

TREEINSPECTION.COM, LLC

Certified Arborists

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www.Treeinspection.com**TREE IMPACT REPORT**

NAME: (BROOKWOOD HILLS RESIDENT)

ADDRESS: BROOKWOOD HILLS NATURE PRESERVE

DATE: 07/03/16

ASSIGNMENT OR PROBLEM:

Determine asset value of trees being removed and impacted by sewer replacement.

SITE DESCRIPTION

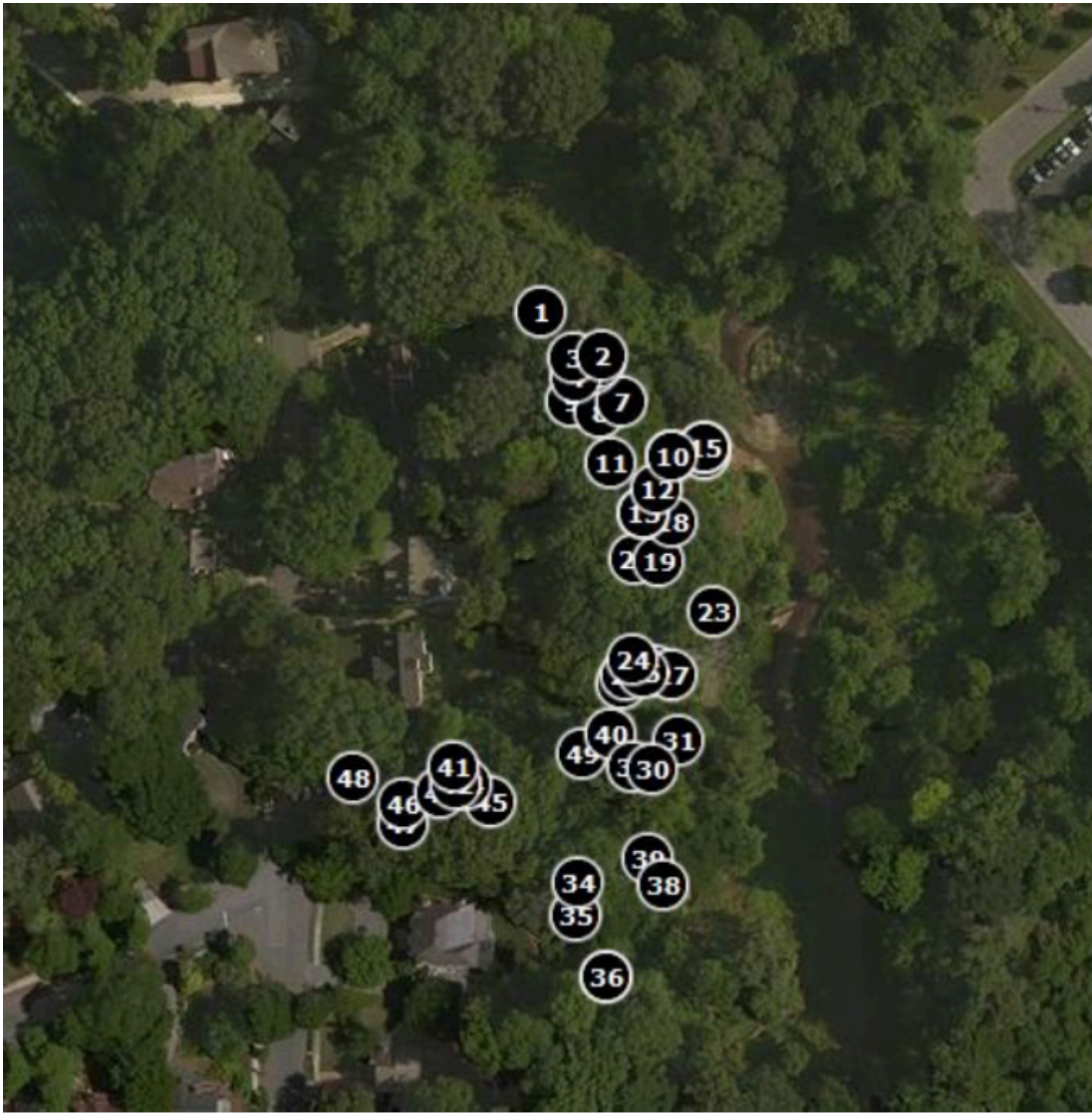
This heavily wooded nature preserve located in the Peachtree Creek Watershed is tucked between Peachtree Road and Hwy 85 within the Brookwood Hills neighborhood. The forest is typical of the Piedmont forest of this region and is likely a direct descendent of old growth forests. It serves as a reminder of how the forest once appeared before European settlement. The property was originally owned by George Washington Collier and sold to the neighborhood by his granddaughters. The total property is around 50.5 acres. A 45-acre Conservation easement was purchased by the city as part of federal decree to protect greenspace in Atlanta. Limited access to the property is over pervious trails during daylight hours for the purpose of walking, bird watching, wildlife viewing and other passive activities, which are consistent with preserving and maintaining the property.

Due to damage of an old sewage line that runs adjacent to the creek, a new line is being installed. Many trees are to be removed or impacted with the installation of the new line. The charge of this study was to appraise the value of the trees being impacted and removed.

ASSEST VALUE

A total of 49 trees were inventoried that were either being removed or "lost." The City of Atlanta Tree Ordinance designates a tree as "lost" if more than 20% of the critical root zone has been impacted. The nationally-accepted Trunk Formula Method was used to appraise the monetary value of the trees. It is commonly used when the trees are too large to be replaced with nursery or field grown stock.

The value of the removed trees was \$146K, and the value of "lost" trees was \$246K, for a total of \$392,700. For a full listing of sources and methods, see Appendix 1; a full list of trees being removed and impacted is included in Appendix 2. Below is a map showing each tree that was inventoried. The trees inventoried are along the sewer line replacement and the access road to the sewer line.



REPORT CONCLUSIONS

The installation of the new sewer line, in combination with the access road to the line, will impact at least 49 trees as determined in this report. As part of the purchase of the conservation easement, the City of Atlanta is federally mandated to maintain the preserve in its natural state. Similar to how money compounds over time, so does tree value. In aggregate, the trees removed and destroyed represent hundreds of years of growth. By using the Trunk Formula Method, if all the trees inventoried are removed or die, the assessed value total would be \$392,700. Of that, \$146K are trees that will be cut down; \$246K are trees that the critical root zone (CRZ) has been impacted by more than 20%, some of which may survive. The City of Atlanta determines any tree with a CRZ impacted between 20% and 33% as lost and requires mitigation to deem it not destroyed. If more than 33% of the CRZ is impacted, it is automatically considered destroyed. A large percentage of these trees could be expected to survive if professional mitigation -- including root pruning, watering, fertilizing and mulching -- is applied. The impact on all trees will affect their longevity and could take up to five years to manifest.

Neil W Norton
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ISA Tree Risk Assessment Qualified

APPENDIX I: ASSET VALUE SOURCES AND METHODS

Asset value is determined using the Council of Tree and Landscape Appraisers' Guide to Plant Appraisal (9th Edition), which provides guidelines for determining appraised value of trees, shrubs, plants, etc. The Council of Tree and Landscape Appraisers is comprised of representative from the following organizations: American Nursery and Landscape Association, American Society of Consulting Arborists, American Society of Landscape Architects, Associated Landscape Contractors of America, Association of Consulting Foresters of America, International Society of Arboriculture, and Tree Care Industry Association.

The appraisal method used was the Trunk Formula Method, commonly used to appraise the monetary value of trees considered too large to be replaced with nursery or field grown stock. Using the trunk formula method, determination of a tree's tree value is based on the cost of the largest commonly available transplantable tree and its cost of installation, plus the increase in value due to the larger size of the tree being appraised. Values are then adjusted by species, condition, and location. To provide a conservative value, all trees were considered to be of "Fair" condition despite many of the trees being in "good" or excellent" condition. Trees in poor condition were not considered, unless the condition was a direct result of activity surrounding replacement of the line. The location value was also conservatively estimated at sixty percent.

The City of Atlanta identifies a tree as "lost" if between 20% and 33% of the critical root zones (CRZ) are impacted. The tree is considered "destroyed" if more than 33% of the CRZ is impacted. A lost tree may be retained with a prescription that often will entail root pruning, trunk protection, and watering during disturbance. Documentation included measuring each tree, listing the condition, and if CRZ was being impacted by more than 20 percent.

APPENDIX 2: IMPACTED TREES

A list of all trees inventoried is below, sorted by condition. Each tree has been labeled with species, diameter at breast height (DBH), and condition. A map of the GPS coordinates has also been included.

Tree #	Species	DBH	Tag	Removal/ Impacted	Condition	Appraisal
9	White oak	42	na	Impacted	5 excellent	\$25,000.00
16	American elm	16	45	Impacted	3 fair	\$4,200.00
17	American elm	11	46	Impacted	3 fair	\$2,000.00
19	Sugar Maple	12	118	Impacted	3 fair	\$2,400.00
21	White oak	32	125	Impacted	4 good	\$16,000.00
29	Tulip tree	26	197	Impacted	3 fair	\$10,800.00
30	Sugar maple	11	121	Impacted	3 fair	\$2,000.00
31	Green ash	28	120	Impacted	4 good	\$12,500.00
32	Black walnut	26	71	Impacted	4 good	\$10,800.00
33	Tulip tree	39	74	Impacted	3 fair	\$22,400.00
34	Ash	42	196	Impacted	3 fair	\$25,000.00
35	River birch	17	201	Impacted	3 fair	\$1,700.00
38	American elm	22	3	Impacted	3 fair	\$7,800.00

39	Sweetgum	14	2	Impacted	3 fair	\$3,200.00
40	Tulip tree	38	89	Impacted	3 fair	\$21,600.00
43	Tulip tree	35	240	Impacted	3 fair	\$18,900.00
44	Ash	18	239	Impacted	3 fair	\$5,300.00
45	Tulip tree	15	238	Impacted	3 fair	\$3,700.00
46	Tulip tree	44	243	Impacted	3 fair	\$26,000.00
48	Sweetgum	11	249	Impacted	2 poor	\$2,000.00
49	American elm	10	194	Impacted	3 fair	\$1,700.00
15	American sycamore	38	44	Impacted	4 good	\$21,600.00
				Total for impacted trees		\$246,600.00
1	American beech	32	10	Remove	5 excellent	\$16,000.00
2	American beech	43	17	Remove	4 good	\$25,800.00
3	Tulip tree	9	24	Remove	3 fair	\$1,400.00
4	Hickory	21	16	Remove	3 fair	\$7,100.00
5	Magnolia	5	na	Remove	4 good	\$500.00
7	Magnolia	5	na	Remove	5 excellent	\$500.00
8	American elm	12	na	Remove	2 poor	\$2,400.00
10	Black walnut	31	52	Remove	4 good	\$15,000.00
11	Bigleaf maple	4	na	Remove	4 good	\$400.00
12	American basswood	12	112	Remove	3 fair	\$2,400.00
13	Sugar maple	13	119	Remove	3 fair	\$2,800.00
14	Sugar maple	16	114	Remove	3 fair	\$4,200.00
18	American elm	19	116	Remove	3 fair	\$5,800.00
23	American basswood	15	131	Remove	3 fair	\$3,700.00
24	Tulip tree	35	215	Remove	3 fair	\$18,900.00
25	Water oak	12	135	Remove	3 fair	\$2,400.00
26	American basswood	18	140	Remove	3 fair	\$5,300.00
27	Sugar maple	10	153	Remove	3 fair	\$1,700.00
28	Sugarberry	11	198	Remove	2 poor	\$2,000.00
36	American basswood	18	202	Remove	3 fair	\$2,000.00
37	Tulip tree	30	na	Remove	3 fair	\$14,100.00
41	Black walnut	11	256	Remove	3 fair	\$2,000.00
42	Green Ash	12	257	Remove	3 fair	\$2,400.00
47	Hackberry	11	244	Remove	3 fair	\$2,000.00
6	American elm	18	18	Remove	3 fair	\$5,300.00
				Total for tree removal		\$146,100.00
	TOTAL VALUE					\$392,700.00