

Passed
9/15/15

Notes on Village of Whitehouse Tree Planting Master Plan

Tree Commission Tree Planting Master Plan

In 2015 the Village of Whitehouse Tree Commission has prepared a Tree Planting Master Plan for the village. The plan lays out what species of trees to plant in each location along the village rights-of-way.

The Village Benefits

Trees are the only public asset in the village that increase in value over time. Trees of the largest stature, on balance, live the longest lives. So, to minimize tree planting expenses, the Village should plant the largest possible tree that can thrive in each location.

Trees enhance property values for a street. Studies have also shown that large trees in front of residences are correlated with lower crime rates for such neighborhoods, when compared with neighborhoods of equivalent value and similar demographics. Sociological studies show that tree-lined streets are correlated with overall higher mental health. Shoppers linger longer and are willing to spend more in shopping areas with trees incorporated.

Trees serve their sites by lowering the cooling, and often the heating, energy demand for the nearby houses. Demand for yard-watering is also reduced.

For all these benefits, trees are a value to a community. To derive their highest possible value, it is important to choose the correct trees for a location with careful consideration for each tree's tolerances.

Village Operations

Whitehouse Tree Ordinance #10-2007 states that the Tree Commission shall establish and recommend species and varieties of trees and may prepare a plan for the Village tree resources. Village policy should be to check the plan first, then order the species called for in the area where planting is happening.

When planting opportunities arise, the Village staff can refer to the Master Tree Planting Plan and see the species to specify along with their planting location. The biodiversity analysis is already done in the production of the master plan, so the staff can be confident that attention to the planting design is thoughtful and reasonable. The planting plan groups species of large, medium, and small trees for each segment.



White Oak in Whitehouse, Ohio



Cedar of Lebanon in Whitehouse, Ohio

So, if wires or a narrow tree-lawn prevent using the large tree specified, the Village can indicate the use of an appropriate medium or small tree.

Guiding Principles

Pests and diseases can spread easily if a large population of like trees are closely planted. For example, some oak rusts are spread through mycorrhizal connections in roots, and emerald ash borer expansion was accelerated by single-species plantings in landscape designs.

ODNR Forestry Urban Forestry Program has developed guidance based on the twin goals of efficient tree management and biological drivers of tree health.

Species diversification is a valuable strategy for limiting losses in case of weather, insect, fungal, bacteriological, or viral threats. This plan follows a pattern of separating trees of the same species by 6 segments planted in other species; trees in the same genus are separated by 4 segments in other genera; and trees in the same family are separated by 2 segments using other plant families. This way, Whitehouse will be planted in a design that assures

diversity and minimize opportunity for pests.

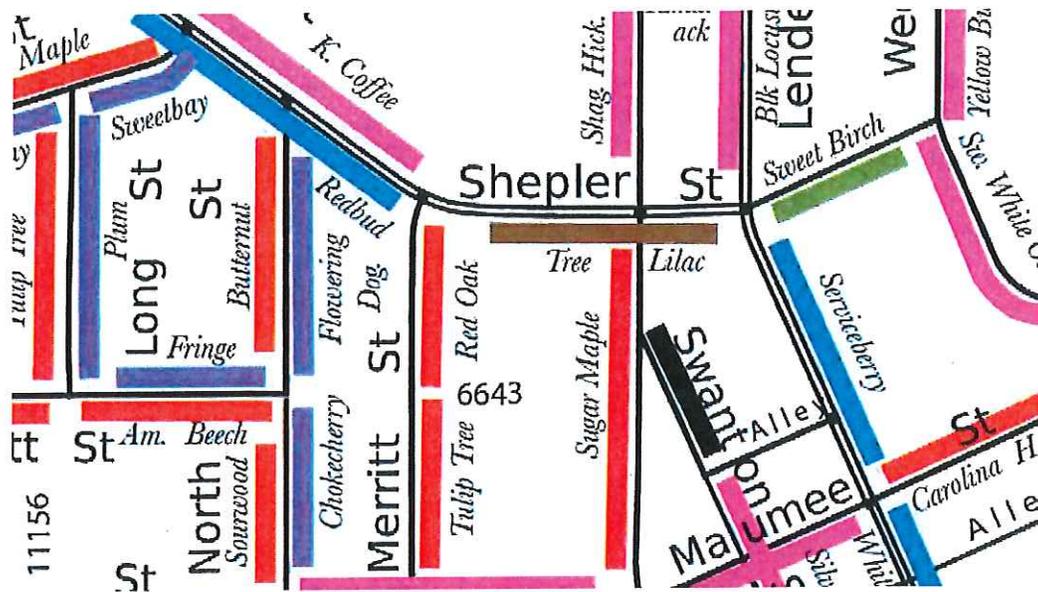
The Ohio Division of Forestry, through its Urban Forestry Program, has provided a table of trees by mature growth size that indicates which are more delicate and which will be robust in various growth conditions. By investigating the village street rights-of-way block by block, members of the Tree Commission have assessed the existing site quality for tree vitality.

By following the species isolation principles, the tree-site quality principles, and the principle of highest benefit from largest tree described above, the Tree Commission has prepared the Tree Planting Master Plan for Whitehouse.

Plan Documents

The plan is presented in two forms. The first form is the map of Whitehouse with colors showing the length of each segment and the names of the chosen trees drawn along the segment. The pencil and marker copy is the original document. It is the controlling reference document if there is a conflict of information between formats.

Also in map form, is a PDF format map for digital access. It is the same base map as the hand-marked field



Typical section of Tree Planting Master Plan Map document —
The colors show the site quality from the field analysis.

map, but the field tree-choice results are added on the PDF form. The legibility is somewhat better owing to the ability to zoom in and out with the computer format. Colored stripes on both versions of the map are keyed to show the tree-site quality and maximum tree size for each segment.

The second form of the document is a spreadsheet. With the spreadsheet format, the segments can be searched by street name and so forth. Additional information is entered in the spreadsheet, such as the scientific name for contract planting specifications.

ID #	Street	St., Ave. Ct...	Segment Start	Segment End	Tree	Field Results			Date of Field Insp	Field Comments	
						Total	Size	Priority			
120	Gillett	St.	North St.	Long	Am. Beech	16	L	2	G	10/7/14	Large on South Side
121	Gillett	St.	North St.	Long	Fringe Tree	16	S	2	G	10/7/14	Small on North Side
151	Lucas	St.	Waterville	Providence	Pignut Hickory	13	L	1	I	5/7/15	
42	Maumee	St.	Providence	Texas	Kentucky Coffeetree	15	L	1	I	7/17/14	
158	Maumee	St.	Gilead	Providence	Carolina Hemlock	16	L	1	G	5/7/15	
45	Merritt	St.	West	6643 Merritt	Tulip Tree	16	L	2	G	7/17/14	
46	Merritt	St.	6643 Merritt	Shepler	Red Oak	16	L	2	G	7/17/14	
116	North	St.	West St.	Gillett	Sourwood	18	L	2	G	10/7/14	Large on West Side
117	North	St.	West St.	Gillett	Chokecherry	18	S	2	G	10/7/14	Small on East Side
118	North	St.	Gillett	Centerville	Butternut	17	L	2	G	10/7/14	Large on West Side
119	North	St.	Gillett	Centerville	Flowering Dogwood	17	S	2	G	10/7/14	Small on East Side
154	Providence	St.	Maumee	Shepler	Serviceberry	12	S	1	I	5/7/15	Sweetgum is dying? - r
47	Shepler	St.	Merritt	Providence	Tree Lilac	0			P	7/17/14	
155	Shepler	St.	Providence	Wackerly Dr	Sweet Birch	14	M	2	I	5/7/15	

Sample of spreadsheet provided as part of Tree Planting Master Plan

Commission members have assigned the largest possible tree to each segment, since that is the best investment, that will grow successfully and not interfere with overhead electric lines. However, many situations arise in segments where a utility line crosses in only one spot or the sidewalk in a certain stretch is much closer to the curb and precludes planting the largest tree for the segment. To allow for the variation in circumstances, the plan provides for not only the largest possible species for a segment, but includes companion designations of medium and small trees that can fill the more restrictive planting sites.