

SAUGATUCK TOWNSHIP ZONING ORDINANCE

ALLEGAN COUNTY, MICHIGAN

ADOPTED MARCH 13, 2024
EFFECTIVE MARCH 28, 2024
AMENDED 9.26.24



4. The minimum enclosure height for rolling carts or garbage cans shall be no less than four (4) feet.

Section 11.80 Parking Lot Landscaping

- A. **Applicability.** This section applies to all parking lots with 12 or more spaces.
- B. **Parking Lot Canopy Trees.** For every 12 parking spaces, one (1) canopy tree shall be installed. At least half of the required trees shall be installed within an island, peninsula, or corner-lot bump-out. The remaining required trees shall be placed within 10 feet of the parking area.
- C. **Islands and Peninsulas.** Islands and peninsulas in parking rows required by Section 10.30 J and required for parking lot canopy trees shall be at least nine (9) feet wide and 16 feet deep for a single parking row and nine (9) feet wide and 32 feet deep for a double row of parking.
- D. **Screening.** Parking rows within yards that abut public right-of-way shall be lightly screened. Screening may consist of one of the following treatments or other alternatives determined to be suitable by the Planning Commission:
 1. Shrub row at a rate of two (2) shrubs per parking space fronting the right-of-way; or
 2. Decorative fencing, such as split rail, picket, or wrought iron style, no less than two and one-half (2.5) feet in height.

Section 11.90 Tree Protection Zones

- A. **Intent and Purpose.** The wooded areas along streets require protection from tree removal for the reasons provided in Section 11.10.
- B. **Protected Tree.** For the purposes of this section, all living trees six (6) inches in diameter at breast height (DBH) four and one-half feet from ground level are protected trees.
- C. **Tree Removal Restriction.** No more than 10 percent of trees located within the TPZ area on a lot shall be removed without a tree removal permit or approval of a site plan. However, removal of protected trees under one (1) or more of the exceptions listed in Section 11.90 E and tree trimming are not prohibited by this article and do not require a permit or site plan approval.
- D. **Locations of Tree Protection Zones.** The following described areas are designated as Tree Protection Zones (TPZ) and are therefore regulated by this article.
 1. Streets. TPZs are designated along the following streets:

Table 11.90: Tree Protection Zones from Streets	
Street	Distance from Right-of-Way (each side)
I-196	40 feet
Blue Star Highway	40 feet
Old Allegan Road	30 feet
Riverside Road	30 feet
Lakeshore Drive	30 feet
62 nd south of Old Allegan to 131 st	30 feet
131 st from 62 nd to the end of Indian Point	30 feet
Wiley Road	30 feet

2. Critical Sand Dune Area. All property within the critical sand dune area along and or near Lake

Michigan shall be designated within the TPZ.

- E. **Exceptions.** The following tree removal activities shall be allowed without a tree removal permit or site plan approval unless otherwise prohibited by statute or township ordinance:
1. Necessary clearing to proceed with construction in accordance with an approved building permit or an approved site plan issued prior to the effective date of this section.
 2. Tree removal or transplanting occurring during use of land for agriculture or the operation of a commercial nursery or tree farm.
 3. Tree removal or transplanting for conservation of soil, vegetation, water, fish, wildlife, and other natural resources.
 4. Actions made necessary by an emergency, such as a tornado, windstorm, flood, freeze, dangerous and infectious insect infestations or disease, or other disaster, in order to prevent injury to persons or damage to property or to restore order.
 5. Repair or maintenance work performed by public utilities, the Allegan County Road Commission, and the Michigan Department of Transportation necessitating the removal of trees within an easement or right-of-way.
 6. Removal of dead, diseased, or damaged trees, where the damage resulted from an accident or nonhuman cause.
 7. Tree removal or transplanting for outdoor recreation, such as the utilization of field trails through woodland on publicly owned property for nature study, horseback riding, trapping, and hunting as otherwise legally permitted and regulated.
 8. Tree removal from a swath not to exceed 20 feet in width to provide drive access to a lot.
 9. Removal of any tree within 25 feet of a dwelling.
- F. **Replacement of Removed Protected Trees.** Any protected tree removed or damaged so as to threaten its continued viability beyond the 10 percent cutting allowance must be replaced on a caliper-by-caliper basis. If a protected tree is too large to be replaced directly, then the largest available caliper tree in multiple groups would be required. For example, if a 24-inch caliper maple tree is removed, four (4) six-inch caliper maple trees would need to be planted.

Section 11.100 General Tree Preservation

- A. **Introduction and Purpose.** Trees and woodlands provide for a number of public benefits, including environmental, social, and aesthetic benefits. Uncontrolled development or tree removal could result in the unnecessary removal of trees, woodlands, and related natural resources. Therefore, it is the intent of this section to:
1. Encourage the preservation of trees and related natural resources of the woodland ecosystem on undeveloped land and in connection with the development of land;
 2. Prohibit clear-cutting of woodland areas prior to or in anticipation of development without prior approval from the Planning Commission;
 3. Prohibit removal of protected trees or woodlands without a permit when required by this section;
 4. Provide for the protection, preservation, proper maintenance, and use of trees and woodlands to minimize damage from erosion and siltation, loss of wildlife and vegetation, and/or from the

destruction of the natural habitat; and

5. Provide for the paramount public concern for these natural resources in the interest of the health, safety, and general welfare of the residents of the Township, in keeping with Article IV, section 52 of the Michigan Constitution of 1963 and the intent of the Michigan Natural Resources and Environmental Protection Act, PA 451 of 1994.

B. **Applicability.** This section shall apply to all land located in the Township unless exempt pursuant to this section.

C. **Prohibitions.**

1. Clear-cutting of woodlands, including grubbing, on parcels covered by this section is prohibited without first obtaining a tree/woodland removal permit. Clear-cutting as a long-term forestry management practice for long-term regrowth of the woodland and not prior to or in anticipation of the development of land is allowed without a tree/woodland removal permit if consistent with a woodland stewardship plan described in Section 11.100 M that has been reviewed, approved and is on file with the Township prior to the start of any forestry management practices or operations.
2. Removal of protected trees or woodlands or taking any action to deliberately cause the death of a tree without a permit when required by Section 11.100 G is prohibited.

D. **Exemptions.** Tree and woodland removal associated with the following shall be exempt from the requirements of this section:

1. Parcels that are not subject to site plan, site condominium, or subdivision plat review, and:
 - a. Are three (3) acres or less.
 - b. Are greater than three (3) acres, but where no more than 33 dbh inches of protected trees are removed per acre during any 12-month timeframe.
2. Farming operations, as defined by the Right to Farm Act, are lawfully existing and operating in accordance with Generally Accepted Agricultural Management Practices (GAAMPS) as adopted by the Michigan Department of Agriculture.
3. Forestry operations conducted in compliance with a woodland stewardship plan that has been filed with the Township Zoning Administrator and has been reviewed and approved by the Township Environmental Consultant prior to the start of any forestry management practices or operations.
4. Installation, repair, or maintenance of public utilities lawfully operating in the Township in accordance with an operating permit or right-of-way permit issued by the Township but only to the extent that such tree or woodland removal is necessary for the protection of utility lines and the public health, safety, and welfare.
5. Work within an existing public street right-of-way or an existing private street easement but only to the extent necessary for safe access along such right-of-way or private street easement and to protect the public health, safety, and welfare in accordance with an operating permit or right-of-way permit issued by the Township.
6. Any trees that are demonstrated by the property owner to the satisfaction of the Township Zoning Administrator, in consultation with the Township Environmental Consultant, to have a health and condition standard factor of less than 50 percent based upon the standards established by the International Society of Arboriculture.
7. Any tree that poses a safety hazard, whose removal will prevent injury or damage to persons or

property, provided that removal is accomplished through the use of accepted standard forestry practices.

- E. **Authorization.** Under certain conditions defined in this section, a tree/woodland removal permit may be authorized by the Planning Commission to allow limited removal of tree/woodland resources or construction, activity, use, or operations within a woodland area if preservation techniques described in this section have been applied to the greatest extent practical, and tree and/or woodland removal is found by the Planning Commission to be unavoidable.
- F. **Application and Fees; Amendment.**
1. Application for proposed tree/woodland removal permit shall be made by filing an application form and required fee with the Township Clerk. The fees shall be set by resolution of the Township Board. In addition, when this section requires or permits review, approval, and filing of a woodland stewardship plan, the plan shall be filed with the Township Clerk on an application form provided by the Township and the required fee. The fee for review of the woodland stewardship plan shall be set by resolution of the Township Board.
 2. Any request for an amendment to a tree/woodland removal permit shall be made by filing an application form with the Township and the required fee. The fee for an amendment to a tree/woodland removal permit shall be set by the Township Board. Any amendment to a tree/woodland removal permit shall be processed in the same manner as the initial permit, and the amendment request and the amended plan submittals shall highlight the proposed changes, including any additional tree/woodland removal proposed, the reasons for such changes, and any additional mitigation proposed unless otherwise required by the Township Environmental Consultant in consultation with the Planning Commission due to the nature of the proposed amendment.
- G. **Procedure for Tree/Woodland Removal Permit.** The provisions of this section shall apply to all parcels in the Township that (1) require site plan review, site condominium, or subdivision plat review, or are greater than three acres in area (unless exempted by Section 11.100 D). The procedure for review and approval of a tree/woodland removal permit is as follows:
1. When site plan, site condominium, or subdivision plat review is required. If protected trees or woodlands are proposed for removal as part of a development proposal, the following are required:
 - a. A tree/woodland survey.
 - b. A tree replacement plan (see tree replacement options Section 11.100 N).The Planning Commission shall review the tree/woodland survey, any tree replacement plan, and all information required by this section and the site plan or plat review sections, as applicable. The Planning Commission shall approve, approve with conditions, or deny the tree/woodland removal permit in accordance with the standards set forth in this section and the site plan or plat review sections, as applicable.
 2. When site plan review, site condominium, or subdivision plat review is not required. If protected trees or woodlands are proposed for removal and are not part of a development proposal, the Planning Commission shall conduct a review of permit applications in the following situations:
 - a. The Zoning Administrator may approve the removal of up to 500 inches of trees. Beyond 500 inches, or at the discretion of the Zoning Administrator, for requests less than 500 inches, the Planning Commission shall review and take action.

- b. For parcels that are greater than three acres in area, when more than 100 d.b.h. inches of protected trees are to be removed within 12 months (unless exempted by Section 11.100).
 - c. The Planning Commission may require a tree/woodland survey in circumstances where the Commission determines that it would be helpful in understanding the number and/or sizes of trees proposed for removal. At a minimum, a plot plan, as defined in Section 11.100 L, shall be submitted that provides the location, size, and type of all protected trees and/or woodlands to be removed as well as a tree replacement plan and tree protection method where necessary.
3. The Planning Commission, in consultation with any appropriate consultants, if needed, shall approve or deny the tree/woodland removal permit in accordance with the standards set forth in this section.

H. **Review Criteria.** In determining whether the proposed disturbance or removal of trees and/or woodlands is limited to the minimum necessary to allow reasonable use of the land, the Planning Commission shall apply the following criteria:

- 1. The importance and overall value of the trees/woodlands on the site. In general, the importance of trees/woodlands increases with rarity, size, and age.
- 2. The existence of overlapping natural features such as wetlands, 100-year flood plains, woodlands, landmark trees, steep slopes, or endangered species in one area. Overlapping natural features increases the importance and overall value of preservation of the area.
- 3. The impact of the proposed disturbance on the integrity of ecological systems or the continuity between natural features. Wherever possible, ecological systems and continuity between natural features should be preserved.
- 4. The amount of disturbance in relation to the scale of the proposed development.
- 5. The adequacy of the tree replacement plan or other mitigation plan.
- 6. The justification for forestry management practices, the benefits of the proposed disturbance, and proposed coordination with the recommendations in the woodland stewardship plan.

I. **Landmark Trees.**

- 1. Trees listed as invasive in Table 11.20 B shall not be considered protected landmark trees under this section and are prohibited.
- 2. The following species that meet the minimum size requirement are considered landmark trees so long as they are considered to be healthy.

Table 11.100 A: Landmark Trees		
Common Name	Botanical Name	Landmark Tree Size (d.b.h.)
Any healthy tree with a DBH 24" or greater (except invasive species)		
Ash	<i>Fraxinus</i>	18"
Basswood	<i>Tilia</i>	18"
Beech, American	<i>Fagus grandifolia</i>	18"
Black Cherry	<i>Prunus serotina</i>	18"
Black Walnut	<i>Juglans nigra</i>	18"
Buckeye, Ohio	<i>Aesculus glabra</i>	18"

Table 11.100 A: Landmark Trees		
Common Name	Botanical Name	Landmark Tree Size (d.b.h.)
Douglas Fir	<i>Pseudotsuga menziesii</i>	18"
Elm	<i>Ulmus</i>	18"
Fir	<i>Abies</i>	18"
Kentucky Coffeetree	<i>Gymnocladus dioicus</i>	18"
London Planetree/American Sycamore	<i>Platanus</i>	18"
Maple (Silver)	<i>Acer saccharinum</i>	18"
Pine (All species)	<i>Pinus</i>	18"
Spruce	<i>Picea</i>	18"
Tulip Poplar	<i>Liriodendron tulipifera</i>	18"
Hickory	<i>Carya</i>	16"
Honey Locust	<i>Gleditsia tricanthos</i>	16"
Maple (Red)	<i>Acer rubrum</i>	16"
Maple (Sugar)	<i>Acer saccharum</i>	16"
Oak (All species)	<i>Quercus</i>	16"
Arborvitae	<i>Thuja</i>	12"
Bald Cypress	<i>Taxodium distichum</i>	12"
Birch	<i>Betula</i>	12"
Black Tupelo	<i>Nyssa sylvatica</i>	12"
Cherry, Flowering	<i>Prunus spp.</i>	12"
Crabapple/Hawthorne	<i>Malus/crataegus</i>	12"
Dawn Redwood	<i>Metasequoia glyptostroboides</i>	12"
Ginkgo	<i>Ginkgo</i>	12"
Hackberry	<i>Celtis occidentalis</i>	12"
Hawthorn	<i>Crataegus</i>	12"
Hemlock	<i>Tsuga</i>	12"
Larch/Tamarack	<i>Larix</i>	12"
Magnolia	<i>Magnolia</i>	12"
Pear	<i>Pyrus spp.</i>	12"
Persimmon	<i>Diospyros virginiana</i>	12"
Poplar	<i>Populus except for p. deltoides, alba</i>	12"
Sassafras	<i>Sassafras albidum</i>	12"
Sweetgum	<i>Liquidamber styraciflua</i>	12"
Yellow Wood	<i>Cladrastis lutea</i>	12"
Blue-Beech/Hornbeam	<i>Carpinus caroliniana</i>	8"
Butternut	<i>Juglans cinera</i>	8"
Cedar of Lebanon	<i>Cedrus spp.</i>	8"
Chestnut	<i>Castanea</i>	8"
Dogwood, Flowering	<i>Cornus florida</i>	8"
Eastern Red Cedar	<i>Juniperus virginiana</i>	8"

Table 11.100 A: Landmark Trees		
Common Name	Botanical Name	Landmark Tree Size (d.b.h.)
Hop-Hornbeam/Ironwood	<i>Ostrya virginiana</i>	8"
Maple, Mountain/Striped	<i>Acer spicatum/pensylvanicum</i>	8"
Paw Paw	<i>Asimina triloba</i>	8"
Redbud	<i>Cercis canadensis</i>	8"
Serviceberry	<i>Amelanchier</i>	8"

- J. **Tree/Woodland Survey.** A tree/woodland survey shall meet the following requirements:
1. Plan Requirements. If a tree/woodland survey is required as part of the site plan or subdivision plat review process, then the scale of the survey shall be the same as the site plan or the subdivision plat. In any other case, a tree/woodland survey shall be a scaled drawing that shall not exceed 100 feet to the inch.
 2. Plan Contents. In all cases, a tree/woodland survey shall show all protected trees and woodlands to be removed and to remain. (Note that the phrase "protected trees" includes "landmark trees.") The survey shall contain the following:
 - a. Location of all protected trees and woodlands accurately plotted.
 - b. Common and botanical names of all protected trees, their size in inches at their DBH, and a description of each tree's health.
 - c. Ecological Characterization Report, prepared by a professional or professionals qualified in the areas of ecology, botany, wildlife biology or other relevant discipline that includes, at a minimum, the following information. If the proposed activity or proposed woodland impacts are minimal as determined by the Planning Commission and as assisted by the Zoning Administrator, Township Environmental Consultant, or others, the Planning Commission may, at its discretion, waive the requirement for an ecological characterization report.
 - i. The plant species, plant communities/associations (paying particular attention to Michigan endangered, threatened, and special concern species) that the woodland contains;
 - ii. The wildlife use and habitat (paying particular attention to Michigan endangered, threatened, and special concern species) showing the species using the woodland, wildlife movement corridors, the times or seasons that the woodland is used by those species, and the "functions" (meaning feeding, watering, cover, nesting, roosting, and/or perching) that the woodland provides for such wildlife species;
 - iii. The boundary of wetlands that are located within, either partially or wholly, the woodland and a description of the vegetation and ecological functions provided by those wetlands;
 - iv. The pattern, species, and location of native trees, native tree stands, and other native site vegetation, including their relationship to adjacent areas;
 - v. The top of the bank or shoreline of any inland lake or stream located, either partially or wholly, within the woodland; and
 - vi. The general ecological functions provided by the woodland and its features.

range silvicultural objectives for each stand or cover type clearly stated and related to landowners' goals.

2. Professional Qualifications. All woodland stewardship plans must be prepared by a certified forester. Certified foresters are foresters registered with the State of Michigan or a conservation district forester.
3. Purpose. The purpose of the woodland stewardship plan shall be for long-term forest management and regrowth of the woodland and not prior to or in anticipation of development of the land.
4. Review and approval by State of Michigan Forest Stewardship Program (FSP). Prior to filing the woodland stewardship plan with the Township, the applicant shall obtain and provide evidence of approval of the plan pursuant to the State of Michigan Forest Stewardship Program or its successor.
5. Compliance with Generally Accepted Forest Management Practices (GAFMP). The woodland stewardship plan shall comply with GAFMP adopted by the Michigan Department of Natural Resources or its successor.

M. **Tree Replacement Options and Requirements.** The tree replacement requirements herein can be met in part or in whole by the landscape requirements set forth in this article.

1. Protected Tree Replacement. For every one-inch d.b.h. of protected trees removed, one-half inch d.b.h. of replacement trees shall be planted on the parcel, each of which replacement trees shall have a 2.0-inch minimum caliper for deciduous trees or six (6) feet in height for coniferous trees. Replacement trees using caliper measurements must be provided at 70 percent of the DBH removed to compensate for the disparity between d.b.h. and caliper inch measurements. Replacement trees shall be species native to Michigan and non-sterile varieties. If more than 20 replacement trees are required, a mixture of three (3) or more species must be used.

Table 11.80 B: Tree Replacement Options Example	
Replacement Trees Using d.b.h.	Replacement Trees Using Caliper Inches
Trees to be removed in woodland area greater than three (3) acres = 200 d.b.h. inches	Trees to be removed in woodland area greater than three (3) acres = 200 d.b.h. inches
200 DBH x 0.5 = 100 d.b.h. inches of replacement trees 100 / 2 = 50 replacement trees at: <ul style="list-style-type: none"> • 2.0 d.b.h. inches for deciduous • 6 feet in height for coniferous 	200 d.b.h. x 0.7 = 140 caliper inches of replacement trees 140 / 2 = 70 replacement trees: <ul style="list-style-type: none"> • 2.0 caliper inches for deciduous • 6 feet in height for coniferous

2. Tree Replacement and Woodland Stewardship Plans. If removal of protected trees is conducted in compliance with a woodland stewardship plan, then replacement trees are not required.
3. Tree Replacement Plan Contents.
 - a. Plan Requirements. If a tree replacement plan is required as part of the site plan review or subdivision plat review process as set forth in 1), then the scale of the tree replacement plan shall be the same as either the site survey, the site plan, and/or the subdivision plat. If a tree replacement plan is required for other woodland or protected tree removal as set forth in Section 11.100 G.2, the tree replacement plan, if required, shall be a scaled drawing, and the scale shall not exceed 100 feet to the inch.
 - b. Plan Contents. In all cases, a tree replacement plan shall contain the following:

- i. Property boundaries, existing and proposed buildings and structures, pavement, overhead and underground utilities, and other permanent features of the property.
 - ii. Existing natural features such as edges of woodlands, protected trees to remain, wetlands, water courses, and water features (ponds, lakes, etc.).
 - iii. Location, size, species (common and botanical names), and number of all proposed trees.
- 4. Tree Removal without Permission. If protected trees are removed without the required review and approval or without filing any required woodland stewardship plan, then, in addition to sanctions for violation of this chapter, each one (1) inch DBH removed must be replaced with two DBH inches in replacement trees. Replacement trees shall meet the same minimum size, species, and diversity requirements as noted in (1) and (2) above. Plans showing the location, size, species, and other relevant information regarding tree mitigation and replacement as required by this subsection shall be submitted to the Zoning Administrator for review and approval in consultation with the Township Environmental Consultant if needed.
- 5. Transplanting trees. Where native woodland species are being displaced by development, smaller-sized native trees transplanted from the disturbed area of the site may be used to fulfill tree replacement requirements. Transplanted trees shall be native species, no less than 1.0-inch caliper for deciduous trees, or three (3) feet tall for evergreen trees, and the total number of plants used adds up to the size requirements for a single species. For example, two rescued 1.0-inch caliper oaks can be used instead of one (1) 2.0-inch caliper oak. Native species transplanted from the site shall not be removed from undisturbed areas of the site or areas designated as preservation or conservation areas. Federal and state laws protecting native plant species designated as endangered, threatened, or of special concern must be adhered to, and under no circumstances shall these plants be damaged, destroyed, or removed from the site.
- 6. Woodland Restoration. If deemed appropriate by the Planning Commission, woodland areas disturbed by development activities may be mitigated by the creation of an area planted with a native plant community appropriate to the area. The proposed plant community shall be illustrated on a tree replacement plan, including information about all proposed plant materials. In reviewing such a proposal, the Planning Commission shall apply the following standards:
 - a. The use of existing woodland soils from the site to establish necessary soil conditions for woodland plants to establish themselves.
 - b. The native species diversity proposed for tree, understory, and groundlayer plants.
 - c. The age diversity of the proposed tree canopy. Native trees and shrubs of various ages and sizes are appropriate for this type of planting. Therefore, the minimum tree size requirements do not apply here.
 - d. The use of plants with local genotypes, including rescued plants from the disturbed portion of the site, seed, and propagates from the local plant populations.
 - e. The habitat values created by the proposed mitigation, including plant species proposed adjacent to other site features, such as contiguous woodlands, tree rows, wetlands, streams, or other features.
- 7. Security. After issuance of a permit under this section, the applicant shall deposit with the Township security in the form of cash or letter of credit, in an amount recommended by the Township environmental consultant and approved by the Planning Commission, and in a form approved by the Township Zoning Administrator and Township Attorney to ensure proper

installation and survival of replacement trees, transplanted trees, and/or woodland plants for a period of three years after the later of (i) planting, (ii) issuance of a certificate of occupancy for the project, or (iii) final approval of the tree/woodland removal permit or any amendment. The tree replacement plan shall include a description of the proposed amount and type of security to be posted. The applicant and the Township shall enter into an escrow agreement pertaining to the conditions for the release of the security in a form approved by the Township Attorney and building official at the time the security is posted.

8. Alternative Mitigation Measures. The Planning Commission shall be authorized to waive a portion of the tree replacement requirements of this section when site factors, tree condition, or development requirements make conformity to the tree replacement requirements of this section difficult or undesirable.

N. **Preservation of Existing Trees and Woodlands.** Protected trees, landmark trees, and woodlands shall be preserved to the greatest extent practicable through the use of site development techniques, including but not limited to the following:

1. In general, landmark trees should not be removed for development. Site design should consider any landmark tree on a site as an important design element. Removal of landmark trees should occur rarely and should be considered only after alternatives are studied and found to be not feasible.
2. Locate development in areas of the site that are already disturbed or cleared of trees and woody vegetation.
3. Minimize clearing and grading of the site by working with the site's existing topography. Grading, roads, walkways, utility lines, and all other aspects of soil disturbance shall be minimized to the extent possible, considering standards of sound design and public safety. Clearing for buildings should be limited to the smallest area needed for safe and effective building work. Excavated soil and materials from basements and grading shall not be spread in the Woodland area. Careful handling of trees and the use of adequate tree protection measures should be undertaken, especially for trees near the building envelope.
4. Use retaining walls and other techniques to minimize grade changes near trees.
5. Provide tree and understory/groundlayer protection during all construction phases of the project. Woodland areas excluded from development should be protected from all intrusions during development by well-maintained barrier fencing (see Section 11.100 P) tree protection during construction below for minimum requirements. If construction or grading is to occur within a portion of woodlands, those woodland areas excluded from development should be clearly marked and/or fenced off during development. Unpermitted intrusions include any activity that could adversely affect the plants (trees, shrubs, and herbaceous/groundlayer plants) within the fenced-off woodland, including, but not limited to, the following: driving vehicles and/or heavy equipment; stockpiling, storage, or parking of any soils, materials, equipment or vehicles; spreading excess fill/soil; dumping of construction or landscaping wastes; and clearing/removal of the understory or groundlayer of vegetation within the woodland.
6. Minimize the building/construction footprint on individual lots to preserve trees within lot boundaries.
7. Maintain grades and moisture conditions within the Critical Root Zone (CRZ) of trees. Many of the native hardwood trees: oaks, hickories, maples, and beeches, for example, and most old trees do not adapt to environmental changes brought about by construction. Grading changes should not

occur within the CRZ of a tree. In addition, grading on a site should neither increase nor decrease moisture conditions within a tree's CRZ. The area of concern around an important tree may be significantly larger than the CRZ. The drip line of the tree shall be used for comparison, and if larger than the CRZ, the dripline should be used to determine how best to protect an important tree.

8. Locate utility lines away from trees to be retained. If this is not possible, install utility lines through bored tunnels instead of trenches.
9. Conduct any necessary excavation around trees by hand.

O. Tree Protection During Construction.

1. Critical Root Zone (CRZ). No disturbance or construction activities may occur within the CRZ of any protected or landmark tree designated to remain as shown on the Tree/Woodland survey, site plan, or subdivision plat.
2. Protected Barrier. The applicant and the applicant's agents and successors shall erect and maintain suitable barriers as approved by the Township to protect trees designated to remain as shown on the approved site plan or subdivision plat. Protected barriers shall be placed at the outer limits of the critical root zone, or drip line if larger and if required by the Planning Commission to provide greater protection for an important tree, and shall remain in place until the Township authorizes removal based on tree protection factors or issues a final certificate of zoning compliance, whichever occurs first.
3. Inspections. The Township shall have the right to periodically inspect the site during site plan or subdivision plat review, land clearing, and/or construction to ensure compliance with this section.
4. Construction Damage. Any woodland, protected tree, or landmark tree that is determined to be dead, dying, or severely damaged due to construction activity within three years after the later of issuance of a certificate of occupancy or final permit approval for development authorized by an approved site plan, subdivision plat, or tree/woodland removal permit shall be replaced by the applicant in the amount specified in the requirements for mitigation of woodlands. Plans showing the location, size, species, and other relevant information regarding tree mitigation shall be submitted to the Zoning Administrator for review and approval in consultation with the Township's environmental consultant.

Section 11.110 Man-Made Inland Lakes, Grading, and Excavation

A. Stormwater Management.

1. Applicability. All commercial and non-commercial site development plans, platted subdivisions, and condominium projects shall meet the stormwater design requirements of the Allegan County Drain Commission.
2. Approval. Applicants shall secure approval from the Allegan County Drain Commission prior to site development activities.

B. Permitting.

1. Creating Man-Made Inland Lakes Over One-Quarter of an Acre. In recognition of the potentially harmful impacts of construction, a man-made inland lake with a surface area over a quarter acre in size, as measured from ground level, shall be permitted in the Township only in the following circumstances:
 - a. When the man-made inland lake is developed in conjunction with a Planned Unit Development