

**§ 525 Landscaping.**

A. General Provisions. The following general provisions shall apply to the installation and design of landscapes:

1. All land areas not covered with buildings, parking, or other impervious surfaces shall be landscaped with suitable materials. Landscaping shall consist of trees, shrubs, ground cover, perennials, and annuals singly or in common as well as other inanimate materials such as rocks, water, sculpture, art, walls, fences, and paving materials.
2. A landscape design shall be provided as part of site plan and subdivision submissions in accordance with Article VIII. Every applicant for subdivision or site plan approval shall comply with the minimum standards as set forth in this section.
3. The Board of Jurisdiction may require additional landscaping to create an appropriate landscaping scheme for the site given the nature of the site and the proposed development.
4. Where subdivisions only are applied for, the minimum standards shall apply only to street trees and to common open space and areas proposed to be dedicated to the public.
5. All landscape plants shall be typical in size and weight for their species and shall conform to the standards of the American Association of Nurserymen for quality and installation.
6. Plants with pervasive root systems shall not be located where they may cause damage to drainage pipes or other underground utilities and storm water management facilities and should generally be no closer than 10 feet measured horizontally.
7. All plants shall be tolerant of specific site conditions. The use of indigenous species is strongly encouraged. Exotic, non-native invasive plant species shall not be permitted.
8. Visual screening is required to buffer all trash enclosures, above ground propane tanks and other similar structures as identified by the Zoning Officer. [Ord.1585-99, 9/7/1999]

B. Landscape Design Guidelines.

1. Landscaping shall be conceived holistically and be designed to achieve a thorough integration of the various elements of site design, including building and parking placement, the natural features of the site and the preservation of pleasing or aesthetic views. Landscaping shall be used to accent and complement the form and type of building proposed.
2. In the landscape design of sites, areas shall be designated for retaining existing trees and the replacement of trees cleared from the site in accordance with §541.
3. Landscaping shall be located to provide effective climatic control. The east and west walls of a building should be the most heavily vegetated to shade for summer sun and the north to northwest area for winter prevailing winds. The southerly

facing side of a building should be shaded from summer sun but open for solar gain during the winter.

4. Plant's susceptibility to disease, their colors, textures, shapes, blossoms, and foliage characteristics shall be considered in the overall design of a landscape plan.
5. Local soil conditions and water availability shall be considered in the choice of landscaping.
6. In the design process, the eventual maturity of the plant shall be considered for its effect on circulation patterns, solar access, site lighting, drainage, emergency access and relationship to buildings and the streetscape.

C. Street Trees.

1. Location. Street trees shall be installed on both sides of all streets in accordance with an approved landscape plan. Trees shall be spaced evenly along the street between the curb and sidewalk. Where the distance between the curb and sidewalk is less than 5 feet, sidewalks should be placed in a public access easement outside of the right-of-way to create a planting strip at least 5 feet wide to facilitate street tree growth. In commercial areas with wider sidewalks that extend to the curb, trees shall be placed in tree wells with root guard systems. Such tree wells shall have sufficient soil volume to support tree growth as follows:

<u>Tree Size at Maturity (Height in feet)</u>	<u>Soil Volume (in cubic feet)</u>
Large trees (45'+)	200
Medium-sized trees (30'-45')	150
Small trees (to 30')	100

Areas under sidewalks may be used to meet the soil volume requirement provided no more than 50% of the volume is located under such hard paving.

2. Spacing. When trees are planted at predetermined intervals along streets, spacing shall depend on tree size.

<u>Tree Size at Maturity (Height in feet)</u>	<u>Planting Interval (in feet)</u>
Large trees (45'+)	40
Medium-sized trees (30'-45')	30
Small trees (to 30')	20

Trees may be planted closer together in order to avoid interference with utilities, roadways, sidewalks, sight easements, and street lights.

3. Street tree type. Tree type may vary depending on overall effect desired but as a general rule, all trees shall be large deciduous trees except as needed to achieve special effects. Tree selection shall be approved by the Board in accordance with Tables 5.4, 5.5 and 5.6. Alternate selections may be approved at the discretion of the Board.

**Table 5.4 Recommended Small Street Trees.**

<b>Botanical Name</b>	<b>Common Name</b>	<b>Minimum Planting Size</b>
<i>Acer campestre</i>	Hedge Maple	2½ -3" cal.
<i>Acer ginnala</i>	Amur Maple	2½ -3" cal.
<i>Amelanchier x hydrida 'Cumulus'</i>	Shadblow 'Cumulus'	2-2½" cal.
<i>Acer buergeranum</i>	Trident Maple	2½ -3" cal.
<i>Crataegus phaenopyrum x. fastigiata</i>	Washington Hawthorne	2½ -3" cal.
<i>Crataegus viridis</i>	Green Hawthorne	2½ -3" cal.
<i>Magnolia x lobneri 'Merrill'</i>	Merrill Magnolia	10'-12'
<i>Malus baccata</i>	Siberian Crabapple	3"-3½" cal.
<i>Malus x zumi 'Calocarpa'</i>	Zumi Crabapple	3"-3½" cal.
<i>Syringa reticulata</i>	Japanese Tree Lilac	10'-12'

**Table 5.5 Recommended Medium Street Trees.**

<b>Botanical Name</b>	<b>Common Name</b>	<b>Minimum Planting Size</b>
<i>Acer rubrum 'Northwood'</i>	Northwood Red Maple	2½ -3" cal.
<i>Acer rubrum 'Scanlon'</i>	Scanlon Red Maple	3"-3½" cal.
<i>Acer saccharum 'Goldspire'</i>	Goldspire Sugar Maple	3"-3½" cal.
<i>Celtis bungeana</i>	Bunge Hackberry	2½ -3" cal.
<i>Cladratis lutea</i>	Yellowwood	2-2½" cal.
<i>Carpinus caroliniana</i>	American Hornbeam	2½ -3" cal.
<i>Malus baccata 'Manchurian'</i>	Manchurian Crabapple	3"-3½" cal.
<i>Phellodendron amurense</i>	Amur Corktree	2½ -3 ½" cal.
<i>Tilia cordata x. 'Whitehouse'</i>	Whitehouse Linden	3"-3½" cal.

**Table 5.6 Recommended Large Street Trees.**

<b>Botanical Name</b>	<b>Common Name</b>	<b>Minimum Planting Size</b>
<i>Acer rubrum</i> 'October Glory'	October Glory red maple	3"-3½" cal.
<i>Acer rubrum</i> 'Red Sunset'	Red Sunset red maple	3"-3½" cal.
<i>Celtis occidentalis</i> 'Magnifica'	Hackberry	3"-3½" cal.
<i>Fraxinus americana</i> 'Autumn Purple'	Autumn purple ash	3"-3½" cal.
<i>Ginkgo biloba</i> (male only)	Ginkgo	3"-3½" cal.
<i>Platanus acerifolia</i>	London Planetree	3"-3½" cal.
<i>Platanus occidentalis</i>	Sycamore	3"-3½" cal.
<i>Quercus coccinea</i>	Scarlet Oak	3"-3½" cal.
<i>Quercus marcocarpa</i>	Bur Oak	3"-3½" cal.
<i>Quercus phellos</i>	Willow Oak	3"-3½" cal.
<i>Quercus rubra</i>	Red Oak	3"-3½" cal.
<i>Sophora japonica</i> 'Regent'	Scholar tree	3"-3½" cal.
<i>Tilia x euchlora</i>	Crimean linden	3"-3½" cal.
<i>Tilia tomentosa</i> 'Green Mountain'	Silver linden	3"-3½" cal.
<i>Ulmus parvifolia</i>	Chinese elm	3"-3½" cal.
<i>Zelkova serrata</i> 'Village Green'	Japanese zelkova	3"-3½" cal.

4. **Planting Specifications.** All trees shall have a minimum caliper as noted in the appropriate table in this section unless otherwise exempted. Street trees shall be substantially uniform in size and shape, and have straight trunks. Trees shall be properly planted and staked in accordance with the Lawrence Township Engineering Standards. Provision shall be made by the developer for regular watering and maintenance until they are established. Dead or dying trees shall be replaced by the developer during the next suitable planting season.

- D. **Additional Recommended Trees.** Any of the trees noted in Tables 5.4, 5.5 and 5.6 may be used in the design of landscapes as well as their use as street trees. The following trees are recommended for site development purposes:

**Table 5.7 Additional Recommended Trees.**

<b>Botanical Name</b>	<b>Common Name</b>	<b>Minimum Planting Size</b>
<i>Acer palmatum</i>	Japanese Maple	6'-7'
<i>Acer saccharum</i>	Sugar Maple	3"-3 ½" cal.
<i>Betula pendula</i>	Weeping Birch	12'-14'
<i>Cedrus atlantica glauca</i>	Blue Atlas Cedar	6'-8'
<i>Cercidiphyllum japonicum</i>	Katsura-tree	3"-3 ½" cal.
<i>Cercis canadensis</i>	Eastern Redbud	6'-8'
<i>Cornus kousa</i>	Chinese Dogwood	2"-2 ½" cal.
<i>Crataegus crusgalli inermis</i>	Thornless Cockspur Hawthorn	2"-2 ½" cal.
<i>Cryptomeria japonica</i>	Cryptomeria	5'-6'
<i>Fagus grandifolia</i>	American Beech	3"-3 ½" cal.
<i>Fagus atropinicea</i>	Copper Beech	3"-3 ½" cal.
<i>Gleditsia triacanthos inermis</i>	Thornless Honeylocust	3"-3 ½" cal.
<i>Ilex opaca</i>	American Holly	6'-7'
<i>Koelreuteria paniculata</i>	Golden Rain Tree	2"-2 ½" cal.
<i>Liquidambar styraciflua</i>	Sweetgum	3"-3 ½" cal.
<i>Liriodendron tulipifera</i>	Tulip Poplar	2"-2 ½" cal.
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	8'-10'
<i>Oxydendrum arboreum</i>	Sourwood	6'-8'
<i>Picea abies (excelsa)</i>	Norway Spruce	5'-6'
<i>Picea omorika</i>	Serbian Spruce	5'-6'
<i>Pinus strobus</i>	White Pine	5'-6'
<i>Pinus thunbergiana</i>	Japanese Black Pine	5'-6'
<i>Pinus virginiana</i>	Virginia Pine	5'-6'
<i>Populus balsamifera</i>	Balsam Poplar	2 ½"-3" cal.
<i>Prunus cerasifera</i>	Flowering Plum	2 ½"-3" cal.
<i>Prunus serrulata</i>	White Cherry	2 ½"-3" cal.
<i>Pseudolarix kaempferi</i>	Golden Larch	8'-10'
<i>Pseudotsuga menziesii</i>	Douglas Fir	5'-6'

Botanical Name	Common Name	Minimum Planting Size
<i>Quercus acutissima</i>	Sawtooth Oak	3" -3 ½" cal.
<i>Quercus palustris</i>	Pin Oak	3" -3 ½" cal.
<i>Tilia cordata 'Greenspire'</i>	Greenspire Linden	3" -3 ½" cal..
<i>Tilia tomentosa 'Green Mountain'</i>	Silver Linden	3" -3 ½" cal.
<i>Tsuga canadensis</i>	Canadian Hemlock	5'-6'
<i>Ulmus americana 'Delaware'</i>	American Elm, 'Delaware'	3" -3 ½" cal.

E. Fall Planting Hazard. Certain trees have been identified as having a high degree of transplantation failure if planted during the Fall season. These should be noted on landscape plans as Spring planting season only. The Fall planting hazard trees include the following genus and in some cases particular species:

<i>Betula</i>	<i>Pyrus</i>
<i>Carpinus</i>	<i>Quercus, excluding Q. palustris</i>
<i>Crataegus Salix</i>	<i>Salix babylonica</i>
<i>Ilex opaca</i>	<i>Tilia tomentosa</i>
<i>Liquidambar styraciflua</i>	<i>Zelkova</i>
<i>Liriodendron tulipifera</i>	

F. Recommended Shrubs. The following shrubs are recommended for use in the Township:

**Table 5.8 Recommended Shrubs.**

Botanical Name	Common Name	Minimum Planting Size
<i>Abelia grandiflora</i>	Glossy Abelia	18"-24"
<i>Aronia arbutifolia brilliantissim</i>	Red Chokeberry	2'-3'
<i>Azalea delaware valley</i>	Delaware Valley Azalea	18"-24"
<i>Azalea exbury</i>	Exbury Azalea	18"-24"
<i>Azalea hino-crimson</i>	Hino-Crimson Azalea	18"-24"
<i>Azalea stewartsonia</i>	Stewartson Azalea	18"-24"
<i>Berberis julianae</i>	Wintergreen Barberry	18"-24"