### **ARTICLE 7**

## LANDSCAPE REQUIREMENTS

#### Section 7.1 Intent

The standards of this article are intended to guide and encourage the protection and enhancement of the environment through requirements for site design and the use of landscape materials. Applicants are encouraged to provide landscaping in addition to the minimum requirements of this Ordinance to improve the function, appearance and value of their property.

No site plan or land use will be approved unless said site plan provides landscaping consistent with the provisions of this Article.

The Planning Commission may also determined that dimensional conditions unique to the parcel would prevent development of required buffer zones, off-street parking area, landscaping or green belts. If such a determination is made, the Planning Commission may grant an exception from the landscaping provisions of this Article.

The following are minimum landscaping standards and nothing shall preclude the developer and Village from agreeing to more stringent standards.

- A. Landscape Plan Requirements: A separate detailed landscape plan shall be submitted as part of the site plan review. The landscape plan shall include, but not limited to the following items:
  - 1. Minimum scale one (1) inch to twenty (20) feet.
  - 2. Existing and proposed contours on site and one hundred (100) feet beyond the boundaries of the site at intervals not to exceed two (2) feet.
  - 3. Identification of existing trees and plant materials proposed to be saved, including individual tree caliper size and species.
  - 4. Identification of existing trees over two and one-half (2-1/2) inches in caliper proposed to be removed.
  - 5. Proposed new plant location, spacing, size, species (common and botanical name) and necessary descriptions for use.
  - 6. Straight cross section including slope, height and width of berms and type of ground cover and plants, or height and type of construction of wall or fence, including footings.
  - 7. Significant construction details to resolve specific site conditions, such as tree wells to preserve existing trees or culverts to maintain existing natural drainage patterns.
  - 8. Identification of grass and/or other ground cover and method of planting.
  - 9. Clearly indicate on the plan the total number of proposed parking spaces.
  - 10. Site plan review for pre-existing sites shall clearly identify the proposed building and/or parking expansion and label the net percent site increase.

### Section 7.2 Buffer Zones

A buffer zone shall be provided within the setback between the subject site and all adjacent properties. Wall and berms, or combination thereof, with a height greater than forty (40) inches shall typically be prohibited along a public street right-of-way or a in a front yard unless specifically approved by the Planning Commission. Buffers utilizing a combination of plant materials, berming and walls shall be encouraged. The Planning Commission may waive this requirement if the applicant can demonstrate that omitting the buffer zone will have no adverse affect on the adjacent property.

- A. Screening Standards: Required screening shall comply with the following standards.
  - 1. Parking lot screens shall be designed with a hedge, wall, berm or combination thereof forming a continuous screen at least forty (40) inches in height above parking lot grade. The parking lot screen shall be located in the buffer zone to provide maximum screening of the parking lot.
  - 2. All loading and unloading areas which are visible from residential zoning districts or public thoroughfares, shall be screened by a vertical screen consisting of structural or plant materials no less than six (6) feet in height.
  - 3. All storage areas, including areas for storage of refuse, which are visible from residential zoning districts or public thoroughfares, shall be screened on three (3) sides by a fence or wall not less than six (6) feet in height. The fence or wall shall not allow light to penetrate through it. The three (3) sides screen shall be those sides where the potential visual impact of the storage areas is greatest for adjacent property owners.
- B. Wall Standards: Required walls shall comply with the following standards.
  - 1. Walls shall be located on the lot line except where underground utilities interfere and/or where this Ordinance requires conformance with yard setback lines.
  - Walls shall be constructed of high quality, durable, weather resistant, rustproof an easily maintainable materials. Walls shall be sight obscuring, sufficient to shield light and block blowing debris. The finish side or most visibly attractive side of a wall or decorative wood fencing shall face the exterior of the property line. Posts shall be on the side of the wall or fence facing the interior of the lot or parcel of land upon which the wall or fence is constructed or be located with the fence line as a decorative element.
  - 3. Curbing, bollards, or plant material shall be required where parking is adjacent to walls. Bumper blocks shall not be permitted.

- 4. Walls shall be maintained in good condition by the property owner.
- C. Berm Standards: Required berms shall be constructed as landscaped earth mounds with a crest area at least three (3) feet wide. The exterior face of the berm shall be constructed as an earthen slope. The interior face of the berm may be constructed as an earthen slope or retained by means of a wall, terrace or other means acceptable to the Planning Commission. Whenever an earthen slope is provided, it shall be constructed with a slope not to exceed one (1) foot of vertical rise to three (3) feet of horizontal distance (1:3). Free form naturalistic contouring and berm shaping is encouraged.
- D. Minimum Buffer Zones for Zoning Districts: The following minimum landscaping requirements apply to said zoned property abutting all other zoning districts. When said zoning property abuts liked zoned property landscaping requirements do not apply. The Planning Commission may reduce the minimum landscaping requirements for any zoning district abutting another zoning district other than those abutting a residential zoning district.
  - 1. Single Family Residential Rural (R-1) Zoning District: No requirements.
  - 2. Single Family Residential Medium Density (R-2) Zoning District: No requirements.
  - 3. Single Family Residential (R-3) Zoning District: No requirements.
  - 4. Single Family Residential Attached (R-4) Zoning District: No requirements.
  - 5. Multiple Family Residential (R-M) Zoning District: Two (2) deciduous canopy trees and four (4) large shrubs per each twenty-five (25) linear feet along the property line. One (1) evergreen tree may be substituted for one (1) canopy tree.
  - 6. Manufactured Home Community (RMHC) Zoning District: The following is recommended landscape screening, but is not required. Either of, or a combination of, the following:
    - a.) Two (2) deciduous canopy trees and four (4) large shrubs per each twenty-five (25) linear feet along the property line abutting a public right-of-way.
    - b.) Five (5) foot high wall/berm structure along the property line abutting a public right-of-way.
  - 7. Local Business (C-1) Zoning District: No requirements.

- 8. General Commercial (C-1) Zoning District: When abutting or within two hundred (200) feet of any residential zoning district. Either of, or a combination of, the following:
  - a.) One (1) deciduous canopy tree, one (1) evergreen tree and four (4) large shrubs per each twenty (20) linear feet along the property line.
  - b.) Five (5) foot high wall/berm structure.
- 9. Light Industrial (L-1) Zoning District: When abutting or within four hundred (400) feet of any residential zoning district. Either of, a combination of, the following:
  - a.) One (1) deciduous canopy tree, one (1) evergreen tree and four (4) large shrubs per each twenty (20) linear feet along the property line.
  - b.) Five (5) foot high wall/berm structure.
- 10. Waterfront Protection Overlay (WO) Zone: Per requirements of Article 3, Section 3.13.

### Section 7.3 Green Belts

A green belt shall be planted adjacent to the right-of-way of any public street. The green belt plantings shall be planted within the required setback. The Planning Commission may allow such planting to be placed anywhere within the front yard. The green belt shall meet the following standards:

- A. The green belt shall include only plant materials and planting beds, except for approved sidewalks, signs, driveways and essential services.
- B. The green belt shall include one (1) deciduous canopy tree per thirty (30) linear feet of the frontage, including any openings for driveways, sidewalks, or easements. The Planning Commission may approve substitution of evergreen trees for up to fifty (50) percent of the required green belt trees, if consistent with the existing character of the area.
- C. Arrangement of landscaping materials shall insure adequate site visibility for motorists, adequate clearance for pedestrians and vehicles and accessibility to fire hydrants. Plant materials within the twenty-five (25) foot site distance triangle shall not be more than thirty (30) inches in height.

### **Section 7.4 Plant Materials**

All plant material shall be free of disease and insects at time of planting, and conforming to the American Standard for Nursery Stock of the American Association of Nurseryman

ANZI A60.1. The use of plant species native to Michigan and Otter Lake area is strongly encouraged. Planting of invasive plant species is prohibited. See list of invasive plant species at end of this section.

Size and Space Requirements			
General Plant Type	Minimum Size Allowable	Recommended On-Center Spacing	
Evergreen Trees	5'-6' height	15 feet	
Narrow Evergreen Trees (Tall hedges)	5'-6' height	5 feet	
Large Deciduous Trees	2.5" caliper	25 to 30 feet	
Small Deciduous Trees (Ornamental)	2" caliper	15 feet	
Large Evergreen Shrubs	2' to 3' height or 1'-6" to 2' spread	6 feet	
Small Evergreen Shrubs	1'-6" to 2' spread	4 to 5 feet	
Large Deciduous Shrubs	3' to 4' height	4 feet	
Small Deciduous Shrubs	1'-6" to 2' height	3 to 4 feet	
Ground Covers	2" peat pot	1 foot	
Vines	2 gallon	3 to 4 feet	

### **Section 7.5 Maintenance**

Within all zoning districts, all land areas disturbed during construction shall be finish graded and restored with final vegetation having a minimum overall density coverage of eighty (80) percent and be at least one (1) inch in height within six (6) months of the completion of the exterior envelope of the structure for with a building permit has been issued.

If a certificate of occupancy is issued prior to the completion of the required landscaping, the owner may be required to provide a performance bond to ensure installation of required landscaping in the next planing season. Said bond shall be in the amount of one hundred twenty-five (125) percent of the material and labor value of the required landspacing.

Greenbelt areas, planting beds, and plant materials required by this Ordinance shall be kept free from debris and refuse. Plant materials shall be maintained in a healthy growing condition, neat and orderly in appearance in perpetuity from the time of planting. If any plant material required by this Ordinance dies or becomes diseased, they shall be replaced by the applicant/owner within thirty (30) days of written notice from the Village or within time period as specified in said notice.

## **End of Article 7**

# **PROHIBITED PLANT SPECIES**

The following plant materials are commonly recognized as invasive species and are prohibited from being planted within the village limits. Plan applicants/property owners are strongly encouraged to remove and/or destroy any existing invasive species growing upon the parcel presented for site plan review.

# **TREES**

Common Name	Scientific Name
Norway Maple Tree of Heaven Black Alder Russian Olive Autumn Olive Black Locust Princess Tree	Acer platanoides Ailanthus altissima Alnus glutinosa Elaeagnus angustifolia Elaeagnus umbellata Robinia pseudoacacia Paulownia tomentonsa

# **SHRUBS**

**Common Name** 

Japanese Barberry	Berberis thunbergli
Privet	Ligustrum vulgare
Amur Honeysuckle	Lonicera maackii
Morrow's Honeysuckle	Lonicera marrowii
Tartarian Honeysuckle	Lonicera tatarica
Bell's Honeysuckle	Lonicera xbella
Common Buckthorn	Rhamnus cathartica
Glossy Buckthorn	Rhamnus frangula
Black Jetbead	Rhodotypos scandens
Multiflora Rose	Rosa multiflora

**Scientific Name** 

# **WOODY VINES**

Common Name	Scientific Name
Oriental Bittersweet	Celastrus orbiculata
Japanese Honeysuckle	Lonicera japonica
Kudzu	Pueraria lobata

### HERBACEOUS PLANTS

#### **Common Name**

Garlic Mustard

Narrow-leaved Bitter-cress Spotted Knapweed

Canada Thistle

European Swamp Thistle

Leafy Spurge Giant Hogweed

Dame's Rocket

Purple Loosestrife White Sweet Clover Yellow Sweet Clover

Japanese Stilt Grass

Wild Parsnip

Reed Canarygrass

**Giant Reed** 

Japanese Knotweed Giant Knotweed Mile-a-minute Weed Narrow-leaved Cat-tail

Swallow-worts

## **Scientific Name**

Alliaria pertiolata

Cardarnine impatiens Centaurea maculosa

Cirsium arvense

Cirsium palustre Euphorbia esula

Heracleum mantegazzianum

Hesperis matronalis Lythrum salicaria melilotus alba

Melilotus officinalis

Microstegium viminium

Pastinaca sativa
Phalaris arundinacea
Phragmites australis
Polygonum cuspidatum
Polygonum sachalinense

Polygonum perfoliatum
Typhia angustifolia
Vincetoxicum spp.

## **AQUATIC PLANTS**

#### **Common Name**

Water-hyacinth

Hydrilla

European Frog-bit
Eurasian Water Milfoil

Curly Pondweed

## **Scientific Name**

Eichornia crassipes

Hydrilla verticillata

Hydroncharis morsus-ranae

Myriophyllum spicatum Potamogeton crispus