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March 11, 2008

Mr. Doug Lowe
Artisan Construction
1130 E Market ST
Charlottesville VA 22902

Re: Greenleaf Center, Rose Hill Drive & Amherst Street

Dear Mr. Lowe,

Per your request, we have recently evaluated the 37" dbh (diameter at breast height) Tulip Tree (*Liriodendron Tulipifera*) which lives on the north side of the above referenced property. The subject tree was evaluated as to its current health and structural condition. We also assessed this tree's relative ability to tolerate and survive the proposed construction project.

Inherently, Tulip Tree is a large, heavy, fast growing, soft wooded species. Its growth habit tends to be tall and overextended with marginal structural integrity. Additionally, the subject tree has a co-dominant trunk growth habit which further reduces its structural integrity. However, the tree appears to be vigorous and in good health and lends itself to selective pruning and structural bracing. These routine arboricultural maintenance procedures would help to insure a safer, healthier, long term contribution from this tree to the landscape.

Specifically regarding the construction preservation of the subject tree, we provide the following information and professional opinions. We have used the McNair and Associates set of plans dated 12/07 as a reference for the proposed site work and construction as it relates to the subject tree.

- The subject tree is shown as 42." We measured the tree's dbh to be 37"
- The subject tree appears to be accurately located on the "existing site conditions" plan. However, the existing drip circle of the tree is somewhat larger than is depicted.

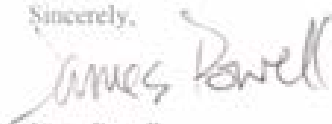
- Ideally the limit of construction activity, particularly that of grade changes or soil disturbance, should be limited to areas beyond the drip circle of this tree, thereby reducing damage to the sensitive absorbing roots. However, this plan and construction details show work within the drip circle of the subject tree. Nevertheless, the encroachment is not severe. If we can adhere to this site plan, or better yet take site-specific steps to further minimize impacts to the tree's root zone and also provide some remedial treatments, we believe that this tree will have a reasonably good chance of living through construction.
- The proposed construction will result in changes to the water drainage patterns around the subject tree. Remedial treatments such as mulching, vertical mulching, root promoting fertilization and irrigation would be beneficial. These procedures would help the tree compensate for the proposed root loss and would allow more time for the tree to make the adjustments necessary to survive short term, and to thrive long term after construction.
- Pruning, when done properly, would improve this tree's structural stability and would also serve to invigorate it.
- For cost reasons, as well as for the health benefits, it would be better to complete the pruning and the other remedial treatments for the tree, prior to the start of construction.
- "Tree Preservation Area" barriers of some sort should be erected on site to protect the subject tree from any unplanned root zone disturbance, additional soil compaction, spills, or mechanical injury. These barriers can be completed in several ways. Their primary function is to inform everyone who is working on the site of our efforts to properly preserve the tree and its vital root zone during construction.

Given that a full and complete tree preservation plan is implemented for the this tree, and that after construction a health maintenance program is initiated, we believe that this tree would survive construction and have a very good life expectancy for many years after.

You might also consider a lightning protection system for this tree. As a species Tulip Tree tends to be very attractive to lightning.

Hopefully this information will be helpful. Should you have need for any additional arboricultural input, please give us a call.

Sincerely,



James Powell
Certified Arborist MA-0005