# MEMORANDUM



TO: MEMBERS OF THE PLANNING COMMISSION
FROM: RICK MEADER, LANDSCAPE ARCHITECT
THROUGH: BARBARA MCBETH, AICP, CITY PLANNER
SUBJECT: WOODLAND ORDINANCE UPDATE
DATE: JANUARY 16, 2018

Periodically, the City staff reviews ordinance standards to determine the need for updates. The original Woodland Protection Ordinance was introduced in 1986 and the latest revision was made in 2009. The City's landscape architect, Rick Meader, and Environmental Consultant, Pete Hill, have worked with and reviewed the ordinance over the past two years and have made notes to address concerns encountered with enforcing the ordinance. Two amendments to the ordinance are proposed at this time to help provide better adherence to the goals of the ordinance.

- An ongoing concern has been with the Woodland Replacement Chart, which has allowed some trees that aren't consistent with the stated goal of the ordinance to "provide for the ... replacement ... of trees and woodlands..." (Sec 37-1(b)(1). Revisions are proposed to the Woodland Replacement Chart in Section 37 of the Code of Ordinances (Woodlands Protection) with these objectives in mind:
  - **Removal** from the chart of <u>species not native to Michigan</u> as allowed species for woodland replacements.
  - Addition to the chart of some <u>native species</u> to increase design flexibility and habitat enhancement.
  - **Restriction** of some plant genera listed in the chart to include just native species. For example, both the American Beech and European Beech are now allowed as we only show "Beech" on the table. The revision restricts the choice to just American Beech.

The proposed changes have been shared with our environmental consultants to get their opinion on <u>species that should and should not be part of the woodland replacement chart</u>. The changes are summarized here:

- Limit: Fagus (Beech) to American Beech (Fagus grandifolia)
- Limit: Juglans (Walnut) to Black walnut (Juglans nigra) and Butternut (Juglans cinerea)
- Add: Smooth shadbush (Amelanchier laevis)
- Add: Pagoda Dogwood (Cornus alternifolia)
- Add: Flowering Dogwood (Cornus florida)
- Remove: Yellowwood (*Cladrastis lutea*) not native to Michigan
- Remove: Sweetgum (Liquidambar styraciflua) not native to Michigan
- Remove: American Bladdernut (Staphylea trifolia) actually a shrub
- Remove: Bald cypress (Taxodium distichum) not native to Michigan
- Remove: Eastern Hemlock (*Tsuga canadensis*) wooly adelgid is negatively impacting it

In addition, the chart will be sorted by Botanical Name. Currently it is not sorted, making it more difficult to use than it needs to be.

The general hope and expectation in making these revisions is that the city will benefit from a greater number of native species planted around the city.

2. One other change proposed is to **limit the percentage of credits that can be gained through the use of native seed mixes on the site**. Currently, the ordinance allows 1 replacement credit per 70 square yards of seeded area, with no limit in the amount of credits gained through this provision. Most projects since this ordinance change have made only moderate use of this ordinance provisions, but two recent projects have made significant use of this allowance. One project used it for 32.9% of its woodland replacement credits and another used it for 32.5% of its woodland replacement credits provided. The ordinance has limits ranging from 70% for undersized canopy trees to 30% for small shrubs, but no limit on seed mixes.

The difficulty with seeding is that there is no way to verify the effectiveness of plantings of native seed mixes until 3 years after the seeding occurs, and few if any developments actually maintain naturally seeded areas to get the desired results. Most areas end up being mowed as lawn, or are allowed to be overtaken by weed, so there is little visual or ecological benefit from this replacement.

The change proposed here is to limit the percentage of woodland replacement credits that can be provided with seeding to a maximum of 5 percent. This would allow some areas that would be planted densely to provide true woodlands with a woodland mix to provide a more complete habitat than just a lawn seed mix. The same problems mentioned above related to maintenance would probably still be encountered, but as the shade density of the woods increased, it is likely that the woodland plants in the mix would have an advantage over weeds that need sunlight.

Both of these proposed changes are fairly minimal but will provide greater ecological benefits to the city without unduly penalizing residents or developers.

The draft ordinance amendments have been prepared by staff and reviewed by the City Attorney's Office. Once the public hearing is set, staff will share the draft ordinance with landscape architects who frequently do business with the City of Novi to solicit additional comment.

## Set Public Hearing

The Planning Commission is asked to review the proposed amendments at the February 7, 2018 meeting, and if acceptable, to set a Public Hearing for a subsequent meeting. At that time, the Planning Commission may make a recommendation to the City Council, who will ultimately approve or deny the amendment and may propose alterations as well. The attached staff version of the proposed amendment is subject to review and changes by City staff and/or the City Attorney's Office. If there are any questions, please contact Rick Meader at 248-735-5621 or rmeader@cityofnovi.org.

#### STATE OF MICHIGAN

#### COUNTY OF OAKLAND

#### **CITY OF NOVI**

#### ORDINANCE NO. 1X – XX.XXX

AN ORDINANCE TO AMEND THE CITY OF NOVI ORDINANCE CHAPTER 37 – WOODLANDS PROTECTION, TO MAKE THE WOODLAND TREE REPLACEMENT CHART MORE CONSISTENT WITH THE GOALS OF THE ORDINANCE, AND TO ALSO AMEND THE REFORESTATION CREDIT TABLE TO RESTRICT THE PERCENTAGE OF CREDITS THAT CAN BE GAINED WITH GROUNDCOVER SEEDING.

THE CITY OF NOVI ORDAINS:

<u>Part I.</u> That the City of Novi Woodlands Protection Ordinance is amended, by amending the Woodland Tree Replacement Chart and the Reforestation Credit Table in Section 37-8, in Chapter 37 - Woodlands Protection, to read as follows:

Common Name	Botanical Name
Red Pine_(1.5:1 ratio) (6' ht.)	Pinus resinosa
Paper Birch	Betula papyrifera
Yellow Birch	Betula alleghaniensis
Downy Serviceberry	Amelanchier arborea
Smooth Shadbush	Amelanchier laevis
Eastern Redbud	Cercis canadensis
Northern Hackberry	Celtis occidentalis
American Bladdernut	Staphylea trifolia
Pagoda Dogwood	Cornus alternifolia
Flowering Dogwood	<u>Cornus florida</u>
Kentucky Coffeetree	Gymnocladus diocus
Ohio Buckeye	Aesculus glabra
Black Cherry	Prunus serotina
Black Maple	Acer nigrum
Striped Maple	Acer pennsylvanicum
Mountain Maple	Acer spicatum
American Beech	Fagus <u>grandifolia</u>
Sugar Maple	Acer saccharum
Swamp White Oak	Quercus bicolor
Shingle Oak	Quercus imbricaria
Scarlet Oak	Quercus coccinea
Chinkapin Oak	Quercus muehlenbergii
Red Oak	Quercus rubra
White Oak	Quercus alba

Woodland Tree Replacement Chart

Burr Oak	Quercus macrocarpa
Black Oak	Quercus velutina
<u>Black</u> Walnut	Juglans <u>nigra</u>
<u>Butternut</u>	Juglans cinerea
Shagbark Hickory	Carya <del>ovata<u>ovate</u></del>
Pignut Hickory	Carya glabra
Bitternut Hickory	Carya cordiformis
Sweetgum	Liquidambar styraciflua
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus
Hemlock_(1.5:1 ratio) (6' ht.)	<del>Tsuga canadensis</del>
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Bald Cypress	Taxodium distichum
Yellowwood	Cladrastis lutea
Red Maple	Acer rubrum
American Basswood	Tilia americana
American Sycamore	Platanus occidentalis
Tupelo	Nyssa sylvatica
Tuliptree	Liriodendron tulipferatulipifera
Thornless Honeylocust	Gleditsia triacanthos inermis
American Hornbeam	Carpinus caroliniana
American Hophornbeam	Ostrya virginiana
Eastern Larch	Larix laricina

## NOTE: The chart will also be sorted by Botanical Name.

Reforestation Credit Table

Section 37 - Reforestation Credit Table

Туре	Minimum Size	DBH Credit Proposed Plant: Required Replacement	Max. Use Percentage
Canopy trees	1.5" caliper	2:1	70%
Evergreen trees	36" height	3:1	30%
Understory trees	1" caliper	5:1	30%
Large shrubs	30" height	6:1	30%
Small shrubs	18" height	8:1	30%
Perennials	1 gallon cont.	25:1	50%

	1		
	Per seed source		
Groundcover seeding	recommendations	<u>70 SY area:1</u>	<u>None 5%</u>

# <u>part II.</u>

<u>Severability</u>. Should any section, subdivision, clause, or phrase of this Ordinance be declared by the courts to be invalid, the validity of the Ordinance as a whole, or in part, shall not be affected other than the part invalidated.

## <u>part III.</u>

<u>Savings Clause</u>. The amendment of the Novi Code of Ordinances set forth in this Ordinance does not affect or impair any act done, offense committed, or right accruing, accrued, or acquired or liability, penalty, forfeiture or punishment, pending or incurred prior to the amendment of the Novi Code of Ordinances set forth in this Ordinance.

## PART IV.

**<u>Repealer.</u>** All other Ordinance or parts of Ordinance in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

## <u>part v.</u>

**Effective Date: Publication**. Public hearing having been held hereon pursuant to the provisions of Section 103 of Act 110 of the Public Acts of 2006, as amended, the provisions of this Ordinance shall be published within fifteen (15) days of its adoption by publication of a brief notice in a newspaper circulated in the City of Novi stating the date of enactment and effective date, a brief statement as to its regulatory effect and that a complete copy of the Ordinance is available for public purchase, use and inspection at the office of the City Clerk during the hours of 8:00 A.M. to 5:00 P.M., Local Time. The provisions of this Ordinance shall become effective seven (7) days after its publication.

MADE, PASSED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, ON THE \_\_\_ DAY OF \_\_\_\_\_, 2018.

ROBERT J. GATT, MAYOR

CORTNEY HANSON, CITY CLERK

Ayes:

Nays:

Abstentions:

Absent: