

## ARTICLE 14

### DESIGN REGULATIONS

5

#### **Sec. 14-01 Architecture and Building**

(a) **Intent.** The intent of these regulations is to provide specific design guidelines that achieve the following:

10 (1) Encourage development and redevelopment that protects and enhances the rural character and creates a character that reinforces a sense of community identity.

15 (2) Encourage a form of development that will achieve the physical qualities necessary to maintain and enhance the economic vitality of the business districts, maintain the desired character of the Township, prevent the creation of blight, and protect property values.

20 (3) Implement recommendations of the Master Plan.

(b) **Applicability.** All uses except single family residential uses shall comply with the design standards of *Sections 14-01 (c), (d), and (e)* under the following circumstances. Refer to *Section 14-01 (f)* for building design standards for single family residential units. All sites shall meet the requirements of the Brighton Township Engineering Design Standards.

25 (1) **New Buildings.** All uses that receive a building permit or site plan approval for construction of a new building after the effective date of this Ordinance shall fully comply with the design standards of this Section.

30 (2) **Expansions to Buildings.** For buildings existing prior to the effective date of this Ordinance, major building improvements or expansions that require site plan approval may be permitted by the Planning Commission without a complete upgrade to meet the requirements of this Section, provided there are reasonable improvements to the building in relation to the scale and construction cost of the building improvements or expansion. Major exterior renovations shall be consistent with the building design standards herein to the extent deemed practical by the Township.

---

**(3) Minor Improvements to Buildings.** For buildings existing prior to the effective date of this Ordinance, minor changes, improvements, and modifications that are approved administratively shall be permitted, provided the improvements shall not increase noncompliance with the requirements of this Section.

**(c) Exterior Wall Design Standards**

**(1) Wall Materials.** The use of exterior wall materials on walls that are visible from a public road or a parking lot shall be in compliance with the maximum percentages permitted in Table 14-01. A table must be provided on the site plan depicting the percentage planned of each material.

**Table 14-01**  
**Schedule of Regulating Exterior Building Wall Materials**

<b>Building Materials</b>	<b>Maximum Percent of Wall that can be Covered by Certain Building Materials by Zoning District</b>				
	<b>RM-1</b>	<b>OS</b>	<b>B-1 (a)</b>	<b>B-2 &amp; B-3 (a)</b>	<b>I-1</b>
Brick or Face Brick	100%	100%	100%	100%	100%
Stone	100%	100%	100%	100%	100%
Split Face Block	25%	25%	50%	50%	100%
Cast Stone	25%	25%	25%	25%	100%
Precast Concrete	0%	25%	0%	25%	75%
Concrete Formed in Place	0%	25%	0%	25%	75%
Metal (b)	0%	25%	0%	25%	50%
Reflective Glass	0%	50%	0%	0%	50%
Glass Block	25%	25%	25%	25%	25%
Wood Siding	75%	50%	50%	0%	0%
Vinyl Siding	75%	50%	50%	0%	0%
Finishes (c)	0%	25%	10%	25%	25%

**Footnotes:**

- (a) All walls exposed to public view from the road or an adjacent residential area shall be constructed of not less than seventy-five (75%) brick, face brick, stone, or cast stone.
- (b) Flat sheets and seamed or ribbed panels, including aluminum, porcelain and stainless steel and similar material. These materials shall not be used where contact with vehicles may occur, such as parking areas, traffic ways, and loading areas, unless the walls are adequately protected to prevent damage.
- (c) Includes fiberglass, reinforced concrete, polymer plastic (fypon), exterior insulation and finishing systems (EIFS), plaster, stucco, and similar materials. These materials shall not be used where contact with vehicles may occur, such as parking areas, traffic ways, and loading areas, unless the walls are adequately protected to prevent damage.

(2) **Allowance for Other Materials.** The Planning Commission may waive strict compliance with the *Section 14-01 (c)(1)* when the following qualities can be demonstrated. The proposed building design and materials schedule shall be accompanied by a written design statement which shall describe how the selected wall materials and material combinations will be consistent with and enhance the building design.

- a. The design and materials are found to be in keeping with the character of the Township.
- b. The materials are found to be permanent and durable.
- c. The design and materials are compatible with the type of use and development proposed.
- d. The design and materials can easily be adapted to another use in the future.
- e. The design and materials meet the intent of this Section.

(3) **Mixture of Materials.** The application of these requirements should promote integration and mixture of materials where more than one (1) material is used on a building. If only one (1) material is used, architectural detailing and articulation, massing, texture and form must be introduced into the building design. Building roof materials should be in harmony with the style and material used on the building walls.

(4) **Long Walls.** When buildings are one hundred (100) feet or greater in length, design variations must be applied to assure that the building is not monotonous in appearance. Variations include but are not limited to the following:

- a. Recess and projections along the building façade. Variations in depth shall be a minimum of ten (10) feet.
- b. Architectural details or features.
- c. Enhanced ornamentation around building entryways.
- d. Landscaping.

e. Streetscape elements.

f. Variations in building height.

5 (5) **Colors.** Information on building colors shall be submitted with the site plan and considered to be part of any site plan approval under *Article 18*. The primary building color shall be earth tone colors and be compatible with the surrounding area.

10 (d) **Roof Design Standards**

15 (1) **Compatible Design Character.** Roof design and materials are considered to be key elements to the Township character, and thus shall be consistent with the intent of this Article. As a part of building design, roofs shall be designed in keeping with the overall architecture of the building.

(2) **Roof Materials.** The following regulations apply to roof materials:

20 a. Asphalt, fiberglass, tile, slate, metal, or cedar shingles may be used in all districts.

b. Standing seam metal roof systems shall be permitted only in the B-2, OS, and I-1 Districts.

25 c. Asphalt shingles shall be heavily textured with colors that are compatible with the building architecture.

30 d. When permitted, the color of standing metal seam roof systems shall be subtle and compatible with exterior building materials.

35 (3) **Screening Rooftop Equipment.** Rooftop equipment shall be screened by a pitched roof enclosure or parapet wall of sufficient height so as to not be visible from the adjoining public road or adjacent property. The method to screen rooftop equipment shall be compatible with the building through color, scale, materials, and architectural style. The Planning Commission may require cross-Section details to confirm compliance.

---

**(e) General Building Design Accent Standards**

- (1) **Front Facade.** Blank walls shall not face a public road. Walls facing a public road shall include windows and architectural features customarily found on the front facade of a building, such as awnings, cornice work, edge detailing or other decorative finish materials. A prominent and usable public building entrance shall be provided at the front of the building. Wall massing shall be broken up with vertical pilasters or other architectural elements to reduce scale.
- (2) **Pedestrian Orientation.** Buildings shall be designed at a pedestrian scale with relationship to the road and sidewalk. Convenient and safe pedestrian access shall be provided between the public sidewalk and the building entrance.
- (3) **Awnings.** Awnings with straight sheds may supplement facades. Awnings shall not be cubed or curved except over doorways. Awnings shall be of an opaque material. Translucent or internally lit awnings shall not be permitted. Signs are not permitted on the awning.
- (4) **Canopies.** Canopies, such as over gasoline pumps or drive-through structures, shall be designed to be consistent with the approved building materials and colors. Support columns shall be brick or materials compatible with the main buildings. The Planning Commission may require a peaked roof to complement the main building. Any canopy lighting shall be flush with the canopy.
- (5) **Neon.** Exposed neon shall not be permitted on a building except on signs as provided for in *Article 17*.
- (6) **Quality and Workmanship.** This Section is not intended to regulate the quality, workmanship and requirements for materials relative to strength and durability.

**Building Design Standards for Single Family Residential Units.** To ensure the compatibility in appearance of single-family dwelling units, such units shall meet the following design and site standards:

(1) Shall be constructed to the most current State or Federal Building Standards. These include the Michigan Construction Code Act of 1972 (Act 230, P.A. 1972, as amended) and the National Manufactured Housing Construction and Safety Standards Act of 1974, as amended.

5

(2) Have a minimum width dimension of twenty-four (24) feet.

(3) The gross floor area and lot coverage of any proposed single-family dwelling unit shall comply with the standards set forth in Table 3-03.

10

(4) Have two (2) exterior doors (front and rear, or front and side), and where there is a difference in ground elevation, steps must be permanently attached, on a frost depth foundation, either to the perimeter wall or to porches connected to the perimeter wall.

15

(5) Have a roof with a minimum 4:12 pitch and minimum eight (8) inch eave, and with a drainage system that will collect and concentrate the discharge of storm water or snow away from the sides of the dwelling. The roof shall have wood shake, asphalt or other acceptable shingles, and meet the snow load standards for southern Michigan.

20

(6) Have an exterior finish architecturally compatible to that of other similar homes in the surrounding area.

25

(7) Shall be firmly attached to a permanent foundation constructed on the site in accordance with the applicable building code and shall have a wall of the same perimeter dimensions of the dwelling and constructed of such materials and type as required in the applicable building code for single family dwellings.

30

(8) The compatibility of design and appearance shall be determined by the Township Planner upon review of the plans submitted for a particular dwelling. An aggrieved party may appeal the Township Planner's decision to the Zoning Board of Appeals as provided for in ***Article 22***.

35

(9) Any determination of compatibility shall be based upon the standards set forth in the definition of dwelling as well as the character, design, and appearance of one (1) or more residential dwellings within five hundred (500) feet of the subject dwelling provided the surrounding existing

---

dwellings considered are located outside of manufactured housing community. The foregoing shall not be construed to prohibit innovative design concepts involving such matters as solar energy, view, unique land contour, or relief from the common or standard design homes.

5

(10) All dwelling units shall be oriented toward the public right-of-way so that the facade that faces the road contains a door, windows, and other architectural features customary of the front facade of a residence.

10

(11) The provisions of this Section shall not apply to manufactured homes situated in licensed manufactured home parks.

(Ord. #281, 12/9/22) (Ord. #231, 12/27/05)

15 **Sec. 14-02 Landscaping**

20

(a) **Intent.** 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 landscaping, greenbelts and buffer zones. Landscaping, greenbelts, and buffer zones are necessary for the continued protection and enhancement of all land uses. Landscaping and greenbelts enhance the visual image of the Township, preserve natural features, improve property values, and alleviate the impact of noise, traffic, and visual distraction. Buffer zones protect less intense uses from the noise, light, traffic, litter, and other impacts.

25

Specifically, the intent of these provisions is to:

30

(1) Improve the appearance of off-street parking area, vehicular use areas, and property abutting public rights-of-way.

(2) Protect and preserve the appearance, character, and value of the neighborhoods which abut non-residential areas, parking areas, and other intensive use areas.

35

(3) Integrate the various elements within a site and link a development with the surrounding environment.

(4) Reduce soil erosion and depletion.

(5) Increase soil water retention, thereby helping to prevent flooding, erosion, and sedimentation.

(6) Remove air pollutants, and control glare and reflection.

5

(7) Assist in directing safe and efficient traffic flow and prevent vehicular and pedestrian circulation conflicts.

(8) Create a more desirable microclimate.

10

(9) Provide natural green space to allow infiltration of stormwater, minimize erosion and filter sediments from runoff.

**(b) Applicability**

15

(1) The requirements of this Section shall apply to all projects subject to administrative review, site plan review, or condominium review. No site plan, condominium, or land use permit shall be approved unless landscaping consistent with the requirements of this Section is provided.

20

(2) The landscaping requirements shall be met prior to the issuance of a certificate of occupancy and shall be continuously maintained in a sound, healthy, and vigorous growing condition.

25

(3) Creativity in landscape design is encouraged. The standards are intentionally flexible to encourage adaptability and creative design. Required trees and shrubs may be planted at uniform intervals, at random, or in groupings, depending on the designer's desired visual effect and the intent of the Township to coordinate landscaping on adjacent properties. Applicants are encouraged to provide additional landscaping to improve the function, appearance and value of their property.

30

(4) The requirements herein, shall be independent of each other and shall not be double counted to fulfill the requirements of different required landscape elements.

35

(5) In any case where an existing building and/or parking area is being increased by twenty-five percent (25%) or more over the original site plan,

the site shall be brought into full compliance with the landscape standards herein.

(6) Where an increase in an existing building and/or parking area is less than twenty-five percent (25%), the extent of new landscaping shall be equal to four percent (4%) of compliance for every one percent (1%) of increase in the building or parking footprint. For example, a ten percent (10%) building expansion shall require forty percent (40%) compliance with these landscape requirements.

10

### (c) General Requirements

15 (1) Plant material shall be installed so that at maturity it does not obscure traffic signs or lighting, obstruct access for emergency vehicles, interfere with adequate sight distance for motorists or disrupt drainage patterns on the site or on adjacent properties.

(2) Landscaped areas shall be covered by grass or other living ground cover.

20 (3) A minimum four (4) inches of topsoil shall be provided for all lawn areas, ground covers and planting beds.

25 (4) Planting beds shall be maintained with woodchips or similar natural material, non-stone, at a minimum depth of three (3) inches. Planting beds shall be limited to the area immediately surrounding the plant material.

(5) Planting beds must be curbed or defined with steel edging.

30 (6) Trees and shrubs shall be set back ten (10) feet from the edge of a road  
and five (5) feet from a vehicular access or pathway.

(7) The overall landscape plan shall not contain more than thirty-three percent (33%) of any one (1) species. The use of trees native to the area and mixture of trees from the same species association are encouraged.

35 (8) Ornamental trees may be used to fulfill the tree requirement, provided two (2) ornamental trees shall be the equivalent of one (1) required tree.

**(d) Plant Material Specifications**

5 (1) **Size.** The following minimum specifications shall apply to all plant material at the time of planting proposed in accordance with the landscaping requirements of this Section:

<b>Table 14-02.1</b> <b>Minimum Plant Material Size</b>			
<b>Plant Type</b>	<b>Minimum Caliper<sup>1</sup></b>	<b>Minimum Height</b>	<b>Minimum Spread</b>
Deciduous Shade Trees	3 inches	4 feet <sup>2</sup> first branch	--
Ornamental Trees	2 inches	4 feet <sup>3</sup>	--
Evergreen Trees <sup>4</sup>	--	6 feet	--
Shrubs	--	2 feet	15 inches
Hedges <sup>5</sup>	--	4 feet	--

Footnotes:

<sup>1</sup> Measured 12 inches above grade.  
<sup>2</sup> Trees planted along pedestrian routes (i.e. sidewalks, plazas, etc.) shall not have branches lower than 6 feet.  
<sup>3</sup> Clumped trees (e.g. birch) shall have a minimum height of 6 feet above grade.  
<sup>4</sup> The size of the burlapped root ball for evergreen trees shall be at least 10 times the caliper measured 6 inches above grade.  
<sup>5</sup> Hedges shall be planted and maintained so as to form a continuous, unbroken, visual screen within 2 years after planting.

10 (2) **Spacing.** Planting in informal groupings to create a naturalistic appearance is desirable. Wherever possible, plant materials shall not be placed closer than four (4) feet from the fence line or property line.

15 (3) **Recommended Plant Materials.** Table 14-02.2 lists recommended plant materials for required landscaping. Plant materials of equal or better quality may be substituted for suggested plant materials.

<b>Table 14-02.2</b> <b>Recommended Plant Materials*</b>	
<b>Common Name</b>	<b>Genus</b>
<b>Deciduous Canopy Trees</b>	
Beech	Fagus
Birch	Betula
Ginkgo (male)	Ginkgo
Hackberry	Celtis
Hard Maple	Acer
Hickory	Carya
Honeylocust (Thornless Cultivars only)	Gleditsia
Hophornbeam (Ironwood)	Ostrya

**Table 14-02.2**  
**Recommended Plant Materials\***

Hornbeam (Blue Beech)	Carpinus
Linden	Tilia
Oak	Quercus
Planetree (Sycamore)	Platanus
<b>Deciduous Ornamental Trees</b>	
Dogwood (Tree Form)*	Cornus
Downy Serviceberry	Amelanchier
Flowering Crabapple (Disease Resistant Cultivars)	Malus
Flowering Plum (Tree Form)	Prunus
Flowering Pear	Pyrus
Hawthorn	Crataegus
Hornbeam	Carpinus
Magnolia	Magnolia
Redbud	Cercis
Rose of Sharon	Hibiscus
<b>Evergreen Trees</b> (Dwarf, Globe, Pendulous species/Cultivars are not permitted)	
Douglas Fir	Pseudotsuga
Fir	Abies
Hemlock	Tsuga
Pine*	Pinus
Spruce	Picea
<b>Narrow Evergreens</b> (Dwarf, Globe, Pendulous species/Cultivars are not permitted)	
Arborvitae (Columnar Giant, Douglas)	Thuja
Column Hinoki Cypress	Chamaecyparis
Juniper (Blue Columnar Chines)	Juniperus
Pyramidal Red Cedar	Cedrus
Pyramidal White Pine	Pinus
Swiss Stone Pine	Pinus
<b>Large Shrubs</b>	
<b>Deciduous</b>	
Cotoneaster	Cotoneaster
Dogwood (Shrub Form)*	Cornus
Euonymus	Euonymus
Forsythia	Forsythia
Lilac	Syringa
Mock-Orange	Philadelphus
Ninebark	Physocarpus
Privet	Ligustrum
Spirea	Spiraea
Sumac	Rhus
Viburnum	Viburnum
Witchhazel	Hamamelis
Buckthorn	Rhamnus
<b>Evergreens</b>	
Juniper (Hetz, Pfitzer, Savin)	Juniperus
Yew (Pyramidal Japanese)	Taxus
<b>Small Shrubs</b>	
<b>Deciduous</b>	
Barberry	Berberis
Boxwood	Buxus

**Table 14-02.2**  
**Recommended Plant Materials\***

Burning Bush	Euonymus
Cotoneaster	Cotoneaster
Currant*	Ribes
Euonymus*	Euonymus
Forsythia	Forsythia
Holly*	Ilex
Hydrangea	Hydrangea
Lilac	Syringa
Potentilla*	Potentilla
Privet	Ligustrum
Quince	Chaenomeles
Viburnum*	Viburnum
Weigela	Weigela
<b>Evergreens</b>	
Arborvitae (Globe/Dwarf)	Thuja
False Cypress	Chamaecyparis
Fir	Abies
Juniper (Low Spreading)*	Juniperus
Pine	Pinus
Spruce	Picea
Yew (Globe, Spreading, Upright)*	Taxus

\*See Section 14-02 (c) (4) Undesirable Plant Materials

5 (4) **Undesirable Plant Materials.** Use of the following plant materials (or their clones and cultivars) is not encouraged because they split easily, their wood is brittle and breaks easily, their roots clog drains and sewers or they are unusually susceptible to disease or insect pests. These plant materials may be permitted to remain in their natural setting but cannot be transplanted. The Planning Commission, however, may allow trees from this list when associated with an appropriate ecosystem, such as a wetland area.

10

**Table 14.02.3**  
**Undesirable Plant Materials**

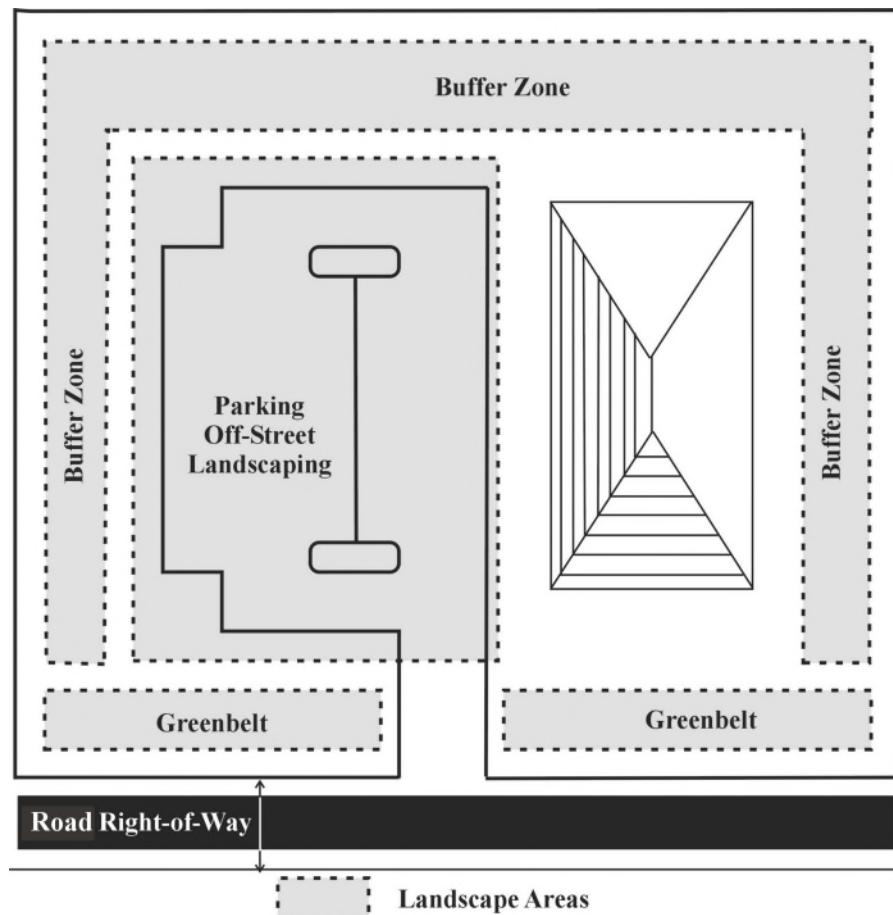
Common Name	Genus Species
American Elm	Ulmus Americana
Ash (All Varieties)	Fraxinus
Box Elder	Acer Negundo
Eastern Red Cedar	Juniperus Virginiana
European Barberry	Berberis Thunbergii
Horse Chestnut (Nut Bearing)	Aesculus Hippocastanum
Northern Catalpa	Catalpa Speciosa
Poplar (All Varieties)	Populus
Soft Maple (Silver)	Acer Sacharinum
Tree of Heaven	Ailanthus Altissima
Willow	Salix Spp.

(e) **Greenbelts.** Greenbelts, where required, shall conform to the following standards:

5 (1) Non-residential uses requiring site plan approval shall provide a twenty (20) foot wide greenbelt along the lot's frontage, adjacent to and outside of the road right-of-way. A minimum of one (1) deciduous canopy tree shall be planted for each thirty (30) lineal feet, or portion thereof, of required greenbelt length.

10 (2) Multiple family developments and site condominiums shall provide greenbelts in accordance with *Section 14-02 (i)(1)*.

15 (3) For the purpose of calculating required plant material, greenbelt length shall be measured between the side lot lines along the site's frontage, following the road right-of-way. The frontage calculation shall include any openings for driveways, sidewalks, or easements with the number of trees. Fractions of trees shall be rounded upward to the nearest whole number.



(4) All existing trees six (6) inches in diameter at breast height within the greenbelt shall be preserved, except where necessary to install vehicular, pedestrian, and utility access points.

5 (5) Greenbelt plantings shall be designed to simulate a natural appearance and include a variety of plant species.

10 (6) A required greenbelt may be interrupted only to provide for pedestrian or vehicular access.

(7) All tree plantings within the greenbelt shall be located to not block vision for motorists and to avoid overhead utility lines.

15 (f) **Buffer Zones**

In order to provide protective screening and buffers between abutting land uses, a landscaped buffer zone, and wall, fence or berm shall be provided by the applicant in accordance with this subsection. This subsection applies to any application for site plan, or condominium approval. These regulations do not apply along a lot line where the abutting land use is separated by a public road right-of-way or private road easement.

25 Table 14-02.4 identifies where and what type of buffer is required between land uses. Table 14-02.5 details the minimum landscape elements that must be included in each type of buffer zone.

Proposed Use	Proposed Use Adjacent to:				
	Single Family District	Multiple Family District	Manufactured Home Park District	Business District	Industrial District
Single Family Residential <sup>1</sup>	None	B	B	B	A
Multiple Family Residential	B	C	B	B	A
Manufactured Home Park	B	B	C	B	A
Commercial <sup>2</sup>	B	B	B	C	B
Industrial	A	A	A	B	None

Footnotes:

<sup>1</sup> Applies to applications for subdivision plat or condominium site plan approval only.

<sup>2</sup> Includes non-residential special land uses in a Residential District.

Table 14-02.5 Description Of Required Buffer Zones			
Buffer Zone	Minimum Width	Wall/Berm	Minimum Plant Materials
A	50 feet	Required See (1) & (2) below	1 deciduous tree, 2 evergreen trees and 4 shrubs per each 20 linear feet along the property line, rounded upward.
B	20 feet	Required See (1) & (2) below	1 deciduous tree, 1 evergreen tree and 4 shrubs per each 30 linear feet along the property line, rounded upward.
C	10 feet	None Required	1 deciduous or evergreen tree or 4 shrubs per each 20 linear feet along the property line, rounded upward.

(1) **Minimum Requirements for Berms.** Where required or provided, berms shall conform to the following standards:

5

- a. Required berms shall be at least three (3) feet above grade elevation, and shall be constructed with slopes no steeper than one (1) foot vertical for each four (4) feet horizontal (twenty-five percent (25%) slope), with at least a two (2) foot flat area on the top. The Planning Commission may modify the height requirement in cases where sufficient room does not exist to construct a three (3) foot high berm.

10

- b. Required berms shall be planted with grass, ground cover, or other suitable live plant material to protect it from erosion so that it retains its height and shape.

15

(2) **Minimum Requirements for Walls and Fences.**

20

- a. **Location.** Required walls shall be located on the lot line except in the following instances:
  - 1. Where underground utilities interfere with placement of the wall on the property line, the wall shall be placed on the utility easement line located nearest the property line.
  - 2. Where located adjacent to a side road, the wall shall be set back eight (8) feet from the side property line. The area between the wall and the property line shall be landscaped in accordance with the greenbelt provisions set forth previously.

25

5                   b. **Openings for Access.** Walls shall be continuous except for approved pedestrian or vehicular connections.

10                 c. **Substitution.** As a substitute for a required wall, the Planning Commission may, in its review of the site plan, approve the use of other existing or proposed natural or man-made landscape features (such as evergreens spaced ten (10) feet on center) that would produce substantially the same results in terms of screening, durability, and permanence.

15                 d. **Wall Specifications**

20                 1. Required obscuring walls shall be six (6) feet in height, and shall be constructed of the materials that are architecturally compatible with the materials used on the facade of the principal structure on the site.

25                 2. Masonry walls shall be erected on a concrete foundation which shall have a minimum depth of forty-two (42) inches and shall not be less than four (4) inches wider than the wall to be erected.

30                 3. The Planning Commission may require brick or decorative facing with the same or complementary materials as the main building on one (1) or both sides of the wall.

25                 e. **Fence Specifications**

30                 1. Fences erected for screening purposes shall be a minimum of six (6) feet in height, and shall be constructed of redwood, cedar, or No. 1 pressure-treated wood, with posts sunk into the ground at least three (3) feet.

35                 2. Chain link fences shall not be permitted for screening purposes.

(g) **Off-Street Parking.** Off-street parking lots shall provide the following landscaping:

(1) All off-street parking lots containing greater than twenty (20) spaces shall provide the following landscaping within the parking lot envelope,

described as the area including the parking lot surface and extending eighteen (18) feet from the edge of the parking lot.

a. One (1) canopy tree shall be required for each ten (10) parking spaces, provided that in no case less than two (2) trees shall be provided.

b. A minimum of one-third (1/3) of the trees required shall be placed within landscape islands in the interior of the parking lot.

10 (2) Landscaped areas shall be protected with curbing or other means to prevent overhang encroachment of vehicles.

15 (3) When visible from a street or service drive, landscape shall shield views of parked cars from passing motorists and pedestrians. Screening shall be provided by a continuous row of shrubs along the front of the parking lot.

(4) Landscape islands shall meet the requirements listed in Table 14-02.6.

**Table 14-02.6**  
**Parking Lot Island Requirements**

<b>Minimum Size</b>	150 square feet; 75 square feet if irrigated
<b>Minimum Width</b>	10 feet
<b>Required Depth</b>	2 feet shorter than adjacent parking space
<b>Required Radii</b>	Minimum 10 feet at ends facing main circulation aisles, minimum 1 foot for others

20 (5) When off-street parking and loading of a non-residential use abuts a Residential District, the parking lot and loading area shall be screened from the Residential District by a solid, ornamental masonry wall at least six (6) feet tall meeting the requirements of **Section 14-02 (f)(2)d**. In lieu of a wall, the Planning Commission may permit or require one (1) evergreen tree planted every ten (10) feet along the mutual property boundary, in addition to the landscape plant materials required in **Section 14-02 (f)**.

25

30 (6) Whenever possible, parking lot landscaping shall be designed to improve the safety of pedestrian and vehicular traffic, guide traffic movement, and improve the appearance of the parking area. Landscaping shall be installed such that, when mature, it does not obscure traffic signs or lighting, obstruct access to fire hydrants, interfere with adequate sight

distance for motorists, nor disrupt drainage patterns on the site or adjacent properties.

5 (7) Landscaping shall be dispersed throughout the parking lot in order to break up large expanses of pavement and help direct smooth traffic flow within the lot.

10 (h) **Detention and Retention Basins.** Detention and retention basins shall provide the following landscaping:

15 (1) Plantings shall be provided a rate of one (1) tree and ten (10) shrubs per fifty (50) linear feet of basin perimeter as measured along the top elevation of the basin bank.

20 (2) Basins shall be designed to not require fencing whenever possible by utilizing a gradual slope not to exceed 5:1. If fencing is unavoidable the use of ornamental fencing shall be used with appropriate landscaping to provide attractive views to the basin.

25 (3) To the extent possible, basin configuration shall be incorporated into the natural topography of the site and shall not be permitted in the front yard. Where these requirements are not practical, the basin shall be shaped to emulate a natural formed 'free form' depression and shall be part of the natural landscape and open space system of the site.

30 (4) The edge of the basin shall consist of sculptured landforms to filter and soften views of the basin.

35 (5) Plantings shall replicate a natural environment. Trees and shrubs shall be clustered around the basin and contain a variety of plant material.

(6) Trees must be planted above the freeboard line of the basin. Shrubs planted below the freeboard line of the pond must be tolerant of wet or moist soil conditions. The location of plant material shall consider the need to provide access for and minimize disruption of plant material during routine basin maintenance.

(i) **Residential Landscaping.** Multiple family developments and site condominiums shall provide the following landscaping:

5

10

15

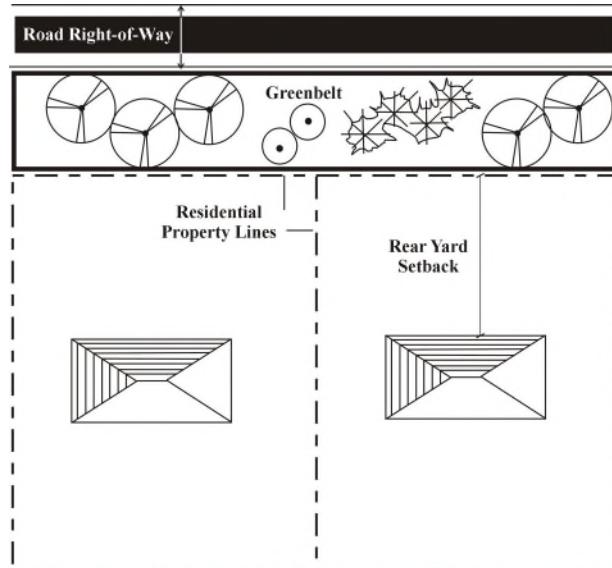
20

25

30

35

(1) A thirty (30) foot wide greenbelt shall be provided along the site frontage adjacent to and outside of the road right-of-way. A minimum of one (1) deciduous canopy tree and one (1) evergreen tree shall be planted for each thirty (30) lineal feet, or portion thereof, of required greenbelt length. The greenbelt requirement applies to all roadways around the perimeter of the site and any proposed internal collector roads that will not have individual unit driveway approaches. The greenbelt requirement does not apply to proposed internal roadways that serve to provide frontage and driveway access to individual units.



(2) Front yard landscaping for individual units shall be provided at a rate of two (2) deciduous canopy trees for every unit.

(3) Cul-de-sacs with islands shall be planted at a rate of one (1) canopy tree, or two (2) ornamental trees, per one thousand (1,000) square foot area. Fractions of trees shall be rounded upward to the nearest whole number.

(4) Cul-de-sacs with islands, site entrances, and boulevard medians shall be landscaped with species tolerant of roadside conditions. The landscape plan shall take into consideration sight distance, size of planting area, location of pathways, maintenance of adequate overhead clearance, accessibility to fire hydrants, visibility of approved signs, and compatibility with the visual character of the surrounding area.

(j) **Landscaping of Rights-of-Way.** Public rights-of-way located adjacent to required landscaped areas and greenbelts shall be planted with grass or other suitable live ground cover, and shall be maintained by the owner or occupant of the adjacent property as if the rights-of-way were part of the required landscaped areas or greenbelts.

5 (k) **Modification of Landscape Requirements.** The Planning Commission may reduce or modify the location of the landscape requirements contained in this Section based upon a determination that the landscaping required in this Section will not be necessary or effective in meeting the intent of this Article. In making such a determination, the following shall be considered:

10 (1) Topographic features or other unique features of the site create conditions such that strict application of the landscape regulations would result in a less effective screen than an alternative landscape design.

15 (2) Parking, vehicular circulation, or existing or planned land use are such that required landscaping would not enhance the site or result in the desired screening effect.

20 (3) The public benefit intended by the landscape requirements could be better achieved with a plan that varies from the strict requirements of the Ordinance.

25 (4) The intent to comply with the requirements has been demonstrated by the applicant with alternatives considered by the applicant prior to the Planning Commission consideration of modification to requirements.

30 (l) **Installation and Maintenance.** The following requirements shall be observed where installation and maintenance of landscape materials is required:

35 (1) **Installation.** Landscaping shall be installed in a sound, professional manner to ensure the continued growth of healthy plant material.

(2) **Protection from Vehicles.** Landscaping shall be protected from vehicles through use of wheel stops or other means. Landscape areas shall be elevated above the pavement to a height adequate to protect the plants from snow removal, salt, and other hazards.

(3) **Maintenance.** Required landscaping (including berms, greenbelts, buffer zones, walls, woodlots, trees, lawns and ground cover) shall be maintained in a healthy, neat, and orderly appearance, free from refuse and debris. All unhealthy and dead plant material shall be replaced in the next

5 appropriate planting period. The landscape plan shall indicate the individual(s) or business(es) who will be responsible for continued maintenance of the landscaping. Those charged with this responsibility shall also be responsible for maintenance of adjacent landscaped areas in public rights-of-way. Tree stakes, guy wires, and tree wrap must be removed after one (1) year.

10 (4) **Irrigation.** The method or irrigation must be specified. Irrigation equipment is not permitted within the right-of-way.

15 (m) **Treatment of Existing Plant Material.** The following regulations shall apply to existing plant material:

20 (1) **Utilization of Existing Elements in the Landscape Design.** In instances where healthy plant material exists on a site prior to its development, the Planning Commission may permit substitution of such plant material in place of the requirements set forth previously in this Section, provided the substitution is in keeping with the spirit and intent of this Section and this Article in general. Existing hedges, berms, walls, or other landscape elements may be used to satisfy the requirements set forth previously, provided that such existing elements are in conformance with the requirements of this Section.

25 (2) **Preservation of Existing Plant Material.** Site plans shall show all existing trees which are located in the portions of the site that will be built upon or otherwise altered, and are six (6) inches or greater in diameter at breast height. Trees shall be labeled "To Be Removed" or "To Be Saved" on the site plan.

30 (3) In the event that healthy plant materials which are intended to meet the requirements of this Article are cut down, damaged or destroyed during construction, the removed plant material shall be replaced.

## 35 **Sec. 14-03 Outdoor Lighting**

(a) **Intent.** The intent of this Section is to protect the health, safety and welfare of the public by recognizing that buildings and sites need to be illuminated for safety, security and visibility for pedestrians and motorists. To do so, this Section provides standards for various forms of lighting that will: minimize

5 light pollution; maintain safe nighttime driver performance on public roadways; preserve the restful quality of nighttime by eliminating intrusive artificial light and lighting that unnecessarily contributes to “sky glow,” reduce light pollution and light trespass from light sources onto adjacent properties; conservation of electrical energy; and curtail the degradation of the nighttime visual environment.

10 (b) **Applicability.** The requirements of this Section shall apply to any light source that is visible from any property line, or beyond, for the site from which the light is emanating. The Township Planner may review any building or site to determine compliance with the requirements under this Section.

15 Whenever a person is required to obtain a building permit, electrical permit for outdoor lighting or signs, special land use approval, or site plan approval, the applicant shall submit sufficient information to enable the Township Planner and/or Planning Commission to determine whether the proposed lighting will comply with this Section.

20 (c) **Submittal Requirements.** The following information must be included for all site plan submissions and where site plan approval is not required, some or all of the items may be required by the Township Planner prior to lighting installation:

25 (1) Location of all freestanding, building mounted, and canopy light fixtures on the site plan and building elevations.

(2) Photometric grid overlaid on the proposed site plan indicating the overall light intensity throughout the site (in footcandles).

30 (3) Specifications and details for the type of fixture being proposed including the total lumen output, type of lamp, and method of shielding.

(4) Use of the fixture proposed.

35 (5) Any other information deemed necessary by the Township Planner to determine compliance with provisions of this Section.

(d) **Lighting Standards.** Unless exempted under *Section 14-03 (e)*, all lighting must comply with the following requirements:

---

(1) **Exterior Lighting.** All exterior lighting including free-standing, canopy, pole, and building mounted, shall be fully shielded and directed downward to prevent off-site glare.

5 (2) **Intensity.** The intensity of light within a site shall not exceed ten (10) footcandles within any part of the site and one (1) footcandle at any property line, except where it abuts a Residential District or use where a maximum of 0.5 footcandles is permitted. The only exception is with gas station canopy and automobile dealership lighting, where a maximum of twenty (20) footcandles is permitted within the site but the above requirements shall apply to intensity at the property line.

10 (3) **Fixtures**

15 a. Metal halide fixtures shall be used in an effort to maintain a unified lighting standard throughout the Township and prevent “sky glow.”

20 b. The Planning Commission may approve decorative light fixtures as an alternative to shielded fixtures when it can be proven that there will be no off-site glare and the proposed fixtures will improve the appearance of the site.

25 (4) **Pole Height.** The maximum height of parking lot light fixtures shall be fifteen (15) feet.

30 (5) **Hours of Operation.** Except where used for security purposes, all outdoor lighting fixtures, existing or hereafter installed and maintained upon private property within Business or Industrial Districts shall be turned off between 11:00 p.m. and sunrise, except when used for commercial and industrial uses, such as in sales, assembly and repair areas, where such use continues after 11:00 p.m. but only for so long as that use continues.

35 (6) **Luminous Tube and Exposed Bulb Lighting**

a. Luminous tube and exposed bulb florescent lighting is prohibited as an architectural detail on all buildings, e.g. along the roof line and eaves, around windows, etc. The Planning Commission may approve

internally illuminated architectural bands when it can be shown that the treatment will enhance the appearance of the building.

5                   b. Luminous tube and exposed bulb flourescent lighting is permitted as part of a sign meeting the requirements of *Article 17* of this Ordinance.

(7) **Other Lighting**

10               a. The internal illumination of building-mounted canopies is prohibited.

15               b. Indirect illumination of signs, canopies and buildings is permitted provided a maximum one hundred twenty-five (125) watt bulb is utilized and there is no glare.

20               c. The use of laser light source, search lights or any similar high intensity light for outdoor advertisement or entertainment is prohibited.

25               d. Lighting shall not consist of or have the appearance of movement or flashing components.

(8) **Installation and Operation Cost.** The cost of installing and operating approved roadway lighting on any public road shall be through a financial method approved by the Township Board or by the Livingston County Road Commission. The costs of all other lighting systems shall be borne by the developer/property owner.

(e) **Exceptions**

30               (1) **Considerations.** The Planning Commission may waive any of the provisions stated in *Section 14-03(d)* when, after a request for an exception has been made and reviewed, the Planning Commission determines that such an exception is necessary for the lighting application. Requests for an exception shall be made to the Planning Commission and shall include, but not be limited to, a description of the lighting plan, a description of the efforts that have been made to comply with the provisions of these requirements, and the reasons an exception is necessary. In reviewing a request for exception, the Planning Commission shall consider safety, design, and other factors deemed appropriate by the Planning Commission, and in particular the following:

5

- a. The new or replacement luminaire is a full-cutoff luminaire when the rated output of the luminaire is greater than one thousand eight hundred (1,800) lumens.

10

- b. If a lighting recommendation or regulation applies, the minimum/maximum illuminance specified by the recommendations or regulation is used.
- c. If no lighting recommendation or regulation applies, the minimum illuminance adequate for the intended purpose is used, giving full consideration to safety, energy conservation, glare, and minimizing light trespass.

15

- d. For roadway lighting, a determination is made that the purpose of the lighting installation or replacement cannot be achieved by installation of reflectorized roadway markers, lines, warnings or informational signs, or other passive means.

20

- e. Adequate consideration has been given to conserving energy and minimizing glare, light pollution, and light trespass.

25

**(2) Uses.** The following are exempt from the lighting requirements of this Section, except that the Township Planner may take steps to eliminate the effects of the below exempted items when deemed necessary to protect the health, safety, and welfare of the public:

30

- a. Sports fields.
- b. Swimming pools.
- c. Holiday decorations.
- d. Window displays without glare.

35

- e. Shielded pedestrian walkway lighting.
- f. Soffit lighting.
- g. Residential lighting with no off-site glare.

- h. Street lights.
- i. Lighting of government flags.

5

(Ord. #243, 8/1/08)

## Sec. 14-04 Waste Receptacles and Enclosures

10 Receptacles, including waste receptacles, waste compactors, and recycling bins shall be designed, constructed, and maintained according to the requirements of this Section. Waste receptacle location and details of construction shall be shown on site plans. A change in receptacle location or size shall require modification to the enclosure, as warranted by this Section. The requirement to provide a waste receptacle may be waived by the Planning Commission if the applicant provides documentation that the development will not necessitate a waste receptacle.

15

20 (a) Waste receptacles shall be located in the rear yard or non-required side yard unless otherwise approved by the Planning Commission. Waste receptacles shall be as far as practical, and in no case be less than twenty (20) feet from any Residential District and located so that they are not easily damaged by the refuse device. The location and orientation of the waste receptacle and enclosure shall minimize the potential for the waste receptacle to be viewed from a public road or adjacent Residential Districts.

25 (b) Waste receptacles shall be easily accessed by refuse vehicles without potential of damaging the building or automobiles parked nearby.

30 (c) The receptacle base shall be constructed of six (6) inches of reinforced concrete pavement. The base shall extend six (6) feet beyond the front of the waste receptacle pad or gate to support the front axle of a refuse vehicle.

35 (d) Waste receptacles shall meet the following requirements:

(1) Each waste receptacle shall have an enclosing lid or cover.

(2) Waste receptacle enclosures shall be enclosed on three (3) sides with a berm or wall meeting the requirements of subsection (3), below, and with a gate on the fourth side. A gate shall not be required if the opening of the

enclosure is not visible from the public road or a Residential District, as determined by the Planning Commission. A gate must be maintained in operable and sanitary condition and must be lockable.

5 (3) The enclosure shall be a wall constructed of brick, concrete block or a wooden enclosure provided the lumber is treated to prevent decay with a minimum height of six (6) feet or at least one (1) foot higher than the receptacle, whichever is higher, and spaced at least three (3) feet from the receptacle. Suggested timber materials include Cedar, No. 2 Cedar rough sawn seasoned, Redwood, No. 2 Common Finish (S4S), Douglas Fir-larch or Southern Pine. Posts shall be set in concrete forty-two (42) inches below grade. Posts shall be either six by six (6 x 6) inch pressure treated wood or three (3) inch diameter galvanized steel posts.

10

15 (4) Bollards or similar protective devices may be installed at the opening to prevent damage to the enclosure.

20 (5) Wherever the enclosure wall is visible to a public road or residential district, it shall be screened with evergreen shrubs or other suitable landscape screening.

## Sec. 14-05 Mechanical and Electrical Equipment

25                   Mechanical and electrical equipment, such as blowers, ventilating fans, generators, transformers, and air conditioning units, must be attached to or within ten (10) feet of the main building and be placed no closer than twenty (20) feet to adjoining properties. Ground mounted equipment will be screened with landscaping or a screening wall. Roof mounted equipment will be screened in accordance with *Section 14-01(d)(3)*.

## Sec. 14-06 Public Utilities

35 All developments will be required to connect to public utilities at the time of construction, if available. If public utilities are not available at the time of construction the development must be designed to accommodate future connection to the system upon availability.