

ARTICLE 18

LANDSCAPING

§18.05 - INTENT & PURPOSE

It is the intent and purpose of this Article to:

- (A) Protect, preserve, and enhance the visual appearance, character, and value of properties and the Township;
- (B) Encourage compatibility between incompatible uses and districts by screening or filtering views and sounds;
- (C) Improve the local environment by moderating harsh or unpleasant sounds, reducing air pollutants, moderating winds and effects of microclimates, controlling soil erosion and depletion, and promoting storm water infiltration;
- (D) Improve the appearance and functionality of off-street parking and loading, other vehicular use areas, and areas abutting public rights-of-way;
- (E) Preserve and enhance existing environmental systems, natural features, and wildlife habitat; and
- (F) Establish minimum standards for design, installation, and maintenance of landscaping, screening, and buffering.

§18.10 - EXISTING SITES

Landscaping for existing sites requiring a site plan shall be brought into compliance with this Article, as outlined below.

- (A) **Building Expansion:** If the building coverage is increased by more than twenty (20) percent from the original conditions or previously-approved site plan, the landscaping shall meet the current landscaping standards of this Article.
- (B) **Parking Lot Expansion:** If the off-street parking lot is increased by more than twenty-five (25) percent from the original conditions or previously-approved site plan, the off-street parking lot landscaping shall meet the current off-street parking lot and loading landscaping standards of this Article.
- (C) **Change of Use:** If the use is changed to a more intensive use, the approving authority shall determine the extent to which compliance with the current landscaping standards of this Article is required, based on the nature of the change of use, the existing landscaping, and the surrounding uses.

§18.15 - DESIGN STANDARDS

Landscaping shall meet the standards outlined below.

- (A) **Live Materials:** All areas of a site or use requiring a site plan that are not covered by a structure or planting beds shall be stabilized by grass or other ground covers. Areas between sidewalks and streets, islands in parking lots, boulevard medians, and similar areas shall be landscaped. Mulch or stone cover shall be limited to a maximum of seventy (70) percent of the landscaped area.
- (B) **Disturbed Area:** At least one (1) deciduous shade tree or coniferous tree shall be planted for every ten thousand (10,000) square feet of disturbed area of site plans, rounded up.
- (C) **Minimum Landscaping:** In addition to any landscaping required for screening, buffering, parking and loading, at least ten (10) percent of the lot area for site plans shall be landscaped with grasses, other live ground covers, planting beds, and trees or a combination of those.
- (D) **Utilities:** All new landscaping shall be coordinated with existing and planned overhead and buried utilities in order to avoid interference with plant growth or damage or interruption of any utility service.
- (1) **Underground Utilities:** Landscaping shall be placed so that it will not interfere with underground utilities.
 - (2) **Electrical Distribution Lines:** Landscaping for sites requiring a site plan shall be placed to maintain a distance of at least ten (10) feet when mature from electrical distribution lines and other overhead utilities.
 - (3) **Electrical Transmission Lines:** Landscaping for sites requiring a site plan shall be placed to maintain a distance of at least seventy-five (75) feet when mature from one hundred twenty (120) kilovolt electrical transmission lines and a distance of at least one hundred fifty (150) feet when mature from three hundred forty-five (345) kilovolt electrical transmission lines. This distance shall be measured horizontally from the center of the tower.
- (E) **Agricultural Fields:** All new landscaping installed in the vicinity of commercial agricultural fields shall be placed in a manner to not interfere with the commercial agricultural operation. Trees shall be set back so that their canopy and critical root zone will not extend into the agricultural field, unless the affected property owner grants written, notarized permission for the trees to be planted closer, with a copy provided to the Township.
- (F) **Berms:** Berms used for buffering or screening for sites or uses requiring a site plan shall meet the standards below.
- (1) **Slope:** The maximum slope shall be one (1) vertical foot per three (3) horizontal feet.
 - (2) **Height:** The maximum height shall be four (4) feet.
 - (3) **Top:** The top shall be flat, at least two (2) feet wide, and extend the length of the berm, minus the slope at the ends of the berm.
 - (4) **Planting:** Berms shall be landscaped to prevent erosion.
 - (5) **Fences:** Fences shall not be placed on top of berms located in front yards. The height of fences on berms shall be measured from the base of the berm.

(G) **Walls & Fences:** Walls or fences used to provide screening or buffering for sites requiring a site plan shall meet the standards below.

- (1) *Location:* Walls or fences shall meet the location standards outlined in §16.35: [Fences, Walls, & Gated Communities of this Ordinance](#).
- (2) *Setbacks:* Walls or fences shall be at least three (3) feet from all lot lines. Walls and fences that are taller than three (3) feet shall be set back a distance at least equal to their height.
- (3) *Height:* Walls or fences shall meet the height standards outlined in §16.35: [Fences, Walls, & Gated Communities of this Ordinance](#). The approving authority may allow for a taller wall or fence if the additional height: a) is necessary to provide adequate screening and b) would not create a negative impact on the surrounding properties.
- (4) *Materials:* Walls or fences shall be constructed in a sound manner assuring long-term structural integrity and visual character.
- (5) *Maintenance:* Walls or fences shall be maintained in a good, upright and plumb condition.
- (6) *Landscaping:* The approving authority may require vegetative landscaping between the wall or fence and the lot lines to reduce the impact of walls or fences.

§18.20 - SCREENING & BUFFERING

The screening and buffering shall be provided, as outlined below, in addition to other applicable landscaping.

(A) **Non-residential:** Non-residential and non-agricultural uses shall provide buffering along streets and along all side and rear lot lines adjacent to residential zoning districts.

- (1) *Front-yard Buffer:* The front-yard buffer shall be located along the front-lot line and shall meet the standards outlined below.
 - a. *Nature of Buffer:* The front-yard buffer shall be landscaped with grass, ground cover, trees, shrubs, and other natural landscape material. Decorative fences, sidewalks, and access driveways may be located within the buffer area.
 - b. *Trees:* One (1) tree shall be planted for every thirty (30) linear feet of frontage, rounded up.
- (2) *Side & Rear-yard Buffer:* The side and rear-yard buffer shall be located along the side and rear lot lines and shall meet the following standards.
 - a. *Nature of Buffer:* The side and rear-yard buffer may consist of a solid wall, berms, living materials, or a combination of those. When living materials are used, they should meet the required standards for height and opacity within three (3) years of planting.
 - b. *Opacity:* The side and rear-yard buffer shall be at least seventy-five (75) percent opaque by observation of any two (2) square yard area. The opacity shall be maintained throughout the year. If plantings do not provide the necessary opacity within three (3) years, a solid wall or additional plantings shall be installed.
 - c. *Height:* The side and rear-yard buffer shall be at least five (5) feet high. If plantings do not provide the necessary height within three (3) years, a solid wall shall be installed.
 - d. *Solid Wall:* The approving authority may require a solid wall if it determines there is a need to provide a greater noise or dust barrier or to screen more-intense development not adequately screened as outlined above.

(B) Multiple-unit Residential: Multiple-unit residential uses shall provide buffering along streets and along all side and rear lot lines.

(1) Front-yard Buffer: The front-yard buffer shall be located along the front-lot line and shall meet the standards outlined below.

- a. *Nature of Buffer:* The front-yard buffer shall be landscaped with grass, ground cover, trees, shrubs, and other natural landscape material. Decorative fences, sidewalks, and access driveways may be located within the buffer area.
- b. *Trees:* One (1) tree shall be planted for every forty (40) linear feet of frontage, rounded up.

(2) Side & Rear-yard Buffer: The side and rear-yard buffer shall be located along the side and rear lot lines and shall meet the following standards.

- a. *Nature of Buffer:* The side and rear-yard buffer may consist of a solid wall, berms, living materials, or a combination of those. When living materials are used, they should meet the required standards for height and opacity within three (3) years of planting.
- b. *Opacity:* The side and rear-yard buffer shall be at least fifty (50) percent opaque by observation of any two (2) square yard area. The opacity shall be maintained throughout the year. If plantings do not provide the necessary opacity within three (3) years, a solid wall or additional plantings shall be installed.
- c. *Height:* The side and rear-yard buffer shall be at least five (5) feet high. If plantings do not provide the necessary height within three (3) years, a solid wall shall be installed.
- d. *Solid Wall:* The approving authority may require a solid wall if it determines there is a need to provide a greater noise or dust barrier or to screen more-intense development not adequately screened as outlined above.

(C) Site Condominiums & Subdivisions: Site condominiums and subdivisions shall provide buffering along boundaries of the development and within the development.

(1) Front-yard Buffer: When a site condominium or subdivision abuts or contains an existing or proposed major or minor thoroughfare, a buffer shall be installed to screen the view of the development from the street. The intent is to soften the impact of the site condominium or subdivision rather than to completely obscure it.

- a. *Nature of Buffer:* The buffer shall be landscaped with grass, ground cover, trees, shrubs, and other natural landscape material. Fences and signs may be placed within the buffer.
- b. *Depth:* The buffer shall be at least fifty (50) feet deep.
- c. *Plantings:* One (1) tree shall be planted for every thirty (30) linear feet of frontage, rounded up.
- d. *Lots:* Individual lots shall not be located within the required buffer.
- e. *Administrative Adjustment:* The approving authority may approve different standards for the buffer, as outlined in [Article 30: Administrative Adjustment of this Ordinance](#).

(2) Side & Rear-yard Buffer: All other exterior boundaries of site condominiums and subdivisions shall provide a buffer, unless the adjacent property already provides a similar buffer.

- a. *Nature of Buffer:* The buffer may consist of berms, living materials, or a combination of those. When living materials are used, they should meet the required standards for height and opacity within three (3) years of planting.
- b. *Width:* The side and rear-yard buffer shall be at least fifteen (15) feet wide.

- c. *Opacity:* The buffer shall be at least seventy-five (75) percent opaque by observation of any two (2) square yard area. The opacity shall be maintained throughout the year. If plantings do not provide the necessary opacity within three (3) years, a solid wall shall be installed.
- d. *Height:* The side and rear-yard buffer shall be at least five (5) feet high. If plantings do not provide the necessary height within three (3) years, additional plantings shall be installed.
- e. *Lots:* Individual lots shall not be located within the required buffer.
- f. *Administrative Adjustment:* The approving authority may approve different standards for the buffer, as outlined in [Article 30: Administrative Adjustment of this Ordinance](#).

(3) Interior Streets: Deciduous shade trees shall be planted along the interior streets.

- a. *Number:* There shall be one (1) street tree for every forty (40) linear feet of frontage, rounded up. Every lot shall have at least one (1) street tree.
- b. *Spacing:* The street trees shall be uniformly placed, to the greatest extent practicable.
- c. *Location:* The street trees shall be located within the right-of-way. The approving authority may approve a location outside the right-of-way, within individual lots or common area, if the alternate location is necessary to avoid conflicts with utilities or preserve clear vision for motorists, pedestrians, or cyclists.
- d. *Maintenance:* The developer shall be responsible for maintaining the street trees until acceptance by the homeowners' association. The street trees shall be maintained by the homeowners' association following acceptance. The approving authority may approve alternate maintenance plans if the alternate plan will provide better maintenance of the street trees.

§18.25 - PARKING & LOADING

Parking and loading for non-residential and non-agricultural uses shall provide the landscaping outlined below, in addition to other applicable landscaping standards.

- (A) Street Screening:** Screening shall be provided to block headlights of motor vehicles in the off-street parking or loading spaces or maneuvering lanes from projecting off of the site or onto a street. This shall not require screening for driveways.
- (B) Landscaping:** Parking lots that provide more than four (4) off-street parking spaces shall provide additional landscaping along the perimeter and/or within the parking lot.
 - (1) Number of Trees:** There shall be at least one (1) tree for every eight (8) parking spaces, rounded up.
 - (2) Location of Plantings:** All shrubs and trees shall be at least three (3) feet from the edge of the parking lot, driveway, or curb.
 - (3) Clear Vision:** All plantings within the parking lot shall not obstruct vision at a height between thirty (30) inches and eight (8) feet above the parking lot surface. This shall not include tree trunks that do not significantly obscure views.

§18.30 - DETENTION & RETENTION PONDS

Detention and retention ponds shall meet the standards outlined below, in addition to other applicable landscaping standards.

- (A) **Integration:** Stormwater management systems, including bioswales, rain gardens, and detention and retention ponds, shall be integrated with the site landscaping.
- (B) **Slope:** Side slopes of detention and retention ponds shall not exceed one (1) vertical foot for every three (3) horizontal feet.
- (C) **Planting:** One (1) tree shall be planted around the detention or retention pond for every fifty (50) lineal feet along the pond's bank, rounded up. Any plantings in or around a detention or retention pond shall be adapted to the soil and water conditions.

§18.35 - PLANTING MATERIALS

Planting materials required for sites requiring site plans shall meet the standards outlined below.

- (A) **Selection:** All plant materials shall be hardy to Dexter Township, shall be free of disease, insects, and damage and shall conform to the American Standard for Nursery Stock. Materials native to the Dexter Township area shall be preferred.
- (B) **Minimum Size:** Trees installed to meet the standards of this Article shall meet the sizes outlined below.
 - (1) *Deciduous Shade Trees:* Deciduous shade trees shall have a caliper of at least two (2) inches.
 - (2) *Deciduous Ornamental Trees:* Deciduous ornamental trees shall have a caliper of at least one point five (1.5) inches.
 - (3) *Evergreen Trees:* Evergreen trees shall be at least six (6) feet high.
- (C) **Variety:** When more than three (3) trees are required to meet the standards of this Article, multiple species shall be planted in order to reduce tree loss due to species-specific disease, as outlined in the table below. Any single species shall constitute a maximum of thirty-three (33) percent of the overall trees to be planted.

Table 18.35(C): Tree Variety		
Number of Required Trees	Minimum Number of Tree Species	Minimum Number of Trees per Species
(1) 3 to 19	2	1
(2) 20 to 49	3	4
(3) 50 to 89	4	10
(4) More than 89	5	15

(D) Prohibited Species: The tree species in the table below shall not count towards the minimum planting requirements. However, the approving authority may allow planting prohibited species in specific circumstances if the tree will not have a negative impact on the site, adjacent properties, or public safety and there is a plan to adequately address any disease or health concerns of the tree species.

Table 18.35(D): Prohibited Species

Common Name	Scientific Name
(1) Ash	Fraxinus
(2) Box Elder	Acer Negundo
(3) Ginko (<i>female only</i>)	Ginko Biloba
(4) Honey Locust	Gleditsia Triacanthos
(5) Mullberry	Morus Species
(6) Poplars	Populus Species
(7) Black Locust	Robina Species
(8) Willows	Salix Species
(9) Siberian Elm	Ulmus Pumila
(10) Slippery Elm/Red Elm	Ulmus Rubra
(11) Chinese Elm	Ulmus Parvifola

(E) **Preservation:** In situations where quality, healthy trees exist on a site before development, the approving authority may grant credit towards the required trees to be planted.

- (1) *Location:* The existing trees shall be in the area that the required trees would be located.
- (2) *Credit:* Credit shall be given for preserving the following trees at the following ratios. Credit shall not be given for prohibited species trees or unhealthy trees.

Table 18.35(E)(2): Preservation Credit

Tree Type	Diameter at Breast Height	Credit
a. Evergreen Trees	8 inches to 12 inches	2 trees
	12 inches to 16 inches	3 trees
	17 inches to 20 inches	4 trees
	Over 20 inches	5 trees
b. Deciduous Shade Trees	3 inches to 8 inches	2 trees
	8 inches to 12 inches	3 trees
	12 inches to 20 inches	4 trees
	Over 20 inches	5 trees
c. Ornamental Trees	Over 2.0 inches	1 tree

- (3) *Protection:* Existing trees to be preserved for credit must be labeled as “To Be Preserved” on the landscaping plan. Protective fencing shall be placed around the critical root zone, and vehicles, construction equipment, and materials shall not be parked or stored within the critical root zone of trees to be preserved during construction. Devices and wires shall not be attached to any tree to be preserved. The grade shall not be changed within the critical root zone.
- (4) *Damage or Removal:* If an existing tree to be preserved for credit is damaged, destroyed, or negatively impacted during construction or dies within three (3) years of completion of the project, the tree shall be replaced with trees of the same species with a combined diameter at breast height equal to or greater than that of the damaged or removed tree.

(F) **Replacement:** When healthy, quality trees that are not on the prohibited species list are to be removed as part of a development, additional trees shall be planted to replace those removed trees. These replacement trees shall not be counted towards other landscaping requirements.

- (1) *Location:* Replacement trees may be located anywhere on the site where trees may be planted.
- (2) *Replacement Ratio:* Removed trees shall be replaced with the following ratio:
 - a. *Evergreen Trees:* Evergreen trees with a height of at least (8) feet and a diameter at breast height of at least eight (8) inches shall be replaced with a combined caliper equal to or greater than that of the tree to be removed.
 - b. *Deciduous Shade Trees:* Deciduous shade trees with a diameter at breast height of at least twelve (12) inches shall be replaced with a combined caliper equal to or greater than that of the tree to be removed.

§18.40 - INSTALLATION, MAINTENANCE, & COMPLETION

Landscaping shall be installed, maintained, and completed as outlined below.

- (A) **Completion:** All landscaping required by this Ordinance shall be installed before issuance of a certificate of zoning compliance, as outlined in §25.35: [Certificate of Zoning Compliance Process of this Ordinance](#).
- (B) **Condition:** All landscaping required by this Ordinance shall be maintained in a reasonably healthy condition. Unhealthy and dead material shall be removed and replaced within one (1) year of damage or death or the next appropriate planting period, whichever comes first.
- (C) **Bracing:** Any bracing shall be removed within one (1) year of planting. This period may be extended by periods of up to one (1) year if the Director of Planning and Zoning determines the extension is necessary for the healthy growth of the plant.
- (D) **Topsoil Storage:** Topsoil removed during construction that remains onsite shall be stockpiled in an appropriate manner to prevent sedimentation.
- (E) **Inspections:** A performance guarantee shall be provided by the developer or property owner for the Township to conduct annual inspections for the landscaping for at least three (3) years following the issuance of the certificate of zoning compliance or the turnover to a homeowners' association. The performance guarantee shall be provided before the certificate of zoning compliance is issued or the development is turned over to the homeowners' association.

§18.45 - ADMINISTRATIVE ADJUSTMENT

The approving authority may grant an administrative adjustment from provisions of this Article, as outlined in Article 30: [Administrative Adjustment of this Ordinance](#). If specific criteria are outlined elsewhere in this Article for modifying a provision [of this Article](#), that criteria shall be controlling.

§18.50 - LANDSCAPING PLAN

A separate landscaping plan, prepared and stamped by a landscape architect licensed by the State of Michigan, shall be submitted as part of a site plan, demonstrating that all of the applicable standards of this Article are satisfied. The landscaping plan shall be easily legible in the format submitted. If the landscaping plan requires more than one (1) sheet, match lines and a composite sheet of the overall site shall also be provided. Landscaping plans shall be at a scale acceptable to the Township and shall include at least the following information:

- (A) **Calculations:** [Calculations used to determine the necessary plantings;](#)
- (A)(B) **Plantings/Planting List:** The location, [quantity](#), size, spacing, root type, mature canopy extent, and descriptions, including common and scientific names, for each proposed plant type;
- (B)(C) **Preservation:** The location, size, and conditions, including common and scientific names, for existing trees and plant materials to be preserved [and the proposed methods of protecting the plant material to remain during construction, including the type and location;](#)
- (C)(D) **Removal:** The location, size, and conditions, including common and scientific names, for deciduous trees with a diameter of eight (8) or more inches or coniferous trees with a height of eight (8) or more feet to be removed;

~~(D)(A) **Topography:** Existing and proposed topography on the site and within one hundred fifty (150) feet of the site at intervals of two (2) feet or less;~~

~~(E) **Grass:** Identification of grass and other ground cover plantings and the method of planting;~~

~~(F) **Planting & Staking:** Planting and staking details, in either text or drawing, ensuring proper installation and establishment of proposed plant materials;~~

~~(G) **Site Conditions:** Significant construction details used to resolve site conditions, such as tree wells to preserve existing trees or culverts to maintain natural drainage patterns;~~

~~(E) **Topography:** Existing and proposed topography on the site and within one hundred fifty (150) feet of the site at intervals of two (2) feet or less;~~

~~(F)(H) **Disturbed Area:** The extent and square footage of the disturbed area;~~

~~(G) **Site Condition:** Significant construction details used to resolve site conditions, such as tree wells to preserve existing trees or culverts to maintain natural drainage patterns;~~

~~(H)(A) **Planting & Staking:** Planting and staking details, in either text or drawing, ensuring proper installation and establishment of proposed plant materials;~~

~~(I)(A) **Grass:** Identification of grass and other ground cover plantings and the method of planting;~~

~~(J)(I) **Berms & Walls:** Typical cross sections and elevations of berms, including slope and plantings, tree wells, and walls or fences, including footings;~~

~~(J) **Water Features:** Location and details of waterbodies;~~

~~(K) **Irrigation Plan:** Irrigation system plan for watering and drainage of landscape areas; and~~

(L) **Maintenance:** A landscaping maintenance program, which, at a minimum, includes a statement that all diseased, damaged, or dead plant materials shall be replaced in accordance with the standards of this Article and the approved final site plan.

End of Article 18.

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