

CHAPTER 23
LANDSCAPING AND SCREENING

SECTION 23.1 PURPOSE

It is the intent of this Chapter to require buffer zones, landscaping, and screening to reduce the negative impacts between land uses. It is further intended to preserve and enhance the aesthetic qualities, value, character, privacy, and living environment of the Township. This Chapter further recognizes that the proper management and use of trees, plants and other types of vegetation will improve and promote resourceful site planning and creative design.

SECTION 23.2 REQUIRED BUFFER ZONES

- A. A buffer zone shall be required on any parcel proposed for development which borders a different zone district, as indicated in 23.2, F. Where the adjacent zone district is more intensive, e.g., B-1 bordering R-1, the required buffer shall be installed only on the property which is in the more intensive district.
- B. The specified buffer shall be required on the subject parcel even if the adjacent parcel is unimproved land. A performance bond may be submitted in lieu of the required buffer where adjacent land is unimproved. The buffer shall be installed when the adjacent property begins development and completed prior to any occupancy of the adjoining use.
- C. When any developed parcel existing as of the date of this Ordinance, or amendment thereto, is changed to a less restrictive zone district, for example, R-2 to B-1, any required buffer shall be installed in compliance with this Section within six (6) months of the effective date of the rezoning. This provision shall not apply to rezonings initiated by the Township.
- D. If two (2) zoning districts requiring a buffer zone are separated by a street, the design of the required buffer zone shall be reduced by one (1) level; for example, a required Major Buffer shall be reduced to a Moderate Buffer. Notwithstanding the foregoing, the minimum buffer installed shall be a Minor Buffer.
- E. 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.

F. The following chart defines the required buffers between adjacent zone districts.

ADJACENT DISTRICT	DISTRICT OF PROPOSED USE						
	AP, AG, R-R, R-1,R-2	R-3*	MHP	VSC	B-1	B-2	LI
AP	NR	Minor	Moderate	NR	Moderate		Major
AG	NR	Minor	Moderate	NR	Moderate		Major
R-R	NR	Minor	Moderate	NR	Moderate		Major
R-1	NR	Minor	Moderate	NR	Moderate		Major
R-2	NR	Minor	Moderate	NR	Moderate		Major
R-3*	NR	Minor	Moderate	NR	Minor	Moderate	Major
MHP	NR	Minor	Moderate	NR	Minor	Moderate	Major
VSC	NR	Minor	Minor	NR	NR	NR	Major
B-1	NR	Minor	Minor	NR	NR	Minor	Major
B-2	NR	Minor	Minor	NR	NR	NR	Major
LI	NR	Minor	Moderate	Major	NR	NR	NR

* Multiple family and nonresidential uses only
 MA= Major Buffer MO= Moderate Buffer
 MI= Minor Buffer NR = None Required

G. Buffer Zone Development Standards

1. Major Buffer Zone

- a. Minimum width fifty (50) feet
- b. The buffer zone shall contain one (1) tree for each thirty (30) lineal feet or fraction of buffer zone length. At least one half (½) of the total number of trees required within the buffer zone shall be canopy trees.
- c. The buffer shall contain a three (3) foot high screen comprised of plant material, berming screen walls or fences, or any combination of these elements.
- d. If berming is used for all or part of the buffer zone screen, the berm shall contain a minimum of one (1) shrub for each ten(10) linear feet or fraction of berm length. All required plant material shall be placed on the top and exterior side slope of the berm.
- e. If a screen wall or fence is used for all or part of the buffer zone screen, a minimum of one (1) shrub for each ten (10) linear feet or fraction of wall or fence shall be placed on the exterior side of the wall or fence.

- f. If plant material is used for all or part of the required buffer zone screen, the screen shall consist of a minimum of four (4) shrubs for each twenty (20) linear feet or fraction of screen length. The shrubs shall be a minimum of twenty-four (24) inches high at the time of planting.
- g. The balance of the required buffer shall be covered with grass or approved ground cover in accordance with this Chapter.
- h. All applicable standards in Section 23.3 shall be met.

2. Moderate Buffer Zone

- a. Minimum width of thirty (30) feet.
- b. The buffer zone shall contain one tree for each thirty (30) linear feet or fraction of buffer zone length. At least one-half ($\frac{1}{2}$) of the total number of trees required within the buffer zone shall be canopy trees.
- c. The buffer zone shall contain a three (3) foot high screen comprised of plant material, berming, screen walls or fences, or any combination of these elements.
- d. If berming is used for all or part of the buffer zone screen, the berm shall contain a minimum of 1 shrub for each ten(10) linear feet or fraction of berm length. All required plant material shall be placed on the top and exterior side slope of the berm.
- e. If a screen wall or fence is used for all or part of the required buffer zone screen, a minimum of 1 shrub for each ten(10) linear feet or fraction of wall or fence shall be placed on the exterior side of the wall or fence.
- f. If plant material is used for all or part of the required buffer zone screen, the screen shall consist of a minimum of four (4) shrubs for each twenty (20) linear feet or fraction of screen length. The shrubs shall be a minimum of twenty-four (24) inches high at the time of planting.
- g. The balance of the required buffer shall be covered with grass or approved ground cover in accordance with this Chapter.
- h. All applicable standards in Section 23.3 shall be met.

3. Minor Buffer Zone

- a. Minimum width of ten(10) feet.
- b. The buffer zone shall contain one (1) tree for each thirty (30) linear feet or fraction of buffer zone length. At least one-half ($\frac{1}{2}$) of the total number of trees required within the buffer zone shall be canopy trees.

- c. The buffer zone shall contain a three (3) foot high screen comprised of plant material, berming, screen walls or fences, or any combination of these elements.
- d. If berming is used for all or part of the buffer zone screen, the berm shall contain a minimum of one (1) shrub for each ten(10) linear feet or fraction of berm length. All required plant material shall be placed on the top and exterior side slope of the berm. The minimum buffer zone width shall be increased as necessary to accommodate a side slope with a one (1) foot rise to three (3) foot run ratio (see Section 23.3, G).
- e. If a screen wall or fence is used for all or part of the buffer zone screen, a minimum of one (1) shrub for each ten(10) linear feet or fraction of wall or fence shall be placed on the exterior side of the wall or fence.
- f. If plant material is used for all or part of the required buffer zone screen, the screen shall consist of a minimum of four (4) shrubs for each twenty (20) linear feet or fraction of screen length. The shrubs shall be a minimum of twenty-four (24) inches high at the time of planting.
- g. The balance of the required buffer shall be covered with grass or approved ground cover in accordance with this Chapter.
- h. All applicable standards in Section 23.3 shall be met.

SECTION 23.3 GENERAL LANDSCAPE DEVELOPMENT STANDARDS

- A. Whenever a landscape planting screen or landscape planting is required by the provisions of this Ordinance, a detailed planting plan for the landscape planting screen or landscape planting shall be submitted to the Township. A planting plan shall consist, at a minimum, of a diagram of the property, drawn to scale, which shows the locations, starting size, spacing, and descriptions of all the landscape materials proposed for use. A building permit shall not be issued until the planting plan has been approved.
- B. All planting screens and landscape plantings shall be planted in accordance with the approved planting plan and an Occupancy Certificate shall not be issued until the planting screen or landscape planting has been completed in accordance with the approved plan.
- C. If weather conditions or other factors determined by the Zoning Administrator sufficient enough to warrant a delay in installing landscaping, a performance guarantee of a sufficient amount to insure the installation of all required landscaping shall be required in compliance with the requirements of Section 23.3, B, to ensure that landscaping is installed within a reasonable period of time.

- D. The Planning Commission may approve landscape plans that use innovative landscaping plans and techniques that may not comply with all of the requirements of the Chapter if the plan substantially preserves and encourages continued conservation of native vegetation and habitat.

- E. Any plant material, berm, screen or other landscape feature shall be installed in such a manner so as not to alter drainage patterns on the site or on adjacent properties; obstruct vision for reasons of safety, ingress or egress; or cause damage to utility lines (above and below ground) and public roadways.

- F. Minimum Material and Planting Standards:
 - 1. All plant materials shall be certified to be hardy to Clinton County, free of disease and insects and conform to the standards of the American Association of Nurserymen.
 - 2. All plantings shall be properly planted so that they are in a healthy, growing condition. Required plantings shall be maintained in an attractive and presentable condition, free of weeds, refuse, and debris. All plantings shall be maintained in a sound healthy, and vigorous growing condition.
 - 3. Dead or diseased plants included as part of the approved landscape plan shall be replaced.
 - 4. Grass areas shall be planted and grown as permanent lawns. Grass may be sodded, or seeded and mulched, and shall be protected from erosion by appropriate means until the grass is established.
 - 5. All scraped or disturbed ground areas shall be provided with coverage of grass, ground cover, shrubs, or other appropriate materials. Materials that inhibit or restrict percolation of water into soils shall not be considered appropriate for these areas.
 - 6. Minimum plant sizes at time of installation:

Tree Type	Minimum Size at Planting
Deciduous Canopy Tree	2 ½ inch caliper
Deciduous Ornamental Tree	2 inch caliper
Evergreen Tree	6 foot height
Deciduous Shrub	2 foot height
Upright Evergreen Shrub	2 foot height
Spreading Evergreen Shrub	12 - 24 inch spread

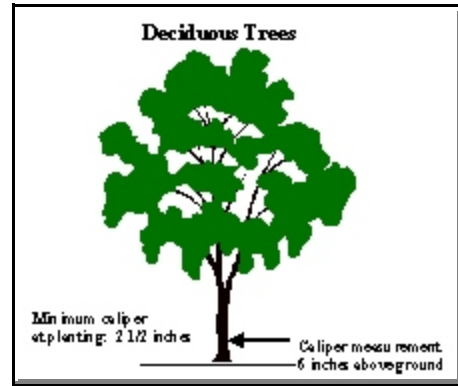
- 7. Plant materials shall not consist of more than fifty percent (50%) of any one (1) plant species.
- 8. The following trees are not permitted as they split easily; their wood is brittle and breaks easily; their roots clog drains and sewers; and they are unusually susceptible to disease or insect pests:

<u>Common Name</u>	<u>Horticultural Name</u>
Boxelder	Acer Negundo
Ginkgo	Ginko Biloba, female only
Honey Locust	Gleditsia Triacanthos (with thorns)
Mulberry	Morus Species
Poplars	Populus Species
Black Locust	Robinia Species
Willows	Salix Species
American Elm	Ulmus Americana
Siberian Elm	U. Pumila
Slippery Elm; Red Elm	U. Rubra
Chinese Elm	U. Parvifolia

9. When plants are placed in two (2) or more rows, the plantings shall be staggered in rows.
10. Evergreen trees shall be at least six (6) feet in height and planted eight (8) feet to ten (10) feet apart from the next tree in the planting, as measured from tree center to tree center.



11. Deciduous trees shall be planted not more than thirty (30) feet from the next tree in the planting, or as otherwise may be required by this Chapter.
12. When planted in a double or triple row, large shrubs (those exceeding thirty (30) inches in height) shall be planted no farther that six (6) feet apart. Large shrubs, when planted in single rows shall be planted no farther than four (4) feet from the next large shrub. All other shrubs shall be planted no farther than four (4) feet from the next shrub.



13. Trunk calipers shall be measured at six (6) inches above the ground. Evergreen tree heights shall be measured from the average grade to the top of the highest branch.
14. Landmark trees shall be preserved unless the Planning Commission deems removal necessary to preserve other significant natural features or for purposes of safety. Landmark trees shall be replaced with an equivalent type of tree having a diameter of not less than four (4) inches. The replacement ratio shall be four (4) replacement trees for every landmark tree removed. Replaced trees shall be kept in a living condition or replaced. The Planning Commission or Zoning Administrator shall approve the location(s) for replacement trees.

G. Minimum Standards for Berms:

1. Berms shall maintain an earthen side slope not to exceed a one (1) foot rise to a three (3) foot in width ratio.
2. Berm areas not containing planting beds shall be covered with grass or living 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.

H. Minimum Standards for Screen Walls and Fences:

1. All screen walls and fences shall be constructed with new, durable, weather resistant and easily maintained materials. Chain link and barbed wire fences are not permitted. (See Section 23.2, G, 2 for a definition of screen.)
2. The screen wall or fence may be constructed with openings that do not exceed twenty percent (20%) of the wall surface. The openings shall not reduce the intended obscuring effect of the wall.

I. Outdoor solid waste dumpsters shall be screened by a continuous screen at least six (6) feet high. The screen may be comprised of berming, plant material, screen walls or fences or any combination of these elements. Dumpsters may be installed within buffer zones.

J. If a project is constructed in phases, the landscape screen may also be constructed in phases. The Zoning Administrator shall determine the extent of 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, existing vegetation, etc.

K. Should the Zoning Administrator determine, upon inspection, that adequate landscape screening on a site already exists or that a landscaping screen is not required, the applicable provisions of this Chapter may be waived in whole or in part by the Zoning Administrator or Planning Commission. Criteria which shall be used when considering a landscaping screen waiver shall include, but shall not be limited to:

1. Topography variations
2. Existence of natural vegetation
3. Existing and proposed building placement
4. Sight distances
5. Adjacent land uses
6. Existence of floodplain and areas of soils unsuitable for plantings

SECTION 23.4 PARKING LOT LANDSCAPING

- A. Applicability: This Section is applicable to parking lots exceeding six (6) spaces serving any nonresidential or multiple family use in any District. A parking lot landscape plan shall be submitted with any application for a building permit or when otherwise required by this Ordinance.
- B. Existing Parking Areas
1. These requirements shall be met for any parking lot existing as of the effective date of this Ordinance which is expanded or substantially altered (e.g., removal and replacement of existing pavement) for an area of more than twenty-five percent (25%) of its original existing area.
 2. Any landscaping existing within or bordering any existing parking area shall not be removed unless replaced with landscaping meeting the requirements of this Section.
- C. General Requirements
1. Landscaping shall be planned and installed such that, when mature, it does not obscure traffic signs, fire hydrants, or lighting, and does not alter drainage patterns on the site or on adjacent properties; obstruct vision for reasons of safety, ingress or egress; or cause damage to utility lines (above and below ground) and public roadways.
 2. Any landscaped area required by this Section shall be constructed outside any public street right-of-way.
- D. Off street parking areas containing six (6) or more parking spaces shall be provided with landscaping in accordance with the following:
1. Six (6) through one hundred (100) spaces; one (1) canopy tree and one hundred (100) square feet of landscaped area per six (6) spaces
 2. One hundred and one (101) through two hundred (200) spaces; one (1) canopy tree and one hundred (100) square feet of landscaped area per eight (8) spaces.
 3. More than two hundred (200) spaces; one (1) canopy tree and one hundred (100) square feet of landscaped area per ten (10) spaces.

- E. In no case shall any buffer zones or greenbelts required in Sections 23.2, 23.3, and 23.5 be considered as part of the off street parking landscape area.
- F. Required parking lot landscape areas shall comply with the following standards:
 - 1. The minimum size of a landscaped area shall be sixty (60) square feet and at least six (6) feet wide.
 - 2. All landscaped areas shall be covered by grass, shredded bark, stone or a living ground cover.
 - 3. All landscaped areas shall contain at least one (1) canopy tree. The tree shall be located so as not to be damaged by any surrounding vehicle.
 - 4. The Zoning Administrator shall approve the location of required off-street parking landscaping using the following criteria:
 - a. Landscaping shall be installed such that, when mature, it does not obscure traffic signs, fire hydrants, lighting, drainage patterns on site or adjacent properties, or obstruct vision for reason of safety, ingress or egress.
 - b. Trees shall be installed in such a manner that parked motor vehicles are shaded whenever possible.
 - c. Landscaping shall be dispersed throughout the parking lot in order to break up large expanses of impervious surfaces.
 - d. At least one-half ($\frac{1}{2}$) of the required shall be installed in the interior of the parking area. The interior shall be considered as any point ten (10) feet from the outside boundary of the parking area.
 - 5. In the R-3 District all landscaped areas shall be protected by a raised standard or rolled concrete curb.
 - 6. All applicable requirements of Section 23.3 shall be complied with.

SECTION 23.5 GREENBELTS

- A. Greenbelts shall be required where any developed parcel abuts or faces a public thoroughfare in the R-3, B-1, B-2 and LI.
- B. If a buffer zone is required along a thoroughfare then the greenbelt requirement shall be waived.
- C. In no case shall off-street parking lot landscaping requirements in Section 23.4 be considered as part of any greenbelt requirement.

- D. All greenbelts shall comply with the following standards:
1. One (1) tree for each forty (40) linear feet or fraction of frontage abutting a public thoroughfare. At least one-half ($\frac{1}{2}$) of the total number of trees required within the greenbelt shall be canopy trees.
 2. One (1) shrub for each ten (10) linear feet or fraction of frontage abutting a public thoroughfare. The shrubs shall be a minimum of twenty-four (24) inches high at the time of planting.
 3. In no case shall a greenbelt be less than ten (10) feet in width.
 4. All greenbelts shall be covered by grass
 5. All applicable standards in Section 23.3 shall be met.

SECTION 23.6 ADDITIONAL LANDSCAPING AND SCREENING

- A. Where deemed appropriate by the Planning Commission or other approving authority for site plans, additional landscaping or screening may be required where it is needed to minimize visual, noise, or other impacts from the proposed development or where there may be some other adverse effect caused by the use being reviewed. Such adverse effect may include, but shall not be limited to, noise, lighting, hazard, traffic conflict, or other such effect.
- B. The nature of such landscaping or screening shall be that required by Section 23.2. The Planning Commission or other approving authority for site plans may designate which buffer zone is appropriate for the required landscaping or screening.
- C. No landscaping, other than ground cover, shall be provided or extend into a public right-of-way.