

LANDSCAPE DESIGN GUIDELINES AND STANDARDS

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TABLE OF CONTENTS

Required Components of a Landscape Plan	1
Treating of Existing Vegetation	1
Recommended Locations and Amount of New Landscaping	2
Street Frontages	
Paved Areas	
Building FoundationsLandscaped Buffer Yards	
General Yard Areas	
Screening	
Vision Triangles and Easement	5
Recommended Sizes and Species of New Landscaping	5
Prohibited Species	5
Descriptions and Standards for Rain Gardens and Bioswales	14
General Installation for Landscaping and Buffer Yards	15
Deciduous Tree Planting Standard	16
Scoring Landscaping Proposals	17



Landscape Guidelines

The Plan and Architectural Review Commission reviews site and landscape plans for all new and expanded commercial, industrial, institutional, and multiple family housing projects. Landscaping beautifies the property and City, buffers land uses and unattractive structures, increases property values, conserves energy, and helps clean the air and water. The Commission adopted the following guidelines to assist developers, builders, and property owners in meeting the expectations for landscaping. The use of the term "must" below, reflects zoning ordinance requirements that are mandatory.

Required Components of a Landscape Plan

- A scale (e.g. 1 inch = 50 feet) a north arrow, a date, and an accurate representation of site conditions (e.g. property dimensions should be correct with all features drawn to scale).
- All areas to be left in green space and how they will be covered (e.g. grass, mulch, native vegetation).
- All trees over 4-inch caliper to be removed or portions of woods with such trees that are proposed for removal.
- All existing trees that are over 4-inch caliper or edges of woods with such trees.
- All existing trees and other plantings proposed to remain on site after construction, including proposed locations for barrier fencing or other ways to ensure their preservation.
- Location, species, size at time of planting, and size at maturity for proposed landscape plants.
- Adjacent streets, existing and proposed buildings, parking lots, loading areas, dumpsters, existing or proposed grades, outdoor storage areas, and mechanical units and utilities in relation to proposed plantings.
- Name, address, and phone number of both the person who prepared the plan and the property owner.

For simple projects, the Landscape Plan may be included on a map that also shows other proposed site improvements, like proposed buildings, signs, lighting, utilities, and grading.

Treatment of Existing Vegetation

Pre-existing landforms, terrain, and vegetation should be preserved as much as practical. This may be achieved by minimizing building construction and site modifications in areas not essential to project development. High quality, mature, and native trees and hedges should be retained where practical and should not be removed to facilitate commercial signage. Preservation of existing vegetation will reduce expectations for new landscaping, while major removal of existing vegetation may result in expectations for new landscaping greater than what guidelines normally suggest. In general, where large, high quality trees are proposed for removal on a landscape plan, the equivalent diameter of new tree should also be included in the plan (e.g. one maple with a 12-inch diameter trunk removed = planting of four 3-inch diameter hardwood canopy trees). Similarly, mature trees identified for preservation in the approved Landscape Plan but subsequently lost should be replaced by new trees of similar total diameter.

Mature trees identified for preservation on a Landscape Plan should be protected during construction by not allowing grading or equipment or vehicle storage in these areas and by

making all contractors aware of the preservation requirements. During construction, barrier fencing should generally be placed at the Critical Root Zone (CRZ) of the tree, as defined as a radius equivalent to 1.5 feet for every inch in trunk Diameter at Breast Height (DBH). For example, a tree with a trunk diameter of 12 inches has a Critical Root Zone radius of 18 ft.

The Urban Forestry Management Plan available from the City's Parks, Recreation and Forestry Department contains additional preservation guidance (see particularly the City's Terrace Tree Protection Guideline).

Recommended Locations and Amount of New Landscaping

New Landscaping planting should be provided on different parts of the site, as advised below;

- 1. Street Frontages. One deciduous tree must be planted for each 35 feet along each side of a street right of way, except where a clustered or wider spacing is allowed by the City Forester where traffic visibility, street lights, or utilities would be negatively affected. Street trees should be planted midway between the sidewalk and curb, or within 15 feet of the property line adjoining the street, but only if space is not available between the sidewalk and curb. Plantings may also be appropriate in any boulevard included in development plans. Street tree species should be approved by City Forester prior to installation, and should be based generally upon the information provided in Figures 3 below.
- 2. Paved Areas. One large deciduous tree and 60 points of additional landscaping (see Figure 3. Appropriate Plant Species and Sizes) should be planted for each 1,500 square feet of paved area, which is about the same amount of space required for five parking spaces plus a driveway. Plants should be installed in landscaped islands within the paved area of within 15 feet of the edges of the paved area. Landscaped islands or peninsulas must be provided at the end of every parking row, and interior islands should be provided for every 20 parking spaces in non-industrial projects. Species selection for paved area plantings is particularly important to ensure salt and snow tolerance (see Figure 3), proper growth habit and branch height, avoidance of messy fruit or other litter from the tree, and maintenance of good visibility within parking lots.

Figure 1: Parking Lot Landscaping Example



- 3. **Building Foundations.** 160 points of landscaping (see Figure 3) should be planted for each 100 lineal feet of exterior building wall that is visible from public right of way and adjoining sites. The graphic on the following page provides an example of building landscaping. Plants required by this section should be installed within 20 feet of the building foundation and generally should not include large deciduous trees.
- 4. Landscaped Buffer Yards. The City requires installation of a landscape buffer yard;
 - In yards where a B-1, B-3. or M-1 zoning district abuts a residential use or zoning districts;
 - Where off-street parking areas for five or more vehicles are within 15 feet of lot line, except where the next-door lot also contains parking within that same distance, and;
 - Where lots in new residential subdivision back onto a proposed major street.

Shrub and ground cover plantings

Medium and small tree plantings

Figure 2: Building Foundation Planting Example

The minimum width of a landscaped buffer yard is 10 feet (30 feet where subdivision lots back onto a major street), not including the area between the sidewalk and street curb. Buffer yards are generally required to be landscaped with two large deciduous trees, five small deciduous and/or evergreen trees, and twelve shrubs for every 100 feet of buffer yard length. The Plan Commission may instead approve substitute landscaping, a berm, an opaque fence or wall, or some combination. Fences or walls should generally not be used in street yards and must not be more than six feet tall in residential zoning districts and 10 ft tall in non-residential districts. A berm is mound of soil surfaced with a landscape ground cover, generally three to six feet above the surrounding grade and preferably of an undulating or otherwise visually interesting layout.

5. **General Yard Areas.** In other parts of the site, 200 additional points of landscaping (see Figure 3) should be planted for each 5,000 square feet of total site area. Most general yard area landscaping should be located in street facing yards. Except for approved natural areas, general yard areas should be seeded. Slopes should be a maximum of three vertical feet for every one horizontal foot. Where retaining walls are necessary, they should be designed to be less than 10 feet in height and constructed with stone or block, or terraced if the grade change is 10 feet or more.

6. Screening.

Dumpsters, outside storage area, loading docks, vending machines, and large or unsightly mechanical utility, or telecommunication units should be enclosed by a fence, wall, and /or landscaping designed to provide a total visual screen from public right of way and adjacent properties. Screening fences and walls surrounding outdoor storage areas should generally be between six and eight feet tall, while fences and walls designed to screen other areas should generally be between four and six feet tall. Future trimming of screen planting that limits their capacity to provide a total visual screen is not permitted. The base of freestanding signs- monuments and pylon signs- should also be landscaped. Low level plantings should be selected in sign areas.

7. Vision Triangles and Easements. No parts of plantings within 10 feet of ground level may extend over any public right of way. No new landscape plantings with a mature height over two and one-half feet or with branches at maturity that will be less than 10 feet may be placed in vision triangles near street intersections (see Section 19.51.010 of zoning ordinance in order to measure extent of vision triangle). Planting in utility easements is at risk of the property owner and may be subject to restrictions associated with the easement. Tree plantings should generally be at least 20 feet from street lights, 10 feet from hydrants, and six feet from gas and water valves.

Recommended Sizes and Species of New Landscaping

Figure 3 indicates the points that may be obtained for each plant within the five different categories of landscape plantings. Large deciduous tree, small deciduous tree, evergreen tree, shrub and perennial planting bed. When added together, the points obtained from each plant depicted in a Landscape Plan may be used to determine whether the landscaping point guideline above are being met. Figure 3 also provides a starting point for potential plant species selection within each of the five categories of plantings.

Figure 3 includes examples of appropriate tree and shrub species for different, unique applications. These include trees appropriate for placement under power lines.

For more information in selecting plants:

https://hort.extension.wisc.edu/article-topic/deciduous-selection/

For more information on prohibited plantings:

https://dnr.wisconsin.gov/topic/Invasives/RegulatedSpecies

Figure 3
Approved Street Tree List

STREET NAME	TREET NAME BOTANICAL NAME			
Aspen				
Quaking	Populus tremuloides	40-50	20-30	165
Buckeye				
Yellow	Aesculus Flava	60-75	30-50	150
Coffeetree				
Espreso Kentucky	Gymnocladus dioicus 'Espresso'	50	35	150
Kentucky	Gymnocladus dioicus	50-60	50-60	165
Cypress				
Bald	Taxodium distichum	50-70	20-30	150
Shawnee Brave Bald	Taxodium distichum 'Mickelson'	50	15-20	150
Elm				
Princeton	Ulmus americana 'Princeton'	60-80	40-60	150
Valley Forge	Ulmus americana 'Valley Forge'	80	60	150
Ginko				
Autumn Gold	Ginko biloba 'Autumn Gold'	40-50	25-30	150
Magyar	Ginko biloba 'Magyar'	40-50	20-25	150
Princeton Sentry	Ginko biloba 'Princeton Sentry'	40-50	15-20	150
Gum				
Black	Nyssa sylvatica	30-50	20-30	165
Hackberry	Celtis Occidentalis	40-60	40-60	165
Linden				
Boulevard American	Tilia americana 'Boulevard'	60	25	150
Sweet Street	Tilia americana 'Kromm'	50	25	150
Honey Locust	Gleditsia triacanthos	40-50	30-40	150
Maple				
Celebration	Acer x freemanii 'Celzam'	40-50	20-35	150
Sienna Glen	Acer x freemanii 'Sienna'	40-50	35-40	150
Sugar	Acer saccharum	50-75	50	165
Oak				
Burr	Quercus macrocarpa	70-80	75-90	165
Chinkapin	Quercus muehlengergii	50-60	50-60	165
Hybrid Swamp x Burr	Quercus x schuettei	75	70	165
Red	Quercus rubra	60-75	60-75	165
Planetree				
Exclamation London	Platanus x acerifolia 'Morton Circle'	60	45	150

Minimum size at time of planting - 2-inch trunk Diameter measure at 4ft. up

Approved Large Area Tree List

		LENGTH	POINTS
Populus tremuloides	40-50	20-30	165
Tilia americana	75-130	23-35	165
Fagus grandifolia	60-75	55-65	165
Betula papyrifera	50	35	165
Betula nigra	40-70	40-60	165
Betula alleghaniensis	40-60	40-50	165
Aesculus Flava	60-75	30-50	150
Juglans cinerea	40-60	40-60	165
Gymnocladus dioicus	50-60	50-60	165
Taxodium distichum	50-70	20-30	150
Taxodium distichum 'Mickelson'	50	15-20	150
Ulmus americana 'Princeton'	60-80	40-60	150
Ulmus americana 'Valley Forge'	80	60	150
Ginko biloba 'Autumn Gold'	40-50	25-30	150
Ginko biloba 'Magyar'	40-50	20-25	150
Ginko biloba 'Princeton Sentry'	40-50	15-20	150
Nyssa sylvatica	30-50	20-30	165
Liquidambar styraciflua 'Moraine'	40-45	25-30	150
Celtis Occidentalis	40-60	40-60	165
Carya ovata	80	40	165
Cercidiphyllum japonicum	40-60	20-35	150
Tilia americana 'McKSentry'	50-60	20-25	150
Gleditsia triacanthos	40-50	30-40	150
Acer rubrum	40-60	40-60	165
Acer x freemanii 'Sienna'	40-50	35-40	150
Acer saccharum	50-75	50	165
	Tilia americana Fagus grandifolia Betula papyrifera Betula nigra Betula alleghaniensis Aesculus Flava Juglans cinerea Gymnocladus dioicus Taxodium distichum Taxodium distichum 'Mickelson' Ulmus americana 'Princeton' Ulmus americana 'Valley Forge' Ginko biloba 'Autumn Gold' Ginko biloba 'Princeton Sentry' Nyssa sylvatica Liquidambar styraciflua 'Moraine' Celtis Occidentalis Carya ovata Cercidiphyllum japonicum Tilia americana 'McKSentry' Gleditsia triacanthos Acer rubrum Acer x freemanii 'Sienna'	Tilia americana Fagus grandifolia Fagus grandifolia 60-75 Betula papyrifera Betula nigra 40-70 Betula alleghaniensis 40-60 Aesculus Flava Juglans cinerea 40-60 Gymnocladus dioicus 50-60 Taxodium distichum Taxodium distichum 'Mickelson' Ulmus americana 'Princeton' Ulmus americana 'Valley Forge' 80 Ginko biloba 'Autumn Gold' Ginko biloba 'Princeton Sentry' 40-50 Nyssa sylvatica Liquidambar styraciflua 'Moraine' Celtis Occidentalis Cercidiphyllum japonicum 40-60 Tilia americana 'McKSentry' Gleditsia triacanthos 40-60 Acer rubrum 40-60 Acer rubrum 40-60 Acer x freemanii 'Sienna' 40-50	Tilia americana 75-130 23-35 Fagus grandifolia 60-75 55-65 Betula papyrifera 50 35 Betula nigra 40-70 40-60 Betula alleghaniensis 40-60 40-50 Aesculus Flava 60-75 30-50 Juglans cinerea 40-60 40-60 Gymnocladus dioicus 50-60 50-60 Taxodium distichum 50-70 20-30 Taxodium distichum 'Mickelson' 50 15-20 Ulmus americana 'Princeton' 60-80 40-60 Ulmus americana 'Valley Forge' 80 60 Ginko biloba 'Autumn Gold' 40-50 25-30 Ginko biloba 'Princeton Sentry' 40-50 20-25 Ginko biloba 'Princeton Sentry' 40-50 20-30 Liquidambar styraciflua 'Moraine' 40-45 25-30 Celtis Occidentalis 40-60 40-60 Carya ovata 80 40 Cercidiphyllum japonicum 40-60 20-35 Tilia americana 'McKSentry' 50-60

Magnolia				
Cucumbertree	Magnolia acuminata	50-80	35-60	150
Oak				
Black	Quercus Velutina	50-60	50-60	165
Burr	Quercus macrocarpa	70-80	75-90	165
Chinkapin	Quercus muehlengergii	50-60	50-60	165
Hybrid Swamp x Burr	Quercus x schuettei	75	70	165
Red	Quercus rubra 60-		60-75	165
Planetree				
Exclamation London	Platanus x acerifolia 'Morton Circle'	60	45	150
Redwood				
Dawn	Metasequoia glyptostroboides	75-100	15-25	150
Sycamore				
American	Platanus occidentalis	70-90	80	165
Tuliptree	Liriodendron tulipifera 70-80 35-45		35-45	150
Yellowwood	Cladrastic kentukea 30-50 40-50		165	

Minimum size at time of planting 2-inch trunk diameter measures 4 ft. up

Approved Medium-Small Street Tree List

STREET NAME	BOTANICAL NAME	HEIGHT	LENGTH	POINTS
Buckeye				
Early Glow	Aesculus glabra 'J.N. Select'	35	35	60
Mystic Ruby	Aesculus x bushii 'Aaron#1'	30-35	15-20	60
Cockspur Hawthorn Thornless			25-35	75
Crabapple				
Crab	Non-native			60
Prairie	Malus ioensis	15-20	15-20	75
Elm				
New Horizon	Ulmus 'New Horizon'	30-40	15-25	60
Ironwood	Ostrya virginiana	25	15	75
Lilac				
Ivory Silk Japanese	Syringa reticulata subsp. Reticulata	25	15	60
Maple				
Paper Barked	Acer griseum	20-30	20-30	60
State Street Miyabe's	Acer miyabei 'Morton'	50	40	60
Magnolia				
Royal Star	Magnolia stellata 'Royal Star'	10-15	10-15	60
Musclewood	Carpinus caroliniana	25-30	25-30	75
Red Bud, Eastern	Cercis canadensis	20-30	25-35	75
Serviceberry	Serviceberry			
Allegheny	Amelanchier laevis	25	15	75
Apple	Amelanchier x grandiflora	25-30	25-30	75
Autumn Brilliance	Amelanchier x grandiflora 'Autumn Brilliance'	20-25	20-25	60

Minimum size at time of planting

^{1 1/2-}inch trunk diameter measured at 4 ft. up

Approved Medium-Small Off-Street Tree List

STREET NAME	BOTANICAL NAME	HEIGHT	LENGTH	POINTS
Buckeye				
Early Glow	Aesculus glabra 'J.N. Select'	35	35	60
Mystic Ruby	Aesculus x bushii 'Aaron#1'	30-35	15-20	60
Crabapple				
Crab	Non-native			60
Prairie	Malus ioensis	15-20	15-20	75
Dogwood				
Golden Glory	Cornus mas 'Golden Glory'	15-25	15-25	60
Pagoda	Cornus alternifolia	15-25	15-25	75
Elm				
New Horizon	Ulmus 'New Horizon'	30-40	15-25	60
Ironwood	Ostrya virginiana	25	15	75
Lilac				
Ivory Silk				
Japanese	Syringa reticulata subsp. reticulata	25	15	60
Maple				
Paper Barked	Acer griseum	20-30	20-30	60
Striped	Acer pensylvanicum	20	15	60
Magnolia				
Royal Star	Magnolia stellata 'Royal Star'	10-15	10-15	60
Musclewood	Carpinus caroliniana	25-30	25-30	75
Red Bud, Eastern	Cercis canadensis	20-30	25-35	75
Serviceberry				
Allegheny	Amelanchier laevis	25	15	75
Apple	Amelanchier x grandiflora	25-30	25-30	75
Autumn Brilliance	Amelanchier x grandiflora 'Autumn Brilliance'	20-25	20-25	60
Seven Son Flower	Heptacodium miconioides	15-20	8-15	60

Minimum size at time of planting 1 1/2-inch trunk diameter measured 4 ft. up

Approved Native Conifer Tree List

COMMON NAME	BOTANICAL NAME	HEIGHT	LENGTH	POINTS
Balsam fir	Abies balsamea	40-60	15-25	55
Growth narrow, conical				
Eastern red cedar	Juniperus virginiana	30-40	8-20	55
Growth tree form				
Tamarack	Larix laricina	30-50	10-15	55
Growth conical, upright				
Northern white cedar	Thuja occidentalis	20-30	10-15	55
Growth tree form				
Canadian hemlock	Tsuga canadensis	20-45	15-25	55
Growth dense, conical				
Eastern white pine	Pinus strobus	50-80	20-40	55
Pyramidal in youth				
White spruce	Picea glauca	40-60	10-20	55
Broad, conical				
Jack pine	Pinus banksiana	35-50	20-30	55
Upright				
Black spruce	Picea mariana	20-50	20-30	55
Upright, narrow, conical				
Red pine	Pinus resinosa	50-80	20-25	55
Tree form				
All other Evergreens				40

Approved Landscape Plants

NATIVE - HERBACIOUS				
COMMON	LATIN	HEIGHT	BLOOM COLOR	POINTS
Lavender Hyssop	Agastache foeniculum	2-4'	Purple	
Nodding Onion	Allium cernuum	18"	Pink	
Sullivant's Milkweed (Prairie)	Asclepias sullivantii	3-5'	Pink	
Butterfly Milkweek	Asclepias tuberosa	2'	Orange	
New England Aster	Aster novae-angliae	5'	Purple/Pink	
Canada Milk Vetch	Astragalus canadensis	1-3'	Cream	
White Wild Indigo	Baptisia alba	4'	White	
Blue Wild Indigo	Baptisia australis	3-5'	Blue	
Cream False Indigo	Baptisia bracteata	1-2'	Cream	
Yellow Wild Indigo	Baptisia tinctoria	2-3'	Yellow	
Downy Wood Mint	Blephilia cilata	1-2'	Purple	
Pale Purple Coneflower	Echinacea pallida	3-5'	Purple	
Purple Coneflower	Echinacea purpurea	3-4'	Purple	
Rattlesnake Master	Eryngium yuccifolium	4'	White/Green	
	Helianthus			
Early Sunflower	helianthoides	3-5'	Yellow	
Prairie Alumroot	Heuchera richardsonii	2'	Green	
Round Headed Bush Clover	Lespedeza capitata	4'	White	
Rough Blazing Star	Liatris aspera	2-5'	Purple	
Michigan Lilly	Lilium michiganense		Orange	
Wild Bergamot	Monarda fistulosa	2-4'	Lavender	
Eastern Prickly Pear Cactus	Optuntia humifosa	6"	Yellow	
	Parthenium			
Wild Quinine	integrifolium	4'	White	
Smooth Penstemon	Penstemon digitalis	1-3'	White	
Large Flavored Departmen	Penstemon	4 21	Lavender	
Large Flowered-Penstemon	grandiflorus	1-3' 8'	Yellow	
Compass Plant	Silphium laciniatum			
Rosin Weed	Silphium integrifolium	4-6'	Yellow	
Spiderwort	Tradescantia ohiensis	2-4'	Blue	
Hoary Vervain	Vergenea stricta	2-4'	Blue	
NATIVE -				
GRASSES/SEDGES				
River Oats/Northern Sea Oats	Chasmanthium latifolium	3-4'	Grass	
1:::: Bi O:	Schizachyrium	0.00	0	
Little Blue Stem	scoparium	2-3'	Grass	
Prairie Dropseed	Sporobolus heterolepis	2-3'	Grass	
Side Oats Gramma	Bouteloua curtipendula	1-3'	Grass	

NATIVE - SMALL SHRUBS				
White Snowberry	Symphoricarpos albus	3-5'	White	35
Black Chokeberry	aronia melanocarpa	3-6'	White	35
Juneberry	amelanchier alnifolia	4-15'	White	35
Running Serviceberry	Amelanchier stolonifera	3-5'	White	35
Northern Bush Honeysuckle	Diervilla Ionicera	1-3'	Yellow	35
Pasture Rose	Rosa carolina	2'	Pink	35
New Jersey Tea	Ceanothus americanus	3'	White	35
Shrubby St. Johns Wort	Hypericum prolificum	4'	Yellow	35
Sweet Fern	Comptonia peregrina	2-5'	Green/Bronzey Brown	
Lead Plant	Amorpha canescens	3'	Purple	35
Shrubby Cinquefoil (Potentilla)	Dasphora fruticosa	204'	Yellow	35
All other shrubs				20

Minimum size at time of planting 2 feet in height or 2-gallon pot

Descriptions and Standards for Rain Gardens and Bioswales

Rain gardens and bioswales can serve both as landscaping and stormwater management features on a building site, where appropriately designed and sited.

A rain garden is a shallow, depressed garden that is designed and positioned on a site to capture stormwater runoff and allow for the infiltration of water back into the ground. Rain garden plants are carefully chosen for their ability to withstand moisture extremes and potentially high concentrations of nutrients and sediments that are often found in stormwater runoff. A well designed and maintained rain garden serves as an attractive component of an overall landscaping plan for a development site.

A bioswale is a linear, vegetative stormwater runoff conveyance system that is designed to store and infiltrate water from small storm events back into the ground and direct water from heavy rain events to appropriate storm sewer inlets or other management facilities. The flow of water being conveyed through a bioswale is slowed down, allowing for municipal storm systems to more effectively manage heavier ran events and help reduce the risk of flooding on or off-site. Water being infiltrated or conveyed via a bioswale is also filtered by the vegetation within it, generally improving both ground and surface water quality.

The installation of a rain garden or bioswale may contribute to the overall stormwater management plan for a development site and count toward meeting the City's landscaping guidelines in the same manner as that presented for "perennial planting bed" in Figure 3 above (20 points for every 20 sq. ft.), provided that:

- 1. Detailed plans are provided that show all proposed dimensions of the rain garden including length, width, depth, and slope of depression; location of the rain garden on the lot relative to hard-surfaced areas, downspouts, and site topography; characteristics of the soil underlying the rain garden or bioswale; description of planting media; the species, number, and size at the time of installation of all vegetation proposed for the rain garden or bioswale; and information of any other materials, (e.g., rocks) that will be used to line the rain garden of bioswale.
- 2. Installation is not proposed for areas where there is know soil contamination unless the rain garden is proposed to be constructed with an under-drain; where the characteristics of the soil would not allow for the proper infiltration of water into the ground; or where there are expected high levels of foot traffic.
- 3. The owner can demonstrate that the rain garden or bioswale will be properly maintained; kept free of trash, weeds debris, and dead or dying plants; any pipes associated with the garden will be inspected on an annual basis and kept free of debris; and by the beginning of every spring dead plant materials will be cut back or removed.
- 4. Bioswales and rain gardens must be generously (and appropriately) vegetated to qualify for landscaping points. Bioswales and rain gardens (or portions thereof) that are lined with turf and/or rocks do not include other vegetation will not qualify for landscaping points.
- 5. To serve as a component of an overall stormwater management plan for a site, detailed plans, calculations, and specifications meeting the City's stormwater management

ordinance are provided. Detailed plans should include the location and description of all other stormwater management facilities serving the site, particularly those to which any bioswale will be directed.

For further information on rain garden and bioswale design:

https://dnr.wisconsin.gov/sites/default/files/topic/Stormwater/RainGardenManualPrint.pdf

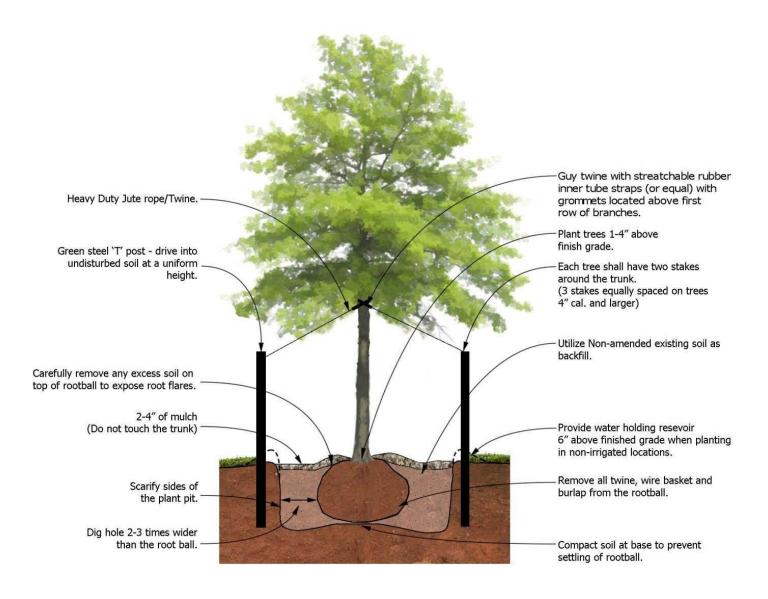
General Installation and Maintenance for Landscaping and Buffer Yards

Landscaping must be installed using landscape contracting industry standards available from landscape designers and nurseries. These include proper soil conditioning, removing any packing materials including wire cages, burlap, and string, and the placement of the root collar at or slightly above grade. A six-foot bark mulch radius around a tree is ideal, with the mulch no thicker than four inches in general and tapered to a depth of one inch at the base of the tree (the classic saucer shape). Rock mulch is discouraged around all planting areas. Figure 4 shall be proper planting and maintenance techniques for deciduous trees; techniques for evergreen trees and shrubs vary slightly, but the basic principles are similar.

All landscaping must be installed prior to building occupancy or operations, unless doing so would result in unsatisfactory plant survival. In this case, the City requires a site improvement deposit until landscaping is installed according to the plan.

All required landscaping should be continually maintained in a live state to meet its original function (e.g., screen plants not overly pruned). Maintenance must include replacement of dead or dying plants, regardless of when the plant dies. Replacement should occur within the same year in which a plant dies or the next spring.

Figure 4: Deciduous Tree Planting Standard



SCORING LANDSCAPING PROPOSALS

IMPORTANT: ADDITIONAL DOCUMENT (INCLUDING MAP) NEEDED DETAILING PREDEVELOPMENT CONDITIONS, SOILS AND VEGETATION - POINTS ASSIGNED FOR MATURE TREES 4" CALIPER AND OVER AND NOTABLES)

REQUIRED FOR PLANS

Scale: North Arrow Date Accurate Representation of Conditions

Inventory: Removed Tree over 4" caliper, and their associated woodlands, Existing Trees over 4" caliper

All trees and other plantings are to remain and must be protected in construction

Record: Large, high quality trees proposed for removal: Note: Equivalent diameter should be included in plan showing replacement of trees of similar quality and equivalent total diameter (4 x 4 diameter hardwood to replace 1 x 12 diameter hardwood either removed or lost in construction.

Green space: specify coverage - report mulch, etc.

Calculations may be completed by filling in the Orange Square below. All measurement in feet.

PAVED AREA						
Length	Width	Total Area	Required Points	NOTE: 1500 sq. ft. = 5 parking places		
1	98174	98174	3927	plus driveway. Tree islands each end of		
				20 parking spaces (4 trees) same		

	FOUNDATION AREA					
Length	Width	Total Area	Required Points	160 points per 100 lineal feet for		
1	98174	98174	3927	appropriate plantings within 20 feet of		
				visible foundation (shrubs, groundcover,		
				medium and small trees)		

			BUFFER	
Length	Width	Total Area	Required Points	160 points per 100 lineal feet for
1	98174	98174	3927	appropriate plantings within 20 feet of
				visible area (shrubs, groundcover,
				medium and small trees)

GENERAL YARDS					
Length	Width	Total Area	Required Points		
1	98174	98174	3927		

STREET Frontage & Total Trees Requirements						
	Street Frontage	Footage Per	Number of Trees per Street	Points		
	Length	Length		Gained		
Large Trees		35		0		
Native Large Trees		45		0		
Small Tree		35		0		
Native Small Tree		45		0		
POINTS PER PLANT Do not count the above Street Frontage Tree Requirements						

Туре	Size	Point	Number	Total	
Large Deciduous	Equal to or greater than 25 ft. 2" diameter @ chest	150			
Native	Equal to or greater than 25 ft. 2" diameter @ chest	165			
Small Deciduous	Less than 25 ft. 2" diameter @ chest	60			
Native	Less than 25 ft. 2" diameter @ chest	75			
Evergreen	10 to 4 feet tall	40			
Native	10 to 4 feet tall	55			
Shrub	2 foot or 2 gallons	20			
Native	2 foot or 2 gallons	35			
Perennial	20 points for 20 sq. ft.	20			
Native	20 points for 20 sq. ft.	35			
Note: Use with Whitewater Landscaping Guideline AND Nowak, M.			Number of Overall Points		
Beyond the Bird Feeder, WSObirds.org					

TOTAL REQUIRED	6167	
TOTAL POINTS PER PROPOSED PLAN		
If the maximum number of points can not be m the option to donate the difference to the White point under will be the equivalent of \$1.00.		