

TREE REMOVAL AND REPLACEMENT PLAN
FOR THE GATES AT BOULDERCREST
ATLANTA, GA

Prepared by
Barneycastle Forestry Services, Inc.

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Introduction – The landscaping for the Phases One, Two and Three at The Gates at Bouldercrest was completed in 2002 and included the installation approximately 170 trees in the front yards of the condominiums. Unfortunately, the species selection and placement of the trees are less than desirable; therefore, these trees will begin to cause problems in the near future. Barneycastle Forestry Services, Inc. was retained to develop an evaluation of the problem trees and make recommendations to rectify current and potential problems.

Objective – To inspect and evaluate 169 trees in the front yards of houses in Phases One, Two, and Three, state findings from the inspection and evaluation, and make recommendations regarding removal and replacement of trees.

Findings and Recommendations from Inspection and Evaluation – Based on the inspection of the trees and an evaluation of current and future problems with the trees, 61 of the 169 inspected trees have been recommended for immediate removal. The trees are listed in the attached spreadsheets by number, species, diameter, description/condition, and recommendations. A map depicting the location of the trees is also attached..

Most of the trees recommended for immediate removal are silver maple. Silver maples normally reach 50 to 70 feet in height at maturity, but can grow to 100 to 120 feet in height. The width of the crown or canopy is usually about 2/3 the height. Since the growing space for the vast majority of the silver maples in Phases One, Two, and Three is very limited, these trees will outgrow their growing space in the very near future.

Since silver maples have gross feeding root systems, they cause problems with buckling of sidewalks and clogging of water and sewer lines. Silver maples also have very brittle branches with narrow branch angles, which cause the branches to fail easily.

Most of the other trees recommended for immediate removal are either planted too close to another tree or are too close to driveways, sidewalks, and water and sewer lines. Regarding spacing between planted trees, overstory trees such as silver and red maples, red oaks, etc. should ideally be planted 40 feet apart. Many of the trees recommended for immediate removal are maples and oaks that are planted too close together.

Many of the trees recommended for immediate removal are planted very close to driveways, sidewalks, water meters, and water and sewer lines. The diameter growth of these trees will cause problems with the driveways and sidewalks with eventual buckling or cracking. While tree roots cannot generate enough pressure to push into water or sewer pipes, they can enter into gaps in the pipe connections, thus causing possible clogging of these water or sewer lines.

Most of the trees that are not recommended for immediate removal should be re-inspected and re-evaluated for removal in 2 years (see spreadsheet). In addition, pruning is recommended for many of the remaining trees. The primary objective for the pruning is to create one main stem for the trees that have co-dominant stems. Trees with co-dominant stems are much more subject to failure of one or more of the stems than trees with one main stem. The pruning should be performed by a certified arborist.

Recommendations for Replacement Trees – Following is a list of trees recommended to replace the trees that will be removed. All of these tree species are understory species that grow to a maximum of 30 feet in height at maturity.

Recommended Replacement Trees for The Gates at Bouldercrest:

- Trident maple (*Acer buergeranum*) – This is a superb small urban tree. A tough, long lived vase-shaped tree that is grown as a single stem of multi-stem specimen.
- Crape myrtle (*Lagerstroemia spp.*) – There are a variety of cultivars of crape myrtles, most of which make an ideal small tree for an urban setting. Most species reach a maximum of 30 feet in height at maturity.
- Flowering Dogwood (*Cornus florida*) – Dogwood is a very popular small tree species that usually reach 20 – 25 feet at maturity. There are a variety of cultivars of dogwoods with white and pink flowers.
- Holly (*Ilex spp.*) – There are many cultivars of hollies that reach 20 to 30 feet at maturity and are evergreen. Most species of hollies have colorful berries in the winter.
- Redbud (*Cercis canadensis*) – This is a popular understory species that does well in urban settings. Redbud usually reaches 20 – 30 feet at maturity and is known for its showy purplish flowers that bloom in the spring just before the leaves emerge.
- Little Gem Southern Magnolia (*Magnolia grandiflora* ‘Little Gem’) – This is one of the smallest species of magnolia that normally reaches 20 feet in height in 20 years. It has small dark green (evergreen) leaves and showy white flowers.
- Downy Serviceberry (*Amelanchier arborea*) – This tree reaches 15 – 30 feet in height at maturity and has small leaves, showy flowers, and a small berry that are a favorite of birds and other wildlife species.
- Clump River Birch (*Betula nigra*) – Can be standard or multi-trunked and grows to 30 – 50 feet at maturity. Great ornamental tree with exfoliating bark.
- American Hornbeam (*Carpinus caroliniana*) – Provides cool, dense shade in the summer because of its many leaves giving a dense appearance. Reaches 20 - 30 feet at maturity.

Trees Atlanta, Inc. has been retained to plant the replacement trees. The replacement trees are scheduled to be planted on February 24, 2007 and the trees designated for removal are scheduled to be removed beginning on March 10, 2007. Trees Atlanta, Inc. has professional staff to oversee the planting of the replacement trees; therefore, it is recommended that Trees Atlanta staff determine species and placement of the replacement trees based on information provided in this report.

Conclusion – Most of the trees planted in the front yards of the units in Phases One, Two, and Three were either a poor species selection, were planted in the wrong location, or were planted too close to other trees. It is recommended that the 61 trees identified in the attached spreadsheets for immediate removal be removed early this year. It is also recommend that many of these trees be replaced with smaller species of trees.

Once the 61 trees recommended for immediate removal are removed and the new trees are planted in proper locations, the problems associated with the initial tree installation will be partially rectified. Many of the trees recommended for re-inspection in two years may need to be removed and replaced with smaller species of trees as well. In the meantime, some of the problems with these trees can be corrected by pruning of co-dominant stems.

LISTIN

Tree #	Species	DBH/Size
1	Bradford pear	6"
2	Red maple	6"
3	Red oak	5"
4	Red oak	3"
5	Red oak	4"
6	Red oak	4"
7	Red oak	5"
8	Red oak	6"
9	Red oak	5"
10	Red oak	4"
11	Red oak	4"
12	Red oak	4"
13	Red oak	5"
14	Red oak	4"
15	Red oak	4"
16	Red maple	5"
17	Red maple	4"
18	Red maple	4"
19	Red maple	4"
20	Red maple	5"
21	Red maple	5"
22	Red maple	5"
23	Red maple	5"
24	Red maple	5"
25	Red maple	5"
26	Red maple	5"
27	Red maple	5"
28	Red maple	4"
29	Crape myrtle	5 stems

Note - DBH is diameter at breast height m

LISTIN

Tree #	Species	DBH/Size
30	Crape myrtle	2 stems
31	Crape myrtle	3 stems
32	Crape myrtle	4 stems
33	Crape myrtle	3 stems
34	Crape myrtle	6 stems
35	Crape myrtle	5 stems
36	Crape myrtle	5 stems
37	Willow oak	3"

38	Kwansan cherry	4"
39	Kwansan cherry	4"
40	Kwansan cherry	4"
41	Crape myrtle	3 stems
42	Crape myrtle	2 stems

Note - DBH is diameter at breast height m

LOG OF TREES IN PHASE ONE OF THE GATES AT BOULDERCREST

Condition/Description
Okay for now.
Okay for now.
Okay for now. 2' feet two water meters.
5' from tree #5.
Okay for now.
6' from tree #7. 1' from driveway.
Okay for now.
Okay for now.
Okay for now.
5' from #9.
5' from #12.
Okay for now.
2' from water meter and 2' from driveway. 4' from tree #14.
Okay for now. 2' from water meter.
Adequate growing space. Some tipping of lower limbs.
Okay for now.
Okay for now.
2' from driveway. 10' from tree #17.
Okay for now.
1' from BellSouth box. Okay for now.
4' from driveway.
Adequate growing space. Okay.
2' from driveway. 15' from tree #22.
Okay for now.
4' from tree #24.
3' from driveway. Okay for now.
15' from tree #26.
Okay for now.
10' in height. Okay.

measured at 4.5 feet above ground.

3 OF TREES IN PHASE ONE OF THE GATES AT BOULDERCREST - PAGE 2

[illegible]

3' from tree #37.
Okay for now.
4' from tree #39.
8' in height. Okay.
8' in height. Okay.

Measured at 4.5 feet above ground.

Remove.
Re-inspect in 2 years.
Remove.
Leave.
Leave.

MAP DEPICTING LOCATION OF TREES AT THE GATES AT BOULDERCREST
PHASE 1



Scale – 1 inch equals approximately 50 feet. Red numbers indicate trees to be removed.

LISTING

Tree #	Species	DBH/Size
1	Silver maple	7"
2	Silver maple	7"
3	Silver maple	5"
4	Silver maple	7"
5	Red maple	5"
6	Silver maple	6"
7	Silver maple	6"
8	Red maple	4"
9	Crape myrtle	1 stem
10	Crape myrtle	4 stems
11	Red maple	4"
12	Crape myrtle	3 stems
13	Silver maple	5"
14	Silver maple	6"
15	Silver maple	7"
16	Silver maple	4"
17	Silver maple	6"
18	Silver maple	5"
19	Silver maple	6"
20	Silver maple	7"
21	Red maple	3"
22	Red maple	4"
23	Silver maple	3"
24	Silver maple	6"
25	Willow oak	4"
26	Silver maple	6"
27	Silver maple	3"
28	Silver maple	4"
29	Silver maple	5"

Note - DBH is diameter at breast height n

LISTING

Tree #	Species	DBH/Size
30	Silver maple	6"
31	Silver maple	6"
32	Silver maple	7"
33	Silver maple	5"
34	Silver maple	4"
35	Silver maple	6"
36	Silver maple	7"
37	Kwansan cherry	3"

38	Silver maple	5"
39	Silver maple	4"
40	Silver maple	5"
41	Silver maple	6"
42	Silver maple	4"
43	Silver maple	7"
44	Silver maple	7"
45	Crape myrtle	3 stems
46	Crape myrtle	4 stems
47	Crape myrtle	3 stems
48	Silver maple	5"
49	Red maple	5"
50	Silver maple	6"
51	Silver maple	5"
52	Silver maple	4"
53	Red maple	3"
54	Silver maple	4"
55	Red maple	5"

Note - DBH is diameter at breast height m

LISTING

Tree #	Species	DBH/Size
56	Silver maple	6"
57	Silver maple	4"
58	Red maple	5"
59	Red maple	5"
60	Dogwood	3"
61	Red maple	4"
62	Red maple	5"
63	Silver maple	6"
64	Silver maple	4"
65	Silver maple	4"
66	Silver maple	5"
67	Red maple	4"
68	Silver maple	3"

Note - DBH is diameter at breast height m

3 OF TREES IN PHASE TWO OF THE GATES AT BOULDERCREST

Condition/Description
Okay for now. Adequate growing space. 3 co-dominant stems at 3'.
3' from water meter. Bark wound.
Okay for now. Adequate growing space..
5' from tree #5.
Okay for now.
Limited growing space. 4 co-dominant stems at 3'.
Okay for now. 2 co-dominant stems at 2'.
Okay for now.
10' in height. Okay.
10' in height. Okay.
Okay for now.
Encroaching house.
5' from tree # 14.
Okay for now. 2 co-dominant stems at 2'.
6' from tree # 16. 2 co-dominant stems at 1.5'.
Okay for now. 2' from water meter.
3 co-dominant stems at ground. 12' from tree #18. Bark wounds.
Okay for now. 2 co-dominant stems at 4'.
Okay for now. 3 co-dominant stems at 3'.
2' from driveway.
Okay for now.
Okay for now. 3 co-dominant stems at 4'.
3 co-dominant stems at 3'.
2' from Georgia Power and BellSouth boxes.
Okay for now.
3 co-dominant stems at 3'.
6' from tree #28.
Okay for now.
6' from tree #30. 2' from driveway.

Measured at 4.5 feet above ground.

3 OF TREES IN PHASE TWO OF THE GATES AT BOULDERCREST - PAGE 2

Condition/Description
Okay for now.
2 co-dominant stems at 4'. Adequate growing space.
3 co-dominant stems at 4'.
2 co-dominant stems at 3'.
1' from driveway.
2 co-dominant stems at 1'. Okay for now.
2 co-dominant stems at 2'.
Blackknot disease.

4 co-dominant stems at 3'. 8' from tree #39.
2 co-dominant stems at 2'.
3' from tree #41.
2 co-dominant stems at 2'.
Bark wounds.
Boring insects at base of tree.
7' from tree #1 in Phase Three.
12' in height. Okay.
6' in height. Okay.
10' in height. Okay.
2 co-dominant stems at 3'. 1' from Bellsouth box. Adequate space.
Okay for now.
3 co-dominant stems at 3'. 4' from tree #49.
3 co-dominant stems at 4'. Okay for now.
15' from tree #53.
Okay for now.
2 co-dominant stems at 3'.
2 co-dominant stems at 5'. Okay for now.

Measured at 4.5 feet above ground.

3 OF TREES IN PHASE TWO OF THE GATES AT BOULDERCREST - PAGE 3

Condition/Description
2 co-dominant stems at 2'.
5' from tree #56.
Okay for now.
Okay for now.
2 co-dominant stems at 2'. Okay.
Okay for now. Behind utility boxes.
2 co-dominant stems at 5'.
12' from tree #62.
Okay for now.
2 co-dominant stems at 3'. 12' from tree #64. 3' from driveway and sidewalk.
3 co-dominant stems at 4'.
15' from tree #66. 2' from driveway.
Bark wound. Broken limb.

Measured at 4.5 feet above ground.

Recommendations
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Leave.
Leave.
Leave.
Remove.
Remove.
Prune smaller stem.
Remove.
Re-inspect in 2 years.
Remove.
Prune smaller stem.
Prune smallest stem.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Prune 2 smallest stems.
Remove.
Re-inspect in 2 years.
Prune smallest stem.
Remove.
Re-inspect in 2 years.
Remove.

Recommendations
Re-inspect in 2 years.
Prune smallest stem.
Prune 2 smallest stems.
Remove.
Remove and replace.
Prune smaller stem.
Prune smaller stem.
Remove.

Remove.
Prune smaller stem.
Remove.
Prune smaller stem.
Remove and replace.
Remove.
Remove.
Leave
Leave
Leave
Prune smaller stem.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove smaller stem.
Re-inspect in 2 years.

Recommendations
Remove smaller stem.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Leave.
Re-inspect in 2 years.
Prune smaller stem.
Remove.
Re-inspect in 2 years.
Remove and replace.
Remove.
Re-inspect in 2 years.
Remove and replace.

MAP DEPICTING LOCATION OF TREES AT THE GATES AT BOULDERCREST
PHASE 2



Scale – 1 inch equals approximately 60 feet. Red numbers indicate trees to be removed.

LISTING OF

Tree #	Species	DBH/Size
1	Red maple	4"
2	Red maple	4"
3	Red maple	4"
4	Red maple	4"
5	Red maple	4"
6	Red maple	4"
7	Red maple	4"
8	Red maple	3"
9	Red maple	4"
10	Red maple	4"
11	Red maple	4"
12	Red maple	4"
13	Red maple	5"
14	Red maple	4"
15	Kwansan cherry	3"
16	Red maple	4"
17	Kwansan cherry	3"
18	Kwansan cherry	3"
19	Kwansan cherry	3"
20	Kwansan cherry	3"
21	Kwansan cherry	3"
22	Kwansan cherry	4"
23	Kwansan cherry	4"
24	Kwansan cherry	3"
25	Kwansan cherry	4"
26	Kwansan cherry	3"
27	Kwansan cherry	3"
28	Kwansan cherry	3"
29	Red maple	3"

Note - DBH is diameter at breast height m

LISTING

Tree #	Species	DBH/Size
30	Red maple	4"
31	Red maple	4"
32	Red maple	4"
33	Red maple	4"
34	Red maple	3"
35	Red maple	4"
36	Red maple	3"
37	Red maple	5"

38	Red maple	3"
39	Red maple	3"
40	Red maple	4"
41	Red maple	4"
42	Red oak	3"
43	Crape myrtle	5 stems
44	Crape myrtle	5 stems
45	Crape myrtle	6 stems
46	Crape myrtle	5 stems
47	Silver maple	6"
48	Red oak	6"
49	Red maple	3"
50	Silver maple	6"
51	Silver maple	3"
52	Silver maple	6"
53	Silver maple	3"
54	Silver maple	3"
55	Silver maple	5"
56	Silver maple	4"
57	Silver maple	5"
58	Silver maple	4"
59	Silver maple	4"

Note - DBH is diameter at breast height m

TREES IN PHASE THREE OF THE GATES AT BOULDERCREST

Condition/Description
Okay for now. Adequate growing space.
7' from tree # 3. 1' from driveway.
Okay for now.
3' from tree # 5.
Okay for now.
Okay for now.
4' from tree #6.
Okay for now. Adequate growing space.
10' from tree #8. 2 co-dominant stems at 6'.
2' from driveway and 7' from tree #11.
2 co-dominant stems at 5'.
2' from driveway. 4' from tree #13
4' from tree #12.
Okay for now.
Okay for now.
Okay for now. Adequate growing space.
Okay for now.
Okay for now.
3' from tree # 20.
Okay for now.
Okay for now.
Leaning. 1' from water meter.
Okay for now.
Okay for now.
Okay for now.
3' from tree #25.
Okay for now.
Okay for now.
Bark wound at base. Okay for now.

Measured at 4.5 feet above ground.

OF TREES IN PHASE THREE OF THE GATES AT BOULDERCREST - PAGE 2

Condition/Description
Okay for now.
7' from tree # 32.
Okay for now.
4 co-dominant stems at 4'. Okay for now.
2 co-dominant stems at 3'.
Okay for now.
Okay for now.
2' from driveway. Bark wounds.

Bark wounds.
15' from tree #40.
Okay for now.
Okay for now.
2' from water meter.
12' in height. Okay for now.
12' in height. 3' from tree #45.
12' in height. Okay.
12' in height. Okay.
2 co-dominant stems at 2'.
2' from driveway. Bark wounds. 1' from water meter.
Okay for now.
3 co-dominant stems at 2'.
2 co-dominant stems at 3'. Okay for now.
4' from tree #51.
2 co-dominant stems at 2'.
8' from tree #53.
2 co-dominant stems at 3'. Okay for now.
Limited growing space (between two driveways.
3 co-dominant stems at 4'. Okay for now.
6' from tree # 57.
3 co-dominant stems at 3'. Okay for now.

Measured at 4.5 feet above ground.

Recommendations
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove and replace.
Remove.
Remove smaller stem.
Remove and replace.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Re-inspect in 2 years.
Re-inspect in 2 years.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Re-inspect in 2 years.

Recommendations
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Prune smaller stem.
Re-inspect in 2 years.
Re-inspect in 2 years.
Remove and replace.

Remove.
Remove.
Re-inspect in 2 years.
Re-inspect in 2 years.
Remove and replace.
Re-inspect in 2 years.
Remove.
Leave
Leave
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.
Remove and replace.
Re-inspect in 2 years.
Remove.
Remove and replace.
Remove.
Re-inspect in 2 years.
Remove and replace.
Re-inspect in 2 years.
Remove.
Re-inspect in 2 years.

MAP DEPICTING LOCATION OF TREES AT THE GATES AT BOULDERCREST
PHASE 3



Scale – 1 inch equals approximately 40 feet. Red numbers indicate trees to be removed.