Red Cedar
ARBORISTS & LANDSCAPERS, INC.

EVALUATION AND PROPOSALS FOR THE FISHKILL SYCAMORE

January 21, 2012

Although the tree may appear to be healthy, there are health and hazard issues described below.

Asphalt pavement covers more than half of the root system. This prevents the exchange of water, gases, air and nutrients into the root system. The roots may be weakened, and/or rotting.

The tree also has a heavy Anthracnose fungus infection made obvious by the annual defoliation and abnormal growth pattern of twigs and branches. The Anthracnose is generally only an aesthetic problem so it would be rare to recommend pesticide over cultural control measures. A method of cultural control of the fungus would be to implement an informed, proper watering regimen in the dry summer months.

Unfortunately, as concerns trees, health and stability are two different things. I had done a "sounding" on the tree. This is simply striking the tree with a dead blow hammer and listening for differences in the sound to determine existence and extent of decay. This method gave no indication of decay in the bole, (lower trunk). Using a Resistograph, which is a mechanical electronic device, in four different locations around the bole gave essentially the same result. In the sites tested to the east and west the device indicated solid wood to it's maximum depth of about 18 inches. As expected in the sites tested to the north facing Main Street, the area where the two main stems of the tree come together, there were indications of included bark. This is an indication of possible weakness and decay, which would be symptomatic of "V" shaped crotches with "Co-Dominant" stems, such as in this case. The solution here is the installation of cables. This is a simple procedure with a long and successful history and it is very cost effective, lasting for many years. This work is contained in the proposals along with cables in other areas of the tree. All of the following recommendations are contained in the proposals.

There are several dead "stubs" in the tree ranging from 3-4 feet to 6-8 feet long. In all likelihood they died as a result of uninformed pruning practices in the past. These should be removed as they could fall at any time into a heavy vehicle and pedestrian traffic area or onto a building. There are two major scaffold branches in the tree which show outward indications of internal decay. These would need to be either reduced in length or completely removed from the tree, depending on the extent of decay. One additional branch gives the same indications but is much smaller. There may be others which could not be readily observed from the ground or the areas I had climbed into. All of the leaders and branches of the tree would be inspected for decay and other defects while performing the proposed work and remedial action would be taken.

There was a relatively small amount of damage to the tree as a result of the storm last fall, even considering the one significant branch, (about 14 inches diameter) which failed. The Anthracnose fungus has caused a profusion of twig growth at the ends of the branches due of the nature of it's damage and the growth habits of the tree. These areas of crowded growth will tend to hold much more snow, ice,

rain and wind load, increasing chances for failures. As every portion of this tree is either over buildings or high pedestrian and vehicle traffic areas, an extensive thinning should take place throughout the entire canopy of the tree. As it happens, this work would also be very effective as a cultural (non-chemical), means of controlling/reducing the amount of fungus in the tree through the removal of inoculant.

Because of the thick pile of brush and debris around the bole of the tree I was not able to perform a thoughrough examination of the root flare areas. This would be important as the circumstances of the tree, like the building foundations and blacktop in close proximity to and in contact with the root flare, can increase the likelihood of butt rot fungus infections such as Armillaria. The debris such as leaves and branches should be cleaned up regularly to keep the bark and wood at ground level dry. A view of the tree on google earth, dated October 2011 shows the tree in full leaf. There appear to be no areas of stunted growth nor any discoloration of foliage which would be an early indication of butt rot fungus presence.

There are portions of this tree which I would describe as hazardous. These can be effectively dealt with through pruning and cabling. The size, level of maturity, value and location of this tree call for a maintenance plan to be adopted if it is to remain in place for future generations. Part of this would include annual inspections by a qualified arborist, pruning to control the Anthracnose and pruning to maintain a low failure risk level.

The hazards in this tree can be reduced through implementation of modern arboricultural practices and adherence to those standards of work. However, due to the physics, height and weight of the tree, Red Cedar cannot guarantee in any manner, that the tree can be deemed safe, without failure.

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