

TOWN OF WELLESLEY



MASSACHUSETTS

Rules and Regulations
Relative to the Administration
of
SECTION XVII
TREE PRESERVATION AND
PROTECTION



TREE BYLAW RULES AND REGULATIONS

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1. AUTHORITY

Pursuant to Section XVII, G. Rules and Regulations of the Town of Wellesley Zoning Bylaw, these Rules and Regulations may prescribe the size, form, contents, style, and number of copies of plans and specifications, the procedure for the submission and approval of such plans, the procedure for determining final compliance with these regulations, and the criteria and procedure regarding the Planning Board's acceptance of sureties (i.e., bonds, letters of credit, etc.) intended to satisfy the requirements of subsection F.2.b.i. of Section XVII. If any requirement of these Rules and Regulations conflicts with a provision of the Wellesley Zoning Bylaw the latter shall govern.

2. WHEN DOES THE TREE BYLAW APPLY?

	YES	NO
Are you demolishing a structure with a footprint of 250 sq. ft. or greater?		
Are you constructing a structure on a vacant lot?		
Are you constructing a retaining wall with a height of 4 feet or greater?		
Are you constructing a structure or an addition that increases the total existing footprint (lot coverage) by 50% or more?		

If you answered *YES* to any of these questions, and there is a Protected Tree located on your property (*see 3. HOW DO I LOCATE PROTECTED TREES ON MY PROPERTY?*), the Tree Bylaw applies to your project. Remember that **Protected Trees removed within the past 12 months prior to an application for any of the projects above are also subject to the requirements of the Tree Bylaw.**

3. HOW DO I LOCATE PROTECTED TREES ON MY PROPERTY?

- a. SINGLE FAMILY RESIDENTIAL PROPERTY: If a project triggers the Tree Bylaw and the site is in a Single Residence District 10, 15, 20, 30, or 40, or a General Residence District, any tree with a DBH (Diameter at Breast Height) of 10" or greater within the following Tree Yards is considered to be a Protected Tree. Table 1 depicts the location on the lot, or Tree Yard, where trees 10" DBH or greater must be protected if retained or compensated for if removed.

Zoning District	Minimum Tree Yard (feet)		
	Front	Side	Rear
SRD 10	20	10	10
SRD 15	20	20	20
SRD 20	20	20	20
SRD 30	40	30	30
SRD 40	40	40	40
General Residence District	20	10	10

- b. MULTI-FAMILY AND COMMERCIAL/OFFICE PROPERTY: If a project triggers the Tree Bylaw and the site is in any of the following zoning districts, any tree with a DBH of 10” or greater located anywhere on the property is considered to be a Protected Tree and must be protected if retained or compensated for if removed: Townhouse, Multi-Family, Educational, Educational A, Educational B, Lower Falls Village Commercial, Wellesley Square Commercial, Limited Business, Business, Business A, Industrial, Industrial A, Administrative or Professional, Limited Residence, Limited Apartment.
- c. DETERMINING TREE DIAMETER: Trees with a diameter of 10” or greater and located on property as specified in a. or b. above, are considered to be Protected Trees. The diameter of a tree is measured at breast height, which is considered to be the area of the trunk four and one-half (4.5) feet above the existing grade at the base of the tree; the following formula may be used to determine the diameter:

Tree circumference at breast height ÷ π = diameter

Example: Tree circumference at breast height = 32”
 π = 3.14159
 32” ÷ 3.14159 = 10.18” DBH

How to Measure DBH:	
<p>Figure 1. Standard Tree The standard measure of tree size for those trees existing on a site that are at least ten (10) inches in diameter at a height of four and one-half (4.5) feet above the existing grade at the base of the tree.</p>	

Figure 2. Tree has branches or bumps which interfere with DBH measurement

Measure DBH below the branch or bump. Some references say to measure a foot below the branching point, which assumes this point is the smallest diameter of the trunk below 4.5 ft. US Forest Service measures DBH immediately above point where bumps or branches cease to affect diameter of the stem. The underlying concept is to measure the diameter that would be closest to the expected DBH if branches or other irregularities were not present. Record the height at which the diameter measured.

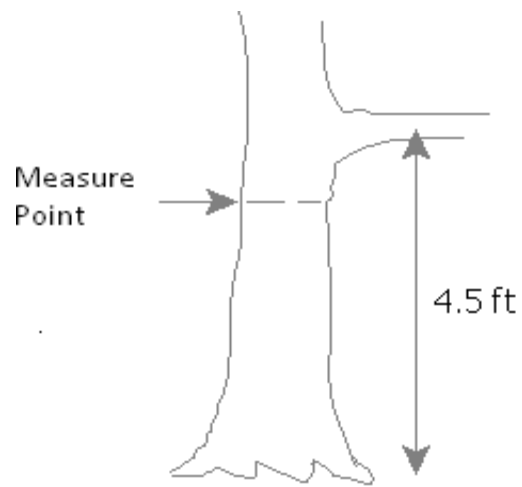
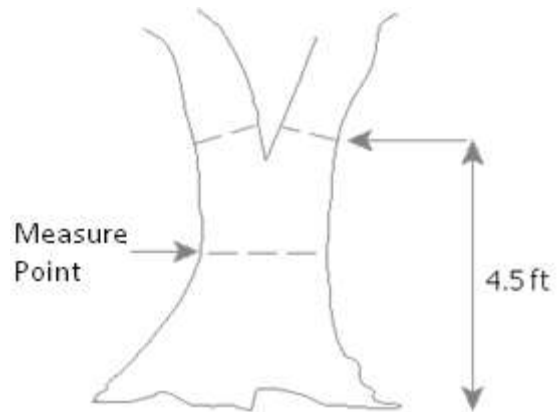


Figure 3. Tree forks below DBH or near DBH.

If a tree splits into multiple trunks below four and one-half (4.5) feet above the existing grade, the DBH shall be considered to be the measurement taken at the narrowest point beneath the split. The height of the DBH measurement and the fork should be noted (e.g., 3 ft diameter @ 2 ft [Forks @ 4 ft]).



4. I TRIGGERED THE TREE BYLAW - WHAT MATERIALS DO I SUBMIT FOR REVIEW?

If the Tree Bylaw applies, Protected Trees may be preserved and protected, removed and replaced with new trees, or removed and compensated with a contribution to the Tree Bank. The following materials are required:

Base Tree Protection and Mitigation Plan

A Base Tree Protection and Mitigation Plan is a plan submitted to the Building Department with an application for demolition or construction, showing the location of Protected Trees. This plan may be part of a landscape plan or a separate plan.

1. The Base Tree Protection and Mitigation Plan shall, at a minimum, include the following elements:
 - a) Boundaries of the subject property, including all property lines, easements, and right-of-ways of public and private ways;

- b) The location of all existing buildings, driveways, retaining walls and other improvements, with an indication of those features to be retained or removed/demolished;
 - c) The location of all planned buildings, driveways, retaining walls and other improvements;
 - d) The location of the Tree Yard for projects located in a Single Residence or General Residence District;
 - e) The location, height, DBH, and species of all existing Protected Trees and all Protected Trees that were removed within twelve (12) months prior to application with an indication of those Protected Trees to be removed and those to be retained, if applicable;
2. All plans must be drawn to a uniform scale (preferably 1" = 10', 1" = 20', or 1" = 30'). All plans shall be a minimum size of 11" x 17" (preferred) and a maximum size of 24" x 36", with 3/4" borders. Letter sizes on plans should be no smaller than 1/8".
 3. All Tree Protection and Mitigation Plans shall be prepared, stamped, dated and signed by a Registered Land Surveyor. If a plan is submitted by a Registered Landscape Architect, the plan must also be stamped by a Registered Land Surveyor.

In addition to the preceding requirements:

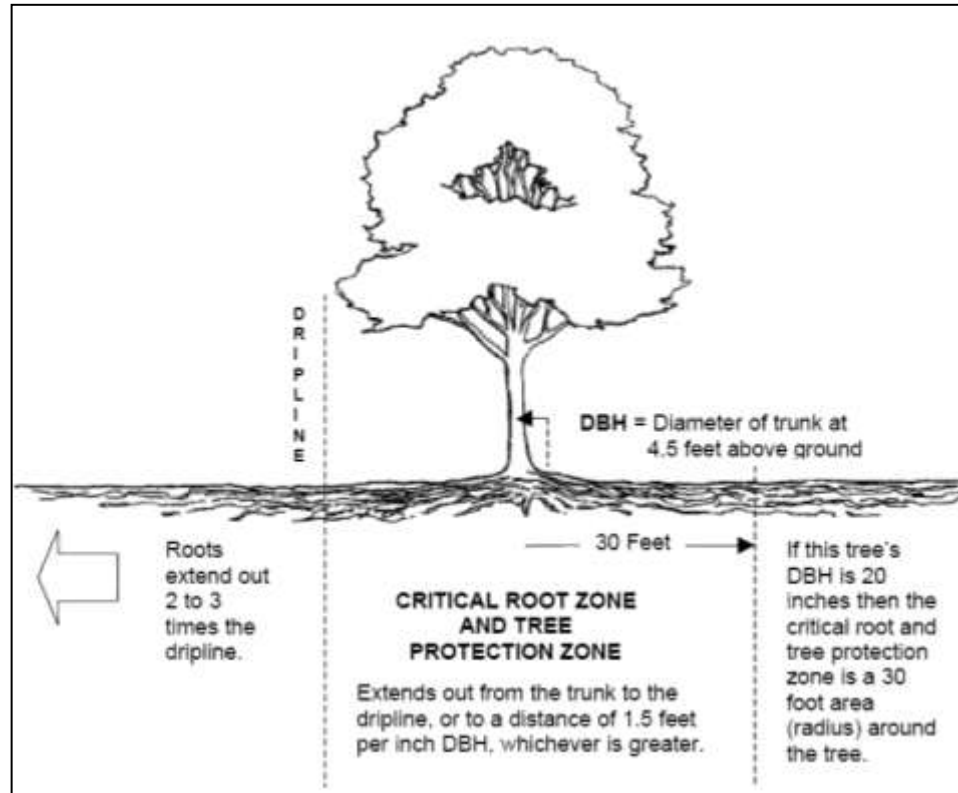
- If Protected Trees that are intended to be **preserved and protected**, additional elements must be added to the Plan as outlined in A below.
- If Protected Trees that are intended to be **removed and compensated for on site by replanting new trees**, additional elements must be added to the Plan as outlined in B below.
- If Protected Trees that are intended to be **removed and compensated for with a contribution to the Tree Bank**, the procedures in C below must be followed.

A. Preserving and Protecting -Tree Retention Plan

The following plan and submittal requirements must be submitted when a Protected Tree is proposed to be retained.

1. The Critical Root Zone, Drip-Line and location of the Tree Save Area shall be shown for all Protected Trees to be retained (*see Figure 4 below*).
2. Submitted plans shall specify the tree protection measures to be installed.
3. Prior to the commencement of construction, written documentation prepared, stamped, dated, and signed by a Certified Arborist must be submitted to the Building Department confirming the Tree Save Area has been installed correctly and consistent with submitted plans.
4. For projects that encroach within the CRZ a maintenance plan shall be submitted for such trees and shall be prepared, stamped, dated and signed by a Certified Arborist; at a minimum, the maintenance plan shall identify the course of action that will be taken to maintain the tree in good health for a period of no less than twenty-four (24) months from the date of Final Inspection or issuance of Certificate of Occupancy.

Figure 4. How to calculate the Critical Root Zone (CRZ) and Drip-Line



B. Tree Replanting Plan – Tree Removal

The following plan and submittal requirements must be submitted for proposed trees to be planted to compensate for the removal of a Protected Tree.

1. The location, caliper, species, and planting schedule of trees to be replanted to mitigate the removal of a Protected Tree(s). One-half (0.5) inches of caliper of new trees is needed to mitigate 1 DBH inch of Protected Trees removed.

When choosing the Replanting Option, remember the following:

1. Each new tree must have a minimum caliper of 2 inches.
2. Replanting must be complete prior to Final Inspection or the issuance of a Certificate of Occupancy.
3. Applicants have the ability to plant on land abutting the applicant's land, with the express written approval of the abutting property owner.
4. Overstory Tree species, which are trees that will generally reach a mature height of greater than 40 feet, if removed, must be replaced with an Overstory Tree species.
5. Invasive tree species identified in Appendix A shall not be replanted to mitigate the removal of a Protected Tree.

C. Tree Removal with Contribution to Tree Bank

The Base Tree Protection and Mitigation Plan shall be required to inventory the number of Protected Trees to be removed and the associated contribution amount based on the total DBH inches to be removed. The Contribution Rate Schedule is attached as Appendix B.

D. Combination Options

Any combination of Tree Retention, Tree Replanting, or Tree Removal with Contribution to the Tree Bank can be used. Tree mitigation for those trees removed must be clearly identified either on the submitted plan or in a written document accounting for each DBH inch of Protected Trees removed and the mitigation proposed. This is not required for tree retention.

The Building Department may request that the applicant submit additional materials for consideration before issuing a permit.

<p>Table 2. provides an example of combining Tree Replanting and Contribution options to compensate for the removal of Protected Trees. Under this example, five Protected Trees totaling 94 DBH inches were removed. The applicant chose to replant three trees totaling 7.5 caliper inches. Since tree replanting is required at a rate of 0.5” for every DBH inch removed, the 7.5” of new trees accounts for 15 DBH inches of Protected Trees removed; therefore, the applicant would have 79 DBH inches remaining to compensate for, which was done through a contribution to the Tree Bank at the rates identified in the Contribution Rate Schedule attached as Appendix B.</p>	Table 2. Sample Tree Mitigation Table		
	<i>Protected Trees to be Removed</i>		
	Site Key	Tree Species	DBH
	A	Maple	14”
	B	Red Oak	30”
	C	Red Oak	30”
	D	Hawthorn	10”
	E	Dogwood	10”
	Total		94”
	<i>Compensation for Protected Tree Removal</i>		
	Tree Replanting		Caliper
	1, 2.5” Red Oak		2.5”
	2, 2.5” Maple		5”
	Total		7.5”
	Tree Bank Contribution		
Remaining DBH inches to be compensated: 79”			
20 x \$150		\$3,000	
55 x \$250		\$13,750	
4 x \$400		\$1,600	
Total		\$18,350	
Total DBH Inches Compensated			
79” + (7.5 x 2) = 94”			

5. COMPLETING MITIGATION FOR REPLANTED TREES

A. Bond Provisions

If weather conditions prevent the installation of replacement trees, at least 30 days prior to the Final Inspection the property owner may contact the Planning Department to post a bond in an amount equal to the cost of the replacement trees estimated by either a Landscape Architect or Certified Arborist. The Planning Department will hold bonds, in an interest bearing account, for no longer than 12 months. After 12 months, the bond shall be released to the Tree Bank as mitigation for the tree removal and the balance of the alternative Tree Bank Contribution required shall be sent to the property owner for payment. After 30 days if the outstanding balance is not paid, the property owner shall be notified they have committed a zoning violation and may be fined up to \$300.00 a day until such time as the violation is mitigated.

The Planning Department may extend the bond for no more than 6 months from the original 12 month period.

B. Compliance

Sign off on the Final Inspection for additions or issuance of a Certificate of Occupancy by the Building Department will serve as verification that all requirements of the Tree Bylaw have been met or have been assured.

Appendix A- Invasive Trees

Per Section XVII.F.2.b.i.4, the following Invasive Tree Species, as determined by the Department of Public Works- Park & Tree Division, shall not be replanted to mitigate the removal of a Protected Tree.

<i>Acer platanoides</i>	Norway Maple
<i>Acer pseudoplatanus</i>	Sycamore Maple
<i>Ailanthus altissima</i>	Tree-of-Heaven
<i>Phellodendron amurense</i>	Amur Cork-tree
<i>Robinia pseudoacacia</i>	Black Locust

Appendix B – Contribution Rate Schedule

Per Section XVII.F.2.b.ii., and following a public hearing, the Board of Selectmen voted to establish the following contribution rate schedule at a meeting held on June 27, 2011:

Contribution Rate Schedule	
20" Diameter at Breast Height (DBH) and Less	\$150 per inch
Greater than 20" DBH but no more than 75" DBH	\$150 per inches 10" - 20"; \$250 per inch thereafter
Greater than 75" DBH	\$150 per inches 10" - 20"; \$250 per inches greater than 20" to 75"; \$400 per inch thereafter

Examples:

Total DBH to be removed = 10": contribution of \$1,500 (10 x \$150)

Total DBH to be removed = 20": contribution of \$3,000 (20 x \$150)

Total DBH to be removed = 21": contribution of \$3,250 (\$150 x 20 + \$250 x 1)

Total DBH to be removed = 75": contribution of \$16,750 (\$150 x 20" + \$250 x 55")

Total DBH to be removed = 76": contribution of \$17,150 (\$150 x 20" + \$250 x 55 + \$400 x 1")

Total DBH to be removed = 100": contribution of \$26,750 (\$150 x 20" + \$250 x 55 + \$400 x 25")