

ARTICLE 12**LANDSCAPING****SECTION 12.01 INTENT**

- A. The intent of this section is to promote the public health, safety, and welfare and improve the visual appearance of the Township by requiring landscaping for each development for which site plan or subdivision plat review is required or where the use of an existing building changes, expands or is otherwise altered. It is further the intent of this section to achieve the following:
1. Minimize noise, air, and visual pollution.
 2. Improve the overall aesthetics and appearance, divide the expanse of pavement, and define parking areas and vehicular circulation within off-street parking lots and other vehicular use areas.
 3. Require buffering of residential areas from more intense land uses, buffering of public road rights-of-way and parking lots.
 4. Prevent soil erosion and promote subsurface water retention.
 5. Encourage an appropriate mixture of plant material and species, to protect against insect and disease infestation and produce a more aesthetic and cohesive design.
 6. Promote the integration of existing woodlands and landscape plans.
 7. Provide and improve wildlife corridors.
 8. Protect and preserve the appearance, character, and value of the community.

SECTION 12.02 APPLICATION OF REQUIREMENTS

These requirements shall apply to all uses for which site plan review is required in Article 5, Site Plan Review, Procedures and Standards or subdivision plat review as required under the Subdivision Control Ordinance. No site plan or subdivision plat shall be approved unless a landscape plan is provided which meets the requirements set forth herein.

SECTION 12.03 LANDSCAPE PLAN REQUIREMENTS AND ELEMENTS

- A. A separate, detailed landscape plan shall be submitted to the Planning Commission as

part of the site plan review and tentative preliminary plat review. The landscape plan shall demonstrate that all requirements of this Section are met and shall include, but not necessarily be limited to, the following items:

1. On parcels of five (5) acres or more, the professional seal of the registered landscape architect who prepared the plan;
2. A minimum scale of one (1) inch equals fifty (50) feet for property less than three (3) acres or one (1) inch equals one hundred (100) feet for property greater than three (3) acres;
3. On parcels greater than one (1) acre, existing and proposed contours on site and fifty (50) feet beyond the site at intervals not to exceed two (2) feet;
4. The location, spacing, size, and root type (bare root (BR) burlapped (BB) or container (C)) and descriptions for each plant type proposed for use within the required landscape area;
5. Typical straight cross section including slope, height, and width of berms and type of ground cover, or height and type of construction of wall, including footings;
6. Construction and grading details to resolve specific site conditions, such as tree wells to preserve existing trees or culverts to maintain natural drainage patterns;
7. Details in either text or drawing form to ensure proper installation and establishment of proposed plant materials;
8. Identify existing trees and vegetative cover to be preserved and/or installed in accordance with Section 15.02, Natural Resources Inventory and Stewardship Plan;
9. Identify a landscape maintenance program including a statement that all diseased, damaged, or dead materials shall be replaced in accordance with the standards of this Ordinance.

B. Landscape plans shall be subject to the following minimum standards:

1. **Composition.**
 - a. Plant materials shall be of generally acceptable varieties and species, free from insects and diseases, hardy to Oakland County, conform to the current minimum standards for nursery stock of the American Nursery and Landscape Association and shall have proof of any required governmental regulations and/or inspections.

6. Installation, Maintenance, and Completion.

- a. All landscaping required by this Ordinance shall be planted before obtaining a certificate of occupancy or the appropriate financial surety as required in Article 3, Administration and Enforcement.
- b. All landscaping and landscape elements shall be planted, and earth moving or grading performed, in a sound workmanlike manner, according to accepted planting and grading procedures.
- c. Landscaping required by this Ordinance shall be maintained in a reasonably healthy condition, free from refuse and debris. All unhealthy and dead material shall be replaced within one (1) year of damage or death or the next appropriate planting period, whichever comes first. All landscaped areas shall be provided with irrigation or a readily available and acceptable water supply.
- d. Failure to install and maintain approved landscaping shall be considered a violation of the approved site plan and this Ordinance.

SECTION 12.04 SCREENING BETWEEN LAND USES

- A. Visual screening between land uses shall be installed or constructed at least six (6) feet in height along all adjoining boundaries when a proposed use is either more intense or incompatible with an adjoining property. The Planning Commission shall determine if the visual screen may be a landscape buffer, a solid wall or fence determined based on the surrounding and proposed uses. If a landscape buffer is required, it shall be installed the length of the adjoining boundaries from the front yard setback to the rear property line. The landscape buffer shall consist of trees, shrubs and grasses and shall be designed to maintain a minimum opacity of at least eighty percent (80%). The buffer shall consist of deciduous trees, evergreen trees and shrubs.
- B. Where a land use activity creates noise, light, dust or other similar nuisance that cannot be effectively screened by a landscape buffer, the Planning Commission may require a solid wall or fence. Such wall or fence shall be a minimum of six (6) and a maximum of eight (8) feet in height as measured on the side of the proposed wall having the higher grade. The required wall shall be located on the adjoining property line except due to site constraints the Planning Commission may approve an alternate location of the wall or fence. The Planning Commission or Zoning Administrator shall approve the construction materials of the wall or fence which may include masonry, stone or durable wood and steel.
- C. In the HS – Highland Station District visual screening between land uses shall be a solid screen utilizing an evergreen landscape hedge, decorative masonry wall or wood

decorative fencing. The maximum height of such screening shall not exceed six (6) feet. See Historic Highland Station Design Guidelines for landscaping and parking.

SECTION 12.05 PARKING LOT LANDSCAPING

A. **Required Landscaping Within Parking Lots.** Separate landscape areas shall be provided within parking lots so as to break up the broad expanse of pavement, guide the circulation of vehicular and pedestrian traffic, and moderate the changes to the micro climate which results from additional pavement. The following minimum requirements shall apply:

1. There shall be a minimum of one (1) tree and three (3) shrubs for every eight (8) parking spaces.
2. Landscaping shall be arranged in curbed islands within the parking lot which shall not be less than two hundred (200) square feet in area. The Planning Commission may consider an alternate design to accommodate creative designs such as rain gardens, bio-swales, or other landscape/storm water management techniques.
3. The Planning Commission may approve an equivalent amount of landscape plantings at the perimeter of parking lots where landscaping within parking lots would be impractical due to the size of the parking lot, detrimental to safe and efficient traffic flow, or would create an unreasonable burden for maintenance and snowplowing.

B. **Required Landscaping at the Perimeter of Parking Lots.** Separate landscape areas shall be provided at the perimeter of parking lots in accordance with the following requirements:

1. Parking lots that are more intense or incompatible with an adjoining property shall meet the screening requirements set forth in Section 12.04, Screening Between Land uses; except those uses in the HS – Highland Station District and
2. Parking lots shall be screened from view along the perimeter of those sides that are visible from all road rights-of-way. The screening shall consist of a landscaped berm, a wall or sufficient plantings three (3) feet in height, to prevent headlights from shining into the road rights-of way.

SECTION 12.06 GREENBELTS

A greenbelt, as defined in Article 2, Rules of Construction and Definitions, shall be provided in accordance with the following requirements:

A. The greenbelt shall be a minimum of twenty (20) feet in width for all non-residential

properties fronting Highland Road (M-59) and twelve (12) feet in width for all other non-residential uses. The minimum greenbelt width for the HS – Highland Station District shall be determined during site plan review

- B. The greenbelt shall be landscaped with a minimum of one (1) deciduous tree for every thirty (30) lineal feet, or fraction thereof, of frontage abutting a public road right-of-way.
- C. Creative placement of the trees, such as staggering, clustering and/or other methods, is encouraged in an effort to eventually achieve a canopy.
- D. In addition to the required trees within the greenbelt, the remainder of the greenbelt shall be landscaped with trees, grasses, ground covers and shrubs.
- E. Access drives from public rights-of-way through required greenbelts shall be permitted, but such drives shall not be subtracted from the lineal dimension used to determine the minimum number of trees.

SECTION 12.07 SITE LANDSCAPING

In addition to any landscape, greenbelt and/or parking lot landscaping required by this Section, at least fifteen percent (15%) of the site area, excluding existing public rights-of-way, shall be landscaped. Such site area may include a combination of the preservation of existing tree cover, planting of new trees and plant material, landscape plazas, gardens and building foundation planting beds. Site area landscaping shall be provided to screen potentially objectionable site features such as, but not limited to, retention/detention units, loading areas, and trash areas. The landscaping design shall promote compatibility, and preserve the character of the site, in relation to the immediately surrounding area and in relation to the general area in which the property is situated.

SECTION 12.08 SCREENING OF TRASH CONTAINERS

- A. Outside trash disposal, recycling and grease containers shall be screened on all sides with an opaque fence or wall, and gate at least six (6) feet in height and as high as the container, and shall be constructed of durable material and construction which is compatible with the architectural materials used in the site development.
- B. Containers shall be consolidated to minimize the number of collection sites and located in close proximity to the building they serve.
- C. Containers and enclosures shall be located away from public view.
- D. Containers and enclosures shall be situated so that they do not cause excessive nuisance or offense to occupants of adjoining properties.

- E. Concrete pads and aprons of appropriate size and construction shall be provided.

SECTION 12.09 SUBDIVISION AND SITE CONDOMINIUM LANDSCAPING

Landscaping for subdivisions and site condominiums shall be provided in accordance with the following standards:

- A. **Street Trees.** The frontage of all internal public or private streets shall be landscaped with the equivalent of one (1) tree for every fifty (50) lineal feet, or fraction thereof. Such street trees shall meet the minimum size, spacing and species requirements set forth in Sections 12.10, Minimum Size and Spacing Requirements and 12.11, Prohibited Species.
- B. **Screening Between Land Uses.** Where a subdivision or site condominium contains uses which are more intense or incompatible with an adjoining property, the screening requirements set forth in Section 12.04, Screening Between Land Uses shall be met.
- C. **Screening From Public Roads.** Where a subdivision or site condominium abuts a public road right-of-way located outside of the proposed subdivision or site condominium, the screening requirements set forth in Section 12.04, Screening Between Land Uses shall be met.
- D. **Other Site Improvements.** A landscape plan for a subdivision or site condominium development shall also include landscaping details of the entrance to the development, stormwater retention and/or detention areas, community buildings and other recreational areas, and any other site improvement which would be enhanced through the addition of landscaping.

SECTION 12.10 MINIMUM SIZE AND SPACING REQUIREMENTS

Where landscaping is required, the following minimum size and spacing requirements set forth in Table 12.1 for representative landscape materials shall be applicable, unless otherwise specified in this Section:

TABLE 12.1
Minimum Size and Space of Landscape Planting

	MINIMUM SIZE ALLOWABLE						MAXIMUM ON-CENTER SPACING**												
	Height			Caliper Spread			Feet												
	5'-6'	3'-4'	2'-3'	2"	2.5"	18"-2'	2 gal.	30	25	15	10	6	5-6	5	4	3	2	1	
Large Evergreen Trees:																			
Fir (Abies)																			
Spruce (Picea)																			
Pine (Pinus)																			
Hemlock (Tsuga)																			
Douglas Fir (Pseudotsuga)																			
Tamarack; Larch (Larix)																			
Narrow Evergreen Trees:																			
Red Cedar (Juniperus)																			
Arborvitae (Thuja)																			
Juniper (Juniperus)																			
Large Evergreen Shrubs:																			
Hicks Yew (Taxus)																			
Upright Yew (Taxus)																			
Spreading Yew (Taxus)																			
Upright Juniper (Juniperus)																			
Spreading Juniper (Juniperus)																			
Mugho Pine (Pinus)																			
Small Evergreen Shrubs:																			
Spreading Yew																			
Dwarf Spreading Juniper																			
Dwarf Mugho Pine																			
Euonymous varieties*																			
Vines:																			
Euonymous varieties*																			
Virginia Creeper																			
Wisteria																			
Riverbank Grape																			
American Bittersweet																			
Large Deciduous Trees:																			
Oak (Quercus)																			
Maple* (Acer)																			
Beech (Fagus)																			
Linden or Basswood (Tilia)																			
Sweetgum (Liquidambar)																			
Ginkgo (Male Only) (Ginkgo)																			
Honeylocust (Gleditsia)																			
Birch (Betula)																			
Sycamore (Plantanus)																			
Hickory (Carya)																			
Black Cherry (Prunus)																			
Tulip Tree (Liriodendron)																			
Blackgum (Nyssa)																			
* Refer to prohibited exotic invasive species list.																			

	MINIMUM SIZE ALLOWABLE						MAXIMUM ON-CENTER SPACING**											
	Height			Caliper Spread			(Feet)											
	5'-6'	3'-4'	2'-3'	2"	2.5"	18"-2'	2 gal.	30	25	15	10	6	5-6	5	4	3	2	1
Small Deciduous Trees (Ornamental):																		
Dogwood																		
Flowering Cherry, Plum, Pear																		
Hawthorn																		
Redbud																		
Magnolia																		
Flowering Crabapple																		
Mountain Ash																		
Hornbeam																		
Sassafras																		
Ironwood																		
Serviceberry; Juneberry																		
Ground Cover:																		
Euonymus varieties*																		
Wild Strawberry																		
Wild Ginger																		
Large Deciduous Shrubs:																		
Lilac																		
Sumac																		
Pyracantha																		
Weigela																		
Flowering Quince																		
Cotoneaster*																		
Sargent Crabapple																		
Dogwood (Red Osier, Grey, Silky)																		
Euonymus varieties*																		
Viburnum varieties																		
Witch-hazel																		
Ninebark																		
Vaccinium (Blueberry)																		
Holly																		
Spicebush																		
Hazelnut																		
Chokeberry																		
Large Deciduous Shrubs (cont.):																		
Chokeberry																		
Buttonbush																		
American Elder																		
Small Deciduous Shrubs:																		
Fragrant Sumac																		
Cotoneaster*																		
Potentilla																		
Meadowsweet																		
Leatherleaf																		
Rubus/Ribes varieties																		

* Refer to prohibited exotic invasive species list.

** "Maximum on-center" spacing refers to the largest space allowed between the centers of plants of the same species/variety.

SECTION 12.11 PROHIBITED SPECIES

A. As of the effective date of this ordinance, the following species shall not be newly planted in landscaping. These plants are not native to the area, reproduce profusely and have potentially harmful effects on natural ecosystems.

Trees

<u>Common Name</u>	<u>Scientific Name</u>
White Ash *	<i>Fraxinus americana</i>
Green Ash *	<i>Fraxinus pennsylvanica</i>
American Elm	<i>Ulmus Americana</i>
Norway Maple	<i>Acer platanoides</i>
Amur Maple	<i>Acer ginnala</i>
Tree of Heaven	<i>Ailanthus altissima</i>
European Alder	<i>Alnus glutinosa</i>
Golden Rain Tree	<i>Koelreuteria paniculata</i>
Amur Cork Tree	<i>Phellodendron amurense</i>
White Poplar	<i>Populus alba</i>
Black Locust **	<i>Robinia pseudocacia</i>
Siberian Elm	<i>Ulmus pumila</i>

* A native species, but prohibited due to Emerald Ash Borer.
 **A native species, but tends to be invasive.

Shrubs and Vines

<u>Common Name</u>	<u>Scientific Name</u>
Porcelainberry	<i>Ampelopsis brevipedunculata</i>
Japanese barberry	<i>Berberis thunbergii</i>
Common barberry	<i>Berberis vulgaris</i>
Oriental Bittersweet	<i>Celastrus orbiculatus</i>
Autumn Olive	<i>Eleagnus umbellata</i>
Russian Olive	<i>Eleagnus angustifolia</i>
Burningbush	<i>Euonymus alatus</i>
Wintercreeper	<i>Euonymus fortunei</i>
English Ivy	<i>Hedra helix</i>
Privet	<i>Ligustrum vulgare</i>
Japanese Honeysuckle	<i>Lonicera japonica</i>
Amur Honeysuckle	<i>Lonicera maackii</i>
Morrow Honeysuckle	<i>Lonicera morrowi</i>

Tartarian Honeysuckle	<i>Lonicera tatarica</i>
Common Buckthorn	<i>Rhamnus cathartica</i>

Shrubs and Vines (cont')

<u>Common Name</u>	<u>Scientific Name</u>
Glossy Buckthorn	<i>Rhamnus frangula</i>
Multiflora Rose	<i>Rosa multiflora</i>
Guelder Rose	<i>Viburnum opulus var. opulus</i>

Grasses and Grass-Like Plants

<u>Common Name</u>	<u>Scientific Name</u>
Chinese Silver Grass	<i>Miscanthus sinensis</i>
Giant Reed	<i>Phragmites communis</i>
Reed Canary Grass	<i>Phalaris arundinacea</i>

Flowers and Groundcovers

<u>Common Name</u>	<u>Scientific Name</u>
Garlic Mustard	<i>Alliaria officinalis</i>
Spotted Knapweed	<i>Centaurea maculosa</i>
Crown Vetch	<i>Coronilla varia</i>
Queen Ann's Lace	<i>Daucus carota</i>
Foxglove	<i>Digitalis purpurea</i>
Japanese Knotweed	<i>Fallopia japonica</i>
Dame's Rocket	<i>Hesperis matronalis</i>
Purple Loosestrife	<i>Lythrum salicaria</i>