 and 35* or equivalent practices as determined by the Town Arborist.

Trees should be planted and maintained in accordance with Recommendations for Planting and Maintaining Trees and Shrubs (University of Massachusetts Extension publication, attached as **Appendix D**).

SECTION IV PRUNING

Primary Objective: To maintain and improve tree health and structure and to reduce hazards. These guidelines should be applied with consideration of the species, the landscape site, the intended function of the trees, the age and condition of the tree, and the desired severity of pruning.

Objective of Pruning: The main objective of pruning branches is to create and maintain strong structure by guiding the tree's architecture and to produce a healthy tree with a functional and pleasing form by removing the smallest possible amount of living tissue at any one pruning. This means that pruning should begin early in the life of the tree, and it should be done at regular intervals. This prevents the branches from growing too fast. In many ways, pruning concerns correcting faults. Young trees should be pruned to develop a strong structure so that they can live many years without creating a safety hazard. Older trees are pruned to maintain good structure and to minimize potentially hazardous conditions in the tree. Regardless of tree age, it is recommended to remove branches that are dead, broken, split, dying, diseased, or touching another branch. Light pruning only causes slight stress, but heavy pruning can induce severe stress because of the large amount of stored energy (starch) removed with the branches.

Trees like elms and oaks, that mature at a height greater than about 40 feet should be trained so that they develop branches spaced along a dominant trunk. Branches should be considerably smaller in diameter than the trunk (preferably less than half). This helps secure them to the trunk and helps the main trunk dominate the tree. Create a dominant leader by slowing the growth rate on fast-growing branches through pruning.

A. Minimum or Safety Pruning

Description of Minimum or Safety Prune: This procedure shall consist of the minimum actions necessary to correct one or more extreme and undesirable conditions within a tree, which may be hazardous to persons or property.

Specifications:

Trees shall be pruned in such a manner as to prevent branch and foliage interference with requirements of safe public passage. Clearance shall be kept at a minimum of 14' above the paved surface of the street.

1. Remove all dead and dying branches of 2 inches or greater in diameter.
2. Remove all broken or loose branches of 2 inches or greater in diameter.
3. Cut back ends of branches to reduce weight where an excessive overburden appears likely to result in breakage of supporting limbs. Such cutting back shall not include any live, healthy branches in excess of 6 inches in diameter, and shall conform to Section IV part D - 1.

B. Spot Prune

Description of Spot Prune: This procedure shall consist of the removal of one or more branches localized in a particular area of a tree.

Specifications:

1. Individual dead or broken branches shall be properly removed without the necessity of performing other work not immediately urgent for the protection of the public or property, or the health of the tree.
2. Cut back ends of branches and foliage, which are blocking the view of traffic control devices or signage, or obstructing safe passage of a public sidewalk or street.

C. Standards of Workmanship

All work shall be performed in accordance with the American National Standards Institute Publication ANSI-300, Tree, Shrub & Other Woody Plant Maintenance Standard Practices.

1. Before beginning work and while the work is in progress, a person certified as an Arborist or another competent person with at least three years of tree pruning experience shall inspect each tree. If a condition is observed that requires additional attention, this condition shall be brought to the attention of the Town Arborist.

2. Cleanup of branches, logs and other debris resulting from any pruning shall be promptly and properly accomplished.
3. The use of climbing spurs or spike shoes in the act of pruning is prohibited.
4. Tree maintenance shall only be performed by qualified tree workers, who through related training or work experience, or both, are familiar with the practices and hazards of arbor culture, and the equipment used in such operations.
5. A responsible tree worker shall seek to coordinate safe operations on the ground at all times when work operations are in progress.

D. Pruning Cuts

1. When tree-pruning cuts are made to a side branch, such remaining branch must possess a basal thickness of at least 1/3 of the diameter of the wound so affected. Such cuts shall be considered proper only when such remaining branch is vigorous enough to maintain foliage to produce woody growth capable of healing the cut in a reasonable amount of time.
2. All final tree pruning cuts shall be made in such a manner as to favor the earliest possible covering of the wound by natural callous growth. Tree pruning cuts should be made just outside the branch collar. (See Figures 1 and 2)
3. All tools used on a tree known to contain an infectious disease shall be properly disinfected immediately after completing each pruning cut on such a tree.
4. All cutting tools and saws used in making tree pruning cuts shall be kept sharpened adequately to result in final cut with a smooth surface and adjacent bark secure.
5. Whenever pruning cuts are to be made while removing branches too large to hold securely in one hand during the cutting operation, the branches shall be cut off first one to two feet beyond the intended final cut. The final cut shall be made in a manner to prevent unnecessary tearing back of the bark and wood. (See Figures 3 and 4)

SECTION V
TREE REMOVAL CRITERIA & PROCESS

- A. The removal of public shade trees shall conform to M.G.L. Chapter 87. Sections 3, 4, and 5 and M.G.L. Chapter 40 Section 15-C.
- B. Any Public Shade Trees other than an endangering tree as defined above shall only be posted for removal during the season when the tree, if alive, would be in leaf.
- C. Public Shade Trees shall be removed according to the policy and requirements set forth in the following table:

PUBLIC SHADE TREE REMOVAL PROCEDURES

Type of Tree	Requires Advance Authorization from:
Public Shade Tree, Living -- less than 1½ inches in diameter 1 foot above ground	Tree Warden
Public Shade Tree, Living -- 1½ inches or more in diameter 1 foot above ground	Tree Warden (and on Scenic Road, Planning Board)
Public Shade Tree, Dead - any size	See definition of "dead" Tree Warden (and on Scenic Road, Planning Board)
Public Shade Tree, Endangering - See definition of "endangering" (emergency)	Tree Warden (and on Scenic Road, Planning Board)
Public Shade Trees, Threatening -- See definition of "threatening" (non emergency)	Tree Warden (and on Scenic Road, Planning Board)
Public Shade Trees, any size, for work on roads, utilities, or public rights of way (non-Scenic Road)	Selectmen and Tree Warden
Public Shade Trees, any size, for work on Scenic Roads	Planning Board and Tree Warden
Public Shade Trees, any size, for pest infestation	Tree Warden and Pest Control Officer (and on Scenic Road, Planning Board)
Public Shade Trees - Thinning	Tree Warden (and on Scenic Road, Planning Board)
Public Tree - Not within public rights of way	Selectmen, Tree Warden

- D. After the close of a public hearing and the rendering of the decision, no new hearing may be held within a year, (i) except for good cause shown, and (ii) without advertising the hearing and providing notification to all persons who were recorded at the original hearing either in favor or opposed.

**SECTION VI
PUBLIC SHADE TREE
REPLACEMENT POLICY**

Definitions:

CALIPER = diameter of a tree trunk that is taken one foot above the ground for up to and including four inch caliper size and twelve inches above the ground for larger sizes.

DBH (Diameter at Breast Height) = diameter of a tree trunk measured in inches at a height of 4 feet above the ground. If a tree splits into multiple trunks below 4 ½ feet then the trunk is measured at its most narrow point beneath the split.

A. Replacement Public Shade Tree by private parties

Any person, firm, corporation or agency, who removes a public shade tree according to the procedures outlined in Section V part C of this manual, shall be replaced according to the following specifications:

Size and number of trees to be replaced:

SIZE OF TREE TO BE REMOVED: WITH:	SHALL BE REPLACED
Less than 6" DBH but more than 1 ½" DBH	1 tree of at least 2-21/2" caliper
1 tree over 6-9" DBH	2 trees of at least 2-21/2" caliper
1 tree 9-12" DBH	3 trees of at least 2-21/2" caliper
1 tree 12-15" DBH	5 trees of at least 2-21/1" caliper
1 tree 15" DBH	8 trees of at least 2-21/2" caliper
1 tree over 30" DBH	13 trees of at least 2-21/2" caliper

Attempts will be made to plant trees as close to the original project site as possible and preferably within the same neighborhood.

Species selected may vary, depending on location; however, preference of native species is urged. Species of replacement trees shall be determined by the tree arborist (warden).

Where there is not adequate room in the right of way to replace the required number of trees within the project limits, the excess trees will be "banked" and planted at location to be determined by the tree arborist (warden).

When replacement of trees is not possible, the equivalent value of the tree as well as projected costs for installation and maintenance for two years will be assessed by the tree warden and cash received from the property owner will be placed in a Sherborn Preservation Account for tree planting on public property.

Care and maintenance of the replacement tree shall be the responsibility of the party responsible for the demise of the original tree.

B. Town of Sherborn Replacement

The town of Sherborn should replace dead or hazard trees and try to replace trees removed during construction according to the formula above. Attempts will be made to plant one of the trees as close to the original project site as possible. Additional trees shall wherever feasible, be planted near old and dying ones in anticipation of their removal. Budgets for town construction projects should include adequate funding to provide for tree replacement.

SECTION VII

EDUCATION

The following are recommended components of a Town public education program about trees.

- Regularly updated website on planting practices, disease, treatment, and what is going on at CM&D etc.
- Annual seminar for the public, bringing in authorities on arboriculture to address a range of topics.
- Periodic newsletter to residents, including some of the same information as would be on the website, but for those who don't have e-mail.
- A component in each level of the schools, coordinated with curriculum consultants

NOTES

Reference Materials:

This manual is based in part on the recommendation provided by: the Municipal Arborists and Urban Foresters Society's 1990 publication *Municipal Tree Manual*; The International Society of Arboriculture 1995 publication *Tree Pruning Guidelines*; and the American National Standards Institute 1995 publications *ANSI A3000, Tree, Shrub, and other Woody Plant Maintenance - Standard Practices*.

Massachusetts Department of Environmental Management *Community Forestry in Sherborn*, February, 2000

Tree Policies from Wellesley, Cambridge and Newton

Although this policy is the work of the Tree Committee as a whole and does not necessarily completely reflect the views of any of its members as individuals, the committee is grateful to the following for providing background materials and consultation:

Paul Scott, director of the Sherborn Community Maintenance Department and Karl Heinz, supervisor of the Land Management Division and Tree Arborist and Warden for their draft of a "Tree Management Manual";

Dr. Rebecca Hunewell for her proposed policy, "Town of Sherborn, General Tree Policies, Public Trees and Public Shade Trees," February, 2000.

APPENDIX A

ENDANGERING TREE:

A consequence of unexpected occurrence or a set of circumstances demanding immediate action (as above, resulting from snow or ice storm, high winds, fire, vehicle collision or other calamity) including, but not limited to the examples below.

- Fallen tree or branches which is/are leaning on a structure such as a building, roof, car utility wires.
- Fallen tree or branches, which lie across a public way and impede traffic.
- A leaning tree with recent root exposure, and evidence of soil movement, which is recently found to stand at less than a 45 degree angle.

THREATENING TREE:

- When objective evaluation of a tree using USDA Forest Service Northeast Center for Urban and Community Forestry standards (please refer to Community Hazard Tree Evaluation Inspection Form) suggests a tree is hazardous. The hazard designation is based on evaluation / calculation of loss of wood strength, hazard rate code and hazard tree evaluation form criteria.
- A tree for which calculation of loss of wood strength rating is less than 30 % (Bartlett Tree Research Laboratory, from Smiley and Fraedrich (1990), or 'Mis formula described by Wagener (1963).
- A leaning tree with soil mounding at the base, but no root exposure.
- A tree of which more than half of roots under crown have recently been crushed or cut (due to new construction or road work).
- When advanced decay is present in root flares or buttress roots, structural defects or extensive dead wood lead to hazard tree evaluation scores according to Northeast Center for Urban and Community Forestry standards.
- Hazardous / endangering / threatening branch or branches on an otherwise sound tree (according to hazard evaluation standards above). In this case, pruning hazardous branches will resolve the hazard problem and associated risks, but removal of the entire tree is not necessary following pruning guidelines.

APPENDIX B

Community Hazard Tree Evaluation Inspection Form using the USDA Forest Service standard procedural guidelines.

**APPENDIX C
RECOMMENDED LIST OF SUITABLE SPECIES**

Latin Name	Common Name	Mature Height	Notes
<i>Acer campestre</i>	Hedge Maple	25-40'	
<i>Acer griseum</i>	Paperbark Maple	25-35'	
<i>Acer ginnala</i>	Amur Maple	15-20'	
<i>Acer rubrum</i> cultivars	Red Maple	50-75'	various
<i>Acer saccharum</i> salt	Sugar Maple	60-80'	sensitive to
<i>Amelanchier</i>	Shad, Serviceberry	15-30'	various species
<i>Betula nigra</i> "Heritage"	Heritage River Birch	40-70'	
<i>Catalpa speciosa</i>	Catalpa	50-60'	
<i>Celtis occidentalis</i>	Hackberry	50-60'	
<i>Cercidiphyllum japonicum</i>	Katsura	40-60'	
<i>Cladrastis lutea</i>	Yellowwood	30-50'	
<i>Cornus kousa</i>	Flowering dogwood	15-30'	
<i>Crataegus phaenopyrum</i> 'Winter King'	Washington Hawthorne	15-30'	
<i>Ginkgo biloba</i>	Ginkgo	45-55'	male only
<i>Gleditsia triacanthos</i>	Thornless honeylocust	40-80'	
<i>Gymnocladus dioica</i>	Kentucky coffee tree	50-70'	
<i>Koelreuteria paniculata</i>	Golden Raintree	25-40'	
<i>Liquidambar styraciflua</i>	Sweet Gum	60-75'	
<i>Liriodendron tulipifera</i>	Tulip Tree	70-90'	
<i>Maackia amurensis</i>	Amur Maackia	20-30'	
<i>Malus</i> cultivars	Flowering crabs	20-25'	various
<i>Nyssa sylvatica</i>	Black tupelo	40-70'	
<i>Ostrya virginiana</i>	Hop Hornbeam	25-40'	
<i>Plantanus acerifolia</i>	Sycamore	75-100'	
<i>Quercus</i>	Oak	60-80'	various species
<i>Syringa reticulata</i>	Tree lilac	20-30'	
<i>Tilia cordata</i> 'Greenspire'	Little Leaf Linden	40-60'	
<i>Zelkova serrata</i>	Zelkova	60-70'	

APPENDIX D

Recommendations for Planting and Maintaining Trees and Shrubs (University of Massachusetts Extension publication)

APPENDIX E

UTILITY COMPANY TREE PRUNING

Letter from Boston Edison to Robert Reed, Sherborn Town Administrator, dated March 4, 1999, and email from Warren Wheelwright, Jr., Sherborn Selectman, dated June 24, 1999, are the understandings for trimming in the town of Sherborn.

1. The 6 foot standard of trimming along the main trunk lines is allowed on non-scenic roads.
2. On scenic roads, the 6-foot standard shall not apply to new growth/ main trunks. Such new growth/ main trunks shall not be “decapitated” or “flat topped”. The trunk shall be allowed to grow where not directly underneath the wire lines. If the trunk is directly under the wires, a lead branch shall be selected to direct the growth away from being directly below the wires. The choice really depends on whether the tree is directly growing under the wires or to the side, but within the 6 feet lateral standard. This policy shall apply to certain species of trees, including but not limited to hickories, oaks, maples, that represent strong re-growth types. To affect this policy, the tree warden shall, prior to any utility company tree pruning, mark these trees that should be saved so that the trunk will rise laterally to the wires and grow above to provide a natural large canopy that we are looking for as replacement. The side branches within 6 feet of the wires maybe trimmed, but not the trunk.