

23-07-201

URBAN AND COMMUNITY FORESTRY GRANT  
MAINTENANCE MEMORANDUM OF AGREEMENT

This Agreement, made and entered into this the 24 day of June, 2010, by and between the DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, State of Florida, hereinafter called the Department and the UF/IFAS Nassau County Extension, hereinafter called the Contractor.

WITNESSETH

WHEREAS, the Department desires to increase the general level of knowledge of the principles of urban and community forestry by awarding funds to the Contractor for the establishment of a demonstration tree planting project as outlined in the Urban and Community Forestry grant application Number 10A-121 and Grant Memorandum of Agreement (the Grant Agreement) attached hereto as Exhibit "1" and by reference made a part hereof;

WHEREAS, the Contractor agreed in the Grant Agreement to maintain the project as described in the Grant Application;

WHEREAS, the Contractor by Resolution desires to enter into this Agreement and authorizes its officers to do so.

NOW THEREFORE, herein and in Exhibit "1", the Grant Memorandum of Agreement, the parties covenant and agree as follows:

- A. The Contractor shall maintain the project in a responsible manner and with due care in accordance with the below listed Project Standards for the property at the following location:

Strip of land with parking lot medians directly across from BOCC Chambers.

Specifically, the Contractor accepts the below listed responsibilities and duties:

- (1) All planting stock or replacement must be Florida Grade #1 or better.
- (2) Proper watering and proper fertilization of all trees/plants.
- (3) Keeping trees/plants as free as practicable from disease and harmful insects;
- (4) Proper mulching of trees and/or planting beds;
- (5) Keeping the premises free of weeds;
- (6) Mowing and/or cutting grasses to the proper length;
- (7) Proper pruning of all trees which includes; removing dead or disease parts of trees or (ii) pruning such parts thereof which present a hazard;
- (8) Removing and replacing dead or diseased trees/plants in their entirety, or removing and replacing those that fall below original Project Standards.
- (9) Following the Planting and Maintenance Guidelines as included herein.

The Contractor agrees to repair, or remove and replace at its own expense all or part of the project that falls below Project Standards. In the event any part or parts of the project, including all plants, must be removed and replaced for whatever reason, then they shall be replaced with the same grade, size and specification as provided in the original plans for the project. Furthermore, the Contractor shall keep litter removed from the project area. The above named functions to be performed by the Contractor shall be subject to periodic inspections by the Department. It is the intent of the parties that the Contractor shall be the owner of the planting and other installations included and stipulated in the grant application comprising the project.

- B. The terms of this Agreement commence on the date of Certification of Acceptance and continue for a period of three (3) years.
- C. In the event this Agreement is terminated in accordance with the provisions provided in Exhibit 1, then the Contractor shall refund to the Department a pro-rated portion of the grant award based upon the following schedule:
  - (1) If this agreement is terminated within one year of this agreement, 75 percent of the grant award;
  - (2) If this agreement is terminated during the second year of this agreement, 50 percent of the grant award;
  - (3) If this agreement is terminated during the third year of this agreement, 25 percent of the grant award.
- D. This Agreement, together with the Urban and Community Forestry Grant Memorandum of Agreement, embodies the entire agreement and understanding between the parties hereto and there are no other agreements or understandings, oral or written, with reference to the subject matter hereof that are not superseded hereby.

Signed by parties to this agreement:

**DEPARTMENT OF AGRICULTURE AND  
CONSUMER SERVICES**

*Mark Gorman*

Signature

*Director of Administration*

Title

Date

*June 24, 2010*

**CONTRACTOR**

*Michael H. Boyle*

Signature

Chairman

Title

Date

*6-9-10*

*10/6/10*

*Ed  
6/9/10*

## PLANTING AND MAINTENANCE GUIDELINES

### A. Planting

Site factors which influence long-term survivability should be considered: overhead and underground utilities, sidewalks, sign conflicts, traffic visibility, light poles, right-of-way or site improvements, size of planting space/site, etc.

All planting stock or replacement stock must be Florida Grade #1 or better.

All synthetic or non-biodegradable material such as nylon rope, synthetic wrap, treated burlap, etc. must be removed from the root ball before planting. All biodegradable material should be removed from the upper 1/3 of the root ball. Precautions should be taken to eliminate any material from extending above the soil surface where it can act as a wick and dry the surrounding soil.

If trees are planted with wire baskets around the root ball, it is recommended that the top two tiers of wire be cut and removed after the root ball is set in the planting hole.

The planting hole should be at least 3-5 times the diameter of the root ball (where possible) and the same depth as the root ball.

Position the tree or palm in the center of the planting hole with the top of the root ball even with the surrounding soil surface.

Backfill with soil from the planting site, if it is not contaminated. All large rocks should be removed. When the hole is half full, slowly water to saturate the soil and remove air pockets, then continue to fill the hole with soil. It is not recommended that large amounts of organic matter be incorporated into the backfill. Rake the soil evenly around the entire planting area.

Water thoroughly to remove air pockets, secure the soil around the roots, and provide nourishment.

### B. Mulching

Mulch an area at least three times the diameter of the root ball to a depth of 2-4" with wood chips, bark mulch, shredded mulch, leaves or pine needles. Keep the mulch several inches away from the tree or palm trunk.

Replenish mulch as it decomposes maintaining a 2-4" layer over the life of the project.

### C. Staking

Stake only if necessary; for example, if the tree or palm will not stand on its own due to potential vandalism or strong winds.

Use flexible materials such as strapping or commercially available ties that give as the tree diameter increases and as the tree moves. Biodegradable material is recommended.

Do not use wire even if the wire is inside rubber hosing.

Stakes and ties should remain on the trees no longer than one year to avoid girdling.

**D. Pruning**

At the time of planting, only dead, damaged, rubbing or cross braches or fronds should be removed.

Remove sucker sprouts from the base of the tree after planting.

Corrective/structural pruning can begin approximately one year after planting. Do not remove more than 1/3 of the live crown during one growing season.

**E. Watering**

Establish a regular watering schedule and follow it. Slow deep watering is recommended.

Additional water may be needed during hot or dry periods.

As tree or palm growth progresses, be sure to water outward (away from the trunk) to the surrounding soil area. This will promote the outward growth and spread of roots.

Various species of trees or palms and/or soil types may require varied degrees of watering. Soil moisture and tree health should be monitored and irrigation adjusted accordingly. Non-irrigated sites need to be monitored more closely.

**F. Fertilizing**

Begin a fertilization program within the first year of planting. Broadcast fertilizing or fertilizer plugs/stakes are recommended.

Fertilize lightly after the first year using a balanced fertilizer (rates should be based on the size of the tree or palm and any special nutrient requirements).

If micronutrient deficiencies are suspected, have a soil test completed and supplement the fertilization program accordingly.

**EXHIBIT A****BID NUMBER: RFP/DF-09/10-47****OPENING DATE: FEBRUARY 12, 2010 @ 2:00 P.M.****ATTACHMENT D****FLORIDA FOREST HEALTH IMPROVEMENT INITIATIVE GRANT PROPOSAL FORM 2009-2011**

**GENERAL INSTRUCTIONS:** Please complete all items pertaining to the Category Grant for which you are applying. The proposal packet must not exceed thirty (30) one sided pages, including attachments. All attachments must be 8 1/2" X 11", except any attached sketches, plans and maps which must be no larger than 2' X 3' and folded into 8 1/2" X 11". Six (6) copies (one copy with original signatures and five copies) of the proposal packet including the proposal form, the project description and all attachments must be received no later than February 12, 2010, at:

Department of Agriculture and Consumer Services  
Purchasing Office - Forest Health Improvement Initiative - 2009-11 PROPOSAL  
Mayo Building - Room SB-8  
Tallahassee, FL 32399-0800  
Telephone (850) 617-7181

If you have any questions, please see ATTACHMENT J, "Division of Forestry District/Center Contacts"

**PROPOSER INFORMATION (Please Print or Type)**

Project Title: UF/FAS Nassau County Extension - Trees for Urban Environments

Proposer Name: Nassau County Extension

Name and Title of Contact Person: Rebecca L. Jordi, UF/FAS Nassau County Environmental Horticulture

Address: 543350 U.S. Highway # 1, Callahan, Florida

Zip: 32211

Phone: (904) 548-1116

FEID Number 59-188-3042

US Congressional District Number 4

Is your organization a Nonprofit corporation pursuant to Chapter 617, Florida Statutes? Yes \_\_\_ No X

If the applicant is a city or county government, does your urban forestry program have the following:

Professional Staff, in-house or contracted, List qualifications such as ISA certification, forestry degree, etc.  
Rebecca L. Jordi, ISA Certified Arborist, FL-1012

Citizen Tree Advisory Board or Tree Advocacy Group, describe: Forest Stewards (Dept of Forestry)

Urban Tree Inventory or Management Plan, how current? Tree Inventory 2006

Tree Ordinance Covering either public or private lands, describe: No tree ordinance for Nassau County

As the duly authorized representative of the Proposer named above, I hereby certify that all parts of the proposal and required grant information have been read and understood and that all information submitted herein is true and correct.

Authorized Executive Officer:

Title:

Signature:

Date:

**BID NUMBER: RFP/DF-09/10-47****OPENING DATE: FEBRUARY 12, 2010 @ 2:00 P.M.****ATTACHMENT D (CONTINUED)****PROJECT DESCRIPTION****Forest Health IMPROVEMENT Initiative Grant Proposal**

(two page limit, #12 font, single-space)

**Describe the local community and current urban forestry program, and the role of the applicant in that program is a non-profit group:**

The applicant received a U&CF Grant in 2006 to provide arborist training to participants in the Northeast Florida area. Since 2006 two classes have been held annually in cooperation with the Urban Forester in Duval County. The program is called ACE (Arborist Certification Education). Nassau County has an unemployment rate of 10.9% as of November 2009.

**Describe the goals and objectives of this project:**

- Provide examples of hardy, under-utilized trees for local professional landscapers to use in commercial and residential landscapes
- Provide proper example of water saving techniques by installing micro-irrigation
- Provide a site for educational programs such as proper planting, pruning and mulching methods.

The UF/IFAS Nassau County Extension Demonstration Garden has been a state and national award winning garden which demonstrates the guiding principles of Florida Friendly Landscaping such as micro-irrigation, mulching, and Right Plant/Right Place. The current garden features several trees for urban settings. By adding the additional plot and incorporating other trees, the demonstration garden expands its ability to reach not only landscape professionals but also arborists. Most landscape plans encourage limited plant material. The urban tree extension would support diversity by using a variety of different trees as oppose to creating a monoculture by planting only a few tree cultivars.

Nassau County's budget, like so many other counties, has been decimated by the current economy eliminating any potential funding for reforestation of urban trees.

Tree planting will be overseen by Master Board Certified Arborist and the Extension agent, and Nassau County Master Gardener volunteers. All of the tree species are native to Florida or the United States. Most were selected as they are under-utilized species. The garden will be maintained by the Extension agent and Nassau County Master Gardener volunteers.

**Large 2.5 – 4 inch caliper trees:**

- Southern Redcedar, *Juniperus silicicola*, native evergreen – provide food for birds, hide marine boat business, <http://hort.ifas.ufl.edu/trees/JUNSILA.pdf>
- Southern Magnolia, *Magnolia grandiflora*, native evergreen – buffer for bread outlet and paint store, <http://hort.ufl.edu/trees/MAGGRAA.pdf>
- Blackgum, *Nyssa sylvatica*, fruit attracts birds <http://hort.ufl.edu/trees/NYSSYLA.pdf>
- Winged elm, *Ulmus alata*, <http://hort.ifas.ufl.edu/trees/ULMALAA.pdf>
- Live Oak 'Cathedral', *Quercus virginiana* 'Cathedral', buffer from local businesses, <http://hort.ufl.edu/trees/quevira.pdf>
- Overcup oak, *Quercus lyrata*, attracts wildlife, <http://hort.ifas.ufl.edu/trees/QUELYRA.pdf>

**Three medians trees:**

- American hombear, *Carpinus caroliniana*, attracts birds, residential street tree, <http://hort.ifas.ufl.edu/trees/CARCARA.pdf> or Cherry Laurel, *Prunus caroliniana*, attracts birds, <http://edis.ifas.ufl.edu/pdffiles/ST/ST50500.pdf>
- Devilwood, *Osmanthus americanus*, attracts wildlife and birds, <http://hort.ufl.edu/trees/OSMAMEA.pdf>
- Flatwoods plum, *Prunus umbellata*, attracts birds, <http://hort.ifas.ufl.edu/trees/PRUUMBA.pdf>

What environmental or educational value will the community derive from this project?

- Annual UF/IFAS Nassau County Extension pruning classes will be held at the garden
- Planting trees in the place of the non-irrigated, grass area will:
- Reduce parking lot vehicle hydrocarbon emissions (Cardelino & Chameides 1990, Taha 1996, 1997)
  - Directly shade the harsh asphalt parking lot areas thereby creating a cooler microclimate.
  - Increase transpiration of water through the tree leaves which can reduce surrounding air temperature as much as 4 to 7°F (Huang 1987, Myrup 1993, Simpson 1994).
  - Buffer area between complex and adjacent commercial sites.
  - Short videos of proper planting techniques and pruning will be placed on the Nassau County Horticulture website which will be accessible by general public and arborists seeking training material.

Phone calls were made by the Environmental Horticulture Agent to determine which local companies would be interested and able to participate in the project then compared costs and availability of products. Several companies provided written estimates which are included in this application.

The Trees for the Urban Environment would be developed on the James S. Page Governmental Complex on which the award winning UF/IFAS Nassau County Extension Demonstration Garden is located. This complex houses the Nassau County Board of County Commissioners, Nassau County Property Appraiser's Office, Supervisor of Elections, and the Nassau County Attorney's office. This site is an extremely active site which potentially receives thousands of visitors annually. The UF/IFAS Extension Horticulture agent receives hundreds of calls annually requesting information on the proper plant material for the Northeast Florida area. The current demonstration garden provides an excellent vehicle for relaying appropriate plant examples. The urban tree expansion will provide additional information on trees to newcomers to Florida.

Publications of the project will be placed in all five local newspapers, added to the Nassau County Extension website and a permanent sign signifying this project was a collaborative effort from local community businesses and grant money by the Urban and Community Forestry Grant. Each tree will have an individual sign providing common name and scientific name for easy identification for any visitor to the area. The website will contain specific information about each tree from UF/IFAS Environmental Horticulture.

Nassau County does not have a Tree City USA certification and growth award. A Master Board Certified Arborist will oversee the planting of the trees and this applicant is also a certified arborist.

This UF/IFAS Environmental Horticulture agent has established partnerships with the vendors over the last eight years but this project should encourage tree professionals to seek arborist certification.

BID NUMBER: RFP/DM-08/09-??

OPENING DATE: April 17, 2009 @ 2:30 PM

ATTACHMENT E

BUDGET

Category: \_\_\_\_\_

Specific Description: \_\_\_\_\_

SUMMARY OF COSTS

	REQUESTED GRANT \$
Contractual costs	<u>2395.00</u>
Equipment Use costs	<u>200.00</u>
Supplies costs	<u>1374.00</u>
Tree costs	<u>1619.00</u>
Total Requested Grant (I)	<u>5588.00</u>

**A BUDGET, DETAILING ALL COSTS IDENTIFIED ABOVE MUST BE ATTACHED.**

PROJECT LOCATION INFORMATION (Please print or type - Complete where applicable)

County Nassau

Describe the Specific Location of the Project: Strip of land with parking lot medians directly across from BOCC Chambers

Who has responsibility for overseeing Project implementation (name and title):

Rebecca Jordi, UF/IFAS Environmental Horticulture Agent (I)

Who has maintenance responsibility for the Project after completion:

UF/IFAS Extension Agent and Master Gardener Volunteer

Is the Land Ownership Public or Private?: Public - 1

Name of Landowner: Nassau County

Project Title: UF/IFAS Nassau County Extension - Trees for Urban <sup>Environment</sup>

Applicant Name: Rebecca L. Jordi

Email Address: rjordi@ufl.edu



BID NUMBER: RFP/DF-09/10-47

OPENING DATE: FEBRUARY 12, 2010 @ 2:00 P.M.

**ATTACHMENT E  
BUDGET**

Please note: All proposals must include a detailed itemized budget summary which lists all anticipated expenditures and explains all project costs. Proposals for site specific demonstration tree planting projects must list the quantity, species, and approximate size (container size, or caliper and height) of trees to be planted.

**IMPORTANT: THIS FORM MUST BE USED. PROPOSERS NOT USING THIS FORM WILL BE RULED INELIGIBLE**

Cost Items	Quantity (#)	Rate or Price (\$)	Grant Cost (\$)
<b>Contractual</b>			
1. ISA Master Certified Arborist	1	<del>\$1,500</del>	\$1,500 <sup>\$500.00</sup>
<del>2. Aerator</del>	<del>1</del>	<del>\$1,000</del>	<del>\$1,000</del>
3. Installing topsoil	20 yards	\$11.77/\$235.40	\$235.40
4. Installing 3, 3" caliper trees	3	\$35/\$210.00	\$210.00
5. Irrigation installation	1	<del>\$1,000.00</del>	<del>\$1,000.00</del> <sup>500.00</sup>
<del>6. Website development</del>	<del>3-5 pages</del>	<del>\$500.00</del>	<del>\$500.00</del>
<del>7. Signage installation</del>	<del>1</del>	<del>\$100.00</del>	<del>\$100.00</del>
8. Tree delivery	2	\$200.00	\$200.00
9. Tree installation for 6 large trees	6	\$450.00	\$450.00
10. Tree site prep, clear out medians of debris and rock	1	\$300.00	\$300.00
<del>11. Install individual tree signs</del>	<del>9</del>	<del>\$200.00</del>	<del>\$200.00</del>
Sub-total			\$2395.00 <del>\$5,595.40</del>
<b>Equipment Use</b>			
<del>1. Aerator</del>	<del>1</del>	<del>\$500.00</del>	<del>\$500.00</del>
2. Chipper	1	\$125.00	\$125.00
3. Tiller	1	\$75.00	\$75.00
Sub-total			\$200.00 <del>\$700.00</del>

BID NUMBER: RFP/DF-09/10-47

OPENING DATE: FEBRUARY 12, 2010 @ 2:00 P.M.

Cost Items	Quantity (#)	Rate or Price (\$)	Grant Cost (\$)
<b>Supplies</b>			
1. Top soil for medians	20 yards 1,128 sq. feet	<del>\$35.30</del>	<del>\$706.60</del>
2. Pine straw around all nine trees	1	\$6/168.00	\$168.00
<del>3. Sandblasted sign and material</del>	<del>1</del>	<del>\$600.00</del>	<del>\$600.00</del>
4. Irrigation pipes, timer, bubble heads and materials	1	\$500.00	\$500.00
<del>5. Fiskars by-pass pruners for classes</del>	<del>20</del>	<del>\$22.97</del>	<del>\$459.40</del>
<del>6. Hitachi 10.8 v reciprocating saw</del>	<del>1</del>	<del>\$250.00</del>	<del>\$250.00</del>
<del>7. 15 pairs of atlas nitrile gloves</del>	<del>15</del>	<del>\$7/\$105.00</del>	<del>\$105.00</del>
<del>8. Slow release fertilizer</del>	<del>3- 50 lb bags</del>	<del>\$121/\$363</del>	<del>\$363.00</del>
<del>9. Individual tree signs, stakes by County</del>	<del>9</del>	<del>\$10/90</del>	<del>\$90.00</del>
10. Illustration to Pruning 2 <sup>nd</sup> Ed.	5	\$65	\$325.00
Sub-total			<del>\$3,506.60</del> \$1374.00

BID NUMBER: RFP/DF-09/10-47

OPENING DATE: FEBRUARY 12, 2010 @ 2:00 P.M.

Cost Items	Quantity (#)	Rate or Price (\$)	Grant Cost (\$)
<b>Trees</b>			
1. Black Gum 3" cal	1	\$289.00	\$289.00
2. Winged Elm 2.5 cal	1	\$155.00	\$155.00
3. Flatwoods Plum ,2 1/2 -3" cal,	1	\$200.00	\$200.00
4. Wild Olive/Osmanthus americanus, 15gallon	1	\$80.00	\$80.00
5. American buckthorn or Cherry Laurel 2.5 inch cal.	1	\$185.00	\$185.00
6. Overcup Oak 3" cal.	1	\$185.00	\$185.00
7. Southern Magnolia 3.25 cal	1	\$175.00	\$175.00
8. Southern Red Cedar 3" cal	1	\$175.00	\$175.00
9. Cathedral Live Oak 3.5 cal	1	\$175.00	\$175.00
Sub-total			\$1,619.00
Total			<del>\$11,581.00</del> \$5588.00

**BID NUMBER: RFP/DF-09/10-47**

**OPENING DATE: FEBRUARY 12, 2010 @ 2:00 P.M.**

**ATTACHMENT F  
ARRA Forest Health Improvement Initiative Grant Program**

**EXAMPLE  
RESOLUTION 00-123**

**A RESOLUTION BY NASSAU COUNTY, FLORIDA TO ENTER INTO A GRANT MEMORANDUM OF AGREEMENT WITH THE STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY**

**WHEREAS, trees are an important part of our community; and**

**WHEREAS, Nassau County desires to apply for a Forest Health Improvement Initiative Grant which would provide monies to improve the condition of the community's tree canopy; and**

**WHEREAS, Nassau County desires to apply for a Forest Health Improvement Initiative Grant which would provide monies to improve the condition of the community's tree canopy; and**

**WHEREAS, Nassau County wishes to enter into a Forest Health Improvement Initiative Grant Memorandum of Agreement between Nassau County, Florida and the Florida Department of Agriculture and Consumer Services;**

**NOW, THEREFORE, BE IT RESOLVED by Nassau County, Florida:**

**Section 1. Nassau County supports the improvement of the condition of the county's tree canopy.**

**Section 2. Nassau County hereby authorizes the UF/IFAS Nassau County Extension Horticulture Agent to enter into a Forest Health Improvement Initiative Grant Memorandum of Agreement between Nassau County, Florida and Florida Department of Agriculture and Consumer Services.**

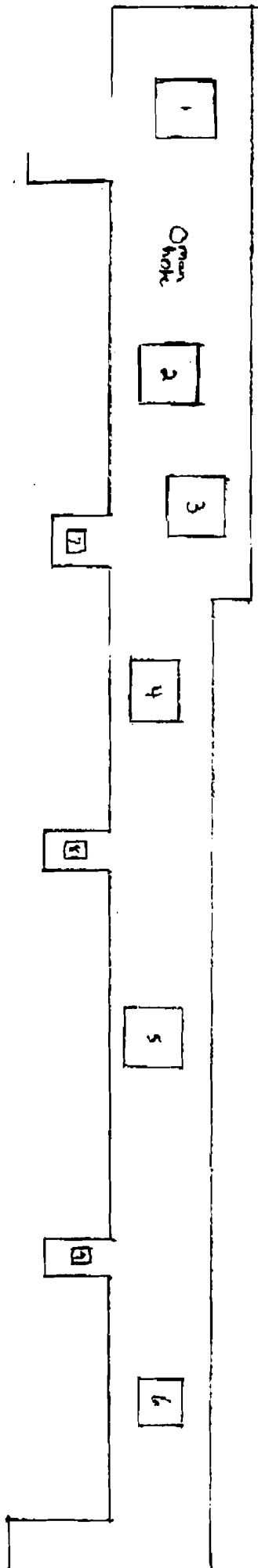
**INTRODUCED, PASSED AND ADOPTED THIS THE 8TH DAY OF February, 2010.**

BY: Michael H. Boyle  
Chair of Nassau County Board of County Commissioners

ATTEST:  
[Signature]  
County Clerk  
99/11  
2/8/10

APPROVAL AS TO FORM  
[Signature]  
County Attorney

UE/IFAS Nassau County Extension - Trees for Urban Environment



1

Open  
Oak

2

3

4

5

6

7

8

9

1. Southern Magnolia

2 Winged elm

3 Post oak

4 Overcup oak

5 Black gum

6 Southern Red Cedar

7 American Hornbeam or Cherry Laurel

8 Flatwoods plum

9 Devil wood

10 - 4 ft