CHARTER TOWNSHIP OF VAN BUREN COUNTY OF WAYNE, STATE OF MICHIGAN ORDINANCE NO. 11-16-04

AN ORDINANCE TO AMEND THE ZONING ORDINANCE 6-2-92 AS AMENDED OF THE CHARTER TOWNSHIP OF VAN BUREN TO REVISE REGULATIONS PERTAINING TO WOODLAND AND TREE PRESERVATION.

THE CHARTER TOWNSHIP OF VAN BUREN ORDAINS:

SECTION 1. ARTICLE IV, GENERAL PROVISIONS, SECTION 4.45.E, WOODLAND AND TREE PRESERVATION, is hereby repealed in its entirety and replaced with the following:

SECTION 4.45.E, WOODLAND AND TREE PRESERVATION

- 1. **Findings**. Rapid growth, the spread of development and increasing demands upon natural resources have had the effect of encroaching upon, despoiling or eliminating many of the trees and other forms of vegetation and natural resources and associated processes which, if preserved and maintained in an undisturbed and natural condition, constitute important physical, aesthetic, recreational and economic assets to existing and future residents of the Township. Specifically, the Township finds that woodlands and trees:
 - a. Protect public health by conserving water quality by reducing noise and the mental and physical damage related to noise pollution, by absorbing air pollutants and contamination by providing buffering to reduce wind and storm impacts and by maintaining visual screening with its accompanying cooling effect during the summer months.
 - b. Provide for further public safety through the prevention of erosion, siltation and flooding.
 - c. Contribute significantly to the general welfare of the Township by maintaining natural beauty, providing recreational and educational opportunities and representing an irreplaceable heritage for existing and future residents.
 - d. Are matters of paramount public concern, as provided by Article IV, Section 52, of the Constitution of the State of Michigan of 1963, as well as the Natural Resources and Environmental Protection Act of 1994, Being Act 451 of the Public Acts of 1994, as amended.

- 2. **Purpose**. The purpose of these requirements is as follows:
 - a. To provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the Township, in order to protect such natural resources from pollution, impairment and destruction, to minimize disturbance, to prevent damage from erosion and siltation, and to prevent loss of wildlife habitat and vegetation. In this regard, it is the intent of this Section 4.45.E to protect the integrity of woodlands as a whole, recognizing that woodlands serve as a part of an ecosystem and to place priority on preservation of woodlands and trees to the greatest extent reasonably possible.
 - b. To protect the woodlands and trees of the Township, in order to support local property values and to promote the natural beauty of the Township.
 - c. To prevent owners or developers of property from removing trees from land prior to or in anticipation of development.
 - d. To provide for the replacement of removed trees where no feasible alternative site development is available.
 - e. To respond to the public concern for the preservation of these natural resources in the interest of public health, safety and general welfare of the residents of the Township.
- 3. **Definitions**. The following terms, words and phrases shall have the following meaning for purposes of this Section 4.45.E:
 - a. "Activity" shall mean any use, operation, development or action caused by any person, including but not limited to constructing, operating or maintaining any use or development; erecting buildings or other structures; depositing or removing material; dredging; ditching; land balancing; draining, or diverting water; pumping or discharging surface water; grading; paving; tree removal or other vegetation removal; excavation; mining or drilling operations.
 - b. "Basal Area" shall mean the cross sectional area of a tree measured in square feet at a point four and one-half (4 ½) feet above the ground.
 - c. "Builder" shall mean a person who builds or contracts to build a building or structure within the Township.

- d. "Building envelope" shall mean the area designated by the developer or builder for the construction of the principal building(s) upon the site in accordance with the following:
 - i. In platted residential subdivisions or residential site condominiums, the buildable area remaining on the lot, parcel or unit after complying with zoning setback and maximum lot or site coverage requirements; or such smaller building area designated by the developer for construction of buildings upon a lot, parcel or unit within the development.
 - ii. In all other developments, the building area(s) plus ten (10) feet around the perimeter of the building(s), provided such areas do not encroach into any required setback.
- e. "Commercial nursery or tree farm" shall mean a plant or tree nursery or farm in which trees are planted and grown for sale, wholesale or the general public in the ordinary course of business.
- f. "Critical Root Zone" shall mean the area where the tree's roots are located. The critical root zone area is described by a circle around the tree with one foot of radius for each one inch D.B.H. of tree.
- g. "Dead, Diseased, or Damaged Tree" shall any tree that has been declared as "dead, diseased or damaged" by an ISA Certified Arborist, a municipal forester, or a state registered forester.
- h. "Developer" shall mean a person who installs or contracts for the installation of improvements such as sewers, streets and water mains in a residential, office, commercial or industrial development.
- i. "Development" means any lawful site improvements authorized by this Zoning Ordinance.
- j. "Diameter at Breast Height (D.B.H.)" shall mean a tree's diameter in inches measured four and one-half $(4 \frac{1}{2})$ feet above ground.
- k. "Driveway envelope" shall mean an area designated by the property owner to provide vehicular access to the building or parking area.
- 1. "Generally Accepted Agricultural and Management Practices" shall mean those practices as defined by the Commission of Agriculture of the State of Michigan.

- m. "Groundcover" shall mean low growing shrubs, wood vegetation, wild flowers and other small herbaceous plants within a woodland.
- n. "Grubbing" shall mean the effective removal of understory vegetation, groundcover, shrubs or trees but not including removal of any trees of greater than eight (8) inches D.B.H.
- o. "Land Clearing" shall mean operations which remove trees and vegetation in connection with the installation of storm or sanitary sewers, public or private utilities, streets or any other clearing or grading of the property at any time prior to construction of a building.
- p. "Landmark Tree" shall mean any tree that has been determined by the Township to have particular value due to unique characteristics and should not be removed unless absolutely necessary to permit the reasonable development or use of land. Landmark trees are determined by species and caliper, as shown in the following list.

Any tree 32 inches or greater D.B.H. not included in the following list shall also be considered a landmark tree.

Common Name	Botanical Name	<u>DBH</u>
Ash	Fraxinus spp. (not cultivars)	24"
Buckeye (Horsechestnut)	Aesculus spp.	24"
Elm	Ulmus spp. (except pumilia)	24"
Basswood	Tilia spp.	18"
Beech	Fagus spp.	18"
Black Cherry	Prunus serotina	18"
Black Walnut	Juglans nigra	18"
Fir	Abies spp.	18"
Fir, Douglas	Pseudotsuga menziesii	18"
Hackberry	Celtis occidentalis	18"
Kentucky Coffee Tree	Gymnocladus dioicus	18"
Maple	Acer spp. (unless otherwise noted)	18"
Pine	Pinus spp.	18"
Spruce	Picea spp.	18"
Sycamore; London Plane	Platanus spp.	18"
Hickory	Carya spp.	16"
Honey Locust	Gleditsia triacanthos	16"
Oak	Quercus spp.	16"
Bald Cypress	Taxodium distichum	12"
Birch	Betula spp.	12"
Black Tupelo	Nussa sulvatica	12"

Dawn Redwood	Metasequoia glyptostroboides	12"
Eastern Hemlock	Tsuga canadensis	12"
Flowering Cherry	Prunus spp.	12"
Ginkgo	Ginkgo bilboa	12"
Larch/Tamarack	Larix spp.	12"
Pawpaw	Asimina triloba	12"
Populus	Populus (except deitoides, alba)	12"
Sweetgum	Liquidambar styraciflua	12"
Tuliptree	Liriodendron tuliperifera	12"
Yellow Wood	Cladrastis lutea	12"
Chestnut	Castanea	8"
Butternut	Juglans cinerea	8"
Cedar	Juniperuis spp. & upright cultivars	8"
Cedar Cedar of Lebanon	Juniperuis spp. & upright cultivars Cedrus spp.	8"
		8" 8"
Cedar of Lebanon	Cedrus spp.	8"
Cedar of Lebanon Eastern Redbud	Cedrus spp. Cercis canadensis	8" 8"
Cedar of Lebanon Eastern Redbud Flowering Dogwood	Cedrus spp. Cercis canadensis Cornus florida	8" 8" 8"
Cedar of Lebanon Eastern Redbud Flowering Dogwood Hornbeam, Blue Beech	Cedrus spp. Cercis canadensis Cornus florida Carpinus spp.	8" 8" 8" 8"

- q. "Locate" shall mean to construct, place, insert or excavate.
- r. "*Material*" shall mean soil, sand, gravel, clay, peat, mud, debris, refuse or other material, organic or inorganic.
- s. "Operations" shall mean locating, moving, depositing or grading of any material or any construction, use or activity or any combination of such activities which modifies conditions of property subject to this Article.
- t. "Person" shall mean an individual, partnership, corporation, association, organization or other legal entity including governmental agencies.
- u. "Regulated Tree" shall mean any tree with a diameter at breast height of eight (8) inches or greater.
- v. "Removal or Remove" shall mean the act of removing a tree by digging up or cutting down, the effective removal through damage or the infliction of damage to a tree or its root system.
- w. "Replacement Tree" shall mean those trees considered by the Township to be acceptable to replace trees proposed to be removed. Replacement trees should display the following characteristics:

- i. Minimal fruit litter.
- ii. Upright growth of trunk; trees used for streetscape purposes should branch at a minimum height of seven (7) or more feet; trees used for other landscaping may have branching at lower heights.
- iii. Resistance to disease.
- iv. No thorns on trunk or branches.
- v. Resistance to drought.
- vi. Salt tolerance.
- vii. Combinations of deciduous and evergreen trees; evergreen trees should be used for screening purposes. Streetscaping and other landscaping should be done with a combination of deciduous and evergreen trees, incorporation the above characteristics.
- x. "Residential Development" shall mean any single-family or multiple family development, including detached single-family subdivisions, single-family cluster housing, residential condominiums, residential site condominiums and all other multiple family development.
- y. "Single Family Residence" shall mean any parcel, lot, unit, or adjacent parcels, lots or units under common ownership that contain(s) a permanent, occupied and habitable single-family dwelling unit.
- z. "Site" shall mean a parcel of unit of land.
- aa. "Woodland" shall mean the portion of any property, parcel, lot, or adjacent lots or parcels under common ownership that satisfies all of the following conditions:
 - i. Contains one-half (1/2) or more acres of land (excluding existing rights-of-way).
 - ii. Is designated as a woodland on the official Township Woodland Map.
 - iii. Contains at least twenty (20) square feet of basal area (including only regulated trees) per one-half (1/2) acre, or, contains ten (10) or more regulated trees per one-half (1/2) acre.

- bb. "Woodland Map" shall mean the map approved by the Planning Commission, which identifies all woodland areas in the Township.
- 4. **Applicability**. The requirements of this Section 4.45.E shall apply to any tree regulated by this ordinance, with the exception of exempt activities as described in Section 4.45.E.5.b.

5. Tree Removal Permit.

- a. <u>Permit required</u>. Except as otherwise provided in this Section 4.45.E, no person shall do any one (1) or more of the following without first having obtained a tree removal permit in accordance with the provisions of this Section 4.45.E:
 - i. Remove, transplant, damage or destroy any tree or similar woody vegetation of any D.B.H. or conduct any land clearing or grubbing activities in a woodland.
 - ii. Remove, transplant, damage or destroy any tree or similar woody vegetation eight (8) inches in D.B.H. or greater which is not located in a woodland.
- b. <u>Permit not required</u>. The following activities are exempt from the provisions of this Section 4.45.E, unless otherwise prohibited by statute or ordinance.
 - i. Public Agencies. The removal or trimming of trees in an existing right-of-way, on public property, or on an *existing* easement for public utilities. Such action must be performed by or on behalf of the Township, County, State or other public agencies, and must be in connection with a publicly awarded construction project such as the installation of public utilities, public streets or public sidewalks. Activities related to the construction of new utilities or improvements in a new development, including but not limited to public or private streets or underground utilities, are not exempt from the regulations of this Section.
 - ii. Routine Maintenance. The trimming and pruning of trees as part of normal maintenance of landscaping or orchards, if performed in accordance with accepted forestry or agricultural standards and techniques.

- iii. Public Safety. The removal or trimming of dead, diseased or damaged trees if performed by or on behalf of the Township, County, State or other public agencies in a public right-of-way or on public property if done to prevent injury or damage to persons or property.
- iv. Dead, Diseased or Damaged Trees. The removal or trimming of dead, diseased or damaged trees (as described by a certified arborist or registered forester and approved by the Township) provided that the damage resulted from an accident or non-human cause and provided further that the removal or trimming is accompanied through the use of standard forestry practices and techniques.
- v. Commercial Nurseries and Tree Farms. The removal or transplanting of trees during the operation of a commercial nursery or tree farm; provided; however, that this exception shall only be applicable if the commercial nursery or tree farm has a valid Grower License from the State of Michigan.
- vi. Disasters and Emergencies. Actions made necessary by an emergency, such as tornado, windstorm, flood, freeze or dangerous and infectious insect infestation or disease or other disaster, in order to prevent injury or damage to persons or property or restore order.
- vii. Agricultural Uses. The removal, transplanting or destruction of trees occurring during a farm operation, as defined in the Michigan Right to Farm Act (Act 93 of the Public Acts of 1981, as amended), for parcels zoned for agricultural uses of at least ten (10) contiguous acres; or during a farm operation, as defined in the Michigan Right to Farm Act (Act 93 of the Public Acts of 1981, as amended) on at least ten (10) contiguous acres zoned for other than agricultural uses.
- c. <u>Single Family Residence Tree Removal Permit</u>. The provisions of this section are intended to create a less demanding tree removal permit process for the owners or representatives of the owners of single family residences. As such, the removal or destruction of regulated trees (either inside or outside of an official woodland) by or on behalf of the owner of a single family residence shall require a single family residence tree removal permit according to the requirements of this Section 4.45.E(5)(c).

The provisions of this Section 4.45.E(5)(c) do not apply to the removal, transplanting, trimming, or destruction of regulated trees in conjunction with or in anticipation of any activity or development on any parcel of land that requires site plan review, including any non-residential development, site condominium development, subdividing of land, or similar activities, pursuant to the Ordinances of the Township.

EXAMPLE: A single family residence tree removal permit shall be required in conjunction with permits required for improvements and activities accessory to or related to the improvement of a single family residence such as deck or pool construction or building additions when such improvements require the removal of a quantity of trees greater than permitted below. Further, the removal of a quantity of trees greater than permitted below when related to the reasonable use and enjoyment of a single family residence and the parcel upon which it is located shall be reviewed according to the provisions of this Section 4.45.E(5)(c).

- i. Parcels, lots or units 2 acres or less in area. The owners of single family residences on parcels, lots or units with an area of two (2) acres or less are exempt from all of the requirements of this ordinance, except as required by Section 4.45.E(5)(c)(iii), below.
- ii. Parcels, lots or units greater than 2 acres in area. The owners of single family residences on parcels, lots or units greater than two (2) acres in area may remove ten (10) regulated trees or five percent (5%) of the total number of regulated located on the parcel, lot or unit, whichever is greater, in a calendar year without a requiring a single family residence tree removal permit and without tree replacement being required. There is no limit on the amount of non-regulated woody vegetation (less than 8" d.b.h.) that may be removed without a tree removal permit.

The removal of a quantity of trees greater than permitted by this exemption shall require a single family residence tree removal permit, including replacement of any trees removed over and above the exempted amount, subject to the requirements of Section 4.45.E(c)(v. and vi), below.

iii. Lots or parcels included in previous tree removal permits.

Any single family lot, unit, or parcel included in a previous tree removal permit shall require a single family residence tree removal permit for the removal of any regulated tree.

- iv. Vacant residentially zoned parcels less than 2 acres. A tree removal permit required in conjunction with the development of a single family residence on an existing and vacant residentially zoned parcel, lot or unit with an area of two (2) acres or less shall be processed following the application and review procedures listed in this Section 4.45.E(5)(c).
- v. Single family residence tree removal permit submittal requirements. When a single family residence tree removal permit is required, the owner or owner's representative shall submit a single family residence tree removal permit application, a tree removal sketch plan in a form acceptable to the Township, and a tree replacement agreement specifying the quantity and type of replacement trees to be provided. Single family residence tree removal permit applications are exempt from all other submittal requirements listed in Section 4.45.E.6.
- vi. Single family residence tree removal permit review procedures. The Director of Planning and Economic Development or his/her designee shall have the authority to review and approve single family residence tree removal permits. Except as noted in Section 4.45.E(5)(c)(v), above, single family residence tree removal permits shall meet all of the applicable standards of this Section 4.45.E, unless a modification of those standards is deemed appropriate by the Director of Planning and Economic Development or his/her designee to permit the property owner reasonable use and enjoyment of his or her land for residential purposes.
- 6. **Application Requirements.** When a proposed development requires site plan review and approval, subdivision of land or another permit pursuant to the Ordinances of the Township, application for a tree removal permit shall be made at the same time as such other related application(s). Single family residence owners may qualify for the reduced application and review requirements in Section 4.45.E(5)(c). All other applications for a tree removal permit shall consist of the following:
 - a. Application form and fee. The fee shall be established by resolution of the Township Board of Trustees.
 - b. The most current available aerial photograph of the site, at a scale not less than one (1) inch equals one hundred (100) feet.

- c. Tree location survey, drawn to a scale of not more than one (1) inch to sixty (60) feet, including the following information:
 - i. A topographical map at the same scale as there related sites plan, plat or survey drawing for the division of the land.
 - ii. The location of all trees eight (8) inches or greater D.B.H., plotted by accurate techniques, and including the common and botanical names of those trees and their D.B.H.
 - iii. The shape and dimensions of the site, together with the locations of existing and proposed structures and improvements, including existing and proposed utilities and proposed changes to existing grades.
 - iv. The proposed area and configuration of each lot.
 - v. Location and dimensions of all setbacks and existing and proposed easements.
 - vi. All existing trees on the parcel shall be inventoried by actual field survey and shown on the topographical map by type, location and crown spread drawn to scale. Existing trees of eight (8) inches D.B.H. or greater shall be shown on the topographical map.
 - All existing trees shall be superimposed on the related site plan, plat or survey drawing for division of land, and over the proposed grading plan. The inventory shall include existing trees of eight (8) inches D.B.H. or greater, within adjoining street rights-of-way and twenty-five (25) feet beyond the property lines of the site.
 - vii. Isolated trees shown on the topographical map shall be tagged in the field with identifying numbers using non-corrosive metal tags. Groups of trees shall be tagged sufficiently to identify the group upon field inspection. Such identifying numbers shall be shown on the topographical map.
 - viii. All existing trees proposed to remain, to be relocated or to be removed, shall be so designated by the identifying number.

- ix. If existing trees are to be relocated, the proposed locations for such trees, together with a statement setting forth how such trees are to be removed, protected and/or sorted during land clearance, development and construction and how they are to be maintained after construction.
- x. A statement setting forth how the critical root zone of existing trees not to be removed or relocated are to be protected during land clearance, development, construction and on a permanent basis thereafter, including proposed use of tree wells, protective barriers, tunneling and/or retaining walls.
- xi. The number of trees proposed to be removed that are eight (8) inches D.B.H. or greater.
- xii. Such other information and detail as to vegetation as may be requested by the Township.
- xiii. All information and details shall be provided by a registered land surveyor or registered engineer, <u>and</u> a registered landscape architect, certified arborist or registered forester who <u>both</u> must verify the contents of the tree survey and protection plan by seal or signature, whichever applies.
- xiv. An evaluation of the quality of woodland area and trees to be removed, including but not limited to the following:
 - a. Tree species (including diversity of tree species)
 - b. Tree size and density.
 - c. Health and vigor of the trees.
 - d. Soil conditions and drainage characteristics of this site.
 - e. Other factors such as the value of the woodland area as a scenic asset, windblock, noise buffer or other environmental benefit (i.e., cooling effect).
- xv. A statement that all retained trees will be identified by a method, such as painting or flagging. The statement shall include a description of how the retained trees are to be protected with an acknowledgment that a tree protection barrier must be in place around the critical root zone and the location of the tree protection barrier on the site must be approved through inspection by the Township before any construction activity commences.

- xvi. A general grading plan prepared by a registered engineer or land surveyor showing the anticipated drainage patterns, including the location of any areas where cut and fill operations are likely to occur. This plan must be superimposed on the tree survey and will enable the Township to determine the impact of the proposal on the viability of the existing trees.
- f. No tree affidavit: Where the request for a tree removal permit relates to any site which contains no trees of eight (8) inches or greater D.B.H., the applicant shall so indicate in his/her application and submit a "no tree" affidavit. In such case, the Township shall conduct an inspection of the site. If the inspection substantiates the applicant's claim, the applicant shall be relieved from the tree removal permit requirement.
- 7. **Tree Preservation.** The applicant or developer shall preserve and leave standing a minimum percentage of trees eight (8) inches D.B.H. or greater according to the following table:

Type of Zoning	Minimum preservation requirement for a site or the portion of a site	
District	In an Official Woodland	Outside an Official Woodland
Residential	30 %	20 %
Commercial	15 %	0 %
Industrial	15 %	0 %
Office-Technology	20 %	10 %

Residential districts: AG-A, R-1A, R-2A, R-1B, R-1C, RM, RMH

Commercial districts: C, C-1, C-2, FS Industrial districts: M-1, M-2, MT, AP Office-Technology districts: OT

- a. Reduction of Preservation Requirements. The Planning Commission shall have the authority to reduce the preservation requirements applicable to a site under Section 4.45.E.7, above by up to seventy five percent (75%) (i.e. reduce a minimum preservation percentage of 20% to 5%). In granting such a reduction, the Planning Commission shall consider the review standards in Section 4.45.E.10, as well as the following considerations:
 - i. Unique conditions on the site make development impossible without removing additional trees.

ii. The applicant has submitted at least three (3) substantially different site layouts superimposed over the tree survey and showing tree preservation possible for each alternative in order to demonstrate that the maximum feasible tree preservation has been achieved.

In order to qualify as substantially different, the alternate layouts should incorporate different building footprint placements and shapes, different parking and maneuvering aisle locations, and alternate locations for other proposed site improvements. Plans that show proposed improvements such as buildings, detention ponds, and paved areas in essentially the same location or in the same layout on the site shall not be considered substantially different.

- viii. Proposed provisions to protect trees to be preserved on the site during construction as well as in perpetuity.
- ix. A reduction in the minimum preservation requirement shall not grant relief from the tree replacement requirements of Section 4.45.E.8.
- b. Location of Preserved Trees on Single-Family Lots or Units. Trees located in the permitted buildable area on single-family residential lots or units may not be counted towards tree preservation requirements. Trees located outside the permitted buildable area on private single-family residential lots or units may be counted towards preservation requirements only if such trees are sufficiently protected by a legal mechanism once the lot or unit is in individual ownership. The Planning Commission shall determine if the proposed legal mechanism provides sufficient protection.
- 8. **Relocation and Replacement.** Whenever a tree removal permit has been issued authorizing removal of a tree eight (8) inches or greater D.B.H., the permit holder shall replace or relocate each such tree in accordance with this Section. The applicant and any person who applies for a building permit in connection with the proposed activity shall be responsible for planting replacement trees as required by this Section. Replacement trees may not be used to satisfy landscaping requirements of the Zoning Ordinance.
 - a. <u>Replacement Required.</u> The permit holder shall provide tree replacement credits according to the following schedule.

Replacement trees are not required for dead or diseased trees or trees located in existing public road rights-of-way.

For landmark trees, the replacement credits that must be provided for a removed landmark tree shall be determined by the D.B.H. ratio of the tree to be removed. The D.B.H. ratio is calculated by dividing the D.B.H. of the landmark tree to be removed by the minimum D.B.H. for a landmark tree of that species as defined in Section 4.45.E.3(p).

The following number of tree replacement credits must be provided for each removed tree:

Type of Tree Removed	Replacement Credits Required
Dead or Diseased Tree	0
Trees located in existing road ROW	0
Regulated, Non Landmark Tree ¹	1
Landmark Tree, 1- 1.49 D.B.H. ratio ²	2
Landmark Tree, 1.50 – 1.74 D.B.H. ratio	3
Landmark Tree, 1.75 – 1.99 D.B.H. ratio	4
Landmark Tree, >2.00 D.B.H. ratio	5

- 1. All regulated coniferous trees, regardless of height or size, are considered non-landmark trees.
- 2. *EXAMPLE*: An applicant is proposing to remove a 25 inch Oak tree. An Oak tree must have a D.B.H. of at least 16 inches to be considered a landmark tree. A 25 inch Oak tree has a D.B.H. ratio of 25/16 = 1.56, so 3 tree replacement credits would be required.
- b. <u>Tree Replacement Credits</u>. The minimum size for replacement trees is 6 feet in height for coniferous trees and 2.5 inches in caliper for deciduous trees. Replacement tree credits shall be determined according to the following table:

CONIFEROUS (Height)		
Replacement Tree Size	Replacement Credit Value	
6 - 8 feet	1 Credit	
8.01 to 10 feet	1.5 Credits	
Greater than 10 Feet	2 Credits	

DECIDUOUS (caliper)		
Replacement Tree Size	Replacement Credit Value	
2.5 - 3 inches	1 Credit	
3.1 - 3.5 inches	1.5 Credits	
Greater than 3.5 inches	2 Credits	

c. Woodland Creation. As an alternative or partial alternative to the above, the Planning Commission may approve replacement trees that are smaller in caliper size in situations where the intent is to recreate or create a densely wooded area or wood lot. Such groupings of trees shall consist of tightly grouped trees with a minimum caliper of one (1) inch. This alternative shall only be used in situations and locations where it is appropriate to create a densely wooded effect.

When this alternative is used, three (3) trees must be provided for each tree replacement credit required. Replacement trees under this alternative shall be planted not less than five (5) feet on center and not more than fifteen (15) feet on center.

- d. Replacement Tree Diversity. If fifteen (15) or more replacement tree credits are required, no one species of replacement tree shall account for more than thirty percent (30%) of all required replacement trees. If fewer than fifteen (15) replacement tree credits are required, there is no diversity requirement.
- e. <u>Replacement Tree Standards</u>. All replacements trees shall satisfy current American Association of Nurseryman standards and shall be as follows:
 - i. Nursery grown or comparable, relocate from the same parcel.
 - ii. State Department of Agriculture inspected.
 - iii. Tree spade transplanted while in the dormant state or if not in the dormant state, balled and burlapped with a solid, well-laced root ball when in the dormant state.
 - iv. Number one (1) grade, with a straight, unsecured trunk, a single dominant leader (unless multi-stem is specified), and a well-developed uniform crown (park grade acceptable).
 - v. Guaranteed for a minimum of two (2) years.
 - vi. Approved through inspection by the Township.
 - vii. Replacement trees shall be of a species included on the list of acceptable replacement trees on file with the Township.
- f. <u>Location</u>. The location of any replacement tree shall be on the same parcel as the removed tree whenever feasible, as determined

by the reviewing body. If the tree replacement on the same parcel is not feasible, the reviewing body may designate another planting location for the replacement trees within the Township, or the reviewing body may allow the permit holder to deposit an amount of money equal to the current market value of the replacement otherwise required by this ordinance into the Township General Fund, Tree Preservation Line. These funds shall be utilized for the planting, maintenance and preservation of trees and woodland areas within the Township. The Township Environmental Director or his/her designee shall determine the current market value of a replacement tree.

Alternately, the applicant may provide compensation in other forms deemed acceptable to the Township that achieve the overall goals of this ordinance and equal to the current market value of the replacement trees otherwise required.

- g. <u>Maintenance</u>. Replacement trees shall be staked, fertilized, watered and mulched to ensure their survival in a healthy, growing condition. Stakes and all associated materials shall be removed after one year.
- 9. **Review procedures**. The Department of Development Services shall review the submitted application for a tree removal permit required by Section 4.45.E.5 to determine that all required information has been provided. At the request of the applicant, an administrative review meeting may be held to review the request in light of the purpose and the review standards of Section 4.45.E.10.
 - a. Reviewing Body. The Planning Commission shall serve as the reviewing body for tree removal permits submitted in conjunction with a required site plan, special land use application, subdivision plat, or condominium plan. The Director of Planning and Economic Development or his/her designee shall review all other tree removal permits (including single family residence tree removal permits). All tree removal permit applications shall be reviewed according to the standards listed in Section 4.45.E.10.
 - b. <u>Field inspection</u>. A field inspection of the site may be conducted by the Department of Development Services to verify and review the accuracy of the information and details provided by the applicant. The receipt of the application shall constitute permission from the owner of the site to conduct such on site investigation.

- c. <u>Department recommendation</u>. If the Planning Commission is the reviewing body, the Department of Development Services shall, after review of the proposed activity, submit a report and recommendation to the Planning Commission.
- d. <u>Waiver</u>. If the tree removal permit application requests a waiver of tree location survey requirements for all or any area of the site, the Department of Development Services may recommend that the reviewing body waive such requirements for all or any area of the site based upon all of the following conditions being satisfied.
 - i. A field investigation of the site to review and verify the accuracy of the information provided by the applicant.
 - ii. Location of the proposed activity being flagged, marked or otherwise identified by the applicant on site at the time of the field investigation.
 - iii. The applicant or an authorized representative of the applicant being present during such field investigation.
 - iv. Finding that the proposed activity in the area of the site for which a waiver is sought meets standards set forth above.
- e. <u>Tree location survey required</u>. Unless the reviewing body waives tree location survey requirements for the site, the applicant shall submit a tree location survey as required for those areas of the site for which a waiver has not been granted.
- f. <u>Disapproval</u>. If an applicant for a tree removal permit is disapproved, the applicant shall be notified in writing of the reasons for disapproval by the reviewing body.
- g. <u>Approval</u>. If an application for a tree removal permit is approved, the reviewing body may do any or all of the following:
 - i. Attach to the approval reasonable conditions considered necessary by the reviewing body to ensure the intent of this Section 4.45.E is fulfilled and to minimize damage to, encroachment in or interference with natural resources within wooded areas.
 - ii. Affix a reasonable time to complete tree removal operations.

- iii. Require the applicant to post a performance guarantee in an acceptable form with the Township in an amount determined to be sufficient by the Township to ensure compliance with any tree removal permit conditions set forth in this Section 4.45.E. If the permit holder has provided a performance guarantee to the Township under any other ordinance or regulation and if such guarantees deemed adequate by the reviewing body to ensure compliance with the requirements of Section 4.45.E, no additional performance guarantees shall be required.
- h. <u>Simultaneous Approval</u>. Where a developer has obtained approval or a tree preservation plan at the same time as tentative preliminary plat approval, preliminary site plan approval of a condominium, or preliminary site plan approval for any other development, such tree preservation approval, together with any additional terms and conditions attached to the approval, shall satisfy the requirements of this Section 4.45.E.
- 10. **Review Standards.** The following standards shall govern the review of an application for a tree removal permit if required by this Section 4.45.E:
 - a. The protection and conservation of natural resources from pollution, impairment or destruction is of paramount concern. Therefore, all woodlands, trees and related natural resources shall have priority over development when there are feasible and prudent location alternatives on the site for proposed buildings, structures or other improvements. The applicant must consider and pursue all development options available under the Zoning Ordinance in order to preserve the woodlands and trees.
 - b. The integrity of woodland areas shall be maintained to the greatest extent reasonably possible, regardless of whether such woodlands cross property lines.
 - c. No landmark trees shall be removed unless absolutely necessary to permit site development. The applicant shall demonstrate to the reviewing body that there is no feasible alternative to removing any landmark tree.
 - d. The removal of trees for which a tree removal permit is required shall be limited to designated street right-of-way, drainage and utility easements, building and driveway envelopes and other areas (such as off-street parking and loading and unloading areas) necessary for site improvements, considering the development options available under the Zoning Ordinance.

- e. Where the proposed activity involves residential development, the residential structures shall, to the extent reasonably feasible, be designed and constructed to use the natural features of the site.
- f. The location and quality of proposed tree protection barriers are sufficient to ensure the protection of preserved trees during construction.
- g. The burden of satisfying standards shall be upon the applicant.

11. **Protection during construction**.

- a. All trees that have been approved for removal shall be so identified on site by fluorescent orange spray paint (chalk base) or by red flagging tape prior to any activity. Trees selected for transplanting shall be flagged with a separate distinguishing color. All tree flag colors to be used must be noted on the plans.
- b. No person shall conduct activity within the critical root zone of any tree designated for preservation, including but not limited to the storage or placing of solvents, building materials, construction equipment or soil deposits, or the parking of any vehicles.
- c. No person shall attach a device or wire to any remaining tree during construction.
- d. Before development, land clearing, filing or any property alteration for which a tree removal permit is required, the developer or builder shall provide and maintain tree protection fences around the critical root zone of all trees to be preserved (except as identified in Section 4.45.E.11(e), below). Tree protection fencing shall be five (5) feet tall chain link fencing wired to seven (7) foot steel poles, unless a fence of similar or greater quality is proposed. Any proposed tree protection fence must incorporate wood, metal, or another other substantial material. Snow fencing or other similar temporary fences incorporating vinyl or plastic are not suitable. Details of the proposed tree protection fences must be shown on the tree preservation plan.
- e. The location and construction of tree protection fences on the site must be inspected and approved by the Township before any construction activity commences.

Protective fences shall remain in place until the Township authorizes their removal or issues a final certificate of occupancy,

whichever occurs first. Fences are required for all trees designated to remain, except as follows:

- i. Street rights-of-way and utility easements may be cordoned by placing stakes a minimum of fifty (50) feet apart and tying ribbon, plastic tape, or other brightly visible materials at least two and one-half (2½) feet above the ground from stake along the outside perimeters of acres to be cleared.
- ii. Large property areas separate from construction or land clearing activities onto which no equipment will venture may also be cordoned off as described above.

12. **Terms of permit**.

- a. Any and all tree removal permits issued by the Township to a developer shall expire (unless extended) at the same time as the contemporaneous approval granted by the Township, for the development, if any (i.e. tentative preliminary plat, preliminary site plan, special land use, site plan approval, etc).
- b. Any and all tree removal permits issued by the Township to any persons for an activity regulated under Section 4.45.E.5 for which a contemporaneous approval of the development is not required by the Township (i.e. removal of trees by a builder in connection with construction of a residence upon a parcel) shall expire one (1) year from the date of issuance.

Any activity regulated under Section 4.45.E.5 that is to be commenced after expiration of a tree removal permit shall require a new applicant, additional fees and new review and approval.

13. **Display of permit**. The permit holder shall conspicuously display the tree removal permit on-site. The permit shall be displayed continuously while trees are being removed or while activities authorized under the permit are performed and for ten (10) days following completion of those activities. The permit holder shall allow the Township to enter and inspect the premises during reasonable business hours or any other time during which activity is conducted as regulated by this ordinance. Failure to allow an inspection authorized under this Section is a violation of this Section 4.45.E. Fences and tree protection devices shall be maintained during all development and construction activities and construction materials, supplies and equipment shall be kept outside of the protection area.

- 14. **Woodland Map**. The designated woodlands areas are hereby established as shown on the official Township Woodland Map, which is on file in the Department of Development Service and which all notations, references and information shown thereon shall be as much a part of this Section 4.45.E as if fully described herein. If, because of problems with scale or detail, there is any ambiguity as to whether a particular area is part of a woodland, that determination shall be made by the reviewing body defined in Section 4.45.E.9, above.
 - a. <u>Amendments</u>. The Woodland Map may be amended from time to time by the Planning Commission and subject to requirements as noted below.
 - b. <u>Information required</u>. The petitioner for an amendment to the Woodland Map shall submit items noted in Section 4.45.E.6
 - c. <u>Amendment criteria</u>. In considering any proposed amendment to the Woodland Map, the Planning Commission shall consider the following criteria in making findings and decisions:
 - i. Consistency with the goals and policies set forth in this Section 4.45.E, the Zoning Ordinance and the Master Plan.
 - ii. Evidence of compatibility with the site's physical, geological, hydrological and other environmental features.
 - x. Reasonableness of the requested amendment in relation to existing features and surrounding uses.
 - iv. Other factors deemed appropriate by the Planning Commission, which would protect the health or safety of the public, protect public and private investment in the Township and enhance the overall quality of life in the Township.
- 15. **Enforcement and Administration**. To ensure enforcement of this Section 4.45.E and the approved plan for tree removal, various inspections will be performed at the site at the direction of the Township. The applicant will be responsible for all inspection fees in accordance. The Township shall have the authority to promulgate additional regulations to implement the terms of this Section 4.45.E.
- 16. **Violations**. A violation of this Section 4.45.E shall be treated as a violation of the Zoning Ordinance and shall be subject to the following penalty provisions:

- a. *Misdemeanor offense*. Any person who shall violate any provision of this article shall be guilty of a misdemeanor and shall be punished by a fine of not more than \$500.00 and costs of prosecution or by imprisonment for not more than ninety (90) days, or both such fine and imprisonment in the discretion of the court.
- b. *Repeated offenses*. Each regulated tree removed in violation of this ordinance shall constitute a separate misdemeanor offense.
- c. *Injunctive and other relief authorized*. Any act or omission in violation of this article is hereby declared to be a nuisance per se and may be abated by order of a court of competent jurisdiction.
- d. Supervisor authorized to act. In addition to any other legal or equitable remedy, the Township Supervisor is hereby authorized to commence a civil action in any court of competent jurisdiction for an order abating or enjoining such unlawful activity.
- e. *Recovery of costs*. The Township shall seek recovery of the costs and actual attorney fees for all such action(s) brought against violators of this Section.