CANAAN HISTORIC DISTRICT COMMISSSION

c/o Tom Milligan, Chair 485 Canaan Street Canaan, NH 03741

September 5, 2023

Greetings, Canaan Street Neighbor:

Members of the Canaan Street Historic District Commission have noticed the condition of many of the trees that line our street. Others remember a time when the entire street was flanked on both sides by trees that were large and beautiful and provided a canopy over the entire street. We have done some research, spearheaded by George Foley, which resulted in the attached report prepared by George.

Organizing to sponsor a drive to plant trees along the street is not within the purview of the Commission. Neither does the Commission have any money to contribute to the tree planting effort. The Commission is only concerned with the appearance of the street architecturally, and the members believe that restoring the trees as they might have been 150 years ago would enhance the architectural appearance of the street.

The members of the Commission are asking each property owner whose property abuts Canaan Street to consider taking the appropriate steps for that property to remove, trim or plant trees to restore the street to an aesthetically pleasing tree lined avenue. George's report provides some history, guidance on tree species suitability and a little technical information on the best tree placement. This report is for you.

It is reported that there is an old Chinese proverb which states: "The best time to plant a tree is twenty years ago." But it is never too late. Some of us may never realize the full benefit of planting trees now, but they will be there for others to enjoy for a long time.

For the Members of the Canaan Historic District Commission. Tom Milligan 603-523-2757 tmilligan70@gmail.com

Canaan Historic District Commission Tree Project - 2023

We started looking at the trees on Canaan Street in the Historic District. The trees are in a variety of stages from small newly planted trees to large dead trees. John Bergeron supplied some great resources about Broad Street in History of Canaan tinyurl.com/03741-hist and A Guidebook for Natural Beauty Projects tinyurl.com/03741-guide from the Cooperative Extension Service at the University of New Hampshire, Durham, NH. John also provided very interesting information about the Canaan Street right of way through the Canaan Historic District:

"The road was laid out in 1788 as 8 rods wide, and that is 132 feet. NH DOT doesn't claim that width, and I forget the number. Perhaps it is just a bit over 50 feet. Ownership is by the property abutters to the center of the road. The town has historically done little tree work for potential safety reasons. There are no plans to extend sidewalk. There are no plans to manage or replace trees. At one time, trees flourished along the street. That made a beautiful canopy, but road salt is slowly killing all of the trees. Replacements should be salt tolerant. Stone walls were constructed by land owners and they probably own them.

The state holds the easement on Canaan Street from Route 4, then north past Switch Rd, over Mascoma River to Cod Fish Hill Rd. This was the Grafton Turnpike running from Andover to Orford, which was chartered by state legislature and built by private companies. Somehow the state gained the right of way after the turnpike's demise, but they don't own the land underneath. Most roads in Canaan are like this, with town or state government having a right of way, but land below owned by abutters. The state does own Route 4, including the land below. NH DOT has tried to give to the town the Canaan Street easement, but the town has refused to accept.

I'm not sure tree renewal is within the authority of the HDC, and we would need to have an independent committee, such as Canaan Lake Association, or a new committee such as Friends of Canaan Street. ... Utility lines on west side of tree limit what can be done on that side. NH DOT doesn't want any new trees too close to street that might impact snow removal operations."

John contacted Douglas R. King, PE, District Engineer for District 2, NH DOT. Doug said:

"I would recommend that any trees be planted outside the ROW. I looked up the ROW in this area and it varies between 3 to 7 rods [49.5' to 115.5']. If interested, let me know and I can have an engineer work with you on determining the ROW where you are interested."

George Foley contacted James Frohn, Field Specialist, Natural Resources for Grafton County·UNH Cooperative Extension to walk the Canaan Street Historic District. John Bergeron and Tom Milligan joined us on part of the walk to look over the existing trees, the topography of the area, and the conditions that affect the selection of replacement or additional trees. Jim was excited to see what we are doing and provided many insights to the existing trees and possible reasons for their condition.

The major impact to the existing trees seems to be the soil compaction and salt from the roadway. While the salt issue is obvious, the soil compaction issue was less so. Jim helped us understand it is

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a soil permeability issue. The tarred surface of the roadways, sidewalks, driveways, and hard packed soil reduce soil permeability. Cars parking along the roadway, driveways, parking lots and even the mowers moving on the grass repeatedly and high foot traffic areas cause soil compaction and reduce permeability.

In addition to salt and soil compaction, Jim found evidence of Emerald Ash Borer beetle in several of the Ash trees; one specifically in the next to the bench with the yellow house across the street. This is treatable if the damage is less than 50% of the tree. If the decision is to remove the tree, cut and chip the tree entirely to prevent the borer from migrating to another tree.

Jim also noticed an interesting giant in the sheltered angle of the Lucerne Inn. This very large Tulip Tree is not normally found this far north. Its leaves are smaller here than those found in the Connecticut area and yet it still had a tulip flower on one of the lower branches. This tree appeared to have some weak branches and decay. There is evidence of past cabling to keep the tree from splitting.

It is important to plant a variety of species and ages to prevent disease from spreading or a large number of trees dying all at the same time. Jim suggested, "Planting when the tree is dormant (leaves are off the sapling). Spring is the best time for planting. Fall is second best. Winter is not a good time to plant due to the soil being frozen or partially so, and the freeze-thaw pattern that can destabilize a newly planted tree.

The guidebook listed above contains excellent descriptions of each tree. Canaan is in Hardiness Zone 4. We looked over the list of trees and Jim suggested the following for Canaan Street:

- Red Oak, White Oak, or Black Oak
 White oak acorns are favored by wildlife but they will also feed on red and black oak acorns.
 Red Oak has the most diversity of caterpillars and draws in song birds.
 The nuts also draw in wildlife. A drawback is the acorns can be quite messy during a bumper acorn year.
- Sugar Maple / Rock Maple / Hard Maple
 (Different names for the same species Acer saccharum)
 Leaves have "U"s in them
- Red Maple / White Maple / Soft Maple / Scarlet Maple Red maple, white maple, soft maple, and scarlet maple are all common names for red maple Acer rubrum
 Leaves are serrated and have sharp "V"s in them
 Red Maple may be subject to rot much more so than sugar maple. Sugar maple is very good at compartmentalizing or "walling off" wounds, while red maple is not.
- Crimson King Maple
- Black Maple (rare)
- Chestnut Hybrid Available from the American Chestnut Foundation https://acf.org/ About 50% are resistant to the Chestnut disease

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- Thornless Honeylocust
 Tree has nice flowers as well
- River Birch
- Scotch Pine
- White Spruce / Norway Spruce these are two separate species:
 - o Picea glauca (white spruce) and Picea abies (Norway spruce)
 - White spruce is native, Norway is not (though it is not considered invasive)
 Note: White Spruce smells like cat pee
 - o Red spruce, Picea rubens, is another good choice, and is a native species

From the chart in the Guide Book listed above, I also found the following:

- European Larch
- Black Locust
- White Birch* / European White Birch / Black Birch
 * = White birch is usually planted in clumps
- Serviceberry aka shadbush, Latin name Amelanchier is also a good choice it has white flowers in spring, produces a red to purple berry that is attractive to wildlife and edible by humans, and doesn't grow quite as tall as some trees
- Flowering crabapples can be a good choice also

Sources for trees, in addition to local landscapers and nurseries, are:

State of New Hampshire

Department of Natural and Cultural Resources

Division of Forests and Lands

172 Pembroke Road

Concord New Hampshire 03301

603-271-2214

Purchases can be made December to May. The nursery has sold out

of seedlings the past couple of years, so order as early as possible

USE THE WEBSITE: www.nh.gov/nhnursery/

Arbor Day Foundation

Information & pricing WEBSITE: shop.arborday.org/