



CITY of NOVI CITY COUNCIL

Agenda Item 2
April 23, 2018

SUBJECT: Approval of Zoning Ordinance Text Amendment 18-125.24 to amend the City of Novi Woodlands Protection Ordinance at Section 37-8, Relocation of replacement of trees, within Article 1, In General, to update the Woodland Tree Replacement Chart in order to align it more closely with the stated goals of the ordinance, and to update the Reforestation Credit Table to increase the effectiveness of on-site replacement plantings.
FIRST READING.

SUBMITTING DEPARTMENT: Community Development Department – Planning *Baub*

CITY MANAGER APPROVAL: *AA*

BACKGROUND INFORMATION:

Periodically, the City staff reviews ordinance standards to determine the need for updates. The current Woodlands Protection ordinance was introduced in 2009 and there have been no updates to it since that time. The City's landscape architect, Rick Meader, has reviewed the ordinance over the past three years and has made notes to address concerns he and our environmental consultant, Environmental Consulting and Technology, Inc. (ECT), have had in enforcing the ordinance. Revisions are proposed to Section 37-8 of Section 37 Woodlands Protection with these objectives in mind:

- Removal of species not native to Michigan from the Woodland Tree Replacement Chart
- Addition of some native species not currently included in the Woodland Tree Replacement Chart
- Restriction of a provision in the Reforestation Credit Table that is difficult to manage and evaluate
- Addition of a provision in the Reforestation Credit Table that can be used to increase species diversity of replacement plantings

The proposed changes have been shared with thirteen landscape architects who frequently work on projects in Novi in order to seek impressions and comments. One of the two replies received has been incorporated in the revised Reforestation Credit Table.

The general hope and expectation in making these revisions is that the city will benefit from well-landscaped sites that are beneficial to our environment and community character, and that they will help on-site replacement plantings make a more beneficial ecological impact in keeping with the stated goals of the ordinance.

The Planning Commission held a Public Hearing on March 28, 2018, and provided a favorable recommendation to the City Council. The matter is ready to be considered by the City Council meeting for First Reading.

RECOMMENDED ACTION: Approval of Zoning Ordinance Text Amendment 18.283 to amend the City of Novi Woodlands Protection Ordinance (Section 37) at Section 37-8 within Article 1, In General, to update the Woodland Tree Replacement Chart and the Reforestation Credit Table in order to align the ordinance provisions more closely with the ordinance goals. **FIRST READING.**

**PROPOSED ORDINANCE
STRIKE-THROUGH LANGUAGE**

STATE OF MICHIGAN

COUNTY OF OAKLAND

CITY OF NOVI

ORDINANCE NO. 18 – 125.24

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 GROUND COVER SEEDING.

THE CITY OF NOVI ORDAINS:

Part I. 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:

Woodland Tree Replacement Chart

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

Burr Oak	Quercus macrocarpa
Black Oak	Quercus velutina
Black Walnut	Juglans nigra
Butternut	Juglans cinerea
Shagbark Hickory	Carya ovata
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.)	Tsuga canadensis
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 tulipifera
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

Type	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%

Tree, shrubs whips	24" height	50:1	5%
Groundcover seeding	Per seed source recommendations	70 SY area:1	None 5%

PART II.

Severability. 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.

PART III.

Savings Clause. 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.

Repealer. 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.

PART V.

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:

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INFORMATIONAL MEMO
APRIL 2, 2018



MEMORANDUM

TO: PETE AUGER, CITY MANAGER
FROM: RICK MEADER, LANDSCAPE ARCHITECT
THROUGH: BARBARA MCBETH, AICP, CITY PLANNER
SUBJECT: WOODLAND ORDINANCE UPDATE
DATE: APRIL 2, 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 current ordinance was adopted in 2009. The City's landscape architect, Rick Meader, and Environmental Consultant, Pete Hill, have worked with and reviewed the ordinance over the past three years and have made notes to address concerns encountered with enforcing the ordinance. Three amendments to the ordinance are proposed at this time to help provide better adherence to the goals of the ordinance.

1. 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 species not native to Michigan as allowed species for woodland replacements.
 - Addition to the chart of some native species 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 species that should and should not be part of the woodland replacement chart. 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*) - woolly 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 which are more beneficial to wildlife and the surrounding environment.

2. A second change proposed is to the Replacement Credit Table. This change would limit the percentage of replacement credits that can be gained through the use of native seed mixes on the site. Currently, the table allows 1 credit per 70 square yards of seeded area, with no limit in the amount of credits gained through this provision. Most projects have made only moderate use of this provision, if any, but two recent projects have made significant use of it. One used it for 32.9% of its woodland replacement credits and another used it for 32.5% of its credits. The table 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 weeds, so there is little visual or ecological benefit from this option.

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.

3. The final change is based on a recommendation made by a local landscape designer in response to the proposed changes above. A new category is being added to the Reforestation Credit Table. Projects would now be able to get 1 woodland replacement credit for planting 50 tree or shrub whips at least 24" tall. This is proposed because many desirable species of native trees and shrubs are not commonly available in nurseries at the larger sizes we require. This will allow much more species diversity to be included in replacement plantings. For now, we will restrict the use of this option to just 5% of the total credits required in order to see how it goes from a survival and verification standpoint.

All 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. The proposed changes were shared with landscape architects who frequently do business with the City of Novi to solicit additional comment. The 3rd change is a result of those comments.

Planning Commission Action:

On March 28, 2018, the Planning Commission reviewed the proposed amendments and held a Public Hearing. No changes to the proposed revisions were requested by the Planning Commission at that meeting.

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.

**DRAFT EXCERPT
PLANNING COMMISSION MEETING MINUTES
MARCH 28, 2018**



Draft Excerpt from
PLANNING COMMISSION
MINUTES
CITY OF NOVI
Regular Meeting
March 28, 2018 7:00 PM
Council Chambers | Novi Civic Center
45175 W. Ten Mile (248) 347-0475

CALL TO ORDER

The meeting was called to order at 7:00 PM.

ROLL CALL

Present: Member Anthony, Member Avdoulos, Member Lynch (Chair), Member Maday
Absent: Member Greco (excused), Member Howard (excused), Chair Pehrson (excused)
Also Present: Barbara McBeth, City Planner; Sri Komaragiri, Planner; Darcy Rechtien, Staff Engineer; Thomas Schultz, City Attorney; Peter Hill, Environmental Consultant

2. AMENDMENT TO WOODLAND TREE REPLACEMENT CHART

Public hearing for consideration of City Code Amendment in order to amend the City of Novi at Chapter 37 Ordinance No. 18.125-24, Woodland Protection Ordinance in order to modify the list of trees provided in the woodland replacement chart, and to set a maximum for credits received in the use of native seed mixes.

City Planner McBeth said you may recall that a few weeks ago, our Landscape Architect Rick Meader set this up for discussion at the meeting this evening. Unfortunately, he could not be here so our consultant Pete Hill from ECT is here and he is very familiar with this, of course, as it relates to the Woodland Ordinance and improvements to that. He has a brief summary of the changes and after that, we will ask you to hold the public hearing.

Environmental Consultant Pete Hill from ECT, Wetland and Woodland Consultants, said good evening, everybody, I'm here to fill in for Rick Meader. I have a quick summary for the Planning Commission and for anyone in the audience that may not have seen this and is interested.

Periodically, the City staff and consultants review ordinances and determine the needs for updates to those, so several amendments are being proposed at this time to the Woodland Ordinance. The amendments are pretty minor and pretty specific and they have to do with the Woodland Replacement Chart and the Reforestation Credit Table.

Basically, there is an ongoing concern in the Woodland Replacement Chart, which has allowed some trees to be planted in the City that aren't consistent with the stated goal of

the Woodland Ordinance. And just to review, I'm going to read the first purpose of the Woodland Ordinance, which is *"to provide for the protection, preservation, replacement, proper maintenance, and the use of the trees and woodlands located in the City in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives."* So again, these are pretty specific changes.

City Consultant Hill said the first is to the Woodland Replacement Chart, and it's to restrict some species currently on the list that are not native to Michigan. I might add that native plants are plants that were here before European settlement in the 1700s. Since that time, thousands of plants and animals have been introduced and become naturalized in an area. And these plants that some people may call invasive grow and, in some cases, push out native plants from the area. So that's the first goal of modifying the Woodland Replacement Chart, to restrict non-native plants that were on the list.

The second is to add several plants that are not on the list and are native and would be good options for planting. And the third is to remove from the chart species that are not native. I'll explain a little bit further.

The first is to restrict some plant genera that were on the list, and there are two examples, beech trees and walnut trees. The way it's currently written for Beech, it opens up for developers and landscape architects to propose other beech trees that are not native, so this would limit it to just the American Beech tree, which is what Rick Meader and we recommended.

The second, adding to the chart some native species that are not already on there, include – and I'm not going to leave the genus and species botanical names off because I don't think anyone wants to listen to them – Smooth Shadbush, Pagoda Dogwood, and Flowering Dogwood. Three species that are native to Michigan and are good options to be on this Woodland Replacement List.

And the third goal is to remove these species that aren't native to Michigan that are currently on this list, I'm just going to read them: Yellowwood would come off, Sweetgum would come off because they're both not native, American Bladdernut is actually a shrub and we did not want it on the tree list because it's more of a shrub-like plant, Bald Cypress is not native to Michigan, and Eastern Hemlock, although it's a great tree we're proposing pulling it off the list because of an insect pest that it's my understanding that once this pest reaches the tree within 4-10 years those trees will be dead, so we're proposing that that's not a good option for woodland replacement.

City Consultant Hill said moving on, the Reforestation Credit Table is the next piece that would be modified and it lists types of vegetation, the minimum seizes required when planting as woodland replacement credit, and the maximum percentage that a developer or landscape architect can use those plants for to meet their requirements.

So the first recommended change is to limit the percentage of credits that can be gained

through the use of native seed mixes on-site, not just trees but native seed mixes that create a seeded area – perhaps woodland, perhaps prairie. It's already on the Reforestation Credit Table, but there was no maximum percentage on the table for use. And actually that native seed mix option hasn't been used very much by developers. So the change that you see here is to take that line item from no maximum percentage of use to 5% of the total woodland replacement credits required. Currently, the ordinance allows one replacement credit per 70 square yards of seeded area but again there's no limit on the percentage of the overall woodland credits that could be met with that. But again, there aren't many projects coming through that are using that provision. And again, the change proposed here is to limit it to 5%.

And the final point is another change to the reforestation table, a line item has actually been added to it. A new category is being added that would now enable projects to get one woodland replacement credit for the planting of 50 tree or shrub whips at least 24 inches tall. So these are 2.5-inch diameter trees, these are ¾ inch or 1 inch diameter small pieces of vegetation.

City Consultant Hill continued I'd like to add that the proposed changes were shared with landscape architects that frequently do business in the City, and this change was actually recommended by one of those folks. And the reason is that the 2.5-inch replacement trees that are generally used by developers to meet these woodland replacement credit requirements, you can't get as many species or varieties of acceptable material in the 2.5-inch size, so this proposed change is for that reason that not all preferable species are available in nurseries in sizes that we require for tree replacement. So this will allow much more species diversity to be included in woodland replacement plantings. And for now, just like I was mentioning in the other category, we'll restrict this use option to 5% of the overall woodland replacement credit requirement. That's all I have.

Chair Lynch asked if there was anyone in the audience that wished to address the Planning Commission regarding this matter. Seeing no one, and seeing no correspondence, he turned it over to the Planning Commission for discussion.

Member Anthony said on the section where it allows a seeded area, what size area does that have to be to be equivalent to one tree credit?

City Consultant Hill said 70 square yards.

Member Anthony said 70 square yards, so a football field is 100 square yards, so that's really big.

City Consultant Hill said and that's probably why it hasn't been used much.

Member Anthony said it seems that would be a really unusual circumstance in which that would be used. And then same with the tree whips, is there something similar as far as the size area for that?

City Consultant Hill said there's not, just a quantity of 50 total whips equals one woodland replacement credit.

Member Anthony said so in dealing with the whip, what do you think the likelihood of

success of, say, half of those whips making it to three years?

City Consultant Hill said it's true that some of them die, but the City will be covered in that there will be a two-year maintenance guarantee through the developer for all vegetation, including the woodland replacement and that would include the whips.

Member Anthony said that's all I have, those were the only things that caught my eye, but other than that, that was really good work that you guys did on this. And with that, I'd be prepared to make a motion.

Member Avdoulos said I had the same questions as Member Anthony, especially with the 50 whips and how they would be allocated on the piece of property. I guess if it's one replacement tree and then you have 50, you don't have to combine them into one area and you could spread them out and use it that way.

I like the fact that we are also getting some of the landscape architects that are working with the City to help make recommendations. I think we were doing that all along throughout the years when we get recommendations so that's a good thing to at least provide in our ordinances because that's what the professionals are going to be using so there's no issue related to that. That's all of my comments.

Chair Lynch said I have one other comment. Are you comfortable now that everything is out of the chart that's non-native to Michigan right now? When you say native, some of the natives are Ohio, Illinois, into that region – just native to Michigan is the only thing that's on the Woodland Replacement Chart, correct?

City Consultant Hill said correct, the bad ones have been honed out and a couple good ones have been added.

Chair Lynch said so this will give us a higher probability of fully thriving and not dying off after five or ten years. I appreciate your efforts.

Motion made by Member Anthony and seconded by Member Avdoulos.

ROLL CALL VOTE TO RECOMMEND APPROVAL TO CITY COUNCIL MADE BY MEMBER ANTHONY AND SECONDED BY MEMBER AVDOULOS.

Motion to recommend approval to City Council of the Amendment to the City of Novi Ordinance Chapter 37 – Woodlands Protection Ordinance No. 18.125-24, Woodland Tree Replacement Chart. Motion carried 4-0.