

# TREE EVALUATION REPORT



prepared by  
Monty Wooten  
Greenleaf Forest Management  
Asheville, N.C.  
828-254-1114

## TREE EVALUATION REPORT

Report Prepared For:  
Inge Durre  
Sawyer Condominiums  
Asheville, N.C.

### Effective Date of Appraisal

The effective date of this appraisal is June 10, 2015. The onsite inspection for the appraisal was conducted on June 8, 2002.

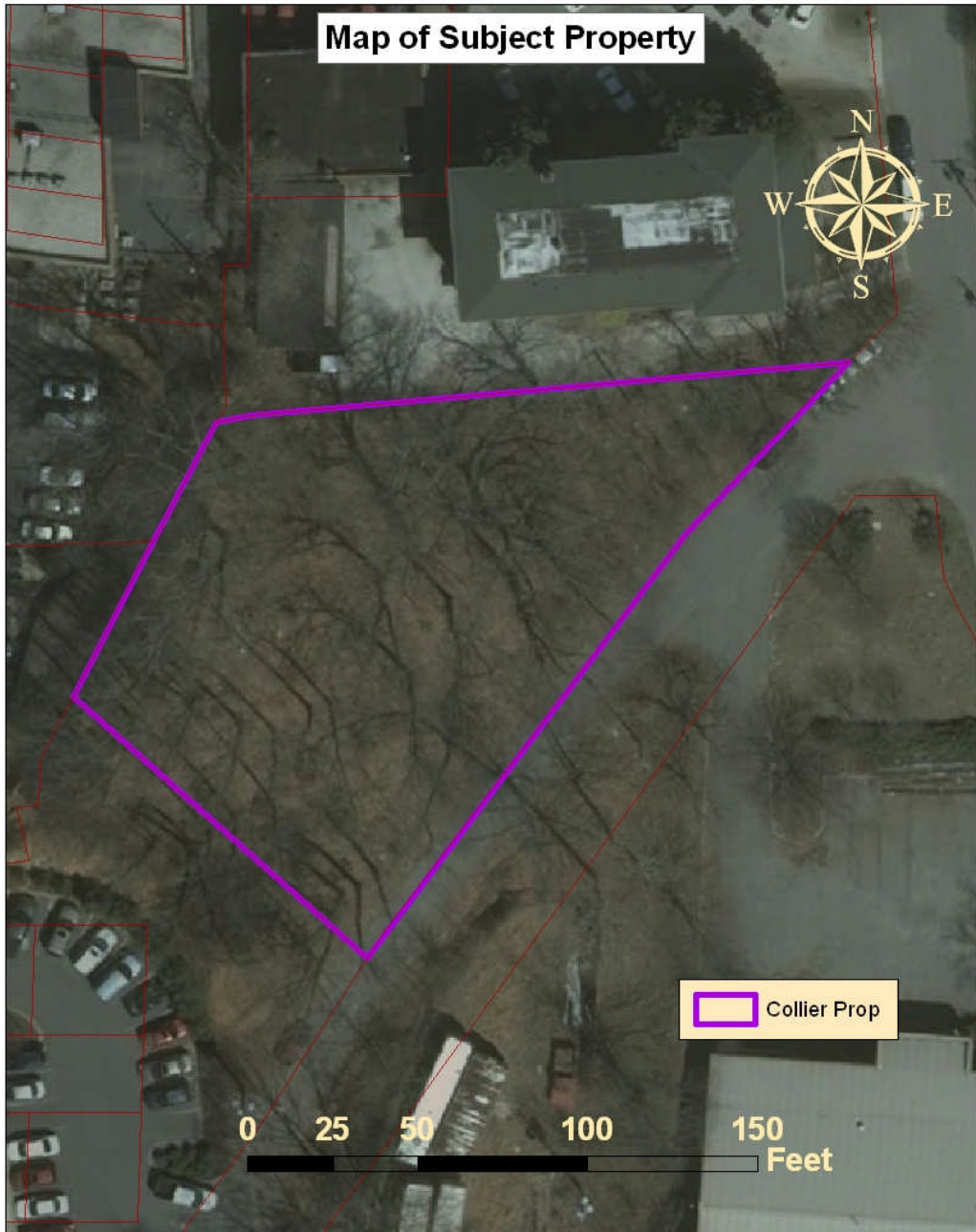
### Purpose of the Appraisal

The purpose of this appraisal is to estimate the landscape value and conservation value of 23 subject trees. Said trees are growing on property located west of Collier Avenue, Asheville, N.C., and listed with the Buncombe County Register of Deeds under Deed/Book 5166/0063. Said property is recorded as containing 0.46 acres.

In order to establish the market value of the subject trees as landscape material two models using the cost approach were used. Therefore, the market value of these trees can be expressed as the price a landowner would be required to pay on the open market to replace those trees in question with similar landscape material of approximately the same size, age, species and condition.

### Scope of the Appraisal

Considering the location of the subject trees the highest and best uses of these trees was deemed to be for landscape and conservation purposes. The subject trees were evaluated using the methods prescribed in the American Council of Tree and Landscape Appraisers' *Guide for Plant Appraisal*, 8th edition (CTLA) and by those of the international method known as VAT03. Using these methods various dimensions of each tree were measured by which a basal area in square inches was calculated. Fixed wholesale values per square inch were determined from quoted prices from local sources. Adjustments were calculated and applied to the fixed values. Adjustments were made for species rating, position in landscape and condition of subject trees.



### Assumptions and Limitations

It is assumed that there are no hidden or non-apparent conditions of the property or subsoil that would render the subject trees less valuable.

### General Description

The subject trees are large oak trees located on the Collier Avenue property. The trees evaluated were all equal to or greater than 18 inches in diameter at breast height (DBH).

There are many smaller trees and shrubs also growing on the subject property but these were deemed as not adding great value to the landscape. In total 23 trees were evaluated from the subject site. All of these trees were of one of the native oak species. Most were either Northern red oak or Southern red oak, although there were also 2 black oaks and one white oak.

The subject trees ranged in size from 18 to 39 inches DBH. Tree heights ranged from 58 to 109 feet in height. Though no direct measurement of age was taken, a comparison of tree heights to site index data for the given soil type indicates that the subject trees are between 80 and 100 years of age.

The trees are located on a gentle slope with inclinations of less than 25%. The site is east-facing. It appears to be moderate in fertility and in its moisture holding capacity. In addition to the subject trees there are three standing dead trees on the property. Also, one of the subject trees has a dead top for approximately 20 feet and there is significant deadwood in the crowns of two other trees. Despite these findings the general health of the subject trees appears to be good with no insect infestations or disease epidemics evident.

#### Landscape Value: Procedure and Results

One way to access the market value of landscape material is to ascertain the value of such material should it be sold on the open market to a willing buyer. In order to calculate a value for the subject trees, wholesale values per square inch were obtained from regional suppliers. This value was then adjusted to account for the condition of each tree. Then the adjusted per square inch values were applied to the subject trees. The resulting value is the price that a buyer might offer for the standing trees. These figures are depicted on Tables 1 & 2. The two methods vary in that the CTLM method makes adjustments for tree health and tree species while the VAT03 method makes adjustments for tree health, site location, site condition and age. The resulting total value for the subject trees is \$433,597 using the CTLA method and \$323,642 using the VAT03 method.

Both CLTA and VAT03 methods do an excellent job of assessing individual trees. However, neither makes any adjustment for a change of value due to the multiplicity of trees. Given that an individual tree's landscape value declines as more trees are added to the group, adjustments have been made to account for this declining value. These adjustments have been included in Table 1.

Although some cases do exist where very large trees were removed from one site and planted at another, the practice is not common in the industry. In one recent case (February 2015) two oak trees sized eight inches DBH each were dug from a South Carolina nursery and transported across two states and then planted at a site on the Auburn University campus. The total cost for that project was \$900,000. Such cases are

rare and as a result there is a lack of good comparable data. However, such examples do indicate that the above figures given for the subject trees are within reason.

### **OPINION OF LANDSCAPE VALUE**

In my opinion as of JUNE 10, 2015, taking into consideration all factors involved, the subject trees have a value as listed below:

**Two Hundred Nineteen Thousand Forty-One Dollars**  
**\$219,041.00**

The above figure represents a fair estimate of the cost of replacing the subject trees with similar size trees or with younger landscape material and adjusting to account for growth.

#### **Conservation Value**

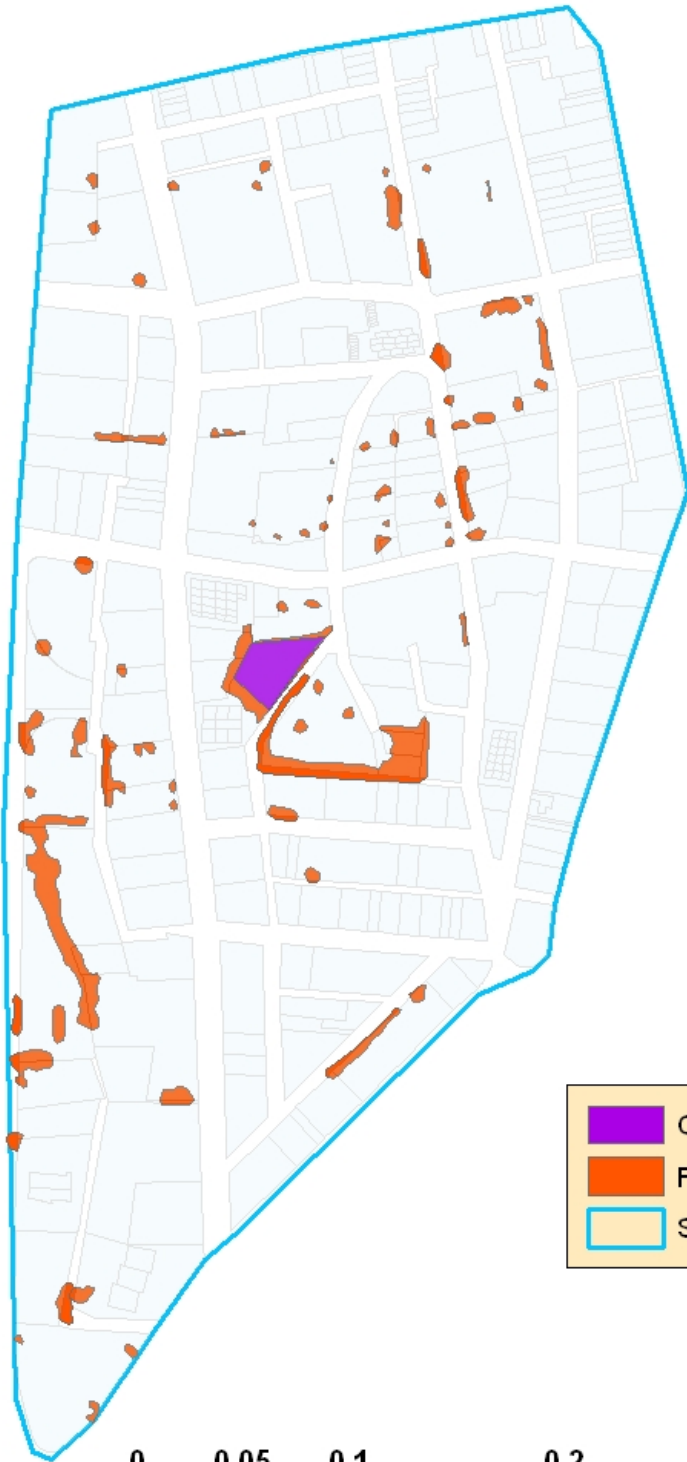
An evaluation of trees for their conservation uses tends to be less quantitative than that for determining landscape value. The subject trees definitely do have conservation value in that they provide biodiversity, heat moderation, scenery, shielding and wildlife habitat in an area with mostly engineered hard-surface structures. The relative conservation value of the subject trees can be ascertained to a certain extent by comparing the stand with the surrounding neighborhood.

A visual examination was conducted of the surrounding neighborhood. The neighborhood was defined by the following physical limits: Patton Avenue - northern boundary, Ashland Avenue – western boundary, McDowell Street – southern boundary, Biltmore Avenue – eastern boundary. This multi block area contains approximately 94.3 acres. The subject property contains 0.46 acres or about one half of 1% of the total area. Although this property contains .05% of the land mass it accounts for almost 12% of the tree canopy in the study area. In other almost 1 out of every 8 trees found within this 94 acre area is found on this property.

Most of the trees that compose the tree canopy in the study area are either small planted trees along the streets or parking lots, or they are relatively young trees that have grown on abandoned back lot spaces. Many of the volunteer trees in the latter case are exotic non-native species.

There are only three forest stands within the study area that are a half acre or more in size. The subject stand is part of one of those. Of these three only the subject stand contains a grove of mature trees. The subject stand is the only grouping of mature oak trees within the 94-acre study area.

# Map of South City Center Surrounding Area



- Collier Prop
- ForestCanopy
- Study area

0 0.05 0.1 0.2 0.3 Miles

Regarding wildlife it is probable that the subject stand provides habitat for a number of avian, invertebrate, mammal and reptile species. Additionally, there are no connecting corridors in the study area between Beaucatcher Mountain to the east and the French Broad River basin in the west; the two main concentrations of biological diversity in the immediate Asheville City area. The subject property serves as one of a few stopover or refuge spots for any animals traveling between the two wildlife concentrations.

Lastly, the subject property represents a significant portion of the pervious soil in the 94-acre study area. Although no data was available detailing the exact acreage of pervious vs. non-pervious surface in the study area, it is apparent that the non-pervious surfaces constitute the great majority of the area. The subject stand currently intercepts and sequesters a great deal of precipitation and runoff that would otherwise need to be dealt with through an engineered system.

### Summary

The subject property with its stand of mature oak trees is an singular occurrence in the hardscape of the city center area. The trees are of significant monetary value as landscape trees. The stand also serves several ecosystem functions such as cleaning air, sequestering carbon, moderating noise, mitigating heat island effect and capturing storm water runoff. As such these trees serve the citizens of the immediate neighborhood and of the entire city.

Any inquiries may be addressed to Greenleaf Forest Management, 26 Hampstead Road, Asheville, N.C. 28804.

Sincerely,

A handwritten signature in black ink that reads "Monty Wooten". The signature is written in a cursive, flowing style.

Monty Wooten  
Registered Forester  
N.C. Registration #947  
Certified Arborist #SO-0289

## APPENDIX

1. Table 1 – Landscape Value of Subject Trees Using CTLA Method
2. Table 2 – Landscape Value of Subject Trees Using VAT03 Method
3. Supplemental photos



Table 1 – Landscape Value of Subject Trees Using CTLA Method

Tree number	Species	Basal area (square inches)	Class/condition	Species rating	Value by basal area	Total group tree value (adjusted)
1	NRO	660	100	90	\$30,306	\$15,153
2	BLO	452	90	90	18,679	9,340
3	NRO	855	90	80	31,408	15,704
4	SRO	201	90	80	7,384	1,846
5	SRO	227	100	80	9,265	2,316
6	NRO	314	40	90	5,767	1,441
7	NRO	1194	80	90	43,861	43,861
8	NRO	283	100	90	12,994	3,249
9	NRO	314	60	90	8,651	4,326
10	NRO	254	90	90	10,496	2,624
11	BLO	491	100	90	22,546	11,273
12	NRO	491	100	90	22,546	11,273
13	NRO	283	100	90	12,995	3,249
14	SRO	314	90	80	11,535	2,884
15	NRO	531	90	90	21,944	10,997
16	NRO	754	90	90	31,160	15,580
17	NRO	1017	80	90	37,359	18,680
18	NRO	962	100	90	44,173	22,087
19	NRO	254	100	90	11,663	2,916
20	NRO	380	100	90	17,449	4,362
21	NRO	346	80	90	12,710	3,178
22	WHO	452	100	90	20,755	10,378
23	NRO	254	90	90	10,497	2,624
Totals					\$433,597	\$219,041

**Table 2 – Landscape Value of Subject Trees Using VAT03 Method**

Tree Number	Basis	Health factor	Location	Age factor	Tree value
1	33,423	1	1	0.58	\$19,385
2	22,886	0.9	1	0.64	14,647
3	43,447	0.9	1	0.46	17,987
4	10,080	0.9	1	0.92	8,346
5	11,407	1	1	0.92	10,494
6	15,770	0.4	1	0.77	4,857
7	60,743	0.8	1	0.46	22,353
8	14,263	1	1	0.77	10,983
9	15,845	0.6	1	0.77	7,320
10	14,264	0.9	1	0.77	9,885
11	12,784	1	1	0.62	7,926
12	24,876	1	1	0.62	15,423
13	24,876	1	1	0.62	15,423
14	15,846	0.9	1	0.54	7,701
15	26,917	0.9	1	0.92	22,287
16	38,294	0.9	1	0.54	18,611
17	51,712	0.8	1	0.46	19,030
18	48,906	1	1	0.54	26,409
19	12,784	1	1	0.62	7,926
20	19,213	1	1	0.92	17,676
21	17,478	0.8	1	0.77	10,766
22	22,886	1	1	0.77	17,622
23	12,784	0.9	1	0.92	10,585
					\$323,642



