Chapter 8.66 - TREE PROTECTION

Sections:

8.66.010 - Short Title

This Chapter may be cited as the Tree Protection Ordinance of the City of Cambridge.

8.66.020 - Statement of Purpose

The City Council hereby finds that the preservation of existing trees and the promotion of new tree planting is a public purpose that protects the public health, welfare, environment and aesthetics of the City of Cambridge and its citizens.

The urban forest serves a wide variety of functions, which promote the health, safety, and welfare of residents. These functions include:

(a) conserving energy, by providing shade and evaporative cooling through transpiration;

(b) improving local and global air quality by absorbing carbon dioxide and ozone, absorbing particulate matter, and producing oxygen;

- (c) reducing wind speed and directing air flow;
- (d) reducing noise pollution;
- (e) providing habitat for birds, small mammals, and other wildlife;
- (f) reducing storm runoff and the potential for soil erosion;
- (g) increasing real property values; and
- (h) enhancing visual and aesthetic qualities that attract visitors and businesses.

8.66.030 - Definitions

Building. A structure enclosed within exterior walls or firewalls, built, erected, and framed of a combination of any materials, whether portable or fixed, having a roof, to form a structure for the shelter or persons, animals, or property.

Certified Arborist. An arborist certified by the Massachusetts Arborists' Association or the International Society of Arboriculture, or any successor of either organization.

City Arborist. The City Arborist appointed by the City Manager, or any other Certified Arborist designated by the Commissioner of Public Works and approved by the City Manager to exercise any of the authority granted to the City Arborist pursuant to this Chapter.

Replace the following Definition;

DBH (Diameter at Breast Height). The diameter of a tree trunk measured in inches at a height of four (4) feet above the ground.

With;

DBH (Diameter at Breast Height). The diameter of a tree trunk measured in inches at a height of four and one-half (4.5) feet above the ground.

Add the following Definition;

Exceptional Tree. Any Significant Tree thirty (30) inches DBH or larger which is on a Lot.

Lot. A parcel of land in identical ownership throughout, bounded by other lots or streets, which is designated by its owner to be used, developed, or built upon as a unit.

Add the following Definition;

Mitigation Payment. A payment to be paid to the Tree Replacement Fund associated with the removal of Significant Trees that have not been replaced with Replacement Trees in accordance with the mitigation requirements established in this Chapter.

Replace the following Definition;

Mitigation Plan. A document to be included within any Tree Study submitted for a project where any Significant Trees are proposed to be removed from a Lot, stating (i) why any Significant Trees are proposed to be removed from a Lot, (ii) a description of the Replacement Trees proposed to replace the Significant Trees to be removed or the value of which is proposed to be paid to the City to be deposited into the Tree Replacement Fund, (iii) an estimate from a local nursery for the cost of purchasing, planting, watering and maintaining said Replacement Trees for a period of not less than five years or the value of which is proposed to be paid to the City to be deposited into the Tree Replacement Fund, and (iv) certification from a Certified Arborist that the proposed Replacement Trees and cost estimates for purchasing, planting, watering and maintaining said Trees are appropriate and reasonable.

With;

<u>Mitigation Plan.</u> A document to be provided where any Significant Trees are proposed to be removed from a Lot, stating (i) why any Significant Trees are proposed to be removed from a Lot, (ii) a description of the Replacement Trees proposed to replace the Significant Trees to be removed, and (iii) the Mitigation Payment, if required.

Owner. For purposes of this Chapter, an owner shall be defined as set forth in the Zoning Ordinance, Title 17 of the Cambridge Municipal Code.

Replace the following Definition;

Replacement Trees. A tree or trees to be planted on a Lot to replace any Significant Trees to be removed from the Lot, or whose equivalent value is proposed to be paid to the City to be deposited into the Tree Replacement Fund instead of planting Replacement Trees on the Lot. The total DBH of Replacement Trees, or equivalent value, as applicable, shall be equal to or exceed the total DBH of the Significant Trees to be removed from the Lot.

With;

Replacement Trees. A tree or trees to be planted to replace any Significant Trees to be removed from the Lot. For large projects, as identified in Section 8.66.050, Replacement Trees can be planted on the same Lot or any other Lot within the same neighborhood or adjoining neighborhood, as defined by the Cambridge Neighborhood Study 1953. The approval of the City Arborist will be required if Replacement Trees are to be placed on other Lots.

Replace the following Definition;

Significant Trees. Any tree or trees larger than 8" DBH which is on a Lot or which has been removed from the Lot within one year prior to the submission of a Tree Study to the City Arborist.

With;

Significant Tree. Any tree six (6) inches DBH or larger which is on a Lot.

Add the following Definition:

Structure. A combination of materials assembled at a fixed location to give support or shelter, such as a building, bridge, tower, retaining wall, tank, tunnel, stadium, or the like.

Replace the following Definition;

Tree Protection Plan. This plan may be either a separate drawing or part of a landscape plan, and shall include the following information:

a) Drawings of tree protection measures and (i) their location on the Lot, including Tree Save Areas, and the location, height and DBH of Significant Trees and an indication of which Significant Trees would remain on the site, or (ii) in the event that any Significant Trees are proposed to be removed, the location of those Significant Trees, and the location, height and DBH of Replacement Trees which are proposed to be planted on the Lot if feasible, or (iii) in the event that Replacement Trees are not proposed to be planted on the Lot, the total sum, as identified in the Mitigation Plan, to be paid to the City to be deposited into the Tree Replacement Fund, shall be required to be submitted together with the Tree Protection Plan;

b) A schedule for planting the proposed Replacement Trees and a representation that such trees will be inspected and, if necessary, treated by a Certified Arborist once a year for five years; and

c) Such other information as is required by the City Arborist pursuant to applicable regulations.

With;

Tree Protection Plan. This plan shall include the following information:

a) Drawings of tree protection measures and:

(i) the location on the Lot of all Significant Trees and an indication of which Significant Trees would remain on the Lot, and

(ii) in the event that any Significant Trees are proposed to be removed, the location of those Significant Trees, and the location, height and DBH of Replacement Trees which are proposed to be planted, and

(iii) in the event that an inadequate number of Replacement Trees are proposed to be planted, the Mitigation Payment, as identified in the Mitigation Plan to be submitted with the Tree Study and

b) A schedule for planting the proposed Replacement Trees; and

c) Such other conditions as specified by the City Arborist pursuant to applicable regulations.

Replace the following Definition;

Tree Save Area. The area surrounding a tree which must remain undisturbed so as to prevent damage to the tree.

With;

Tree Save Area. The area surrounding a tree which must remain as undisturbed as possible so as to prevent damage to the tree. Disturbance within the Tree Save Area may only be for limited and exceptional reasons.

Tree Study. The information submitted to the City Arborist, which shall include a Tree Survey, a Tree Protection Plan, and, if applicable, a Mitigation Plan.

Replace the following Definition;

Tree Survey. A plan showing the location, type, height and DBH of all trees on a Lot.

With;

Tree Survey. A plan showing the location, type, height and DBH of all trees on a Lot and those trees that have been removed from a Lot within one year prior to the submission of a Tree Study.

8.66.040 - Applicability

This Chapter shall apply to all trees located on Lots specified in the following section §8.66.050 and §8.66.055. This Chapter shall not apply to any project of the Affordable Housing Trust or otherwise for the construction of low and moderate-income housing meeting the standards established pursuant to any City, State or Federal housing program designed to assist low and moderate-income households.

Consider replacing with the following:

8.66.040 - Applicability

This Chapter shall apply to all trees located on Lots specified in the following section §8.66.060 and §8.66.065.

Add the following Section;

8.66.050 - Procedures for all Significant Tree Removals.

- a. <u>For any Significant Tree removal, a permit will be required from the City Arborist. The City</u> <u>Arborist shall keep a record of the type and size of tree removed, the reason for the removal,</u> <u>photographs of the tree documenting the reason for removal, the date, the contractor(s), and</u> <u>the name and address of the property owner.</u>
- b. <u>A Mitigation Payment will be required for all Significant Trees removed where an insufficient</u> <u>quantity of Replacement Trees is provided. A Mitigation Payment will not be required if</u> <u>Significant Trees have been removed because of emergency circumstances, significant utility</u> <u>infrastructure projects undertaken pursuant to State or Federal regulations or programs, for City</u> <u>park projects, or where a tree poses significant negative impact to an adjacent Structure as</u> <u>defined in 8.66.030, or for dead or dangerous trees, or a Lot is of such density with existing trees</u> <u>that the removal of certain Significant Trees is considered beneficial to the health of the tree</u> <u>canopy on the Lot.</u>
- c. <u>Protection of Replacement Trees.</u>

(i)Replacement Trees will continue to be identified as Replacement Trees for a period of ten (10) years after they are planted.

(ii)No Replacement Tree shall be removed without a permit issued by the City Arborist. In all cases, the City Arborist shall keep a record of the type and size of any Replacement Tree removed, the reason for the removal, photographs of the Replacement Tree documenting the reason for removal, the date, the contractor(s), and the name and address of the property owner.

(iii)A Mitigation Payment will be required for all Replacement Trees removed. The Mitigation Payment shall be assessed on a DBH basis, in accordance with the City of Cambridge's most recent tree planting and maintenance contract inclusive of purchasing, planting, watering, and maintaining Replacement Trees for a period of not less than five years. No reduction of the amount of Mitigation Payment otherwise available under this Ordinance will be allowed in connection with the removal of Replacement Trees.

Replace the following Section;

8.66.050 - Procedure for Large Projects

- a. In any project which requires a special permit under §§ 4.26.1 4.26.3, §19.20, §11.12.1, §11.12.2, or §11.12.3 of the Zoning Ordinance, the application for the special permit shall include a Tree Study, which shall first have been submitted to the City Arborist not less than twenty-one (21) days prior to the submission of the application for a special permit. The Tree Study shall be reviewed by the City Arborist, who shall certify that he has reviewed it, indicating whether it is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The City Arborist shall refer the Tree Study with his certification and recommendations to the Planning Board, to assist the Planning Board in establishing any conditions that may be required as a result of the findings of the Tree Study in connection with the issuance of a special permit.
- b. Regarding any project which includes a building of 25,000 square feet or more and which is subject to the provisions of § 19.50 of the Zoning Ordinance, the materials submitted to the Inspectional Services Department with the application for a building permit shall include a Tree Study, together with a certification from the City Arborist that the applicant has submitted the Tree Study for review to the City Arborist not less than twenty-one (21) days prior to the submission of the application for a building permit, and that the Tree Study is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The owner of the Lot shall be required to commit to comply with all provisions of the Tree Study and the applicable provisions of this Chapter and regulations promulgated hereunder in the application for a building provisions of this Chapter and regulations promulgated hereunder in the application for a building provisions of this Chapter and regulations promulgated hereunder in the application for a building provisions of this Chapter and regulations promulgated hereunder in the application for a building provisions of this Chapter and regulations promulgated hereunder in the application for a building provisions of the Study permit.

With;

8.66.060 - Procedure for Large Projects

- a. In any project which requires a special permit under §§ 4.26.1 4.26.3, §19.20, §11.12.1, §11.12.2, or §11.12.3 of the Zoning Ordinance, the application for the special permit shall include a Tree Study, which shall first have been submitted to the City Arborist not less than twenty-one (21) days prior to the submission of the application for a special permit. The Tree Study shall be reviewed by the City Arborist, who shall certify that he has reviewed it, indicating whether it is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The City Arborist shall refer the Tree Study with his certification and recommendations to the Planning Board, to assist the Planning Board in establishing any conditions that may be required as a result of the findings of the Tree Study in connection with the issuance of a special permit.
- b.Regarding any project which includes a building of 25,000 square feet or more and which is
subject to the provisions of § 19.50 of the Zoning Ordinance, the materials submitted to the
Inspectional Services Department with the application for a building permit shall include a Tree
Study, together with a certification from the City Arborist that the applicant has submitted the
Tree Study for review to the City Arborist not less than twenty-one (21) days prior to the

submission of the application for a building permit, and that the Tree Study is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The City Arborist shall refer the Tree Study with his certification and recommendations to the Planning Board, to assist the Planning Board in establishing any conditions that may be required as a result of the findings of the Tree Study in connection with the issuance of a special permit. The Owner of the Lot shall be required to commit to comply with all provisions of the Tree Study and the applicable provisions of this Chapter and regulations promulgated hereunder in the application for a building permit.

- <u>c.</u> For any project which requires a special permit under §§ 4.26.1 4.26.3, §19.20, §11.12.1,
 §11.12.2, or §11.12.3 of the Zoning Ordinance, or for any project which includes a building of 25,000 square feet or more and which is subject to the provisions of § 19.50 of the Zoning Ordinance the total DBH of Replacement Trees, or Mitigation Payment of equivalent value, as applicable, shall be equal to or exceed the total DBH of the Significant Trees to be removed from the Lot and 1.5 times the total DBH of Exceptional Trees to be removed from the lot.
- d.In addition, the Owner of the Lot shall, prior to the issuance of a building permit, post and file a
bond with the City Clerk in the amount of the total costs set forth in the Mitigation Plan, but in
no event less than five thousand dollars (\$5,000.00), with one or more sureties conditioned to
the faithful observance of the conditions and specifications of the Tree Protection Plan and, if
applicable, the Mitigation Plan. The bond shall remain effective for not less than five years
following issuance of a Certificate of Occupancy and may be released thereafter upon the
issuance of certification by the City Arborist certifying that the above conditions and
specifications of the Tree Protection Plan have been met. Prior to the issuance of such
certification, the Owner shall grant access to the Lot to permit the City Arborist to verify that the
conditions and specifications of the Tree Protection Plan have been met.

Replace the following Section;

8.66.055 - Procedure for Other Significant Tree Removals.

For any significant tree removal not subject to 8.66.050 a permit will be required from the City Arborist. In all cases, the City Arborist shall keep a record of the type and size of tree removed, the reason for the removal, photographs of the tree documenting the reason for removal, the date, the contractor(s) involved, and the name and address of the property owner. No such permits will be issued for one year following ordination of this section, except for emergency circumstances, significant utility infrastructure projects undertaken pursuant to State or Federal regulations or programs, for City park projects or where a tree poses significant negative impacts on an adjacent existing structure or for dead or dangerous trees or where a lot is of such density with existing trees that the removal of certain significant trees is considered beneficial to the health of the tree canopy. Any tree removed in violation of this section, within the one year following ordination, shall require a payment into the tree replacement fund as per section 8.66.070 according to a schedule as follows: 10% of the replacement value for property owners who qualify for the City of Cambridge residential real property tax exemption, no fee for property owners that receive established forms of financial assistance, and the full replacement cost in all other circumstances. The value to be paid into the tree replacement fund shall be

equivalent to the cost of purchasing, planting, watering, and maintaining said Replacement Trees for a period of not less than five years.

With the following sections;

8.66.065 - Procedure for Other Significant Tree Removals.

There are four options from which City Council may choose:

Option 1:

A Mitigation Payment will be required for all Significant Trees removed where an insufficient quantity of Replacement Trees is provided. The total number of Replacement Trees, shall be equal to or exceed the total number of the Significant Trees to be removed from the Lot. The Mitigation Payment of equivalent value shall be based on the total DBH of the removed Significant Trees that have not been replaced and 1.5 times the total DBH of Exceptional Trees to be removed from the Lot.

Option 2:

A Mitigation Payment will be required for all Significant Trees removed where an insufficient quantity of Replacement Trees is provided. The total DBH of Replacement Trees, or Mitigation Payment of equivalent value, as applicable, shall be equal to or exceed the total DBH of the Significant Trees to be removed from the Lot. The Mitigation Payment of equivalent value shall be based on the total DBH of the removed Significant Trees that have not been replaced and 1.5 times the total DBH of Exceptional Trees to be removed from the Lot.

Option 3:

A Mitigation Payment will be required for all Significant Trees removed where an insufficient quantity of Replacement Trees is provided. The total DBH of Replacement Trees or Mitigation Payment of equivalent value, as applicable, shall be equal to or exceed the total DBH of the Significant Trees to be removed from the Lot and 1.5 times the total DBH of Exceptional Trees to be removed from the Lot. Replacement Trees planted on the Lot shall receive credit at double their actual DBH. Any remaining DBH inches not planted on the Lot shall require a Mitigation Payment for each remaining DBH inch.

Option 4:

A Mitigation Payment will be required for all Significant Trees removed where an insufficient quantity of Replacement Trees is provided. If the total number of Replacement Trees is equivalent to the total number of Significant Trees removed from a Lot, the Mitigation Payment will be 50% the equivalent value of the total DBH removed from the Lot. If the total number of Significant Trees removed from a Lot is greater than the total number of Replacement Trees, then the Mitigation Payment will be 50% of equivalent value of the total DBH of a number associated with Replacement Trees plus 100% of the equivalent value of those Significant Trees not replaced. The Mitigation Payment of equivalent value shall be based on the total DBH of the removed Significant Trees that have not been replaced and 1.5 times the total DBH of Exceptional Trees to be removed from the Lot.

Replace the following Section;

8.66.060 - Tree Replacement

If Significant Trees are to be removed from a lot in connection with the development of a project subject to the provisions of this Chapter, upon approval of any project subject to the provisions of §8.66.050(a) of this Chapter by grant of a special permit from the Planning Board, or submission to the Inspectional Services Department of certification from the City Arborist under the provisions of §8.66.050(b) of this Chapter, the owner of the lot shall either plan Replacement Trees on the same lot in accordance with the schedule set forth in the Tree Study, or he shall pay the estimated cost of Replacement Trees and associated costs for the maintenance of said trees pursuant to the Mitigation Plan, if applicable, to the City to be deposited into the Tree Replacement Fund. In addition, the owner of the lot shall, prior to the issuance of a building permit, post and file a bond with the City Clerk in the amount of the total costs set forth in the Mitigation Plan, but in no event less than five thousand dollars (\$5,000.00), with one or more sureties conditioned to the faithful observance of the conditions and specifications of the Tree Protection Plan and, if applicable, the Mitigation Plan.

With;

<u>8.66.070 – Mitigation Requirements</u>

Except as provided in 8.66.065, the following Mitigation Requirements shall apply when Significant Trees are removed from a Lot:

The Mitigation Payment for Significant Trees shall be estimated, on a DBH basis, in accordance with the City of Cambridge's most recent tree planting and maintenance contract inclusive of purchasing, planting, watering and maintaining Replacement Trees for a period of not less than five(5) years.

The Mitigation Payment associated with Exceptional Trees shall be estimated on a DBH basis at 1.5 times the value provided in the City of Cambridge's most recent tree planting and maintenance contract inclusive of purchasing, planting, watering and maintaining Replacement Trees for a period of not less than five(5) years.

<u>A 10 % Mitigation Payment shall apply for Owners who qualify for the City of Cambridge residential real</u> <u>estate property tax exemption.</u>

<u>No Mitigation Payment shall apply to property owners that receive established forms of financial</u> <u>assistance.</u>

Replace the following Section;

8.66.070 - Tree Replacement Fund

There is hereby established a Tree Replacement Fund which shall be held by the City Treasurer in an account and administered in accordance with applicable provisions of the General Laws. Any payments into the Tree Replacement Fund required by §8.66.060 shall be deposited in said Fund and shall be used solely for the purpose of buying, planting, and maintaining trees in the City.

With;

8.66.075 - Tree Replacement Fund

<u>There is hereby established a Tree Replacement Fund which shall be held by the City Treasurer in an</u> <u>account and administered in accordance with applicable provisions of the General Laws. Any payments</u> <u>into the Tree Replacement Fund required by 8.66.060 or 8.66.065 shall be deposited in said Fund and</u> <u>shall be used solely for the purpose of supporting tree planting and maintenance throughout the entire</u> <u>City.</u>

Add the Following Section;

8.66.078 - Duty of Care

Upon issuance of any City of Cambridge permit by the Inspectional Services Department, Department of Public Works, Water Department, Electrical Department or Traffic, Parking and/or Transportation Department the permit holder is required to take reasonable precautions to ensure that all Significant Trees on the Lot are adequately protected and maintained free from harm from work associated with the permit issued. Failure to adequately protect and maintain Significant Trees free from harm may result in a fine in accordance with 8.66.090, and failure to adequately protect Significant Trees that results in a Significant Tree being removed within two (2) years of the failure to protect being noted may result in a fine in accordance with 8.66.090 and a Mitigation Payment that reflects the value of the Significant Trees removed in accordance with 8.66.070.

8.66.080 - Regulations

The Commissioner of Public Works shall have the authority to promulgate regulations to accomplish any of the provisions of this Chapter.

8.66.090 - Enforcement

(a) Notice of Violations. Any person who violates any of the provisions of this Chapter shall be notified by the City Arborist of the specific violation by certified or registered mail, return receipt requested, or by hand delivery. The notice shall set forth the nature of the violation and a reasonable time period within which compliance must be had.

(b) Stop Work Order

(1) Upon notice from the City Arborist that work on any Lot on which a Significant Tree is located is being performed contrary to any applicable Mitigation Plan or Tree Protection Plan or any provision of this Chapter, such work shall be immediately stopped by the Commissioner of Inspectional Services or his designee. The stop work order shall be in writing, and shall be given to the owner of the Lot involved, or to the owner's agent, or to the person doing the work, and shall state the conditions under which work will be permitted to resume.

(2) Any person who shall continue any work in or about said lot after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not more than \$300.00. Each day during which a violation exists shall constitute a separate offense.

(c) Injunctive Relief. Whenever there exists reasonable cause to believe that a person is violating any applicable Mitigation Plan or Tree Protection Plan or any provision of this Chapter, the City may institute a civil action for a mandatory or prohibiting injunction in a court of competent jurisdiction ordering the defendant to correct the unlawful condition upon or cease the unlawful use of the property.

Replace the following paragraph;

(d) Failure to Replace Trees or Make Payment. Each failure to replace a Significant Tree or make a payment into the Tree Replacement Fund or to post and maintain a bond in accordance with §8.66.060 shall constitute a separate violation of this Chapter for which there shall be a fine of not more than \$300.00. Each day such violation continues shall constitute a separate offense.

With;

(d) Failure to apply for and receive a permit or failure to replace a Significant Tree or make a payment into the Tree Replacement Fund or to post and maintain a bond in accordance with §8.66.060 shall constitute a separate violation of this Chapter for which there shall be a fine of not more than \$300.00. Each day such violation continues shall constitute a separate offense.

(e) Alternative Penalty. As an alternative to any fine stated in this §8.66.090, citations may be issued pursuant to G.L. c. 40, §21D, assessing a fine of not more than \$300.00 for each day the violation is committed or permitted to continue. The Commissioner of Public Works or his designee, the City Arborist, employees of the Department of Public Works and Police Officers shall be the authorized enforcement personnel.

8.66.100 - Severability

The provisions of this Chapter are severable. If any section, provision, or portion of this Chapter is determined to be invalid by a court of competent jurisdiction, the remaining provisions of this Chapter shall continue to be valid.

8.66.110 - Effective Date

This ordinance shall take effect only upon ordination of the companion zoning amendment and any other zoning amendments necessary to effectuate the provisions of this Tree Ordinance.

Add the following Section;

<u> 8.66.120 - Permit Fee</u>

The fee for a Tree Removal permit shall be determined by the Commissioner of Public Works.