

Chapter 22, Landscaping

SECTION 22.00 PURPOSE

It is the intent of this Chapter to establish standards for buffer zones, landscaping, and screening to preserve and enhance the aesthetic qualities, character, privacy, and environment of the Township. It is further intended to reduce the negative impacts between incompatible land uses. Through landscaping and green infrastructure strategies, the rural character of the Township is preserved and enhanced. Therefore, the purpose of these standards is to encourage development that is compatible with the surrounding natural setting of the Township and limit negative impacts associated with intensive land uses.

SECTION 22.01 APPLICABILITY

All development requiring site plan review pursuant to Chapter 4 of this Ordinance shall comply with the requirements of this Chapter. When site plan review is required pursuant to Chapter 4, a landscape plan shall be submitted in conjunction with the site plan. The landscape plan shall clearly describe the location, type, size, height, and spacing of plant materials, along with any other details deemed necessary by the Zoning Administrator.

SECTION 22.02 REQUIRED SCREENS AND BUFFERS

A. General Standards. Buffers shall be placed to screen the developed areas of the property between specified uses and may consist of a screen, planted buffer or berm, fencing, or combination thereof. When a buffer is required, it shall comply with the following standards:

1. Required buffers shall be placed within a strip the along the specified property line(s), extending the length necessary to screen the developed areas of the subject property. Developed areas may include, but are not limited to, buildings and structures, parking, loading, and storage areas, refuse containers, and aboveground utilities.
2. Buffer Screens. When required, there shall be provided and maintained a buffer screen consisting of landscaping or fencing at least six feet in height, sufficient to provide adequate screening between developed areas of the property for the purpose of protecting the quality and integrity of adjacent uses. One, or a combination, of the following screening options shall be placed within the required strip:
 - a. A wall or fence used for all or part of the obscuring screen. In addition to a wall or fence, four shrubs per 20 linear feet of wall or fence must be installed along the exterior edge of the screen.
 - b. A vegetative berm used for all or part of the obscuring screen. The combined height of the berm and shrubbery plant material shall be at least six feet. All required plant materials shall be placed on the top and both sides of the slope.
 - c. A continuous vegetative hedge used for all or part of the obscuring screen. The height of the

hedge must be a minimum of six feet upon installation of plant material and must maintain a minimum 80% summer opacity.

3. Planted Buffer. When required, a planted buffer shall be located within the specified landscape strip and include a mixture of evergreen and deciduous trees spaced at a maximum of 20-foot intervals, or an equivalent measure of screening as approved by the Planning Commission.
4. The specified buffer shall be required on the subject parcel even if the adjacent parcel is unimproved land, except that a performance guarantee may be submitted in lieu of the required buffer where adjacent land is unimproved only if the buffer is installed when the adjacent property begins development and completed prior to any occupancy of the adjoining use.

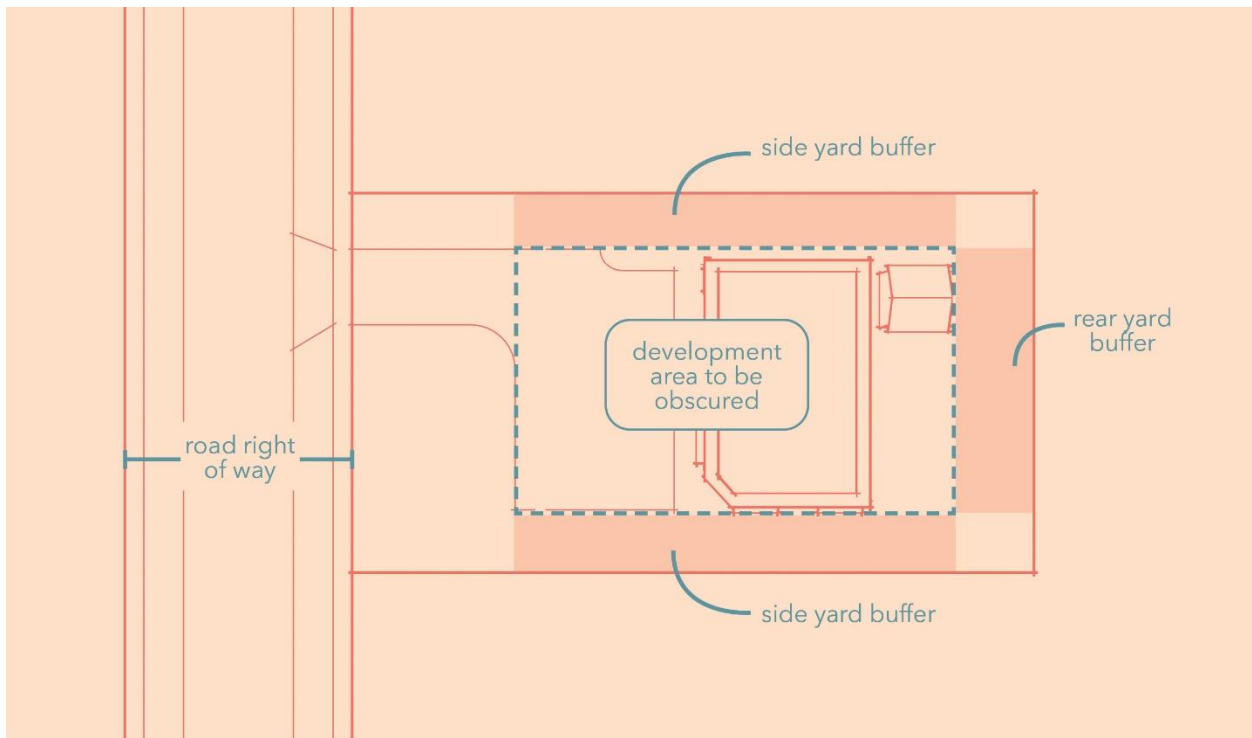


FIGURE 22.1 REQUIRED BUFFER PLACEMENT

B. Non-Residential Uses.

1. For any Commercial or Office district abutting or adjacent to a Residential district or use, there shall be a buffer screen located in a landscape strip at least 10 feet wide along the side and rear property boundaries abutting or adjacent to such Residential district or use.
2. For any Industrial district abutting or adjacent to a Residential district or use, there shall be a buffer screen and a planted buffer located in a landscape strip at least 30 feet wide along the side and rear property boundaries abutting or adjacent to such Residential district or use.
3. For any Industrial district abutting an Office or Commercial district(s) or use(s), there shall be a planted buffer located in a landscape strip at least 10 feet wide along the side and rear property boundaries abutting or adjacent to such Office or Commercial district or use.

- C. Multi-Family Residential Uses. For any multi-family residential use abutting or adjacent to a single-family or two-family use, there shall be a planted buffer located in a landscape strip at least 20 feet wide along any property boundary abutting or adjacent to such single-family or two-family use.
- D. Manufactured Home Park Uses.
1. For any Manufactured Home Park Residential district abutting or adjacent to any other Residential use or Office district, there shall be a planted buffer located in a landscape strip at least 20 feet wide along the side and rear property boundaries abutting or adjacent to such Residential use or Office district.
 2. For any Manufactured Home Park Residential district abutting or adjacent to a Commercial district, there shall be a buffer screen located in a landscape strip at least 20 feet wide along the side and rear property boundaries abutting or adjacent to such commercial use.
- E. Adjustment of Requirements.
1. Pursuant to the site plan review process described in Chapter 4, the Planning Commission or Zoning Administrator may review a landscape plan and determine that the provisions of this Chapter would better serve the intent and purpose of this Ordinance if modified. Additional landscaping beyond the minimum requirements may be required where screening is needed to minimize visual, noise, or other impacts from the proposed development; where there may be some other adverse effect caused by the use being reviewed; or where elsewhere deemed necessary due to the scope and nature of the proposed development.
 2. Should the Planning Commission or Zoning Administrator determine that an adequate landscaping screen already exists on a site or that a landscaping screen is not required, the applicable provisions of this Chapter may be waived in whole or in part. Criteria that shall be used when considering a landscaping screen waiver shall include, but shall not be limited to:
 - a. Topography variations
 - b. Existence of natural vegetation
 - c. Existing and proposed building placement
 - d. Sight distances
 - e. Adjacent land uses
 - f. Existence of floodplain and areas of poor soil

SECTION 22.03 PARKING LOT LANDSCAPING

- A. Applicability. In addition to the site landscaping required in Section 22.02 above, any new construction of a parking lot, expansion of a parking lot by 25 percent of its original existing area, or substantial alteration or reconstruction of an existing parking lot (e.g., removal and replacement of existing pavement) must be landscaped in accordance with this Chapter.
- B. General Requirements.

1. Landscaping shall be planned and installed such that, when mature, it does not obscure traffic signs, fire hydrants, or lighting; does not create a negative impact on drainage patterns on the site or on adjacent properties; does not obstruct vision for reasons of safety, ingress, or egress; or cause damage to utility lines (above or below ground) and public roadways.
 2. Any landscaped area required by this Chapter shall be constructed outside any public or private street right-of-way.
 3. All landscaped areas, including perimeter areas, shall be protected by a barrier (e.g. raised standard or rolled concrete curb), except where landscape islands in parking lots are being utilized as part of a stormwater detention or conveyance system.
 4. Any landscaping existing within or bordering any existing parking area shall not be removed unless replaced with landscaping meeting the requirements of this Chapter.
- C. Frontage Landscaping. Where any parking area directly abuts or faces a public or private street, a screen shall be required between the parking area and the road right-of-way. Such screen shall consist of, at a minimum, one of the following:
1. A strip of land at least five feet in width and a solid screen comprised of a hedge or decorative wall, or any combination thereof, which measures at least three feet in height, or
 2. A strip of land at least 10 feet in width containing one approved tree and three shrubs placed at a maximum of 30-foot intervals.

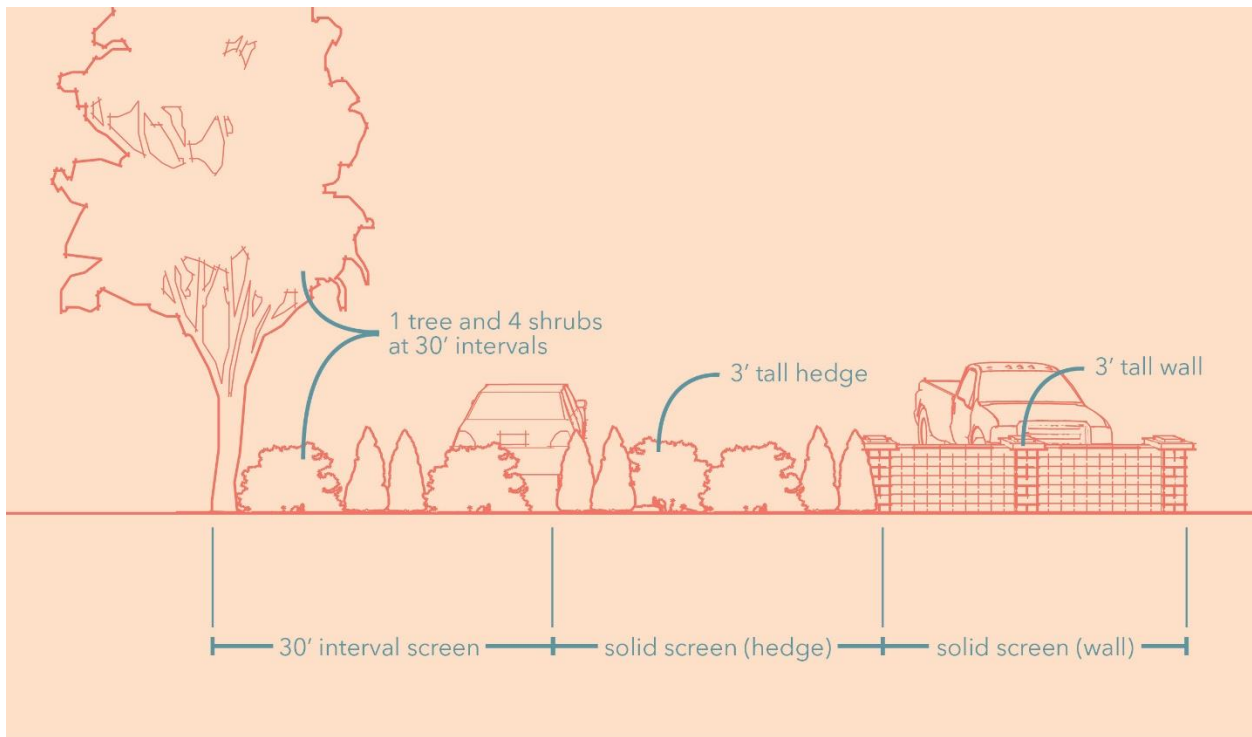


FIGURE 22.2 PARKING LOT FRONTAGE LANDSCAPING

- D. Interior Landscaping. For any parking area containing 20 or more parking spaces, interior landscaping

shall be provided according to the following standards:

1. The interior of the parking lot shall begin at the outside boundary of the parking area.
2. The interior area of any parking lot shall incorporate one planting island or peninsula and one approved tree per each 20 parking spaces or fraction thereof.
3. Each planting island or peninsula shall be at least 90 square feet in landscaped area and have a minimum width of nine feet; however, planting islands and peninsulas may be combined so long as there is at least 90 square feet of landscaped area per each 20 parking spaces or fraction thereof.
4. At least one approved tree shall be included in each planting island or peninsula with the balance of the island covered with landscaping, such as grass, approved shrubs, perennials, or ground cover.
5. Landscaped islands may be used to separate pedestrian areas, parking rows, maneuvering areas, and drives.

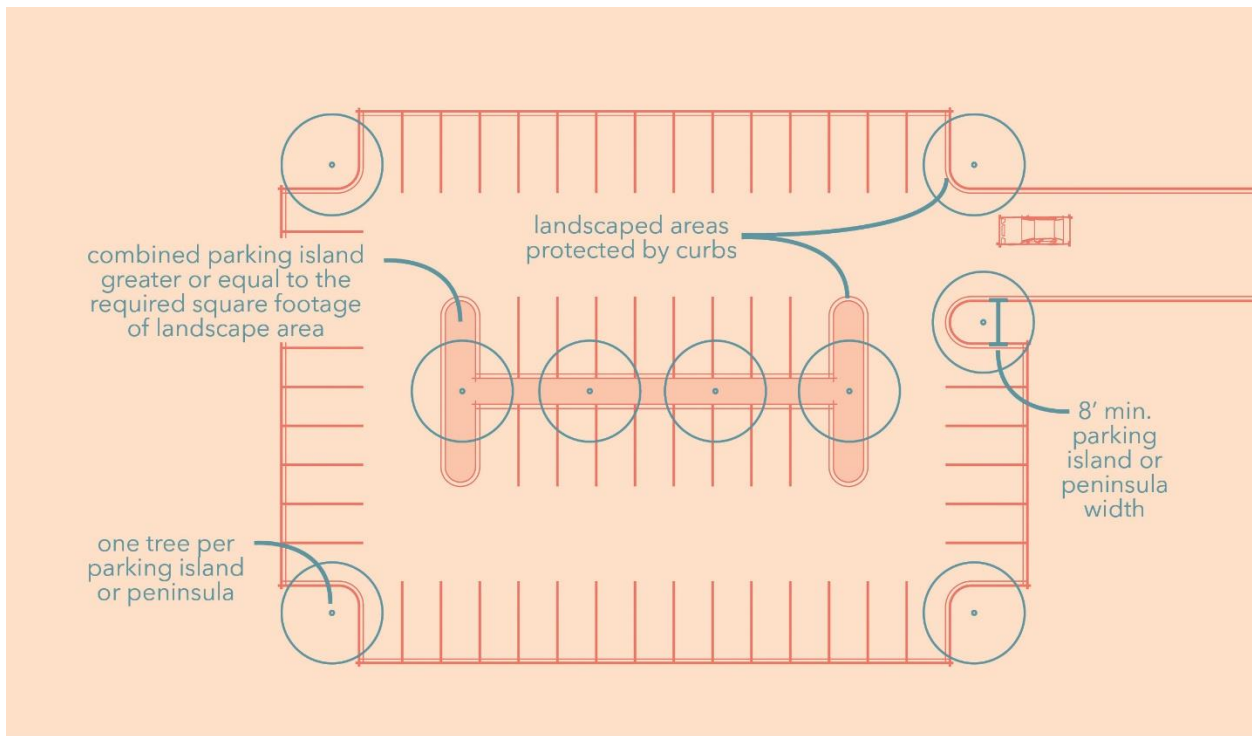


FIGURE 22.3 PARKING LOT INTERIOR LANDSCAPING

SECTION 22.04 GENERAL LANDSCAPE STANDARDS

A. Minimum Plant Material Standards.

1. All plant materials shall be certified to be hardy to Montcalm County, free of disease and insects, and conform to the standards of the American Standards for Nursery Stock.

2. Minimum Plant Size at Time of Installation:

Table 22.1 Plant Size at Time of Installation	
Tree Type	Minimum Size at Planting
Deciduous Canopy Tree	2 ½ inch caliper
Deciduous Ornamental Tree	1 ½ inch caliper
Evergreen Tree	6 foot height
Deciduous Shrub	2 foot height
Upright Evergreen Shrub	2 foot height
Spreading Evergreen Shrub	18-24 inch spread

3. Plant materials shall not consist of more than 50% of any one plant species.
4. Any site on which a use permitted by this Ordinance is established shall install a lawn or other type of living ground cover for all land areas not covered by impervious surfaces within 12 months following the issuance of a Certificate of Occupancy. A performance guarantee may be required by the Township to ensure that landscaping is installed within the 12-month period. No landscape materials other than lawn and street trees approved by the Zoning Administrator shall be planted within any public or private road right-of-way.
5. The following trees are prohibited as they split easily, their wood is brittle and breaks easily, their roots clog drains and sewers, and they are unusually susceptible to disease or insect pests:

Table 22.2 Prohibited Species	
Common Name	Horticultural Name
Boxelder	Acer Negundo
Ginkgo	Ginko Biloba, female only
Honey Locust	Gleditsia Triacanthos (with thorns)
Mulberry	Morus Species
Poplar	Populus Species
Black Locust	Robinia
Willow	Salix Species

American Elm	Ulmus Americana
Siberian Elm	Ulmus Pumila
Slippery Elm/Red Elm	Ulmus Rubra
Chinese Elm	Ulmus Parvifola

B. Mature Tree Preservation.

1. It is the intent of this section that developments, structures, utilities, and all other site activities be designed, installed, and construed so that the maximum number of mature trees with a diameter of 12 inches or larger at breast height (DBH) are preserved on all lots or parcels. To minimize tree loss and mitigate tree removal on wooded lots or parcels with trees, the following shall be submitted as part of the landscaping plan required by this Chapter:
 - a. The location, size, and identification of species of all existing mature trees with a diameter of 12 inches or greater at breast height (DBH) on the subject parcel(s).
 - b. Demonstration that the proposed development would retain as many healthy, existing mature trees with a diameter of 12 inches or larger at breast height (DBH) as practicable.
 - c. Tree protection fencing plan showing the locations of temporary fencing to be installed prior to all construction activities. Tree protection fencing shall surround all existing trees identified for preservation and shall extend to the canopy dripline. This plan may be included on the landscape plan itself or be presented as a separate drawing to be included in the plan set.

C. Minimum Standards for Berms.

1. Berms shall have a minimum height of three feet and maintain a side slope not to exceed a one-foot rise to a three-foot width ratio.
2. Berm areas not containing planting beds shall be covered with grass or approved permanent vegetative ground cover maintained in a healthy growing condition.
3. If a berm is constructed with a retaining wall or by terracing, the earthen slope shall face the exterior of the site.

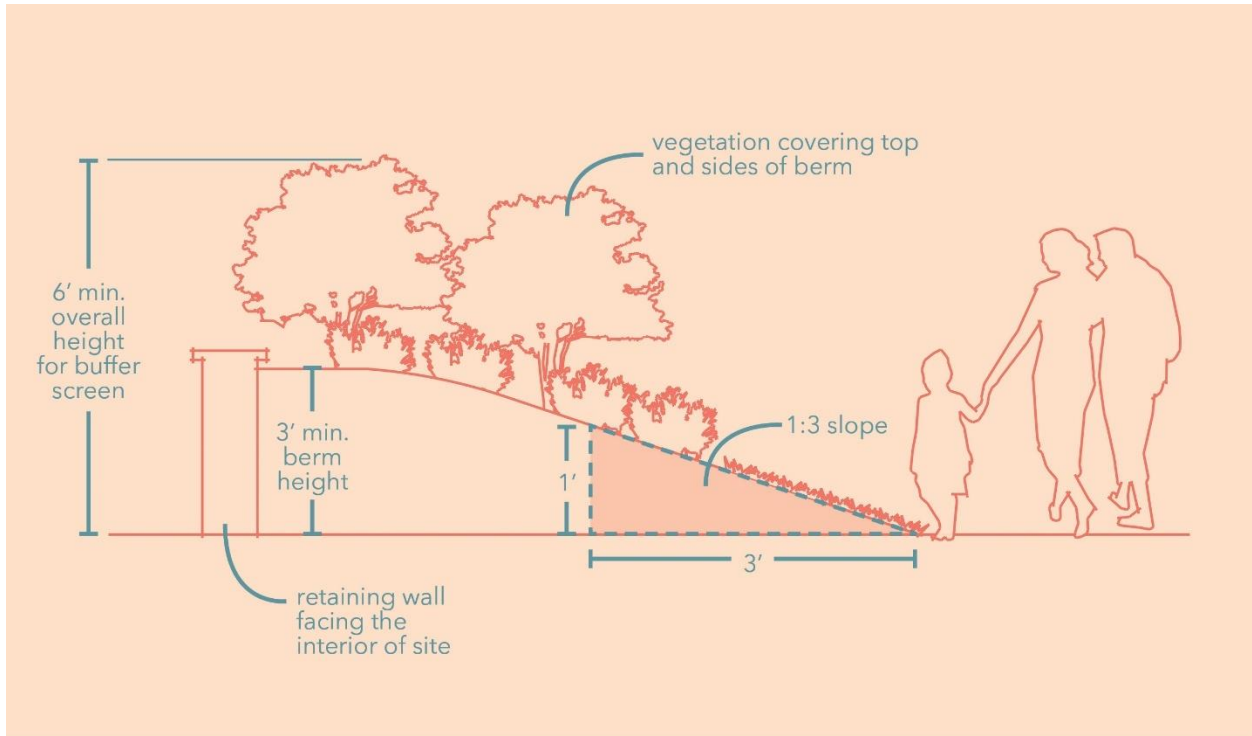


FIGURE 22.4 BERM STANDARDS

D. Minimum Standards for Obscuring Screen Walls and Fences.

1. All obscuring screen walls and fences shall be constructed with new, durable, weather-resistant, easily maintained materials. Chain link and barbed wire fences are not permitted.
2. The obscuring screen wall or fence may be constructed with openings that do not exceed 20% of the wall surface. The openings shall not reduce the intended obscuring effect of the wall.

E. Any plant material, berm, obscuring screen, or other landscape feature shall be installed in such a manner as to not create a negative impact on drainage patterns on the site or on adjacent properties, obstruct clear vision areas, ingress or egress, or cause damage to utility lines (above and below ground) and public roadways.

F. Stormwater Management.

1. Detention/retention areas shall be permitted within buffer zones provided they do not hamper the screening intent of the buffer or jeopardize the survival of the plant materials.
2. Green Infrastructure Best Management Practices (BMPs) should be implemented, where practicable, according to the following hierarchy of preference:
 - a. Conservation of natural areas;
 - b. On-site infiltration practices, including, but not limited to, rain gardens, bioretention cells, vegetated swales, filter strips, constructed wetlands, and porous pavement;
 - c. Capture and reuse of runoff through low-impact practices, including, but not limited to, green

roofs, blue roofs, and rain barrels.

- G. If a project is constructed in phases, the landscape screen may also be constructed in phases. The Zoning Administrator shall determine the extent of the landscaping required for each phase based on:
 - 1. Adjacent land uses
 - 2. Distance between land uses
 - 3. Operational characteristic both on- and off-site
 - 4. Building heights
 - 5. Physical characteristics of the site such as topography and existing vegetation
- H. If weather conditions or other factors are determined by the Zoning Administrator to be sufficient to warrant a delay in installing landscaping, a performance guarantee of an adequate amount to ensure the installation of all required landscaping within a reasonable period of time shall be required.
- I. Maintenance. All landscaping and screening materials required by this Ordinance, whether living (e.g., shrubs, lawns) or non-living (e.g., fences, curbs), shall be maintained by the property owner. All landscaping shall be maintained in a healthy, neat, and orderly state, and be free from refuse and debris. Any dead or diseased plants shall be replaced as soon as practicable.