

October 06, 2021

Mr. Mike Bushnell
Bushnell Construction
481 Great Road, Suite 201
Acton, MA 01720

RE: Sugar Maple Review
615 Lowell Road

Mr. Bushnell:

I have reviewed the condition and location of three *Acer saccharum* (Sugar Maple) trees located on the northern border in proximity to above mentioned project. The trees form half of an old line of six beautiful mature trees in various states of health and vigor running east to west. The three sugar maples in the western section on the neighbor's property are very large, full and relatively healthy. The eastern three trees are located on the 615 Lowell Road property and they are thinner, weaker and in failing health. These trees are proximate to proposed new construction of a garage and associated driveway. I offer the following review:

Tree 4: A 20" caliper sugar maple in declining health. There are broken and dead branches, cracks in the trunk and overall poor health. Tree restoration procedures including pest management, aeration and feeding might prolong the life expectancy. Tree is a borderline safety hazard.

Tree 5: A 24" caliper sugar maple in declining health. There are broken and dead branches, cracks in the trunk, a broken central leader and overall poor health. Tree restoration procedures including pest management, aeration and feeding might prolong the life expectancy. Tree is a borderline safety hazard.

Tree 6: A 20" caliper sugar maple in declining health. There are broken and dead branches, thinning canopy, split trunk and overall poor health. Tree restoration procedures including pest management, aeration and feeding might prolong the life expectancy. Tree is a borderline safety hazard.

Pre-Construction Procedures for Work In Tree Save Area:

1. The Project Arborist must be present when work takes place within the Tree Save Area (TSA).
2. All root pruning necessary for construction shall be performed prior to tree protection fencing installation. Excavate by hand, using air, water or via directional boring to protect roots. Immediately remove excavation tailings from the TSA, and do not place the tailings within the TSA of any other trees.
3. Do not raise or lower soil grades, except as approved by the Project Arborist.
4. TSA fencing must remain closed when no work is being performed inside.
5. Tree protection zone barriers shall be placed as shown. Provide continuous fencing that is easily visible and is marked by protective signage in both English and Spanish. The tree protection zone barriers shall not be attached or anchored to the tree or trees to be preserved.

Construction Procedures for Tree Save Areas:

1. No stockpiling construction materials or demolition debris
2. No parking vehicles or equipment
3. No piling soil and/or mulch
4. No trenching for utilities installation or repair, or for irrigation system installation
5. No changing soil grade by cutting or filling
6. No damaging roots by grading, tearing, or grubbing
7. No compacting soil with equipment, vehicles, material storage, and/or foot traffic
8. No contaminating soil from washing out equipment (especially concrete) and vehicle maintenance
9. No installing impervious parking lots, driveways, and walkways
10. No attaching anything to trees using nails, screws, or spikes
11. No wounding or breaking tree trunks or branches through contact with vehicles and heavy equipment
12. No wounding trunks with string weed trimmers and lawn mowers
13. No causing injury by fire or excessive heat

Post Construction Procedures:

1. Spread tree chips spread over the designated area to a minimum depth of 6 inches.
2. Consider planting new sugar maple (*acer saccharum*) trees to provide continuation of tree heritage in easement.

Tree preservation is most successful when it is considered early in the process and a Project Arborist is involved throughout. A Project Arborist advises on the impacts to trees in the design phase, is on site when work takes place within the Tree Save Area), and monitors tree health throughout the project.

The proposed new home construction and associated excavation and other improvements will necessitate the removal of some trees, but efforts should be made to protect the Sugar Maples along the northern property line. These trees when healthy are significant in their environmental benefit, local heritage and their visual screening capabilities to the neighbors. They are mature trees transitioning to an older state and need special considerations as listed above.

Sincerely,



David Fisher
Fisher Design Group