



**TOWN OF SULLIVAN'S ISLAND, SOUTH CAROLINA  
LAND USE & NATURAL RESOURCES COMMITTEE OF COUNCIL**

Friday, April 11, 2014

The Land Use & Natural Resources Committee of Council met at 8:35 a.m. on April 11, 2014 at Town Hall, 2050-B Middle Street, all requirements of the Freedom of Information Act having been met. Present were Committee members Pat O'Neil, Chair, Mayor Mike Perkis and Council member Jerry Kaynard; Staff, Administrator Benke, Asst. to Administrator Darrow, Zoning Administrator Henderson and Building Official Robinson.

There were approximately twenty-three members of the public present, including Council members Chauncey Clark and Susan Middaugh; no media representatives present. Jeff Jackson, Town naturalist consultant, was present for agenda items #4 and #5.

**1. Call to Order.** Chair O'Neil called the meeting to order, stated the press and public were duly notified pursuant to state law and noted all members were present. Chair O'Neil noted the Committee would solicit questions and comments from the public after each agenda item.

**2. Approval of Agenda**

**MOTION: Councilman Kaynard moved to approve the April 11, 2014 agenda with the following amendment: review/approve the March 14, 2014 minutes; seconded by Mayor Perkis. MOTION UNANIMOUSLY PASSED.**

**3. Approval of Minutes – March 14, 2014**

**MOTION: Councilman Kaynard moved to approve the March 14, 2014 minutes; seconded by Mayor Perkis. MOTION UNANIMOUSLY PASSED.**

**4. Staff Reports: Zoning Administrator and Building Official**

**Zoning Administrator Henderson:**

- **Planning Commission – met on April 9, 2014:**
  - Continued consideration of café eating establishment designation, carried forward to May 14, 2014 meeting. During interim a Planning Commission work group and interested residents will craft some revised draft ordinance language. Public hearing will be scheduled no earlier than June.
  - Bike path concept for marsh boardwalk from Ben Sawyer Boulevard to Patriot Street area has been removed from the Commission's agenda.
- **Board of Zoning Appeals – met on April 10, 2014**
  - Two Town appeals upheld by Board at this meeting.
- **Design Review Board – meets on April 17, 2014 to consider six items, to include parking plan for the new restaurant, Obstinate Daughter.**

**Building Official Robinson:**

- **Department prepares for five-year Insurance Services Organization (ISO) visit for the Town's CRS rating (Flood Insurance) – to be held after June 1<sup>st</sup>.**
  - Town is currently a Class 6 designation resulting in 20% insurance rate credit. Mt. Pleasant is currently a Class 6, City of Charleston is a Class 7, Isle of Palms is a Class 7 and Folly Beach is a Class 7 or 8 (Class 1 is ideal)
  - Town receives substantial credit for the large mass of undeveloped deed restricted land, both the Accreted/Protected Land and the marsh area. He noted more than fifty (50%) percent of the Town's land mass is not developable. This credit resulted in almost one Class Rating point.

*Wayne Guckenberger, 2105 Pettigrew Street, Sullivan's Island*

- Regarding the CRS/Flood Insurance rating: will this visit include a review of the flood zones and maps?

Building Official Robinson clarified that the ISO visit is more of an internal audit of the Town's current CRS program. New maps should be released in December 2014.

*Francis Johnson, 2301 Atlantic Avenue, Sullivan's Island*

- Regarding the CRS credit the Town receives for the Accreted Land: is credit due to the distance from residences to the beach instead of what is developed/not developed on the Accreted Land?

Building Official Robinson clarified that the CRS credit is given because the land cannot be developed. It is natural and beneficial, meaning the public can go through it but as a passive area, not accessed by dune buggies and golf carts. The fact that the land is protected from development results in almost one CRS credit point, according to a formula with the following criteria: land is under a Land Trust and deed protected so it remains passive/not developed. The distance of residences from the beach will be relevant for the flood mapping.

**5. Five-year (2013) Comprehensive Plan: Status**

Mayor Perkis reported that each Committee of Council will look at the portion of the proposed 2013 Comprehensive Plan relevant to its respective Committee and provide feedback to the Council by the May 12, 2014 Council Workshop. The Land Use & Natural Resources Committee had no specific changes to the proposed Plan to recommend to Council, at present.

**6. Review of status of Approved Projects in the Protected Land: implementation of approved projects. Report from Town Administrator and Naturalist Consultant Jeff Jackson:**

- a. **Station 16 Nature Trail & Boardwalk/benches/deck RFP**
- b. **Other projects**

Administrator Benke reported on the Station 16 Nature Trail and boardwalks:

- Nature trail has been identified and path cut. Recent rain provides a good indication of where boardwalks/hardscape will be needed through trail.

- Boardwalk Request for Proposal (RFP) has been advertised. The RFP provided for boardwalk west of Station 16 and, on the eastern section, provided for a boardwalk that would take visitors directly to the beach, removing them from being on the emergency beach access in the event of an emergency response. He noted erosion is currently occurring beach front near Station 16 and does not recommend the boardwalk on the eastern portion of the trail (side route from beach path to beach front) at present.
- Noted the Town will probably re-bid the boardwalk RFP after removing the eastern portion of the boardwalk (during erosion cycle) and tightening up other sections of the trail.
- Noted this boardwalk work would be funded by Urban Greenbelt funds (does not require matching Town funds).
- General comments about the boardwalk trail (Town moniker is Station 16 West):
  - Consultant Jeff Jackson worked on the trail design over a period of time;
  - Input on the trail has been received by the following:
    - Charleston County Greenbelt Board
    - Charleston County staff
    - Department of Natural Resources
    - Dr. Porcher (Botanist)
    - Fish and Wildlife Society
    - Audubon Society
- Noted that Phase 2 would provide potential for trail to connect to federal land and Sullivan’s Island Elementary School.

Jeff Jackson walked the Committee through a GIS map of the area, noting the trail boundaries. He noted areas of identified seasonal wetlands where a boardwalk would be needed. Boardwalk sections would be six (6’) feet wide and ATV accessible for emergency staff response, with care taken to allow for handicap accessibility. Boardwalk and marked trail portions would help navigate people to the preferred sections of the protected land and away from the sensitive vegetation and habitats. Mr. Jackson noted that this Station 16 West trail would be the one area that would retain interpretative trail elements. The trail from Station 16 East, if/when realized, would be passive in nature, with very limited boardwalk sections.

Administrator Benke commented that the St 16 West project would be re-bid with an anticipated six-week timeline from advertisement to selection. He anticipated the boardwalks could feasibly be started in mid-June.

*Michael Borland, 1607 Atlantic Avenue, Sullivan’s Island*

- Asked for clarification on an interpretive trail – what would this entail?
- Where would this interpretive portion be located?

Jeff Jackson clarified that by interpretive trail he means a trail with signs that explain and educate people on the types of flora, fauna and habitats in the area. The interpretive portion would generally be located from Station 16 West in the area near/in front of the Fort Moultrie property, not in front of residences.

*Ettaleah Bluestein, 2513 Atlantic Avenue, Sullivan's Island*

- Will boardwalks be placed beyond SIES toward Breach Inlet?

Administrator Benke noted that Urban Greenbelt funding may be used for boardwalks running perpendicular to the beach (road/pavement to beach front) and parallel to the Island (nature trail).

Chair O'Neil noted that the majority of parallel/longitudinal paths would be mainly dirt with some boardwalk sections where needed.

Administrator Benke noted that the decision to expand trails beyond the SIES would be done at the will of Council. Mayor Perkis clarified that the current plan is to finish the Station 16 trail area and move toward the school.

Councilman Kaynard noted that the nature trail was originally the idea of the elementary school. SIES was using a portion of land adjacent to the school for educational purposes, prior to CCSD plans to build a new school at its current I'On Avenue site. The Town's negotiation with CCSD for the new SIES included the ability for the school to continue to access some of the Accreted Land for student education.

Councilman Kaynard clarified the term "boardwalk." Council does not envision a boardwalk tantamount to the Atlantic City Boardwalk. Instead limited sections of low boardwalk will be put over seasonal wetland sections. He noted that financial limitations will contribute to minimizing the scope of the trail projects.

*Evelyn Needle, 2419 Atlantic Avenue, Sullivan's Island*

- Concerned about trails being placed in front of the residences.
- Concerned about visitors meandering through trails in front of residences, wandering into yards, parking in inappropriate places (yards), etc.

Chair O'Neil noted that the Town would endeavor to have trails that did not run closely to residences. He also noted that the marked trails would help navigate people toward dedicated paths instead of meandering through the existing land.

Councilman Kaynard noted that Council appreciates the varying depths of the Accreted Land running in front of residences and feels Council will be sensitive to those residents' concerns as the area is discussed.

*Judy Grossman, 2423 Atlantic Avenue, Sullivan's Island*

- Regarding the allocated Greenbelt funds: questioned how far those funds would go toward nature trails and whether all the money should be spent on a trail system.
- Questioned why the Town seemed intent on creating a park that would invite non-residents and potentially vagrants to the area.

Administrator Benke clarified that the Urban Greenbelt grant application did not stipulate a geographic boundary for the trails. He provided a brief background on the Urban Greenbelt funds (half-cent sales tax):

- Original grant directive – purchase land to retain as open space.

- Town grant share is approximately \$197,000 – not enough money for small beach communities to purchase land.
- Local beach communities petitioned Charleston County to modify the grant parameters to identify beach access for coast, to include paths from edge of pavement to beach, as an allowed use of grant funds.
- Town identified the creation of parallel/longitudinal paths to walk parallel to the beach through designated trails, off of the sand dunes and away from residential properties.
- Town’s grant application incorporates both types of access.

Councilman Kaynard noted that it is not the intention of Town Council to create a “county” park or park-like environment in the Accreted Land. The Town plans to develop a limited trail area, in small steps, and Council will assess the situation. He noted that the residents’ concerns are the Council’s concerns.

Mayor Perkis noted that people are coming to the area right now and anticipates the interpretive signs would help attract desirable visitors to the area.

*Tim Reese, 305 Station 20, Sullivan’s Island*

- Asked for the Committee to explain Mr. Jackson’s credentials and identify the scope of work that Council has contracted to pay Mr. Jackson. Secondly, he questioned how far of a trail Council has approved at present.

Jeff Jackson

- Resident of Berkeley County; Clemson University graduate with a B.S in plant science; involved in landscaping and environmental projects since 1981.
- He has worked with the Town over the past 19 years on the Accreted Land.
- Has experience working with Dr. Porcher (who recommended him to the Town for this work), a highly respected southeast regional botanist.

Mayor Perkis stated his understanding that the Town has not considered plans beyond Station 18.

*Ben Nixon, 1611 Atlantic Avenue, Sullivan’s Island*

- Noted he is familiar with the interpretive nature trail on Fripp Island, but over the years maintenance has become an issue. Questioned who would maintain the trail and whether the Town had money for this maintenance?
- Also, do dog leash laws apply to the trail?

Chair O’Neil

Yes, leash laws will apply. Town maintenance crews will maintain the paths just as they do the Town rights-of-way.

*George Malanos, 2603 Bayonne Avenue, Sullivan’s Island*

- Asked if the Greenbelt funds are a one-time grant.
- Asked if the Greenbelt application specifically included parallel trails through the Accreted Land and requested a copy of the grant application.

- Commented that the Town plans to make the trails limited in nature, but, Council is setting a precedent. Submitted that everything that starts as being limited in nature or lacking funds to expand can be expanded over time. Also money can be found to accomplish a project expansion if a future Council desired to do so.

Administrator Benke

- Indicated he would get a copy of the Urban Greenbelt grant application to Mr. Malanos and anyone else interested in it.
- Clarified that the grant application did specify both perpendicular and parallel beach paths.
- Noted that Charleston County made changes to the allowed scope of grant fund projects to enable beach communities to use funds for beach access projects and/or purchasing land.

*Francis Johnson, 2301 Atlantic Avenue, Sullivan's Island*

- Asked how the funds, since limited, would be allocated. Stated his expectation would be for the funds to be prioritized to cover new beach paths and existing path extensions, first, and then nature trail development second.

Administrator Benke noted that work is already being done to build new beach access paths (Stations 21 ½ for example) and expand/improve current beach path boardwalks while simultaneously working toward the Station 16 nature trail.

*Margaret Wilson, 2602 Bayonne, Sullivan's Island*

- Asked if the longitudinal paths will be in front of a residence?

Chair O'Neil: Paths may be between ocean and residences, but not right in front of the residence.

*Mrs. Wilson:*

- How close will the paths be to the residences?
- What are the times people will be allowed on the paths? How will you keep them off of it at night?
- How will Town police the area to keep rowdy non-resident visitors off the path, particularly those who might have had a few drinks at a restaurant in the CCD?
- Why is the Town working to attract “party people” to the Accreted Land instead of the beach area?

Jeff Jackson: Suggested that the nature trail and passive trails would attract bird watchers and dog walkers. Anticipates the area would attract less than 1% of the people heading for the beach.

*George Lewis, 2101 Pettigrew Street, Sullivan's Island*

- Commented on the quality of the beach path on Station 21 ½ and asked why the Town will not place construction of the traditional beach access paths first, instead of the nature trail.
- Commented that he is not hearing about the management of the Accreted Land right now; rather he hears the Town talking about putting a nice trail through it.

- Noted that his understanding is that the Urban Greenbelt grant allows for the Town to use the grant funding for both paths – the Town appears to have the latitude to choose to use funds only for traditional street-to-beach boardwalks.

*Nat Robb, 2209 Atlantic Avenue, Sullivan’s Island*

- Questioned why the Town should spend any money on nature trail boardwalks that the Town does not need when the Urban Greenbelt funds can save taxpayers from paying for current beach path expansions and improvements.

Jeff Jackson provided an additional report on other approved projects in the Protected Land:

**Invasive species eradication:**

- He and Mr. Billy McCord plan to have open workshops for residents to get educated on the area, walk around it, assist with invasive species plant removal, and, learn how to identify and remove invasive species from personal yards.
- Tentative dates for the workshop will be 4-7PM on Tuesday, May 6<sup>th</sup> and Friday, May 9<sup>th</sup> (dates/times not finalized/subject to change).
- Mr. Jackson indicated he would finalize dates/times and provide additional information to the Town in the near future.

**7. Protected Land Management Plan: Review & Discussion**

**a. Review of Phase I projects**

**b. Review of Phase II projects**

**i. Transition zones**

Committee stated that it planned to focus on Phase II and the transition zones in this meeting. The balance of the meeting will be dedicated to this topic.

Chair O’Neil provided background on the definition of transition zones (sections of draft Accreted Land Management Plan version 3A were projected on the screen for the audience). He noted that transition zones would provide a “belt” of land, transitioning from residential yard to the natural area and dunes line/beach. He noted four transition zones were identified in the Accreted Land Management Plan (version 3A, starting at page 9 of document) and then read to the audience the management principles in the draft Plan.

*Cheryl Clark, 2119 Pettigrew, Sullivan’s Island*

Questioned whether the Committee is referencing the version 3A Accreted Land Management Plan or some other document.

Councilman Kaynard briefly reviewed the various documents the Committee references in this meeting:

- Version 3A refers to the Draft Accreted Land Management Plan, Version 3A (Town draft Plan last modified in 2011). The boundaries for the transition zones to be discussed today are identified in version 3A ;
- Phase I and Phase II refers to the list of Council approved projects in the Accreted Land (October 2013) incorporating 13 list items. Transition zones were on Phase II of the Project list, which the Committee will discuss today.

*Andrew McMarland, 1850 Flag Street, Sullivan's Island*

- The transition zones –will discussion today address the coyote habitats and dealing with them?

Chair O'Neil noted that the coyote habitat issue will not be discussed today. Councilman Kaynard noted that the transition zones will be discussed regarding the range of dimensions for each zone, and, what can be cleared/must remain in said transition zone.

Staff utilized GIS mapping to provide Committee and audience with graphic representation of what 50' and 100' might represent from a residential property line seaward into a transition zone.

### **Vegetation and Overstory - Retain and Clear**

Committee considered establishing a priority tree list, an initial suggestion being:

1. Live oaks
2. Red Cedar
3. Magnolias
4. Palmettos

*George Lewis, 2101 Pettigrew Street, Sullivan's Island*

- Questioned why all residents along the beach should not get the same buffer size?

*Nat Robb, 2209 Atlantic Avenue, Sullivan's Island*

- Noted he serves on the Tree Commission which has an approved list of understory and canopy trees.
- He also suggested that the Tree Commission could be given the responsibility for reviewing the types of trees to remove.

Zoning Administrator Henderson read the trees on this list (**Exhibit A**).

General Committee discussion about using the Tree Commission list as a starting point for the list of priority trees, noting the size of trees is important too. Mayor Perkis expressed support for the Town aligning protected trees in the transition zones along the requirements placed upon residents by the Tree Commission. Chair O'Neil concurred with Mayor Perkis' comments. Committee noted that palmettos are protected, in general, throughout the Town Code.

Committee did not define the minimum size of trees that will be protected in the transition zones. Councilman Kaynard suggested the size of trees that can be removed can be discussed by Council, noting that the transition zones would be assessed and tree sizes marked in the future.

Mayor Perkis suggested that the Committee express some consensus on items that could be cleared, to include: understory, dead wood and myrtles.

Councilman Kaynard stressed that the transition zones would be special, something not anticipated when the Tree Ordinance was developed thirty years ago. Mayor Perkis suggested the Town create a guideline for the transition zones and see what types, quantity and sizes of trees are in each zone.



Thereafter the Committee discussed zone depth. Committee reached general consensus that the transition zones would be between forty (40') and one-hundred (100') feet in depth, varying by zone with the maximum transition zone being no more than one-hundred (100') feet.

The Committee reviewed the language in the Town's draft Accreted Land Management Plan (version 3A) regarding the four planning units and transition zones located therein. Version 3A of the draft Accreted Land Management Plan was developed by the Town approximately 2 years ago pursuant to a lengthy process of community and committee meetings. The following is a summary of the zone depths and accompanying management strategies the Committee considered for recommendation to Council for these planning units.

### **Transition Zones (Accreted Land Management Plan version 3A)**

#### **Planning Unit/Zone 1, WEST –**

**Fort Moultrie area to Sand Dunes Club beach access path (Stations 13-16)**

**Depth: Forty to one-hundred feet (40'-100')**

Management strategy: Remove all species except trees protected pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.

#### **Planning Unit/Zone 2, WEST CENTRAL –**

**Sand Dunes Club path to Coast Guard/National Park Service (Stations 16-Station 18, 1815 I'On Avenue)**

**Depth: Forty to seventy feet (40'-70')**

Management Strategy: Managed as a maritime grassland emulating the lighthouse property while protecting all trees pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.

### **Zone 3, EAST CENTRAL – Three subsections**

**Zone 3A: Station 18 ½ to SIES**

**Depth: Twenty-five to fifty feet (25'-50')**

**Zone 3B: SIES (TMS 529-09-00-068) – no transition zone has been discussed for this area in front of the elementary school grounds.**

**Zone 3B: SIES to Station 22**

**Depth: Twenty-five to fifty feet (25'-50')**

Management Strategy: Managed as a maritime grassland emulating the lighthouse property while protecting all trees pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.

#### **Zone 4, EAST -**

**Station 22 ½ beach path extension to Station 29**

Note: This zone includes a platted Bayonne Street extension, a 40' right-of-way (ROW) currently undeveloped over 4-5 blocks of this transition zone. The Bayonne Street extension is not part of the accreted land and protected with the Land Trust.

**Station 22 ½ - 26 (Bayonne Street Extension area)**

**Depth: Bayonne Street Extension (40' ROW) plus forty to sixty feet (40'-60') measured from the seaward boundary of the Bayonne Street Extension ROW.**

**Station 26-29**

**Depth: Forty to one-hundred feet (40'-100')**

Management Strategy: Managed as a maritime grassland emulating the lighthouse property while protecting all trees pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.

*George Lewis, 2101 Pettigrew Street, Sullivan's Island*

- Reiterated his inquiry why there are different depths for each transition zone.
- Questioned the science behind the Committee's transition zone recommendations, suggesting it appeared like arbitrary numbers.

Committee briefly discussed the benefits and pitfalls of forcing a one-size transition zone depth for the entire Island. Establishing a one-depth compromise transition zone creates inflexibility and does not recognize the varying density and development stages of the vegetation and trees in the transition zone, due to the different zone depths. The Committee stressed that the goal of the transition zones is to provide some relief for the residences abutting the transition zones.

**MOTION: Chair O'Neil moved to recommend to Council to provide the following approach to developing transition zones in the Accreted Land; first that the range of depth for the transition zones be as follows for each of the management planning units:**

**Unit/Zone 1 (West): 40-100'**

**Unit/Zone 2 (West Central): 40'-70'**

**Unit/Zone 3 (East Central), Unit 3A & 3C: 25'-50' deep**

**Unit Zone 4 (East) Station 22 ½ -26 which includes the Bayonne Street right-of-way: 40'-60' from the seaward boundary of the Bayonne Street extension right-of-way; from Station 26-29: 40'-100'. Committee is not proposing a transition zone for Planning Unit 3B, currently, which is in front of the Sullivan's Island Elementary School. The management strategies for each unit should be:**

**Unit/Zone 1(West): Remove all species except trees protected pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.**

**Units/Zones 2, 3A, 3C and 4: Manage as a maritime grassland emulating the lighthouse property while protecting all trees pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.**

**Seconded by Councilman Kaynard.**

**Discussion:**

Councilman Kaynard suggested the motion should clearly state that the size/diameter of trees has not been specified, and, shall be discussed and determined by Council.

**MOTION ABOVE AMENDED:** Chair O'Neil included the following to the main motion: the minimum diameter which would cause a tree to be in protected status has yet to be determined; seconded by Mayor Perkis.  
**Call for the question on Motion to Amend: MOTION UNANIMOUSLY PASSED**

**RESTATE MOTION (As Amended)**

**Recommend to Council to provide the following approach to developing transition zones in the Accreted Land; first that the range of depth for the transition zones be as follows for each of the management planning units:**  
**Unit/Zone 1 (West): 40-100'**  
**Unit/Zone 2 (West Central): 40'-70'**  
**Unit/Zone 3 (East Central), Unit 3A & 3C: 25'-50' deep**  
**Unit Zone 4 (East) Station 22 ½ -26 which includes the Bayonne Street right-of-way: 40'-60' from the seaward boundary of the Bayonne Street extension right-of-way; from Station 26-29: 40'-100'. Committee is not proposing a transition zone for Planning Unit 3B, currently, which is in front of the Sullivan's Island Elementary School.**

**The management strategies for each unit should be:**

**Unit/Zone 1(West): Remove all species except trees protected pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees.**

**Units/Zones 2, 3A, 3C and 4: Manage as a maritime grassland emulating the lighthouse property while protecting all trees pursuant to the Tree Commission's approved list of protected trees, and, palmetto trees. Further, that the minimum diameter which would cause a tree to be in protected status has yet to be determined.**

**Call for the question on amended motion: MOTION UNANIMOUSLY PASSED.**

Chair O'Neil noted, for audience, that Council makes all final decisions on this topic and that this Committee's recommendation will go forward to Council for its consideration at the May 12, 2014 Council Workshop.

There being no further business, the meeting was adjourned at approximately 11:05 a.m. (Councilman Kaynard motioned; Mayor Perkis seconded; unanimously passed).

Respectfully submitted,  
Pat O'Neil, Chairman  
Land Use & Natural Resources Committee

Approved at the April 22, 2014 Regular Council Meeting

Land Use & Natural Resources Committee  
April 11, 2014 Meeting  
Exhibit A

APPROVED TREE LIST  
Sullivan's Island Tree Commission  
Sullivan's Island, South Carolina

**UNDERSTORY TREES:**

American Holly – Ilex opaca  
Black Cherry – ( Wild Cherry ) – Prunus serotina  
Carolina Laurel Cherry ( Cherry Laurel ) – Prunus caroliniana  
Chickasaw Plum – Prunus augustifolia  
Japanese Black Pine – Pinus thunbergi  
Leyland Cypress – Cupressus leylandii  
Red Bay ( Shorebay ) – persea borbonia  
Southern Waxmyrtle ( Southern Bayberry ) – Myrica certifera  
Sweetbay ( Swamp Magnolia ) – Magnolia virginiana  
Tamarisk ( Salt cedar ) – Tamarix parviflora -popcorn  
Toothache Tree ( Hercules Club ) – Zanthoxylum clave-herculis  
Youpon ( Cassena berry ) – Ilex vomitoria  
crape myrtle

**CANOPY TREES:**

Black Willow ( Swamp Willow ) – Salix nigra  
Bumelia ( Tough, narrowleaf Bumelia, Buckthorn ) – Bumelia tenax  
Carolina Poplar ( Eastern, Southern Cottonwood ) Populus deltoids  
Common Persimmon ( Possumwood ) - Diospyros virginiana  
Hackberry ( Sugarberry ) – Celtis laevigata -  
Loblolly Pine – Pinus taeda  
Longleaf Pine ( Southern Yellow Pine ) – Pinus palustris  
Red Maple – Acer rubrum  
Sweet Gum – liquidambar styraciflua  
White poplar – Populus alba  
Planetree Maple ( Sycamore Maple ) – Acer pseudoplatanus  
Sassafras – Sassafras albidum  
Southern Catalpa ( Catawba, Indian bean ) – Catalpa bignonioides  
Sycamore – Plantanus occidentialis

**PROTECTED TREES:**

Eastern Red Cedar – Juniperis virginiana  
Southern Red Cedar ( Sand/Salt Cedar ) – Juniperis silicicola removed  
Laurel Oak – Quercus laurifolia  
Live Oak – Quercus virginiana  
Pecan – Carya illinoensis  
Southern Magnolia – Magnolia grandiflora