Date: xx January 2021

To: City of Stoughton Planning Department and Plan Commission

From: City of Stoughton Tree Commission

Subject: Proposed modifications of City Landscaping Ordinance

2439 County Rd A
Stoughton, WI 53589

During the Public Works Committee meeting held on August 15th, 2017, City of Stoughton Alderperson Majewski requested the "Review and update of the landscape point system for commercial development." Specifically, "asking if the landscaping planting points are current with other communities and <he> feels that the city is lacking in diversity when planting."

During the September 14th, 2017, Tree Commission Meeting, Public Works Director Herbert clarified the task to 'Discuss and Recommend changes to the Stoughton Municipal Zoning Ordinance: Appendix B'. Furthermore, "the Planning Department requested that the Tree Commission review the trees in this ordinance for the purpose of making sure the street trees planted meet the city standards."

The City of Stoughton Tree Commission, including the City Forester, reviewed the Ordinance (ARTICLE VI. - LANDSCAPING AND BUFFERYARD REGULATIONS) including the landscape point system (Sec. 78-603 and Table 78-603), Appendix B (LANDSCAPING CHARTS AND CHECKLISTS, Detailed Classification of Plant Species) and the associated text which refers to Appendix B (Sec. 78-611. - Classification of plant species).

Key decisions and proposed modifications from the review include:

1. The landscaping point system should not be changed. Modification of the point system (Sec. 78-603 and Table 78-603) is beyond the scope of the Tree Commission as landscaping points are critical components throughout Article VI. Changing the point system would require rewriting the entire Article VI and would require the City Zoning Administrator and City Plan Commission.
2. The species list (Appendix B) was reviewed and attached draft modified by:
    a. Reflecting current needs of the urban forest by demoting species with disproportionate representation in the urban forest (e.g. Acer spp).
    b. Removing invasive species.
    c. Removing disease prone or poor performing species.
    d. Simplifying the interpretation of the list by including landscaping points and removing cultivars, growth rate, form and adaptation/remarks fields. This was done in recognition of the knowledge of the landscape contractor conducting the planting and the immense breadth of potential information that could be included.
3. Table 78-611 should be removed to reduce redundancy with Appendix B.
4. The attached draft text for Sec. 78-611, which references Table 78-611 and Appendix B was modified to reflect changes above and to direct inquiries to the City Forester and/or the City Tree Commission instead of the Zoning Administrator.

Attached: Proposed Sec. 78-611 text.pdf
Proposed 78-611 Appendix B table.pdf

Proposed text modifications to Section 78-611

Sec. 78-611. - Classification of plant species.

For the purpose of this chapter, plant materials are classified into 13 groupings: "climax tree", "tall deciduous tree", "medium deciduous tree", "low deciduous tree", "tall evergreen tree", "medium evergreen tree", "low evergreen tree", "tall deciduous shrub", "medium deciduous shrub", "low deciduous shrub", "medium evergreen shrub", "low evergreen shrub", and non-contributory plants. Species suitable for landscaping use and compatible with Dane County climate and soil factors are listed in Appendix B. The City Forester and/or the City Tree Commission shall review proposals for, and the applicability of, species not contained in this list and is authorized to approve appropriate similar species.

Classification of Plant Species

Botanical Name	Common Name	Classification	Landscaping Points
Betula lutea RF	yellow birch	Climax Tree	75
Carya ovata RF	shagbark hickory	Climax Tree	75
Catalpa speciosa	northern catalpa	Climax Tree	75
Celtis occidentalis RF	common hackberry	Climax Tree	75
Ginkgo biloba	ginkgo	Climax Tree	75
Larix decidua	European larch	Climax Tree	75
Larix kaempferi	Japanese larch	Climax Tree	75
Larix laricina RF	tamarack	Climax Tree	75
Liriodendron tulipifera	tulip tree	Climax Tree	75
Metasequoia glyptostroboides	dawn redwood	Climax Tree	75
Platanus occidentalis	American sycamore	Climax Tree	75
Platanus x acerfolia	London planetree	Climax Tree	75
Taxodium distichum	bald cypress	Climax Tree	75
Ulmus hybrids	hybrid elm	Climax Tree	75
Ulmus japonica 'Discovery'	Discovery Japanese elm	Climax Tree	75
Ulmus wilsoniana 'Prospector'	Prospector elm	Climax Tree	75
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Aesculus flava	yellow buckeye	Tall Deciduous Tree	30
Aesculus glabra	Ohio buckeye	Tall Deciduous Tree	30
Aesculus hippocastanum	horse chestnut	Tall Deciduous Tree	30
Carya cordiformis RF	bitternut hickory	Tall Deciduous Tree	30
Carya illinoinensis	pecan	Tall Deciduous Tree	30
Fagus grandiflora RF	american beech	Tall Deciduous Tree	30
Fagus sylvatica	european beech	Tall Deciduous Tree	30
Gleditsia triacanthos f. inermis	thornless honey locust	Tall Deciduous Tree	30
Gymnocladus diocus	Kentucky coffeetree	Tall Deciduous Tree	30
Juglans nigra RF	black walnut	Tall Deciduous Tree	30
Liquidambar styraciflua	sweetgum	Tall Deciduous Tree	30
Prunus serotina RF	black cherry	Tall Deciduous Tree	30
Populus deltoides RF	Eastern cottonwood	Tall Deciduous Tree	30
Populus grandidenta RF	big-tooth aspen	Tall Deciduous Tree	30
Quercus alba RF	white oak	Tall Deciduous Tree	30
Quercus bicolor RF	swamp white oak	Tall Deciduous Tree	30
Quercus ellipsoidalis RF	northern pin oak	Tall Deciduous Tree	30
Quercus imbricaria	shingle oak	Tall Deciduous Tree	30
Quercus macrocarpa RF	bur oak	Tall Deciduous Tree	30
Quercus muehlenbergii	chinkapin oak	Tall Deciduous Tree	30
Quercus palustris	pin oak	Tall Deciduous Tree	30
Quercus robur	English oak	Tall Deciduous Tree	30
Quercus rubra RF	red oak	Tall Deciduous Tree	30
Quercus x macdenielli	Heritage oak	Tall Deciduous Tree	30
Quercus x schuettei	swamp-bur hybrid oak	Tall Deciduous Tree	30
Styphnolobium japonicum	Japanese pagoda-tree	Tall Deciduous Tree	30
Tilia americana RF	American basswood	Tall Deciduous Tree	30
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Aesculus x carnea	red horse chestnut	Medium Deciduous Tree	15
Betula nigra RF	river birch	Medium Deciduous Tree	15
Betula papyifera RF	white birch	Medium Deciduous Tree	15
Betula populifolia	grey birch	Medium Deciduous Tree	15
Carpinus betulus	European hornbeam	Medium Deciduous Tree	15
Cercidiphyllum japonicum	Katsuratree	Medium Deciduous Tree	15
Cladrastis kentukea	American yellowwood	Medium Deciduous Tree	15
Corylus colurna	Turkish filbert	Medium Deciduous Tree	15
Maclura pomifera 'White Shield'	osage-orange	Medium Deciduous Tree	15
Magnolia acuminata	cucumbertree	Medium Deciduous Tree	15
Nyssa sylvatica	black tupelo	Medium Deciduous Tree	15
Ostrya virginiana RF	ironwood	Medium Deciduous Tree	15
Prunus americana RF	Amur chokecherry	Medium Deciduous Tree	15
Prunus pennsylvanica RF	pin cherry	Medium Deciduous Tree	15
Quercus x warei	Regal Prince oak	Medium Deciduous Tree	15
Salix alba tristis	weeping willow	Medium Deciduous Tree	15

Botanical Name	Common Name	Classification	Landscaping Points
Tilia cordata	littleleaf linden	Medium Deciduous Tree	15
Ulmus parvifolia	lacebark elm	Medium Deciduous Tree	15
Zelkova serrata	Japanese zelkova	Medium Deciduous Tree	15
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Alnus incana	speckled alder	Low Deciduous Tree	10
Amelanchier arborea RF	downy serviceberry	Low Deciduous Tree	10
Amelanchier canedensis	shadblow serviceberry	Low Deciduous Tree	10
Amelanchier leavis	Allegheny serviceberry	Low Deciduous Tree	10
Amelanchier x grandiflora	apple serviceberry	Low Deciduous Tree	10
Carpinus caroliniana RF	musclewood	Low Deciduous Tree	10
Cersis canadensis	eastern redbud	Low Deciduous Tree	10
Cornus alternifolia	pagoda dogwood	Low Deciduous Tree	10
Cotinus obovatus	American smoketree	Low Deciduous Tree	10
Crataegus crus-galli var. inermis	thornless cockspur hawthorn	Low Deciduous Tree	10
Crataegus phaenopyrum	Washington hawthorn	Low Deciduous Tree	10
Crataegus viridis	Winter King hawthorn	Low Deciduous Tree	10
Maackia amurensis	Amur maackia	Low Deciduous Tree	10
Magnolia x loebneri "Merrill"	Dr. Merrill magnolia	Low Deciduous Tree	10
Magnolia x soulangiana	saucer magnolia	Low Deciduous Tree	10
Malus spp.	crabapple and apple	Low Deciduous Tree	10
Parrotia persica	Persian parrotia	Low Deciduous Tree	10
Prunus americana RF	American plum	Low Deciduous Tree	10
Prunus sargentii	Sargent chokecherry	Low Deciduous Tree	10
Prunus virginiana RF	chokecherry	Low Deciduous Tree	10
Ptelea trifoliata	wafer ash	Low Deciduous Tree	10
Syringa pekinensis	Peking lilac	Low Deciduous Tree	10
Syringa reticulata	Japanese tree lilac	Low Deciduous Tree	10
Viburnum prunifolium	blackhaw viburnum	Low Deciduous Tree	10
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Abies balsamea	balsam fir	Tall Evergreen Tree	40
Abies concolor	white fir	Tall Evergreen Tree	40
Picea abies	Norway spruce	Tall Evergreen Tree	40
Picea glauca RF	white spruce	Tall Evergreen Tree	40
Picea omorika	Serbian spruce	Tall Evergreen Tree	40
Pinus resinosa RF	red pine	Tall Evergreen Tree	40
Pinus strobus RF	eastern white pine	Tall Evergreen Tree	40
Thuja plicata	western red cedar	Tall Evergreen Tree	40
Tsuga canadensis RF	eastern hemlock	Tall Evergreen Tree	40
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Juniperus virgiana RF	eastern red cedar	Medium Evergreen Tree	20
Pinus bungeana	lacebark pine	Medium Evergreen Tree	20
Pinus cembra	Swiss stone pine	Medium Evergreen Tree	20
Pinus heldreichii	Bosnian pine	Medium Evergreen Tree	20
Pinus koraiensis	Korean pine	Medium Evergreen Tree	20
Pinus sylvestris	Scotch pine	Medium Evergreen Tree	20
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Juniperus chinensis	Chinese juniper	Low Evergreen Tree	12
Picea glauca var. "Densata"	Black Hills spruce	Low Evergreen Tree	12
Taxus cuspidata	Japanese yew	Low Evergreen Tree	12
Thuja occidentalis RF	white cedar	Low Evergreen Tree	12
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Caragana arborescens	Siberian peashrub	Tall Deciduous Shrub	5
Cephalanthus occidentalis	buttonbush	Tall Deciduous Shrub	5
Chionanthus virginicus	fringetree	Tall Deciduous Shrub	5
Cornus mas	Cornelian-cherry dogwood	Tall Deciduous Shrub	5
Cornus racemosa	gray dogwood	Tall Deciduous Shrub	5
Cornus sericea	red osier dogwood	Tall Deciduous Shrub	5
Cotoneaster multiflora	manyflowered cotoneaster	Tall Deciduous Shrub	5
Euonymus atropurpurea	eastern wahoo	Tall Deciduous Shrub	5
Exochorda racemosa	pearlbush	Tall Deciduous Shrub	5
Hamamelis virginiana	common witchhazel	Tall Deciduous Shrub	5
Hydrangea paniculata	panicled hydrangea	Tall Deciduous Shrub	5
Kolkwitzia amabilis	beautybush	Tall Deciduous Shrub	5

Botanical Name	Common Name	Classification	Landscaping Points
Ligustrum amurense	Amur privet	Tall Deciduous Shrub	5
Ligustrum vulgare	Cheyenne privet	Tall Deciduous Shrub	5
Magnolia stellata	star magnolia	Tall Deciduous Shrub	5
Physocarpus opulifolius	eastern ninebark	Tall Deciduous Shrub	5
Prunus tomentosa	Manchu cherry	Tall Deciduous Shrub	5
Prunus triloba	double flowering plum	Tall Deciduous Shrub	5
Rhus glabra	smooth sumac	Tall Deciduous Shrub	5
Rhus typhina	staghorn sumac	Tall Deciduous Shrub	5
Salix caprea	goat willow	Tall Deciduous Shrub	5
Shepherdia argentea	buffaloberry	Tall Deciduous Shrub	5
Staphylea trifolia	American bladdernut	Tall Deciduous Shrub	5
Syringa vulgaris	common lilac	Tall Deciduous Shrub	5
Vibernum opulus var. americana	American cranberrybush	Tall Deciduous Shrub	5
Viburnum dentatum	arrowwood viburnum	Tall Deciduous Shrub	5
Viburnum lantana	wayfaringtree viburnum	Tall Deciduous Shrub	5
Viburnum lentago	nannyberry	Tall Deciduous Shrub	5
Viburnum sieboldii	Siebold vibernum	Tall Deciduous Shrub	5
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Aronia arbutifolia	red chokeberry	Medium Deciduous Shrub	3
Aronia melanocarpa	black chokeberry	Medium Deciduous Shrub	3
Cornus alba	Tartarian dogwood	Medium Deciduous Shrub	3
Corylus americana	American hazelnut	Medium Deciduous Shrub	3
Cotoneaster divaricatus	spreading cotoneaster	Medium Deciduous Shrub	3
Cotoneaster lucidus	hedge cotoneaster	Medium Deciduous Shrub	3
Forsynthia spp.	forsythia species	Medium Deciduous Shrub	3
Ilex verticillata	winterberry	Medium Deciduous Shrub	3
Ligustrum obtusifolium regelianum	Regel's Border privet	Medium Deciduous Shrub	3
Myrica pensylvanica	bayberry	Medium Deciduous Shrub	3
Philadelphus x virginalis	mockorange	Medium Deciduous Shrub	3
Rhodotypos scandens	jetbead	Medium Deciduous Shrub	3
Rosa hugonis	Father Hugo rose	Medium Deciduous Shrub	3
Rosa rugosa cvs.	rugosa rose	Medium Deciduous Shrub	3
Rosa setigera	prairie rose	Medium Deciduous Shrub	3
Syringa meyeri	Korean lilac	Medium Deciduous Shrub	3
Viburnum carlesii	Koreanspice viburnum	Medium Deciduous Shrub	3
Viburnum cassinoides	witherod viburnum	Medium Deciduous Shrub	3
Weigela florida	old-fashioned weigela	Medium Deciduous Shrub	3
Aronia melanocarpa	black chokeberry	Medium Deciduous Shrub	3
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Amelanchier stolonifera	running serviceberry	Low Deciduous Shrub	1
Buxus microphylla koreana	Korean littleaf boxwood	Low Deciduous Shrub	1
Chaenomeles japonica alpina	dwarf Japanese flowering quince	Low Deciduous Shrub	1
Cotoneaster apiculatus	cranberry cotoneaster	Low Deciduous Shrub	1
Deutzia x lemoinei	Lemoine's deutzia	Low Deciduous Shrub	1
Diervilla lonicera	bush honeysuckle	Low Deciduous Shrub	1
Hydrangea arborescens	snowball hydrangea	Low Deciduous Shrub	1
Hypericum kalmianum	Kalm's St. John's wort	Low Deciduous Shrub	1
Mahonia aquifolium	oregongrape holly	Low Deciduous Shrub	1
Philadelphus coronarius	golden mockorange	Low Deciduous Shrub	1
Philadelphus x lemoinei	Mont Blanc mockorange	Low Deciduous Shrub	1
Potentilla fruticosa	bush cinquefoil	Low Deciduous Shrub	1
Prunus glandulosa	dwarf flowering almond	Low Deciduous Shrub	1
Rhus aromatica	fragrant sumac	Low Deciduous Shrub	1
Ribes alpinum	alpine currant	Low Deciduous Shrub	1
Rosa virginiana	Virginia rose	Low Deciduous Shrub	1
Salix repens argentea	silver creeping willow	Low Deciduous Shrub	1
Spiraea spp	spirea	Low Deciduous Shrub	1
Symphoricarpos rivularis	snowberry	Low Deciduous Shrub	1
Symphoricarpos orbiculatus	coralberry	Low Deciduous Shrub	1
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Juniperus chinensis	Chinese juniper	Medium Evergreen Shrub	5
Juniperus communis depressa	old field juniper	Medium Evergreen Shrub	5
Juniperus squamata	singleseed juniper	Medium Evergreen Shrub	5

Botanical Name	Common Name	Classification	Landscaping Points
Pinus mugo	mugo pine	Medium Evergreen Shrub	5
Taxus cuspidata	Japanese yew	Medium Evergreen Shrub	5
Taxus x media	Anglojapanese yew	Medium Evergreen Shrub	5
Thuja occidentalis	shrub arborvitae	Medium Evergreen Shrub	5
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Juniperus horizontalis	creeping juniper	Low Evergreen Shrub	3
Juniperus sabina	savin juniper	Low Evergreen Shrub	3
Rhododendron x kosteranum	Mollis hybrid azaleas	Low Evergreen Shrub	3
Rhododendron x "PJM Hybrid"	PJM hybrid rhododendron	Low Evergreen Shrub	3
Botanical Name	**Common Name**	**Classification**	**Landscaping Points**
Acer spp.	maple tree species	Non-contributory Plants	0
Fraxinus spp.	ash species	Non-contributory Plants	0
Pinus nigra	Austrian pine	Non-contributory Plants	0
Picea pungens	Colorado blue spruce	Non-contributory Plants	0

RF refers to reforestation. Marked species are native to Wisconsin, and recommended for reforestation efforts by the Wisconsin DNR. (See

The following sources were used in compiling the preceding lists of plant species:

Department of Natural Resources. Forest Trees of Wisconsin: How to Know Them. Madison, Wisconsin: Department of Natural Resources, 1987.

Hasselkus, E.R. A Guide to Selecting Landscape Plants for Wisconsin. Madison, Wisconsin: College of Agricultural and Life Sciences University of Wisconsin - Extension, Cooperative Extension Programs, 1982.

Hightshoe, Gary L. Native Trees, Shrubs, and Vines for Urban and Rural America: A Planting Design Manual for Environmental Designers. New York: Van Nostrand Reinhold, 1988.

Iowa State University. Landscape Plants for Iowa. Ames, Iowa: Iowa State University Cooperative Extension Service, May 1984.

This list was reviewed and modified by the Stoughton Tree Commission in 2020 referencing the following online sources:

Missouri Botanical Garden Plant Finder, http://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx, Accessed Nov-Dec, 2020

Wisconsin Department of Natural Resources, Terrestrial Invasive species - Regulated plants, https://dnr.wi.gov/topic/Invasives/species.asp?filterBy=Terrestrial&filterVal=Y&catVal=PlantsReg, Last revised: July 10, 2015.