

ITEM #20

Allison

May 3, 2016

John Sveum  
Yahara Construction Co.  
147 S. Butler  
Madison, WI 53703

Dear Mr. Sveum,

At your request I have today joined you and architect Mr. Ed Linville at the proposed residential building site at 201 Larkin Street, Madison. You have asked me to examine and comment on the landscape trees currently growing around the existing house. It is my understanding that the existing house will be demolished and that some of the existing trees will be removed to allow new home construction. Following are my observations and comments (microdrill testing graphs are enclosed for illustration):

1. white oak behind the garage; 16 inch trunk diameter (DBH) to the south has a flat root collar area lacking taper on the west trunk side nearest the garage foundation indicating some prior root plate disturbance, the microdrill resistance test using an IML PD400 instrument indicates solid wood with a small pocket of decay or cavity around 9.5 inch depth.
2. white oak behind the garage; 30 inch DBH has crown dieback, a large *Ganoderma applanatum* fungal conk and extensive heartwood decay and cavity as evidenced by the microdrill test; prompt removal for safety recommended.
3. between the garage and the house are a hemlock (11 inch DBH) with smaller co-dominant stem attachment; and to its west surrounded by driveway asphalt a bur oak (28" DBH) with no evidence of internal decay or significant crown dieback; there is no leaf growth this early in the spring so I am not able to determine if the limestone base beneath the asphalt is causing lime-induced iron chlorosis yellowing of the leaves, however, it is likely the rhizosphere chemistry is very basic.
4. bur oak (34 inch DBH) at the northwest corner of the house with central crown branch dieback and accumulated deadwood some falling on the roof; microdrill resistance test east entry at ground level does not reveal decay or cavity in the area tested; there are small canker areas at the soil line but no observation of *Armillaria mellea* root rot rhizomorphs; there is normal bud break on other parts of the crown but lack of leaf development this early in the season prevents additional observations to diagnostically explain the significant crown dieback; both safety

pruning of all deadwood and a significant reduction of live branches for roof clearance will be required.

5. spruce (12" DBH) to the west of #4 oak.

6. along the north boundary and public sidewalk are from west to east shagbark hickory (12" DBH), Norway maple (21"), sugar maple (24"), sugar maple (9") and smaller elms.

7. on the south property line is a shagbark hickory (32" DBH) with a co-dominate branch union with included bark.

You have advised me that the construction will require the removal of the two oaks behind the garage, the oak and hemlock between the garage and house, and the oak and spruce immediately to the north of the house. Considering my observations and the challenge, costs and risks associated with preserving trees in such close proximity to excavation and new construction, the decision to remove is reasonable. However, I strongly recommend that all the remaining trees be carefully protected from any disturbance during the construction and sturdy fencing be placed around the root zones until the new owners are ready to take occupancy. Furthermore, I feel it would be appropriate to mitigate the loss of these trees in the landscape by the planting of new oak trees that will contribute to the new owners and the neighborhood for future generations. Two cultivars to consider are Crimson Spire oak, an English oak cross with a tall narrow form suitable along the street and Regal Prince oak, a swamp white oak cross. A red oak or native bur or white oak would also be excellent contributions to the yard. Starting with a 3-4 inch caliper balled-in-burlap freshly dug specimen, surround the root zone with shredded bark mulch and water regularly.

Respectfully submitted for Allison Tree, LLC,

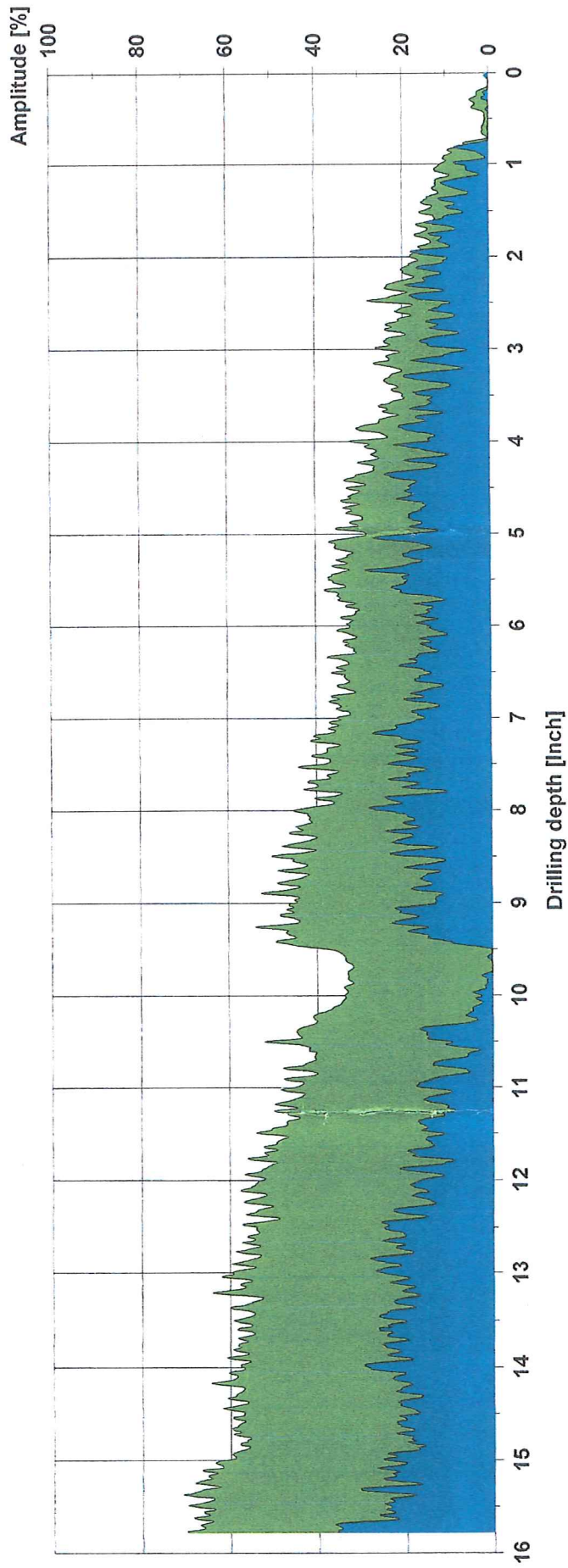


R Bruce Allison  
ISA Board Certified Master Arborist

Encls.

**Measuring / object data**

Measurement no. : 1	Needle speed : 5000 r/min	Diameter :
ID number :	Needle state : ---	Level :
Drilling depth : 15,780 "	Tilt : ---	Direction :
Date : 03.05.2016	Offset : 97/336	Species :
Time : 12:18:12	Avg. curve : off	Location :
Feed speed : 20 "/min		Name :



**Comment**

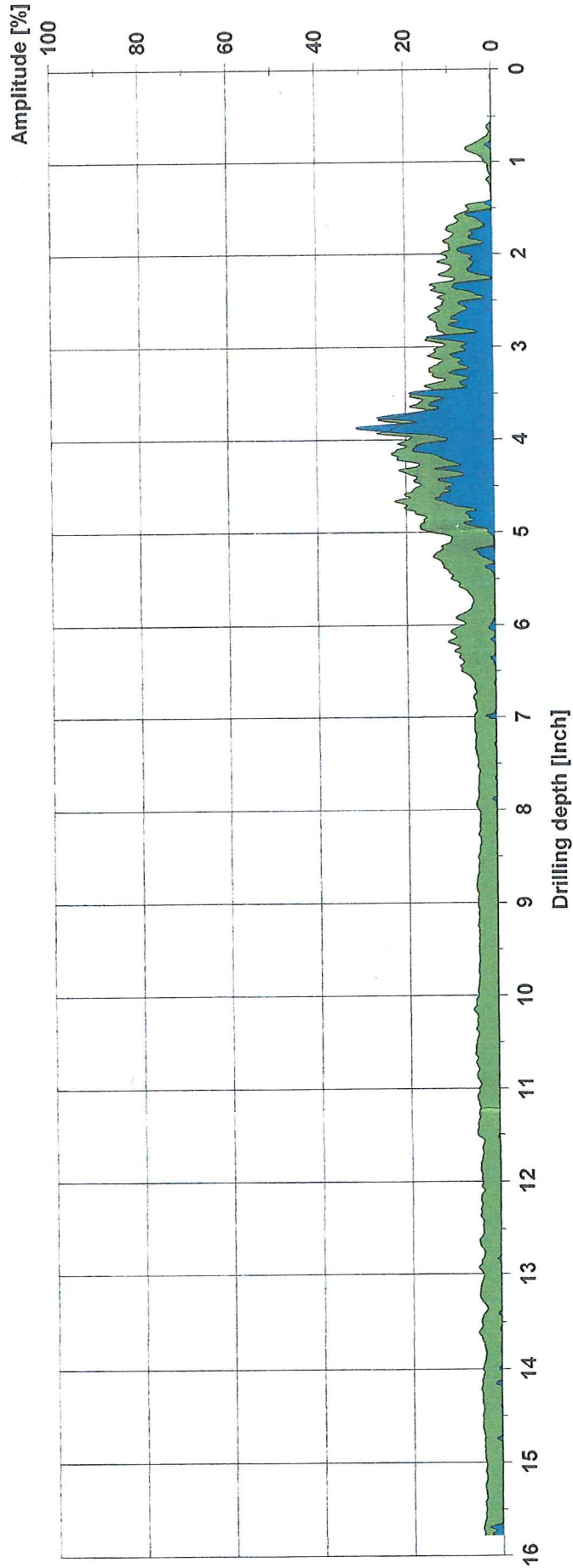
white oak 201 Larkin, 16 inch DBH behind garage - south radial - entry at 10 inch elevation small area of soft wood, decay near center 9.5 inch depth in area tested

**Assessment**

<input type="checkbox"/>	From 0,00 " to 0,00 " :
<input type="checkbox"/>	From 0,00 " to 0,00 " :
<input type="checkbox"/>	From 0,00 " to 0,00 " :
<input type="checkbox"/>	From 0,00 " to 0,00 " :
<input type="checkbox"/>	From 0,00 " to 0,00 " :
<input type="checkbox"/>	From 0,00 " to 0,00 " :

**Measuring / object data**

Measurement no. :	2	Needle speed :	5000 r/min	Diameter :	
ID number :		Needle state :	---	Level :	
Drilling depth :	15,780 "	Tilt :	---	Direction :	
Date :	03.05.2016	Offset :	95/356	Species :	
Time :	12:21:28	Avg. curve :	off	Location :	
Feed speed :	20 "/min			Name :	



**Assessment**

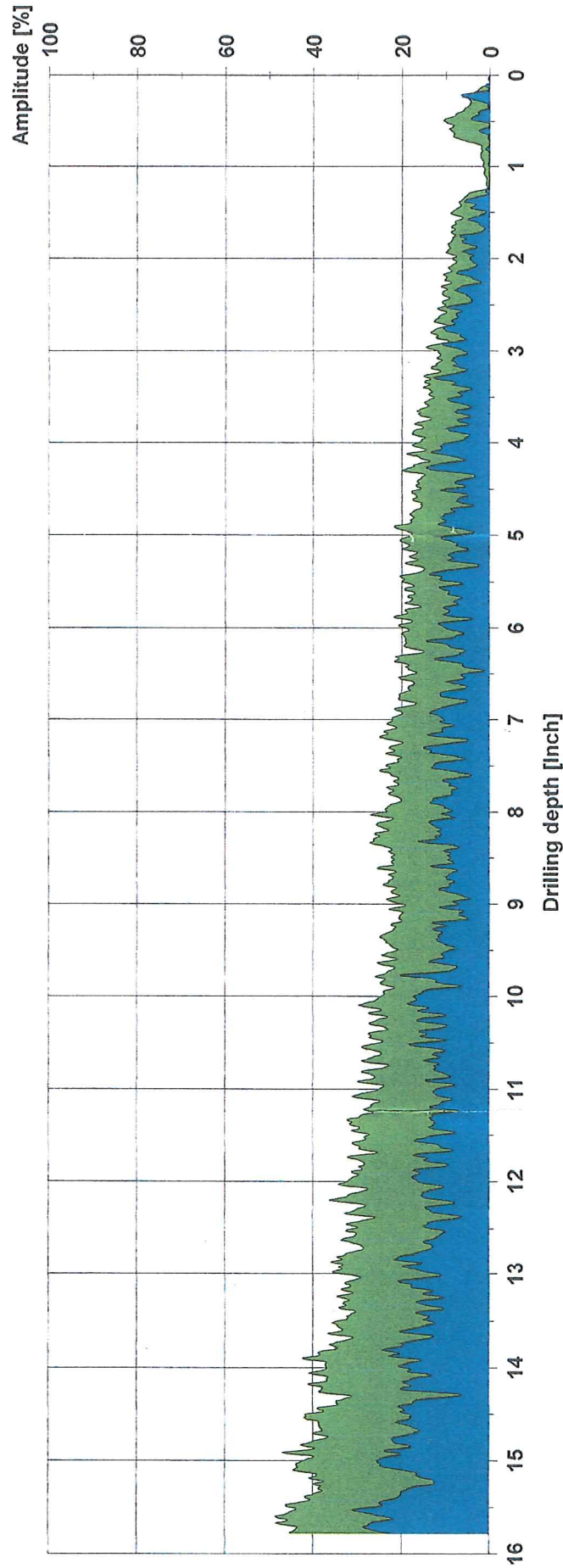
<input type="checkbox"/>	From 0,00 "	to 0,00 "
<input type="checkbox"/>	From 0,00 "	to 0,00 "
<input type="checkbox"/>	From 0,00 "	to 0,00 "
<input type="checkbox"/>	From 0,00 "	to 0,00 "
<input type="checkbox"/>	From 0,00 "	to 0,00 "
<input type="checkbox"/>	From 0,00 "	to 0,00 "

**Comment**

201 Larkin white oak 30 inch DBH behind garage with large fungal conk (Ganoderma applanatum) on northeast side. East radial entry at 10 inch elevation reveals extensive heartwood decay and cavity. Very high risk of failure and targets include neighbor house.

**Measuring / object data**

Measurement no. :	4	Needle speed :	5000 r/min	Diameter :	
ID number :		Needle state :	---	Level :	
Drilling depth :	15,780 "	Tilt :	---	Direction :	
Date :	03.05.2016	Offset :	84/352	Species :	
Time :	12:26:01	Avg. curve :	off	Location :	
Feed speed :	20 "/min			Name :	



**Assessment**

<input type="checkbox"/>	From	0,00 "	to	0,00 "	:
<input type="checkbox"/>	From	0,00 "	to	0,00 "	:
<input type="checkbox"/>	From	0,00 "	to	0,00 "	:
<input type="checkbox"/>	From	0,00 "	to	0,00 "	:
<input type="checkbox"/>	From	0,00 "	to	0,00 "	:
<input type="checkbox"/>	From	0,00 "	to	0,00 "	:

**Comment**

201 Larkin, bur oak 34 inch dbh at northwest corner of house. Center crown dieback indicating root stress, accumulated deadwood in crown with debris on roof, normal budbreak on other parts of crown, small cankers at base but east radial entry at 10" solid wood