

ARTICLE 19

LANDSCAPE STANDARDS

Section 19.01 Intent.

Landscaping is necessary for the protection and enhancement of the environment and for the continued vitality of all land uses in the Village. The intent of this Section is to promote the public health, safety and welfare by establishing minimum standards for the design, installation, and maintenance of landscape improvement. The requirements of this article are intended to help achieve a number of functional and environmental objectives such as:

- 19.01.01 To promote the implementation of the Village Master Plan and related subarea plans;
- 19.01.02 To aid in stabilizing the environment's ecological balance by contributing to the processes of air purification, oxygen regeneration, groundwater recharge, and storm water runoff retardation, while at the same time aiding in noise, glare and heat abatement;
- 19.01.03 To encourage the preservation of existing trees and vegetation;
- 19.01.04 To assist in providing adequate light and air and in preventing overcrowding of land;
- 19.01.05 To provide visual buffering and enhance the beautification of the Village;
- 19.01.06 To reduce the physical impact between adjacent land uses by requiring complementary landscape treatments and providing a transitional area adjacent to natural areas;
- 19.01.07 To safeguard and enhance property values and to protect public and private investment;
- 19.01.08 To preserve, protect and restore the unique identity and environment of the Village of Dundee and preserve the economic base attracted to the Village by such factors;
- 19.01.09 To define, articulate and integrate outdoor spaces, architectural elements, and various site elements;
- 19.01.10 To conserve energy, and to protect the public health, safety, and general welfare;
- 19.01.11 To provide habitat for living things that might not otherwise occur or be found in urban and suburban environs; and
- 19.01.12 To provide reasonable standards to bring developed sites that existed prior to the adoption of these standards, into compliance with the requirements contained herein.

Section 19.02 Scope of Application.

- 19.02.01 The requirements set forth in this Article shall apply to all uses, lots, sites, and parcels that are developed or expanded following the effective date of this Ordinance. No site plan that is reviewed in accordance with Article 12, Site Plan Review Procedures and Requirements, shall be approved unless the site plan shows required landscaping consistent with the provisions of this Article.
- 19.02.02 Where landscaping is required, a building permit shall not be issued until the required landscape plan is submitted and approved, and a certificate of occupancy shall not be issued unless provisions set forth in this Article have been met or a performance bond has been posted in accordance with the provisions set forth in this Article.
- 19.02.03 The Planning Commission or the Zoning Enforcement Officer may determine existing landscaping or screening, which is intended to be preserved, would meet the intent of this Article (see Section 19.04).
- 19.02.04 The Planning Commission or Zoning Enforcement Officer may determine that there exist unique circumstances that would prevent the installation of all or a portion of the required site landscaping, greenbelts, buffer zones, and parking lot landscaping or detention/retention basin landscaping requirements. Such a determination shall be made based upon criteria such as the following:
- (a) Topography
 - (b) Existing woodlands, wetland, floodplain, drainage conditions and poor soils
 - (c) Types and distance to adjacent land uses
 - (d) Dimensional conditions unique to the parcel
 - (e) Provision of adequate sight distances/clearance for motorists and pedestrians
 - (f) Health, safety and welfare of the Village
 - (g) Clearance from overhead utility lines and separation from underground utilities
 - (h) Accessibility to fire hydrants
- In return the applicant shall be required to incorporate at least one (1) of the following elements in the landscape plan:
- (a) Use of creative design (including reforestation plans, see Section 19.03.01)
 - (b) Use of larger plant material (see Section 19.03.01)
 - (c) Payment in lieu of installation (see Section 19.08)
- 19.02.05 In any case, where the building and/or parking area is being increased by at least twenty-five percent (25%) over the originally approved site plan, or is being changed to a more intense use, as determined by the Planning Commission, the site shall be brought into full compliance with the landscape standards herein. The change in use intensity shall consider factors such as parking required, amount of traffic generated, maximum building occupancy or change to a different use category in the Building Code.

Section 19.03 Landscape Plan Specifications.

- 19.03.01 **Minimum Requirements.** The requirements contained in this Article are considered the minimum necessary to achieve the intent of this Article, but nothing herein shall preclude the use of more extensive landscaping to further improve the function, appearance and value of the property. The use of larger plant material may be used to count towards the overall minimum planting requirements (i.e. planting a 12 foot tall evergreen when a 6 foot is required equals credit for 1.5 trees). However, an applicant can also propose reforestation that includes a variety of plant sizes and types in a random pattern and grouped in an area of no less than 100 sq. ft.
- 19.03.02 **Landscape Plan Review Required.** A separate detailed landscape plan shall be submitted as part of the preliminary site plan review, preliminary condominium/site condominium and final preliminary plat approval process.
- 19.03.03 **Registered Landscape Architect Required.** Landscape plans shall be signed and sealed by a registered landscape architect.
- 19.03.04 **Required Information.** The landscape plan shall demonstrate that all requirements of this Article are met and shall include the following information:
- (a) Illustrate location, spacing, species, size and root type of proposed plant material;
 - (b) Separately identify compliance with the minimum numeric requirements (rounded up) for site landscaping, greenbelts, buffer zones, parking lot landscaping, and detention/retention ponds;
 - (c) Provide, where required by the Planning Commission, typical cross sections to illustrate views from adjacent land uses, and the slope, height, and width of proposed berms or landscape elements;
 - (d) Provide a tree survey which denotes all trees with a caliper of greater than four (4) inches or eight (8) feet and other landscape elements to be preserved;
 - (e) Delineate the location of tree protection fencing at the perimeter of areas that are to be preserved. The protective fencing shall be located no closer than the drip line of the trees, and a detail of all such fencing shall be provided on the plans;
 - (f) Provide construction details to resolve specific conditions such as limits of grading adjacent to areas with trees and vegetative cover to be preserved, tree wells to preserve existing trees or culverts to maintain natural drainage patterns;
 - (g) Provide details to ensure proper installation and establishment of proposed plant material;
 - (h) Identify grass areas and other methods of pervious ground cover; and
 - (i) Identify a landscape maintenance program including statement that all diseased, damaged or dead materials shall be replaced in accordance with the requirements of this Article.

Section 19.04 Preserving Existing Vegetation.

Refer to Section 24.03.

Section 19.05 Landscape Standards.

All landscaping shall conform to the following standards, each of which shall be calculated separately:

	Dimensions (min.)	Location	Landscape Quantities (1)		
			Trees (min.)	Shrubs (min.) (2)	Other Materials
Site Landscaping		Open areas remaining after accounting for the required landscape areas	1 tree per each 400 sq. ft.	1 shrub per each 250 sq. ft.	Grass, ground cover, or other similar material (i.e. day lilies)
		Along street frontage (between sidewalk and road curb, aka street trees)	1 tree per each 30 linear feet of frontage (unless already in existence)		
		Cul-de-sac islands (if applicable)	1 tree per each 1,000 sq. ft. area		
		Front Yard (new residential only – between the house and sidewalk)	2 canopy trees per each dwelling unit	4 shrubs per each dwelling unit	
		Outdoor ground mounted equipment (i.e. HVAC units, etc.)		Evergreen hedge no less than the height of the equipment OR	Fence and/or wall no less than the height of the equipment
Greenbelts	20 feet wide	Entire street/access drive frontage measured from the right-of-way	1 tree per each 30 linear feet (3, 4)	6 shrubs per each 30 linear feet (3, 4)	

	Dimensions (min.)	Location	Landscape Quantities (1)	
			Trees (min.)	Shrubs (min.) (2)
Buffer Zones	Equal to building setback as measured along the property line	Multiple Family District or Use ADJACENT TO One Family Residential District or Use	1 canopy or evergreen tree per each 20 linear feet	4 shrubs per each 20 linear feet
	Equal to building setback as measured along the property line	Institutional Uses ADJACENT TO Any Residential District or Use	1 canopy or evergreen tree per each 20 linear feet	4 shrubs per each 20 linear feet
	Equal to building setback as measured along the property line	Business and Manufacturing Districts or Uses ADJACENT TO Any Residential District or Use	1 canopy tree and 2 evergreen trees per each 20 linear feet	4 shrubs per each 20 linear feet
	Equal to building setback as measured along the property line	Manufacturing District or Use ADJACENT TO Any Business District or Use	1 canopy or evergreen tree per each 20 linear feet	4 shrubs per each 20 linear feet
	50 feet wide as measured along the property line	Any District or Use ADJACENT TO U.S. 23 Right-of-Way	1 canopy tree per each 30 linear feet (5)	2 evergreen trees per each 20 linear feet (5)
Berm and/or Masonry Wall (5)	Between 4 and 6 feet tall (6)	Along the lot line, but outside of the required front yard setback (7, 8, 9)	Applicable buffer zone landscaping may also be required	Applicable buffer zone landscaping may also be required

	Dimensions (min.)	Location	Landscape Quantities (1)	
			Trees (min.)	Shrubs (min.) (2)
Parking Lot Islands	10 feet wide, 150 sq. ft. in area, 10 foot curve radius	Within and/or immediately adjacent to the parking lot, protected by curbing, and spaced no more than 15 parking spaces apart	1 canopy tree per each parking lot island equal to 1 tree per each 8 parking spaces (10)	
Perimeter Parking Lot Landscaping	Within 10 feet from the edge of pavement	Perimeter of the parking lot envelope	1 canopy tree per each 2,000 sq. ft. of paved surface area (11)	3 foot tall perimeter hedge (11)
Loading and Outside Storage Areas		To be determined by the Planning Commission	Planning Commission may require additional landscaping/screening for loading areas and outdoor storage areas when visible from adjoining parcels or streets	
Detention and Retention Ponds (11)		Rear or side yards within a natural or man-made depression designed to appear natural or free formed	1 tree per each 50 linear feet measured at the top bank of the pond (12, 13)	10 shrubs per each 50 linear feet measured at the top bank of the pond PLUS a native seed mix on the slopes to prevent erosion (12, 13)

Footnotes:

- (1) Equivalent plantings may be proposed provided they comply with the following:
 - 1 canopy tree equals 2 ornamental trees
 - 1 large deciduous shrub equals 1.5 small deciduous or upright evergreen shrubs
 - 1 spreading evergreen shrub equals 20 day lilies
- (2) The type of shrubbery shall be a mix of each type noted in Section 19.06.
- (3) Greenbelt plantings shall be arranged to emulate the landscape character of the surrounding areas. Subject to Planning Commission determination, the greenbelt plantings may be waived within the B-1, Central Business District and B-3, Tecumseh Street District providing the buildings are located at or near the property line.
- (4) Nothing but landscaping is allowed within the greenbelt.
- (5) A berm and/or masonry wall may be required in place of the buffer when deemed necessary by Planning Commission to meet the intent of Section 19.06.09.
- (6) Up to an 8 foot berm and/or wall may be permitted within the commercial and industrial districts.
- (7) The location may be modified by the Planning Commission upon recommendation of the Village Engineer due to unique circumstances, such as conflicts with underground utilities and better screening provided at alternative locations.
- (8) Masonry walls shall be constructed of the same or complementary building material to that of the principal structure shall be unpierced (except for pedestrian connections) and have a decorative cap. Cement or slag blocks shall not be permitted.
- (9) See subsection 19.06.09 for berm construction standards.
- (10) No branches shall remain within 4-6 feet above the grade of the parking lot.
- (11) Decorative treatment may be incorporated into the perimeter parking lot landscaping such as the inclusion of tree clusters, or a two and half (2.5) foot tall wood fence, brick wall or wrought iron fencing with brick pilasters. Treatment provided must be compatible with, or a site improvement to, surrounding properties. This decorative treatment is encouraged on sites within the business districts and multiple family developments near the downtown.
- (12) The basin slopes shall be sculptured to filter and soften the views.
- (13) The plantings shall be clustered in a natural pattern around the basin with trees above the freeboard line, and all other plantings must be tolerant of wet/moist soils. The location of plant material shall also be done in consideration of the need to provide access for and minimize disruption of plant material during routine pond maintenance.

Section 19.06 Specifications for Landscape Improvements and Plant Materials.

19.06.01 **Plant Material.** All plant material shall be hardy to the Village of Dundee, be free of disease and insects, and conform to the American Standard for Nursery Stock of the American Nursery and Landscape Association.

19.06.02 **Minimum Sizes and Spacing.** The minimum plant sizes shall be provided in accordance with the following:

Plant Type	Minimum Plant Size	Spacing Requirements (max. on center)
Large Deciduous Canopy Trees	Three (3) inch caliper	Twenty-five (25) feet
Ornamental Trees	Two (2) inch caliper or Six (6) foot height	Fifteen (15) feet
Evergreen Trees	Six (6) foot height	Fifteen (15) feet
Large Deciduous Shrubs	Three (3) foot height	Four (4) - six (6) feet
Small Deciduous Shrubs	Two (2) foot height	Three (3) feet
Upright Evergreen Shrubs	Two (2) foot height	Three (3) - four (4) feet
Spreading Evergreen Shrubs	Two (2) foot spread	Three (3) – four (4) feet

19.06.03 **Mixing of Species.** The overall landscape plan shall not contain more than thirty-three percent (33%) of any one (1) plant species. The use of native species and mixture of plants from the same plant community is strongly encouraged.

19.06.04 **Trees Not Permitted.** The following trees are not permitted as they split easily, their wood is brittle, their roots clog drains and sewers, and they are unusually susceptible to disease or insects. The Planning Commission may, however, allow trees from this list when associated with an appropriate ecosystem. Trees not permitted are as follows: Box Elder, Elms, Ash, Tree of Heaven, Willows, Soft Maples (silver), Poplars, Horse Chestnut (nut bearing), Ginkgo (female), Mulberry, Catalpa, Cottonwood, Black Locust and Honey Locust (with thorns).

19.06.05 **Planting Beds.** Bark used as mulch shall be maintained at a minimum of two (2) inches deep. Plantings beds shall be edged with either plastic or metal edging in residential districts, and metal edging in all other zoning districts.

19.06.06 **Top Soil.** Top soil shall consist of a four (4) inch base for lawn areas and an eight (8) to twelve (12) inch base within planting beds. This also applies to berms.

19.06.07 **Proximity to Utilities.** Plant material shall not be located in a manner that will interfere with or cause damage to underground or overhead utility lines, public roads or other public facilities.

19.06.08 **Lawn Grasses.** Lawn grasses shall be planted in species normally grown as permanent lawns in Monroe County. Grasses may be seeded or sodded. Only rolled sod, erosion reducing net or suitable mulch shall be used in swales or other areas susceptible to erosion and shall be staked where necessary for stabilization. When complete sodding or seeding is not possible, nursegrass seed shall be sown and mulched for immediate protection until permanent coverage is achieved. Grass sod and seed shall be free of weeds and noxious pests or disease.

19.06.09 **Landscape Berms.** Where provided, landscape berms shall conform to the following standards.

- (a) The berm may be up to ten (10) feet shall be at least three (3) feet above the grade elevation, but in no case shall be maintained at a continuous height. All berms shall be undulating and include gaps where deemed necessary.
- (b) Sides of the berm shall be constructed with slopes no steeper than one (1) foot vertical for each three (3) feet horizontal.
- (c) In measuring slope and height, grade elevation shall be the average ground elevation adjacent to the proposed berm.
- (d) Side slopes shall be protected from erosion by sod, seed or other living ground cover. If slopes are seeded, they shall be protected until the seed germinates and a permanent lawn is established.
- (e) The Planning Commission has the ability to permit a deviation from the height and slope requirements noted above.

19.06.10 **Regulations Pertaining to Landscaping Areas Used for Sight Distance.** When an access drive intersects a public right-of-way or when the subject property abuts the intersection of a public right-of-way, all landscaping within the corner triangular areas described below shall permit unobstructed cross-visibility. Shrubs located in the triangular area shall not be permitted to grow to a height of more than thirty (30) inches above the grade at the edge of the pavement. Portions of required berms located within sight distance triangle areas shall not exceed a height of thirty (30) inches above the pavement grade at the edge of the pavement. Trees may be maintained in this area provided that all branches are trimmed to maintain a clear vision for a vertical height of ten (10) feet above the roadway surface. Landscaping, except grass or ground cover, shall not be located closer than three (3) feet from the edge of a driveway.

The triangular areas referred to above are:

- (a) The area formed at the corner intersection of a public right-of-way and an access drive, two (2) sides of the triangle area being twenty (20) feet in length measured along the right-of-way line and access drive line and the third side being a line connecting these two (2) sides.
- (b) The area formed at a corner intersection of two (2) public right-of-way lines, the two (2) sides of the triangular area being twenty (20) feet in length measured along the abutting public right-of-way lines and the third side being a line connecting these two (2) sides.

Section 19.07 Minimum Standards for Installation, Irrigation and Maintenance.

- 19.07.01 **Timing of Planting.** All required plant materials shall be planted prior to issuing a Certificate of Occupancy. In the event that the project is completed during a time of year when planting is impractical, a financial guarantee shall be provided equal to the amount of installation of the proposed landscaping.
- 19.07.02 **Completion of Improvements.** Tree stakes, guy wires, and tree wrap shall be removed after completion of the initial growing season.
- 19.07.03 **Irrigation.** All landscaped areas shall be provided with a readily available and acceptable water supply, or at least one (1) outlet located within one hundred (100) feet of all plant material.
- 19.07.04 **Maintenance.** The owner of the property shall be responsible for the regular maintenance of all landscaping. Landscaped areas and plant materials required by this Article shall be kept free from refuse and debris. Plant materials, including lawn, shall be maintained in a healthy growing condition, neat and orderly in appearance per the intent of the approved site plan. Additionally, all plantings approved as part of a site plan shall be maintained in perpetuity or an amended landscape plan shall be submitted for consideration by the Administration and/or Planning Commission. However, if any required plant material dies or becomes diseased, it shall be replaced. Replacement shall be within thirty (30) days unless an extended time period is necessary due to weather in which case a written request shall be submitted and reviewed by the Village Manager prior to its potential authorization.

Section 19.08 Payment In Lieu of Installation.

- 19.08.01 **Criteria.** The Planning Commission, in coordination with staff, may recommend to the administration that an applicant pay a fee-in-lieu of installing some of the required landscaping because it cannot be accommodated on the subject site and would be better suited elsewhere within the Village.
- 19.08.02 **Quantity of Trees.** The quantity of trees to be used in calculating the payment-in-lieu shall be determined as follows: total caliper of all canopy and ornamental trees, total height of all evergreen trees and the total quantity of all shrubs (evergreen and deciduous).

19.08.03 **Payment.** The applicant shall submit a payment to the Village Tree Fund in an amount determined by multiplying the total quantity of plantings by the cost per plant. The latter shall be derived by averaging the cost provided by local distributors. The Village shall utilize this fund to plant trees/shrubs in public places elsewhere within the community.