

SANDY SPRINGS TREE CANOPY STUDY

September, 2013



Previous Canopy Studies

2

- UGA Institute of Ecology Natural Resources Spatial Analysis Laboratory (NARSAL) conducted canopy studies using 1991, 2001, and 2005 Landsat Satellite Imagery
- Data resolution was 30 meter pixels

NARSAL Study Results

3

- 1991 – 59% canopy cover
- 2001 – 54% canopy cover
- 2005 – 55% canopy cover

2008 Canopy Study

4

- Sandy Springs GIS staff, with significant assistance from NARSAL, conducted a canopy study of using 2008 Landsat 5 data
- 30 meter resolution infrared pictometry
- Data had already been processed by NARSAL

- 2008 – 51.82% canopy cover

2010 Canopy Study

5

- Sandy Springs GIS staff, again with assistance from NARSAL, conducted a canopy study using data from National Agriculture Inventory Program (NAIP) Landsat 7 data
- 1 meter resolution infrared pictometry
- Data was checked against aerial photography

2010 Canopy Study

6

- The 2010 higher resolution allowed for very accurate grading
- Data was converted up to 30 meter resolution to allow comparison to previous canopy studies
- 2010 – 59.02% canopy cover

Sandy Springs Canopy Studies

7

30 Meter Resolution

- 1991 – 59% canopy cover
- 2001 – 54% canopy cover
- 2005 – 55% canopy cover
- 2008 – 52% canopy cover

1 Meter Resolution

- 2010 – 59% canopy cover

Next Steps

8

- Once data is available, conduct another 1 meter resolution canopy study (Late 2013)
- Compare to data from 2010 canopy study
- Develop canopy management plan

Higher resolution data will allow:

- A more accurate assessment of the canopy
- Development of a more targeted canopy management plan



CITY COUNCIL AGENDA ITEM

TO: Mayor & City Council **DATE:** September 11, 2013
FROM: John McDonough, City Manager
AGENDA ITEM: Consideration of Approval of Recommended Uses for Tree Bank Funds
MEETING DATE: For Submission onto the September 17, 2013, City Council Regular Meeting Agenda

BACKGROUND INFORMATION: (Attach additional pages if necessary)

See attached:

Memorandum
Presentation

APPROVAL BY CITY MANAGER: JPM APPROVED

PLACED ON AGENDA FOR: 9/17/2013

CITY ATTORNEY APPROVAL REQUIRED: () YES () NO

CITY ATTORNEY APPROVAL: SMY

REMARKS:

TO: Mayor and City Council

FROM: John McDonough, City Manager

DATE: September 12, 2013 for submission on the Agenda of the September 17, 2013 City Council Meeting

ITEM: Consideration of Approval of Recommended Uses for Tree Bank Funds

Background

At the August 20, 2013 Work Session of the City Council, staff presented an overview of recently completed beautification projects in the City as well as potential projects that could be completed utilizing funds collected and held in the City's Tree Fund. Council requested the opportunity to vote and rank the suggested projects in priority order.

Discussion

An electronic ballot was circulated to Councilmembers for use in ranking the suggested projects. The outcome of the ranking exercise is:

Tree Fund Priority Ranking			
PRIORITY	Project Name	Estimated Budget	Allocation
1	Abernathy/Roswell Road Island	\$ 20,000	\$ 20,000
2	City Center Street Trees	\$ 35,000	\$ 35,000
3	Springs Crossing Landscape	\$ 15,000	\$ 15,000
4	Fig Island	\$ 25,000	\$ 25,000
5	Glenridge Drive (south of Abernathy Road)	\$ 40,000	\$ 21,983
6	Abernathy Road Medians and Street Trees	\$ 110,000	
7	Johnson Ferry Road Medians	\$ 100,000	
7	Tree Replanting at Big Trees	\$ 20,000	

Amount Available \$ 116,983

Attachment

1. Presentation

*City
Manager*

TREE FUND PROJECT RANKING RESULTS

September 17, 2013



Tree Fund

2

Funds collected for:

- Site size not sufficient to meet canopy requirements or mitigation requirements
- Enforcement of Tree Conservation Ordinance, related to illegally removed trees

Fund Balance

3

- Tree Fund
(as of July, 2013) **\$ 116,983.00**

Ranking of Potential Projects

Tree Fund Priority Ranking

PRIORITY	Project Name	Estimated Budget	Allocation
1	Abernathy/Roswell Road Island	\$20,000	\$20,000
2	City Center Street Trees	\$35,000	\$35,000
3	Springs Crossing Landscape	\$15,000	\$15,000
4	Fig Island	\$25,000	\$25,000
5	Glenridge Drive (south of Abernathy Road)	\$40,000	\$21,983
6	Abernathy Road Medians and Street Trees	\$110,000	
7	Johnson Ferry Road Medians	\$100,000	
7	Tree Replanting at Big Trees	\$20,000	

Amount Available

\$116,983

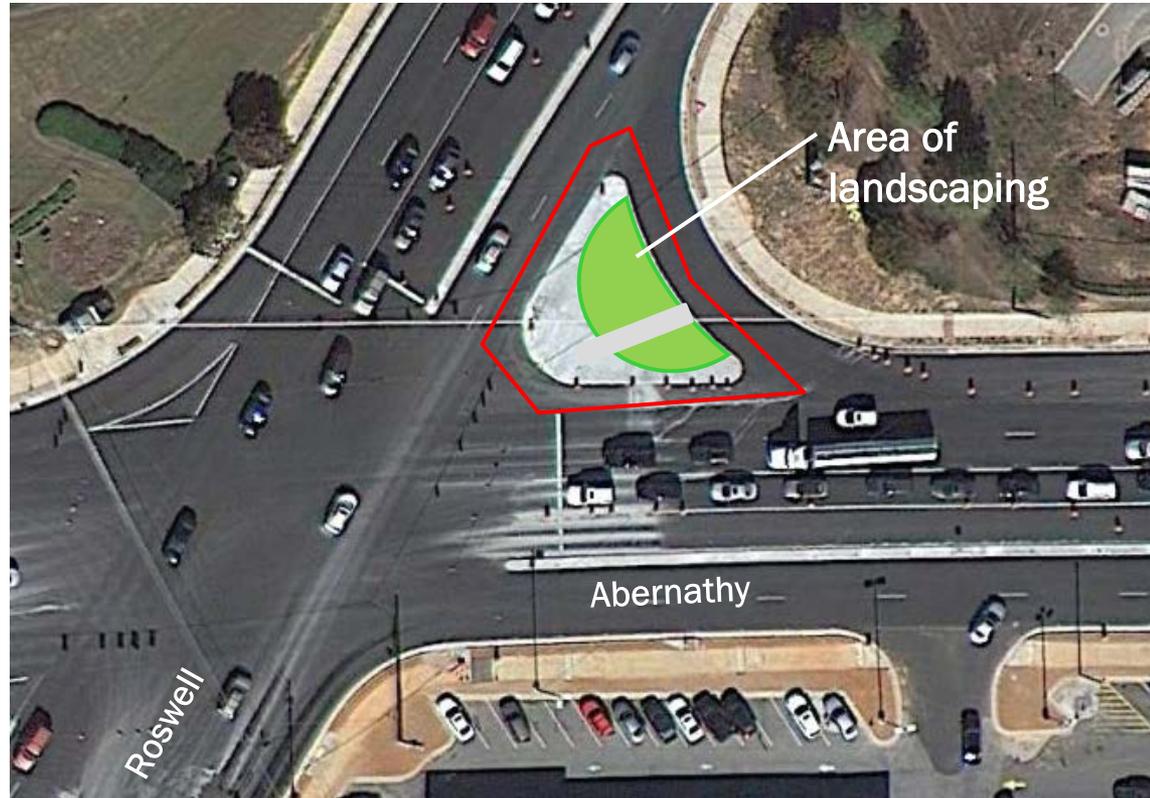
\$116,983

Abernathy/Roswell Road Island

5

Roswell Road Island

- Approx. 2,600 square feet area total
- Must maintain pedestrian crosswalk refuge
- Currently all concrete, would require pavement cutting and removal
- Limited to 30" max. ht. plant materials to keep sight lines open
- Beautification – low shrubs, groundcover such as junipers, daylilies, perennial groundcovers

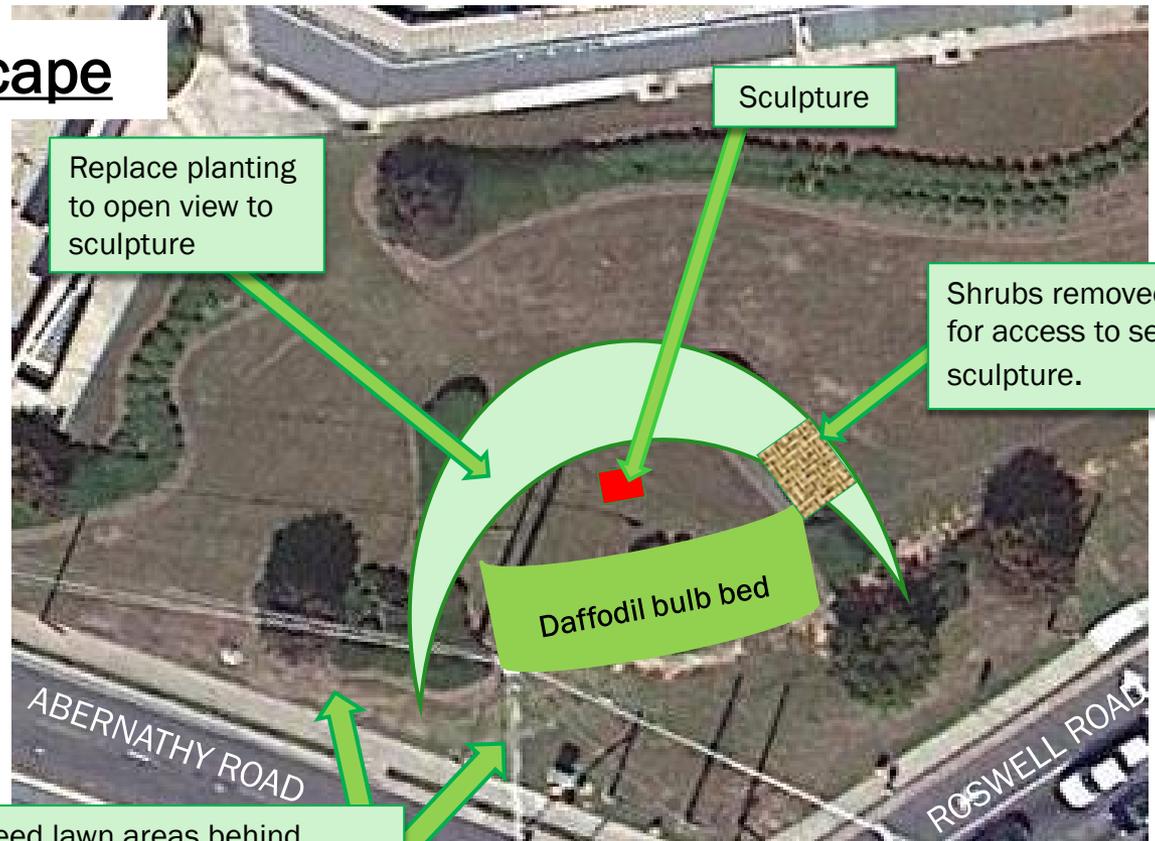


Abernathy Road/Roswell Road

6

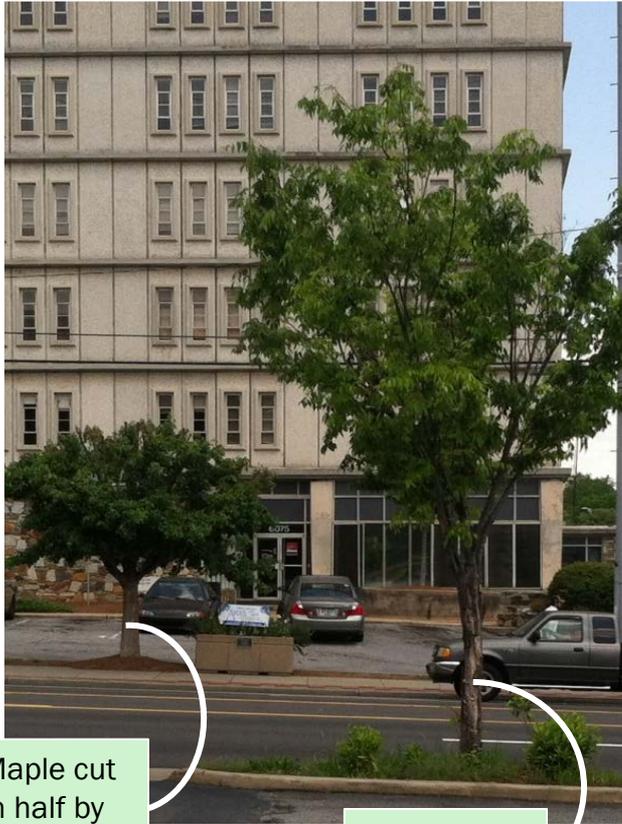
Springs Crossing Landscape

- City-owned parcel at corner of Roswell and Abernathy, maintained by shopping center management
- 2,500 bulbs planted by garden clubs, bed prepared and groundcover planted by COSS in December, 2012
- Sculpture re-installed February, required removal of shrubs
- Recommend removing shrubs, replant area to frame sculpture



City Center Street Trees

7



Maple cut
in half by
GA Power

Zelkova
damaged
by vehicles



City Center Tree Replacements

- Streetscape trees primarily on Roswell Road have failed or have sustained significant damage requiring replacement.
- Highly visible City Center area with streetscape improvements in place
- Many trees stressed, damaged, infected with mistletoe, or severely pruned by GA Power
- Some tree pits and landscape islands have no trees
- Need detailed inventory

Glenridge Drive Improvements

8

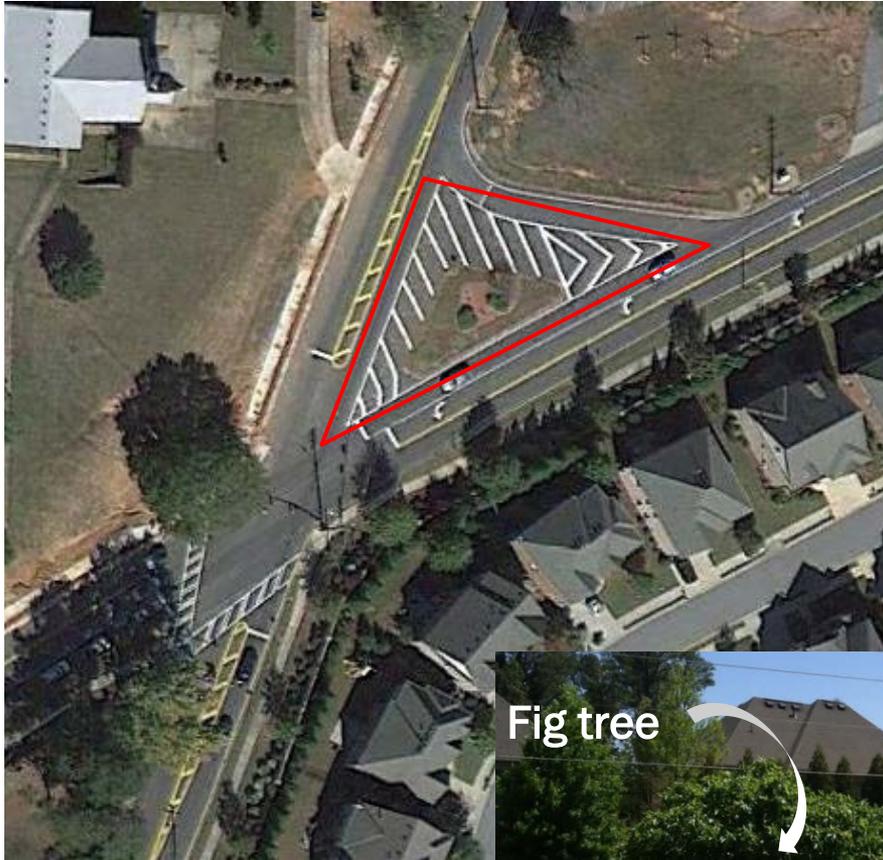


Fig Island

- Mount Vernon and Glenridge island, recently striped to address illegal parking
- Intersection is somewhat bleak – island is lawn, planted with Indian Hawthorn and one fig tree
- Striping added to eliminate overflow parking, island could be expanded by removing pavement
- Beautification – tree, shrubs, and groundcover



Fig tree

Glenridge Drive Improvements

9



Glenridge Intersection

- Open right of way left bare from realignment of intersection
- Approx. 35,000 square feet open area with overhead power lines
- Tall/steep bank, difficult to maintain grass well
- Beautification – trees, shrubs, groundcover

Johnson Ferry Road Improvements

10



Johnson Ferry Rd Median 1

- Approx. 250' length of plantable area
- Concrete removed by GDOT
- Sleeving installed for the addition of irrigation
- Beautification – trees, shrubs, groundcover

Johnson Ferry Road Improvements

11



Johnson Ferry Road Median 2

- Approx. 540' length of plantable area
- Concrete removed by GDOT
- Sleeving installed for the addition of irrigation
- Beautification – trees, shrubs, groundcover

Johnson Ferry Road Improvements

12

Johnson Ferry Road Median 3

- Approx. 400' length of plantable area
- Concrete removed by GDOT
- Sleeving installed for the addition of irrigation
- Beautification – trees, shrubs, groundcover



Abernathy Road Improvements

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Abernathy Road Street Trees

- Trees lost to road widening
- Trees proposed in existing ROW
- Smaller trees required below power lines and in sight lines of shopping center
- Wide expanse of fresh asphalt is hot and bleak, with no trees, and there are no power lines in the way of planting large shade trees



Abernathy Road Improvements

14



Abernathy Median 2

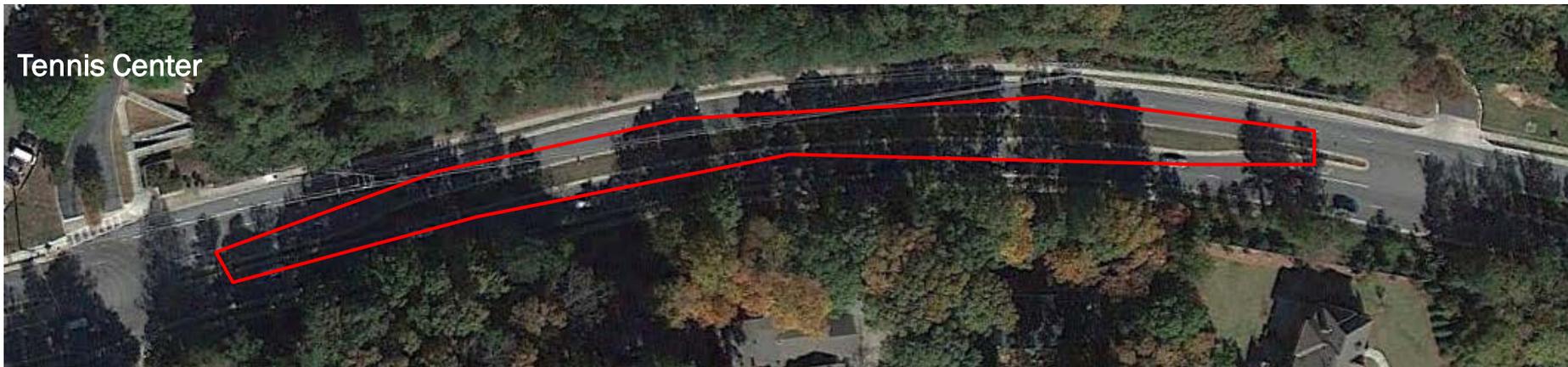
- Approx. 200' length plantable space
- Concrete removed by GDOT winter 2013
- Beautification – trees, shrubs, groundcover to match Median 1, area is in desperate need

Abernathy Road Improvements

15

Abernathy Road Median 4

- Approx. 600' length of plantable area
- Beautification – trees, shrubs, groundcover



Abernathy Road Improvements

16

Abernathy Road Median 5

- Approx. 200' length of plantable area
- Beautification – trees, shrubs, groundcover

Abernathy Road Median 6

- Approx. 85' length of plantable area
- Beautification – trees, shrubs, groundcover



Abernathy Road Improvements

17

Abernathy Road Median 7

- Approx. 430' length of plantable area
- Beautification – trees, shrubs, groundcover
- Can be incorporated in Interchange/ Gateway plantings

