

TOWNSHIP OF FOREST  
ZONING ORDINANCE

**ARTICLE 13: Landscape Standards**

Section 13.01 - Intent

The intent of this article is to promote the public health safety and welfare by establishing minimum standards for the design, installation and maintenance of landscaping as buffer zones between zoning districts, along roadways, between adjacent buildings at entrances to developments and in parking lots.

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.

Section 13.02 - Application

The requirements in this article shall apply to all uses for which site plan review is required under Article 8 of this ordinance. No site plan shall be approved unless it provides landscaping consistent with the provisions of this Article.

If the Planning Commission determines that dimensional conditions or other relevant characteristics unique to the parcel would prevent development of required buffer zones, off street parking area, landscaping or green belts, or make full compliance with the requirements unnecessary, it may grant an exception from the landscaping provisions of this article. The Planning Commission may increase the requirements in unique conditions.

The following are minimum landscape standards and nothing will preclude the developer and Township from agreeing to more stringent standards. If applicable this determination will be made during site plan review.

A. Landscape Plan Required

A separate detailed landscape plan shall be submitted as part of a site plan review. The landscape plan shall include, but not be limited to the following items:

1. The plan will be drawn to an identified scale adequate to read the information presented.
2. Proposed plant location, spacing species (common and botanical name).
3. Existing and proposed contours on-site and 100 feet beyond the site at intervals not to exceed two (2) feet.
4. Straight cross section including slope, height and width of berms and type of ground cover, or height and type of construction of wall or fence, including footings.
5. Significant construction details to resolve specific site conditions, such as tree wells to preserve existing trees or culverts to maintain existing natural drainage patterns.
6. Planting and staking details in either text or drawing form to ensure proper installation and establishment of proposed materials.

7. Identification of existing trees and species proposed to be saved. Clearly reference on the plan the total number of trees proposed to be preserved.
8. Site plan review for pre-existing sites shall clearly identify the proposed building and/or parking expansion and label the net percent site increase and calculated landscape requirement.

**Section 13.03 - Minimum Buffer Zones**

**A. Level of Use**

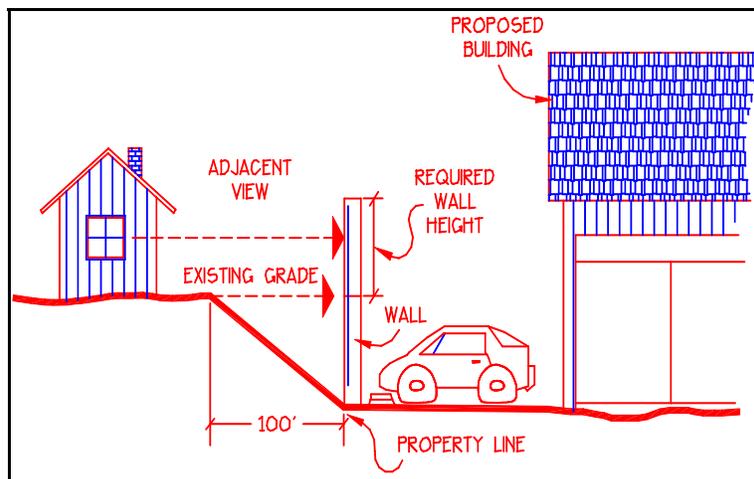
For the purposes of determining the density and type of coverage in the required buffer zone, zoning districts have been classified based on level of use, as follows:

LEVEL OF USE	USES
Level 1	Single Family Residences and Duplexes
Level 2	Multi Family Residences
Level 3	Uses allowed in the C district and institutional uses allowed in the RA, RU-1 and RU-2 districts
Level 4	Uses allowed in the GC district that are not allowed in the C district
Level 5	Uses allowed in the LI district that are not allowed in other districts

**B. Buffer Zone**

A buffer zone shall be provided within the setback between the subject site and all adjacent properties according to Table 13-1 below. Walls/fences and berms with a height greater than 40 inches shall typically be prohibited along a public street right of way or in a front yard unless specifically approved by the Planning Commission. The height requirement of a wall/fence or berm shall be measured from the existing grade at the principal structure (within 100 feet of the property line) nearest to that property, to the top of the proposed berm or wall on the applicant's site (see Figure 13-1). All walls/fences shall meet the standards described Section 13.03.D. Buffers utilizing a combination of plant materials, berming and walls/fences shall be encouraged.

**Figure 13-1**



**Table 13-1 Buffer Zone Requirements**

Level Of Use Of Subject Site	Level Of Use Of Adjacent Site				
	Level 1*	Level 2*	Level 3	Level 4	Level 5
Level 1	None	A or 5 foot high wall/fence/berm	A or a 5 foot high wall/fence/berm	A or 5 foot high wall/fence/berm	A or 8 foot high wall/fence/berm
Level 2	A or 5 foot high wall/fence/berm	None	A or a 5 foot high wall/fence/berm	A or 5 foot high wall/fence/berm	A or 8 foot high wall/fence/berm
Level 3	A or 5 foot high wall/fence/berm	A or a 5 foot high wall/fence/berm	None	B	B
Level 4	A or 5 foot high wall/fence/berm	A or 5 foot high wall/fence/berm	B	None	A or 5 foot high wall/fence/berm
Level 5	A or 8 foot high wall/fence/berm	A or 8 foot high wall/fence/berm	B	None	None

A = One (1) canopy tree, two (2) evergreen trees and four (4) large shrubs per each twenty (25) linear feet along the property line. All property line distances shall be rounded upward to the nearest foot. The Planning Commission may revise the required combination of evergreen and deciduous trees to address public safety and ensure adequate buffering of adjacent uses.

B = One (1) evergreen tree and four (4) large shrubs per each twenty five (25) linear feet along the property line. All property line distances shall be rounded upward to the nearest foot. The Planning Commission may revise the required combination of evergreen and deciduous trees to address public safety and ensure adequate buffering of adjacent uses.

\*Where the adjacent property, including property across a public street or private road, is zoned or used as single family residential, the Planning Commission may require additional landscaping (trees, shrubs, wall or berm) along the property line or within the site to sufficiently screen the parking lot, vehicle headlights, loading zones, outdoor display areas, storage yards, accessory structures, or use.

**C. Parking and Storage**

1. Parking lot screens will be designed with a hedge, wall/fence, 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 bordering side or rear yard setbacks of residential districts, shall be screened by a vertical screen consisting of structural or plant materials no less than 6 feet in height. Screening shall be sufficient to contain blowing debris and screen the loading and unloading areas from adjacent property owners.
3. Storage areas (including areas for storage of refuse) which are adjacent to residential districts, shall be screened on three sides by a fence or wall no less than 6 feet in height.

D. Wall or Fence Standards

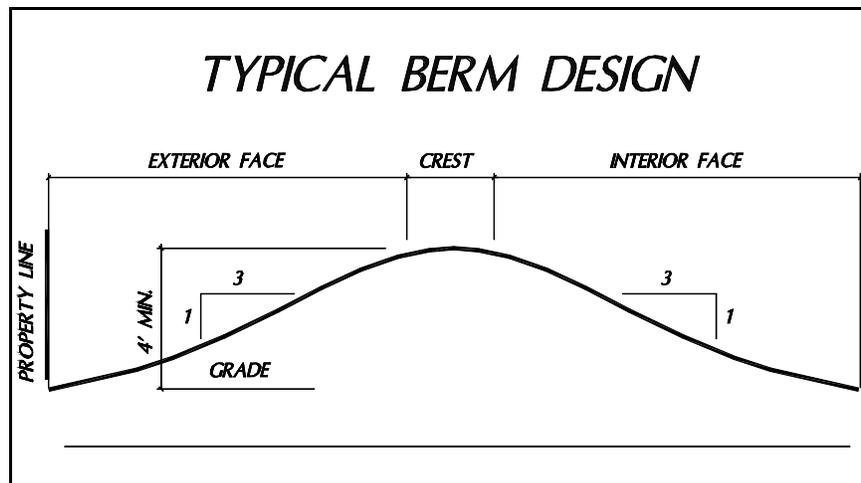
Required walls or fences shall comply with the standards listed below.

1. Walls or fences shall be located so as to abut the applicant's property except where underground utilities interfere or where this Ordinance requires conformance with yard setback lines.
2. Walls or fences must be maintained in good condition by the property owner.
3. The finished 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.
4. The fence must be of an obscuring type approved by the Planning Commission.

E. Berm Standards

Required berms shall be constructed as landscaped earth mounds with a crest area at least three (3) feet in width. The exterior face of the berm shall be constructed as an earthen slope. The interior face of the berm may be constructed as a earthen slope or retained by means of a wall, terrace or other means acceptable to the Zoning Administrator or planning commission depending on who has site plan approval. 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) (see Figure 13-2). Free form naturalistic contouring and berm shaping is encouraged.

Figure 13-2



Section 13.04 - Required Parking Lot Trees and Parking Lot Islands

A. Parking Lot Tree Table

ZONING DISTRICT	Number of parking spaces
C, GC, LI	1 canopy tree per 7 spaces

B. Tree location

All of the required parking lot trees shall be placed within the parking lot envelope, described as the area including the parking lot surface and extending fifteen (15) feet from the edge of the parking lot. Evergreen trees may be used for part of the landscaping on the outer edge of the parking area, provided they will not pose a traffic hazard. Only deciduous canopy trees are permitted within the interior of the parking area. All parking lot tree calculations and interior parking lot tree requirements shall be rounded up.

C. Tree Base

Each tree shall be surrounded by an area of grass or living ground cover at least one hundred fifty (150) square feet in size to provide for adequate resources of air and water. Tree plantings shall also be protected from automobiles with curbing or other suitable device.

D. Parking Lot Trees

Required parking lot trees shall be credited towards required in Section 13.05.

E. Design of Parking Lot Islands

All parking lot islands shall be curbed. Islands shall be at least one hundred fifty (150) feet in area. Each island shall be at least ten (10) feet wide, with a depth two (2) feet shorter than the depth of the adjacent parking space. Islands shall have a minimum of ten (10) feet at the ends facing main aisles. A minimum radius shall be one (1) foot where island is not adjacent to main traffic aisle.

Section 13.05 - Green Belts Required Along the Public Right of Way

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 if there is no front yard parking. The green belt shall meet the following standards:

A. Use of Living Material

The green belt shall include only living materials and planting beds, except for approved sidewalks, signs, driveways and essential services.

B. Density of Trees

The green belt shall include one (1) deciduous canopy or coniferous tree per thirty (30) linear feet of the frontage including any openings for driveways, sidewalks, or

easements. This requirement may be reduced or waived by the planning commission with the showing of necessity by the applicant.

C. Use of Evergreens

The planning commission may approve substitution of evergreen trees for up to fifty percent (50%) of the required green belt trees upon determining evergreens would be consistent with the existing character of the area.

D. Vision Triangle

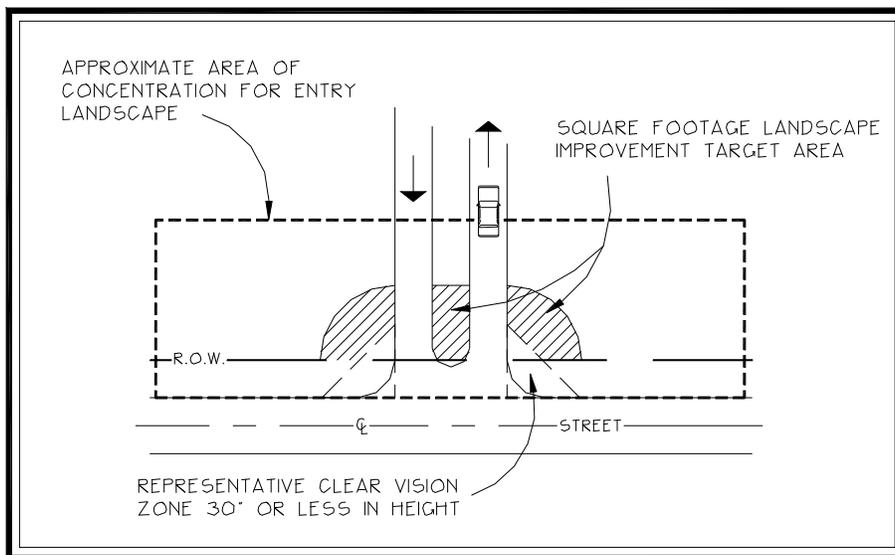
Landscaping materials arrangement shall insure adequate site visibility for motorists, adequate clearance for pedestrians and vehicles, and accessibility to fire hydrants. Plant materials within the twenty five (25) foot site distance triangle shall not be more than thirty (30) inches in height.

**Section 13.06 - Residential Development Entry Landscaping**

Landscaping shall be required at vehicular entry points for residential developments including subdivisions, condominium developments, multi-family developments, retirement communities and other developments.

- A. For residential developments which do not otherwise require landscaping as defined in Section 13.05 of this Ordinance, vehicular entry points shall require landscaping. This shall consist of a minimum of three hundred (300) square feet of landscaping area.
- B. Plant material and planting design is encouraged to be ornamental in character. Deciduous canopy trees and large evergreens will not be credited for ten (10) percent entry landscape requirements. Shredded hardwood, bark mulch, stone mulch, or vegetative ground covers shall be utilized within required landscape areas. Grass, lawn or sod will not be credited for entry landscape requirements.

**Figure 13-3**



Section 13.07 - Minimum Standards for Installation and Maintenance

A. Installation

Landscaping shall be installed in a sound workman like manner and conform to the American Standard for Nursery Stock ANSI Z60.1. If building or paving construction is completed during a planting season, then no certificate of occupancy will be issued unless the landscaping meets the requirements herein provided. If building or paving construction is completed in an off planting season, the certificate of occupancy will be issued only after the owner provides a performance bond to ensure installation of required landscaping in the next planting season.

B. Material Removal

Tree stakes, guy wires and tree wrap are to be removed by the applicant after one year.

C. Maintenance

Greenbelt areas and plant materials required by this ordinance shall be kept free from refuse and debris. 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 Township or within an extended time period as specified in said notice.

Section 13.08 - Compliance for Pre-Existing Sites

In any case where site plan review is required and the existing building and/or parking area is being increased by at least twenty five percent (25%) over the originally approved site plan the landscaping requirements shall be applied at a rate of 2% of the requirements for each 1% increase in the size of the building or parking area. If the use 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.

Section 13.09 - Enforcement

A violation of any provision of this Section or non compliance with written notifications pertaining to this Section shall constitute a violation of this Ordinance as addressed in Article 3.

Section 13.10 - Plant Material Specifications

All plant material shall be free of disease and insects at time of planting, and conform to the American Standard for Nursery Stock of the American Association of Nurserymen ANZI Z60.1.

Section 13.11 - Required Vegetation

When a landscaped buffer strip is required in this ordinance, or stipulated as a condition for a Conditional Use Permit pursuant to Article 9 of this Ordinance, the following requirements shall be fully complied with:

A. Buffer Strip

Each required landscaped buffer strip shall be at least fifteen (15) feet in width. If trees are planted said trees shall be at least 1 ¾ inches in caliper and shall be maintained such that withered or dead trees are replaced within a period not to exceed eight (8) months.

B. Plant Material Spacing

1. Plant materials shall not be placed closer than four (4) feet from the fence line or property line.
2. Where plant materials are placed in two or more rows. Plantings shall be staggered in rows.
3. Evergreen trees shall be planted not more than thirty (30) feet on centers and shall not be less than five (5) feet in height.
4. Narrow evergreens shall be planted not more than six (6) feet on centers and shall not be less than three (3) feet in height.
5. Tree-like shrubs shall be planted not more than ten (10) feet on centers and shall be not less than four (4) feet in height.
6. Large deciduous trees shall be planted not more than thirty (30) feet on centers and shall not be less than eight (8) feet in height.

C. Suggested Plant Materials

1. Evergreen Trees: Minimum five (5) feet in height, Juniper, Fir, Spruce, Hemlock, Pine, Douglas Fir.
2. Narrow Evergreens: Minimum three (3) feet in height. Column Hinoki, Cypress, Blue Columnar. Chinese Juniper Pyramidal, Red Cedar, Swiss Stone, Pine Pyramidal, Irish Yew, Douglas, Arbor Vitae Columnar, Giant Arbor Vitae.
3. Ornamental Trees Minimum five (5) feet in height, Flowering Crab, Mountain Ash, Redbud Hornbeam, Magnolia, Dogwood, Rose of Sharon, Hawthorn.
4. Large Deciduous Shrubs: Minimum six (6) feet in height, Honeysuckle, Mock-Orange, Lilac, Cotoneaster, Euonymus, Viburnum, Forsythia, Ninebark, Hazelnut, Privet, Sumac.
5. Large Deciduous Trees: Minimum eight (8) feet in height. Oak, Hackberry, Planetree (Sycamore), Sweet Gum, Linden, Ginkgo (male species), Birch, Honey Locust, Ash.

D. Prohibited Trees

The following trees are not permitted to be used to meet the requirements of this article as they split easily. Their wood is brittle and breaks easily, they bear fruit or seed pods that can stain vehicles, drives and sidewalks and they are unusually susceptible to disease or insect pests.

E. Common Names

1. Box elder
2. Red Maple
3. Silver Maple

4. Horse Chestnut
5. Hickories
6. Catalpa
7. Hawthorns
8. Black Walnut
9. Mulberry
10. Poplars
11. Willows
12. American Elm
13. Siberian Elm
14. Slippery Elm, Red Elm

Section 13.12 - Drives and Accessways

Necessary drives and accessways from public rights-of-way through such buffer strips shall be permitted, provided that such accessways shall not be subtracted from the lineal dimension used to determine the required number of plants.