

ZONING ARTICLE \_\_\_\_ : Tree Protection & Preservation

Will the Town amend the Zoning By-law of the Town of Hingham, adopted March 10, 1941, as heretofore amended, to insert the following provisions relating to Tree Protection into the Zoning By-Law:

**SECTION 11.9 TREE PROTECTION & PRESERVATION**

**a. ~~a.~~ Title**

~~Section 11.9~~This section may be cited as the "Town of Hingham Tree Bylaw" and/or "Tree Bylaw".

**b. ~~b.~~ Intent and purpose**

The intent of ~~Section 11.9~~this section is to encourage the preservation and protection of sizeable ~~trees~~Trees on portions of private property during significant demolition and/or development activity.

Trees are recognized for their abilities to improve air quality, protect from glare and heat, reduce noise, aid in the stabilization of soil, provide natural flood and drainage control, create habitats for wildlife, enhance aesthetics and property values, contribute to the distinct character of certain neighborhoods, ~~and~~ provide natural privacy to neighbors, and reduce ambient carbon in the atmosphere. Therefore, the Town deems that the preservation and protection of certain ~~trees~~Trees on private property, the requirement to replant ~~trees~~Trees to replace those removed, and the collection of financial contributions to support the Town's ~~tree~~Tree planting and maintenance efforts are public purposes that protect the public health, welfare, environment and aesthetics.

**c. ~~c.~~ Definitions**

For the purposes of ~~Section 11.9~~this section, the following definitions shall apply.

Caliper - Diameter of a ~~tree~~Tree trunk (in inches). For ~~trees~~Trees up to and including four (4) inches in diameter, the caliper is measured six (6) inches above the existing grade at the base of the ~~tree~~Tree. For ~~trees~~Trees larger than four (4) inches in diameter, the caliper is measured twelve (12) inches above the existing grade at the base of the ~~tree~~Tree.

Certified Arborist — A professional arborist possessing current certification issued by the International Society of Arboriculture (~~I.S.S.A.~~I.S.A.) and/or the Massachusetts Arborist Association (M.A.A.).

Critical Root Zone (CRZ) - The minimum area beneath the canopy of a ~~tree~~Tree which must be left undisturbed in order to preserve a sufficient root mass to give a ~~tree~~Tree a reasonable chance of survival. The CRZ is represented by a concentric circle centering on the ~~tree~~Tree's trunk and extending outward towards the ~~tree~~Tree's dripline. The minimum area of the CRZ shall be dependent on the required minimum radius of the CRZ; the required minimum radius of the CRZ shall be determined by multiplying a ~~tree~~Tree's DBH (in inches) by ~~eighteen~~twelve (~~18~~12) inches, with the resulting product constituting the minimum radius of the CRZ.

*EXAMPLE: A ~~tree~~Tree with a DBH of twenty (~~20~~12) inches shall have a CRZ with a minimum radius of ~~360~~inches or 30~~20~~ feet (~~20~~ x 18~~12~~ = 360~~240~~ or 30~~20~~').*

Diameter at Breast Height (DBH) - The standard measure of ~~tree~~Tree size ~~for those trees existing on a site that are at least four (4)~~. It means the diameter of the trunk of a Tree measured in inches ~~in diameter~~outside the bark at a height of four and one-half (~~4.5~~4 feet 6 inches) above the existing

Howell, Priya (TR Product) [P1]

Discuss where this would be inserted. Currently contemplated as Paragraph 9 in the existing zoning bylaw, Section 11, and then the current number 9 would be renumbered to 10.

grade at the base of the ~~tree~~Tree. If a ~~tree~~Tree splits into multiple trunks below ~~four and one-half (4.5) feet above the existing grade~~the measurement point, the DBH shall be ~~considered to be the measurement taken~~measured at the narrowest point beneath the split. All measurements shall be rounded up to the nearest inch.

Drip-Line - The area surrounding the ~~tree~~Tree from the trunk to the outermost branches. This area is distinguished from, and not to be confused with Critical Root Zone.

Overstory Tree - A ~~tree~~Tree that will generally reach a mature height of greater than forty (40) feet.

Protected Tree - ~~Any existing~~A Tree, ~~other than a Tree designated as Invasive by the Massachusetts Invasive Plant Advisory Group,~~ that with the following characteristics:

- Currently exists or was removed within twelve (12) months prior to application for ~~an applicable~~the relevant permit, ~~with or approval.~~
- Is not designated as Invasive by the Massachusetts Invasive Plant Advisory Group.
- Has or had a DBH of ~~{six} (6)~~ inches or greater, ~~located in a Tree Yard.~~
- In the case of a property zoned ~~{Residence District A, B, or C}, B,~~ or located anywhere on C, has or had any portion of the four and one-half feet (4 feet 6 inches) of its stem growing in the Tree Yard of such property
- In the case of property zoned other than ~~{Residence District A, B, or C}, is or was located anywhere on such property.~~

Howell, Priya (TR Product) [P2]  
Discuss carving out invasive trees from mitigation requirements.

Howell, Priya (TR Product) [P3]  
Discuss DBH. Conservation policy is six inches.

Howell, Priya (TR Product) [P4]  
Discuss scope of Tree Yard applicability

Significant Tree - Any tree with a DBH of ~~{six} (6)~~ inches or greater with portions of the stem of the tree actively growing into a Tree Yard between a height of six (6) inches and four and one-half (4.5) feet above grade shall be considered a ProtectedProtected Tree which is seventy-five years or older as determined by a Certified Arborist based on the DBH of the Tree and typical growth of a Tree of the same species, or which has a DBH of thirty (30) inches or greater.

Tree - Any self-supporting, woody perennial plant ~~usually~~ having a ~~single trunk with a diameter~~DBH of three (3) inches or more which normally attains a mature height of ~~sixteen (610)~~ feet or greater.

Tree Bank - An account established for the deposit of contributions in lieu of ~~tree~~Tree replanting ~~as required by Section 11.9.~~ Funds deposited in this account shall be used for the purpose set forth in ~~subsection e of Section 11.9~~the Tree Bylaw.

Tree Protection & Mitigation Plan - A plan submitted to ~~{the Planning Board}~~ for review prior to the commencement of demolition and/or construction on a property on which a Protected Tree is located. This plan shall include the information required by subsection f.iii.x ~~of Section 11.9~~below, and may be either part of another plan submitted to the Planning Board, including a site plan ~~submitted under Section 11.4 and/~~ or a separate plan.

Tree Removal - Any act that causes a ~~tree~~Tree to die or will cause a ~~tree~~Tree to die within a three (3) year period as determined by the Department of Public Works ~~-Tree & Park Division~~ based on arboricultural practices recommended by the International Society of Arboriculture (I.S.A.).

Tree Save Area - The area surrounding a ~~tree~~Tree which includes at a minimum the Critical Root Zone ("CRZ") and Drip-Lineline of all Protected Trees, unless otherwise authorized ~~herein~~. ~~The Tree Save Area must be enclosed within a fence and remain undisturbed so as to prevent damage to~~by the ~~tree~~Planning Board.

Tree Yard - The area of a parcel zoned ~~{~~Residence District A, B, or C} located adjacent to all front, side, and rear lines of a lot; Tree Yards shall have a minimum depth as specified in the table entitled Location of "Protected Trees on Property Zoned Residence District A, B or C Minimum Tree Yard (feet)", contained in subsection f.i. ~~of Section 11.9. Trees having a DBH of [six] ([6]) inches or greater and located within a Tree Yard shall be considered to be Protected Trees.~~

~~d~~below.

#### d. Applicability

i. ~~i.~~ Applicability: The requirements of ~~Section 11.9~~the Tree Bylaw shall apply to:

- ~~x~~ all projects which meet the criteria for Site Plan Review as set forth in Section IV-B.6; ~~and~~ y. plans submitted under the Subdivision Control Law.

ii. ~~ii.~~ Non-applicability: The requirements of ~~Section 11.9~~the Tree Bylaw shall not apply to:

- Town-owned ~~public trees, including trees that are considered to be~~ Public Shade Trees pursuant to M.G.L. Chapter 87, ~~which are protected by the Natural Resources Commission acting as the Town's Tree Warden.~~
- Any ~~trees~~Trees located on property owned by ~~the Town~~, the commonwealth, or any independent authority of the commonwealth, ~~or by the federal government,~~ or the Town, other than property owned by the Town that is used by a private Person, or a public utility.
- Emergency projects necessary for public safety, health and welfare as determined by the Inspector of Buildings, the Tree Warden, or ~~HMLP~~a public utility.
- Trees affected by work performed by a utility company in maintenance of its rights of way or in its maintenance, repair or replacement of infrastructure that is unrelated to a development project requiring zoning relief.
- Trees that are hazardous ~~as determined and confirmed in writing by a Certified Arborist.~~
- ~~Trees subject to an immediate and/or probable risk of~~due to disease, age, or ~~insect infestation~~shallow roots, as determined and confirmed in writing by a Certified Arborist.
- ~~Any tree work completed by HMLP, in connection with its routine maintenance activities.~~ and reviewed by the Tree Warden.

iii. Existing Encroachments: For the purposes of interpreting, administering, and enforcing ~~Section 11.9~~the Tree Bylaw and Section ~~11.1 (111-1~~ (Non-Conforming Uses), an existing structure shall not be considered to be a nonconforming structure solely because the structure, or a portion of the structure, is located within the CRZ and/or Drip-Line of an existing Protected Tree. The reconstruction of demolished structures or portions of structures within the previously encroached

Howell, Priya (TR Product) [P5]

The tree yard is intended to protect trees along the perimeter of a property, allowing for flexibility of clearing trees in the middle for development.

A good explanation is provided here: [https://www.town.lynnfield.ma.us/sites/gf/files/vyhlf3391/f/pages/tree\\_protection\\_bylaw\\_draft\\_flier\\_8-18-2020.pdf](https://www.town.lynnfield.ma.us/sites/gf/files/vyhlf3391/f/pages/tree_protection_bylaw_draft_flier_8-18-2020.pdf)

area of the CRZ and/or Drip-Line shall be prohibited, except when consistent with the requirements of ~~Section 11.9.~~

**Howell, Priya (TR Product) [P6]**  
Discuss whether rebuilding should be allowed on same footprint.

~~the Tree Bylaw.~~

**e. Town of Hingham Tree Bank**

In accordance with M.G.L. c. 44, s. 53E~~4EYI~~, there is hereby established a Town of Hingham Tree Bank ("~~Tree Bank~~") which shall be held by the Town Treasurer in an account administered by the Department of Public Works - Tree & Parks Division in accordance with applicable provisions of the General Laws. Any

contributions collected per subsection f of ~~Section 11.9~~~~the Tree Bylaw~~ shall be deposited in said Tree Bank, and shall be used for the purposes of ~~buying, planting and~~ maintaining ~~trees and protecting~~ Trees in the Town, which may include efforts to remove invasive plants if it is reasonably likely that such removal is necessary to prevent destruction of mature native Trees, and any associated labor costs, including the cost of time spent by town personnel on such ~~efforts~~.

**Howell, Priya (TR Product) [P7]**  
Discuss purpose. Confirm drafting of this section meets state law requirements of revolving funds with town counsel.

**f. ~~f.~~ Protected Trees**

~~Existing trees or trees that were removed within twelve (12) months prior to application for a permit subject to Site Plan Review with a DBH of [six inches (6")] or greater and located within the minimum Tree Yard of a property zoned [Residence District A, B or C] as identified in the following table, shall be considered to be Protected Trees. Existing trees or trees that were removed within twelve (12) months prior to application for a permit subject to Site Plan Review with a DBH of [six inches (6")] or greater and located anywhere on property zoned other than [Residence District A, B or C], shall be considered to be Protected Trees.~~

~~Demolition and/or~~

Subdivision, demolition and construction activity, ~~(as identified under subsection d.i. of Section 11.9)~~the Tree Bylaw, that is not exempt pursuant to subsection d.ii, on a property on which a Protected Tree is located is prohibited unless ~~authorized by the Inspector of Buildings~~required Tree protection and mitigation measures will be taken as set forth in this subsection.

**Location of Protected Trees on Property Zoned Residence District A, B or C Minimum Tree Yard (feet)**

District	Front	Side	Rear
Residence District A	<del>15'</del>	5'	5'
Residence District B	25'	10'	10'
Residence District C	35'	10'	10'

**Howell, Priya (TR Product) [P8]**  
Discuss Tree Yard dimensions. Currently, these numbers are derived by subtracting 10' from dimensions in Schedule IV-A, except for District C, the front dimension is 15.

**g. ~~g.~~ Tree Protection & Mitigation:**

**i. ~~i.~~ Protection:**

**x. ~~x.~~ Tree Save Area.** Each Protected Tree to be retained on property planned for subdivision, ~~demolition~~~~and~~, or construction activity shall be protected by the establishment of a Tree Save Area. The Tree Save Area must be enclosed or set off by temporary protective fence at least 3.5 feet high. The Tree Save Area shall remain undisturbed so as to prevent damage to the Tree and no storage of fill, materials, or equipment may occur within a Tree Save Area .

The Tree Save Area shall be delineated within the submitted Tree Protection & Mitigation Plan, and the applicable fencing shall be installed prior to the issuance of applicable permits, ~~and~~. Protective fencing shall remain in place until work is completed on the property. The applicant shall submit written documentation, prepared, stamped, dated and signed by a Certified Arborist, to the Building Department confirming that the required Tree Save Area identified in the Tree Protection & Mitigation Plan has been installed prior to commencement of any subdivision, construction, or demolition work.

An applicant may choose to encroach within the CRZ and/or Drip-Line of a Protected Tree; however, such proposed action shall require the applicant to submit a maintenance plan for the ~~tree~~Tree, to be prepared, stamped, dated and signed by a Certified Arborist as part of the Tree Protection & Mitigation Plan. Under these instances, the Tree Save Area may be reduced to protect only those areas of the CRZ and/or Drip-Line not proposed for encroachment.

**y. ~~y.~~ Significant Trees.** The landscape shall be preserved in its natural state insofar as practical by minimizing Removal of Significant Trees. Efforts shall be made to avoid clear-cutting of land for the sole purpose of offering land for sale. Every effort shall be made through the design, layout, and construction of a subdivision, and through the site plan review process to save as many Significant Trees as possible. Nothing herein shall be construed as limiting the Planning Board's right to impose other conditions or restrictions within its powers, including the creation of any deeded tree protection area or the denial of any permit.

**ii. ~~ii.~~ Mitigation:** The ~~removal~~Removal of a Protected Tree from a property in connection with one or more of the circumstances set forth in subsection d.i. shall require mitigation by satisfying one of the following provisions: Replanting of Trees in accordance with subsection (x) below, or Contribution to the Town of Hingham Tree Bank in accordance with ~~subsection~~subsection (y). Mitigation measures shall be identified in the submitted Tree Protection and Mitigation Plan. The ~~removal~~Removal or proposed ~~removal~~Removal of a Protected Tree(s) that has been mitigated for, in conjunction with a previous applicable permit, shall not require additional mitigation under subsequent permits, unless such mitigation has not been completed or otherwise assured.

**i. ~~x.~~ Replanting of Trees:** For each inch of DBH of the ~~tree~~Protected Tree(s) removed no less than ~~one-half (0.5)~~ inch of caliper of new ~~tree~~Tree(s) shall be replanted in accordance with the following:

- Each new ~~tree~~Tree must have a minimum caliper of three (3) inches;
- Such replanting, either on the applicant's land or on land abutting the applicant's land with the express written approval of the owner of such abutting land, shall occur prior to final

inspection, or be otherwise assured at such time to the satisfaction of the ~~Town in a manner consistent with the Rules and Regulations~~[Building Department](#);

- If the Protected Tree to be removed is an Overstory Tree species, the replacement ~~tree~~[Tree](#)(s) to mitigate the ~~removal~~[Removal](#) shall be an Overstory Tree species; and
- ~~Invasive tree species, Any Tree designated as determined Invasive by~~ [the Department of Public Works – Tree & Park Division](#), [Massachusetts Invasive Plant Advisory Group](#) shall not be replanted to mitigate the removal of a Protected Tree.

Howell, Priya (TR Product) [P9]  
Replantings should not be invasive, but to discuss whether to use the same list as in the definition of Protected Tree, or make it broader as in here.

y. Contribution to the Town of Hingham Tree Bank: The ~~{~~[Board of Selectmen](#)~~}~~ shall establish a Tree Bank contribution schedule, such schedule to be based on the DBH of Protected Tree(s) to be removed, the cost to the Town of replanting and maintaining a replacement Tree on behalf of the applicant, and other environmental impacts associated with the Removal of the Tree.

Howell, Priya (TR Product) [P10]  
Should this be Planning Board

The schedule may take into account the aggregate DBH of Protected Trees to be removed. The applicant shall make such contribution to the Tree Bank for the ~~removal~~[Removal](#) of a Protected Tree not already mitigated for per subsection g.ii.x; contributions shall be ~~received by the Building Department~~[deposited into the Tree Bank](#) prior to the issuance of all applicable permits.

### iii. ~~iii.~~ Plan Review and Permit Issuance:

w. ~~w.~~ Tree Protection & Mitigation Plan Submittal: Prior to the issuance of a permit in connection with one or more of the circumstances set forth in subsection d.i. on property on which a Protected Tree is located or was located within twelve (12) months prior to application, the owner of the property shall submit a Tree Protection & Mitigation Plan to ~~{~~[the Planning Board](#)~~}~~ along with the applicable application.

Howell, Priya (TR Product) [P11]  
Discuss process for submittal

If a permit requiring the submittal of a Tree Protection & Mitigation Plan was issued for a property within twelve (12) months prior to application for one or more of the circumstances set forth in subsection d.i., the submittal of a Tree Protection & Mitigation Plan shall not be required for subsequent permits unless any information required under subsection g.iii.x below is changed or altered

x. ~~x.~~ Tree Protection & Mitigation Plan Requirements: The submitted Tree Protection & Mitigation Plan shall be a to-scale survey or site plan, along with any accompanying documentation, containing information prepared, stamped, dated and signed by an individual(s) appropriately licensed and authorized by the State of Massachusetts to attest to and certify such information, unless a specific certification is referenced herein. The plan shall include, but not be limited to, the following information:

- 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 for an applicable demolition or building permit, ~~with or other application for approval or relief from the Planning Board,~~ with an indication of whether those Protected Trees are also Significant Trees, and an indication of those Protected Trees to be removed and those to be retained, ~~if~~[as](#) applicable;
- The CRZ, drip-line and location of the Tree Save Area shall be shown for all Protected Trees to be retained;

- The location, caliper, species, and planting schedule of ~~trees~~Trees to be replanted to mitigate the ~~removal~~Removal of a Protected Tree(s), if applicable;
- A maintenance plan prepared, stamped, dated and signed by a Certified Arborist for all Protected Trees which are proposed to have encroachment within the CRZ and/or drip-line, if applicable;
- The amount to be contributed to the Tree Bank to mitigate the ~~removal~~Removal of a Protected Tree(s), if applicable; and
- Such other information as is required by the Inspector of Buildings pursuant to applicable regulations.

If the plan is not included as part of a site plan, it shall also include the following information:

- Boundaries of the subject property, including all property lines, easements, and right-of-ways of public and private ways;
- The location of all existing buildings, driveways, retaining walls and other improvements, with an indication of those features to be retained or removed/demolished; and
- The location of all planned buildings, driveways, retaining walls and other improvements.

y. ~~y.~~ Tree Bank Contribution: In lieu of replanting, if applicable, the owner of the property shall submit any required contribution to the Tree Bank as mitigation for the ~~removal~~Removal of a ~~protected tree~~.

z~~Protected Tree~~.

z. Building Department Action: If the Tree Protection & Mitigation Plan is consistent with the protection and mitigation requirements contained herein and any established rules, regulations or manuals, and any applicable Tree Bank contribution has been submitted, the ~~Building Department~~applicable Board or department of Town may issue any applicable permit. If the proposal does not meet or satisfy these requirements, the ~~Building Department~~the applicable Board or department of Town shall deny all applicable permit applications and so notify the applicant.

#### **h. Maintenance of Protected and Replanted Trees:**

i. *Protected Trees*: Each Protected Tree retained shall be maintained in good health for a period of no less than twenty-four (24) months from the date of final inspection, or issuance of a Certificate of Occupancy ~~if~~f applicable. Should such ~~tree~~Tree die ~~or be Removed~~ within this twenty-four (24) month period, the owner of the property shall be required to provide mitigation consistent with the requirements for the ~~removal~~Removal of a Protected Tree as contained herein within nine (9) months from the death of the original ~~tree~~Tree.

ii. *Replanted Trees*: All new ~~trees~~Trees replanted to mitigate the ~~removal~~Removal of Protected Tree(s) shall be maintained in good health for a period of no less than twenty-four (24) months from the date of planting. Should such ~~tree~~Tree die ~~or be Removed~~ within this twenty-four (24) month period, the owner of the property shall be responsible for replacing the ~~tree~~Tree with a ~~tree~~Tree equal to or greater than the size of the original replacement ~~tree~~Tree at the time of planting; such ~~tree~~Tree shall be planted within nine (9) months of the death of the original replacement ~~tree~~Tree.

**i. Periodic Inspection.**

The Tree Warden, Building Inspector, or any Planning Board member, or any designee of any of them may conduct periodic inspections of the site in order to ensure compliance with Tree Protection & Mitigation Plan. Additionally, if the Town Engineer, any Police Officer, or any other town official observes violations or possible violations of these conditions, such official shall promptly report same to the Tree Warden or Building Inspector.



Document comparison by Workshare Compare on Friday, January 21, 2022  
1:20:58 AM

Input:	
Document 1 ID	netdocuments://4860-4137-6010/2
Description	Hingham Draft zoning bylaw Tree Preservation (July 2021)
Document 2 ID	netdocuments://4853-9007-6682/3
Description	Citizens Petition for Zoning Article Tree Protection and Preservation 12.1.21 (text only)
Rendering set	Standard

Legend:	
Insertion	
Deletion	
Moved from	
Moved to	
Style change	
Format change	
Moved-deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	191
Deletions	205
Moved from	3
Moved to	3
Style changes	0
Format changes	0
Total changes	402