ATTN:  
CITY OF TORONTO URBAN FORESTRY 
WEST DIVISION 
CITY TREE BY-LAWS

2016-08-22

RE: ARBORIST REPORT AND PRESERVATION PLAN FOR THE PROPOSED PARKING PAD PROJECT AT 24 HUMBERVIEW ROAD.

There currently exists a City of Toronto managed large and mature native White oak located at the front of the property next to the sidewalk. It has a co-dominant main trunk sourcing below 1.4m from grade. The DBH of the tree is therefore 85cm and 79 cm respectively, with a corresponding TPZ of 5.4m. 
This TPZ area still consumes the entire area of the front of the property. It is currently rated in good condition.

It is proposed that a car pad be installed at the front of the house located at 24 Humberview Road abutting the existing driveway. The pad is located between the tree and the face of the house. The edge of the pad, at its closest point to the tree is a distance of 2.0m. The existing asphalt driveway is to be lifted and re-clad to match the pad. An amount of excavation and grading is required within the TPZ of this tree to accommodate this project, including the reduction of a small section of sodded area. Grading is required to blend the elevation so the new parking pad and driveway match up.

It should be noted that an exploratory excavation has occurred by the owner and inspected by the arborist. The trench was dug at the edge of required excavation 2.0m from the base of the tree, across the front lawn and to the depth of 45cm, deeper than the lowest point of required excavation for installation.

The findings of the exploration dig are promising! First, as a result of City of Toronto water main upgrades a decade ago, a large section within the proposed pad is root free. The first 3.0m of the 7.0m trench, beginning at the west end of the pad, had no roots discovered at all. This is a third of the pad’s allotted area. The remaining 4.0m of trench revealed 2x2cm roots, 3x3cm roots and 2x5cm roots for a total of 7 roots, in that order. Again from west to east. A string line was run.
through the trench at where the top grade of the pad is to sit. The shallowest of the roots discovered was a 2cm root at a depth of 20cm from the string line, with the remaining roots closer to 30cm from final grade.

**This means that no root requires severing to accommodate the parking pad.** The roots are deeper than the cladding material and can continue to exist within the base material. The same will also hold true for the driveway as the driveway grade requires no excavation into the native subsoil and in fact requires a height adjustment to make up for settlement.

**With this determination it is confident to suggest that this project can move forward with no detriment to the tree.** There are though requirements that are to be adhered to during excavation and installation.

**RECOMMENDATIONS & REQUIREMENTS**

TPZ hoarding is to be erected through the remaining portion of the grass area around the tree. It is to be built using snow fencing and 2x4 lumber and built to the specs outlined by Urban Forestry.

The parking pad is to be constructed using a permeable paver product with a sub base of Granite High Performance Base and/or Granite ¾ aggregate only. This will allow sufficient water and oxygen to the root zone of the tree in question. Granite HPB is a free draining product and will allow for oxygen and water to the tree roots. Granite is also non-alkaline and will not burn off roots like limestone screen and concrete which contain traces of Lye. **By substituting the asphalt driveway with this system, the root mass of the tree will likely improve through the area.**

It is understood that all required soil excavation within the TPZ of this tree will be performed by hand only and not with the use of machinery of any kind within the TPZ of this tree. The asphalt may be fractured using a low-pressure pneumatic jack-hammer only. No powered excavating equipment can be used on site. A small track or rubber tire bobcat may be used to assist in the installation of the base materials providing care is taken. The roots of concern expressed in this report should be clad in heavy gauge landscape fabric to protect them from scuffing.

A qualified arborist will be present during the excavations to inspect and root prune as a last resort. A follow up report on the findings will be drafted.

It is also recommended that upon completion of the project soil remediation occur in the form of Deep Root Fertilization. This application will alleviate any inadvertent root zone compaction that may have occurred during construction. It will also provide the tree with a deserved application of water and nutrients.
SUMMARY

When conducting exploration trenches for Oak trees of similar size, growing in similar native sandy soil, it has been discovered that this species of tree tends to have very deep anchor root systems. In this situation all roots uncovered are well below grade and do not require cutting to accommodate the project. Accommodations will be made to protect roots discovered. The base material being used is harmless to the health of the root mass of the tree and along with the cladding a likely improvement in areas.

As well, a qualified arborist will be on hand to inspect the excavations. Only a small amount of undisturbed soil is required to be excavated by the removal of the one area of sod. The remaining portion of the work is a lift and relay of the existing asphalt of the driveway, which is replaced with a product more conducive to the continued health of the tree.

Providing correct steps are taken along with needed care for the tree during all steps of construction, the tree should continue to perform at its current level of condition post construction, while providing an updated landscape to the front of this property. It is recommended that this project be allowed to be installed.

If there are any concerns in regard to this information, please contact Trevor Whiteside at 416873-4736.

Sincerely,

Trevor Whiteside
This is a view of the front of the property with the White oak at the edge of the sidewalk. The edge of required excavation can be seen to the right of the tree where the exploration trench has been dug. The parking pad will sit to the right of the trench.
This is a view of the tree and front yard from the opposite side from the previous photo. The green tarpaulin seen in the foreground is essentially where the previous excavation took place.
This is a closer view of the trench. Virtually no roots can be seen running through it. The one near the foreground is the 2cm root slightly closer to the surface than the others. It is still 15cm below the string line and 10cm below where the bottom of the paver would sit. The six other roots revealed are deeper and will be fully preserved.