

CITY OF PENSACOLA
ENVIRONMENTAL ADVISORY BOARD

MEETING MINUTES
Thursday, January 3, 2019

Members Present: Neil Richards, Chair, Gloria Horning, Calvin Avant, Blase Butts, Bob Bennett

Members Absent: Steve Elliott, Vice Chair, Kyle Kopytchak, Michael Lynch

Others Present: Don Kraher, Council Executive, Tim Smith, Chris Hoover, Ann Hill, Christian Wagley, Ron Helms, Melissa Pino, Drew Buchanan, Dottie Dubuisson, Laurie Murphy

1. Call to Order/Quorum: The meeting was called to order by Chair Richards. A quorum was established.
2. Approval of Meeting Minutes—December 6, 2018

Motion made by Member Horning to approve the minutes, seconded by Member Avant and was unanimously carried.

3. Updates:
 - a) 12th Avenue Tree Replacement and No Parking Enforcement—Kyle Kopytchak
Member Butts indicated he was encouraged to see tape around a tree in the tree tunnel on 12th Avenue.
 - b) Review of tree and landscaping regulations—Michael Lynch
Council Executive mentioned the draft proposed amendments to the Tree Ordinance as provided by Laurie Murphy to the Board. Since this is a revision to the Land Development Code, it will need to go to the Planning Board for review and public hearing as well as have two public hearings before the City Council and two readings of the ordinance. The EAB can review and provide comments by February or March. It will also have to go through City staff, since there have been a lot of changes, inclusion of stormwater items, etc.
 - c) Criteria for Tree Fund Grant Proposals
Nothing reported.
 - d) DEP and EPA Assessments in Area—Steve Elliott
Nothing reported.
 - e) Environmental Justice/Injustice—Calvin Avant
Nothing reported.
 - f) Water Quality of Bay/Gulf—Blase Butts
Member Butts reported that there is a meeting scheduled for January 16 at 6 p.m. at the Public Library on local water quality in Pensacola Bay sponsored by the

MINUTES OF THE ENVIRONMENTAL ADVISORY BOARD

January 3, 2019

Page 2

Sierra Club. He presented an update on the beach clean-up efforts of Ocean Hour, Florida. A total of 10,578 pounds of trash was picked up in 2018, with 27 events averaging 28 volunteers. They picked up 710 pounds from Bruch Beach and he cautioned about the amount of glass and water quality at Bruch Beach. He encouraged individuals to get on Rick O'Connor's email list for updates.

g) Sanders Beach and Bruce Beach Stormwater Drainage, Flooding/Toxin Issues in Tanyard—Gloria Horning

Member Horning reported on the sheen of oil in the Tanyard caused by flooding issues.

h) Environmental Impacts on Disenfranchised Communities—Gloria Horning

No update. Some of the impacts will be covered in the presentation by member Horning on Climategation.

i) Renewable Energy Sources—Neil Richards, Robert Bennett

As mentioned in the Climate Task Force report there is a need for electric charging stations. Duke Power is providing charging stations in some of the communities they serve in Florida.

4. Presentation—Dr. Gloria Horning, PhD.—Climategation

Member Horning did a power point presentation on the effects of climate change that will occur over the next 50 years and how communities need to prepare to handle those effects and challenges.

Climategation is a new word used to indicate individuals who have relocated due to climate change. Need to look at managed retreat, a strategy to move human development, structures and infrastructure out of harms way. Don't rebuild in those areas where devastation has occurred. There is a need for community discussions. Climate change will have a definite impact on human mobility and the most vulnerable who are unable to move.

She reviewed a survey that the Anthropocene Alliance prepared that is being sent out to various communities affected by flooding and she thought that it could possibly be used here to find out and assess what people already know about climate change and flooding. She has already put it on the NAACP website and it might be something to consider putting out in the City, the County and the state to engage people.

5. Discussion—Christian Wagley, Mayor's Transition Team Member—Environment

Christian Wagley gave a brief update on the transition team members and some of their shared interests as it relates to environment, neighborhoods, traffic, parking,

MINUTES OF THE ENVIRONMENTAL ADVISORY BOARD

January 3, 2019

Page 3

walkability, crime and safety. There will be a public input meeting on January 7th at 4:30 p.m. at the Theophalis May Resource Center, in which transition team members Christian Wagley, Drew Buchanan, and Issac Williams will hear concerns about the environment, biking/traffic/walkability and neighborhoods.

On January 15th from 5 p.m. to 6:30 p.m. all transition team members will receive public input at a meeting held at Asbury Place at Cokesbury Methodist Church.

He has already met with Parks Department, Public Works Department and will be meeting with the Building Inspection Department tomorrow as well as other staff that relate to environmental issues.

The report will talk about the scope of the reviews, who met with, how gathered information, key observations made and recommendations. They want no more than five recommendations given to the Mayor for action that will be prioritized. Some of those will be short term recommendations. There are things that can be done administratively, things that the Mayor can do and there are things that need to be done legislatively which is the purview of the City Council. They are also looking at measurables, things that can be tracked on a regular basis, and then any barriers that were found in being able to collect information.

Some of the environmental issues he's heard about from the EAB and working on city issues thru the years are trees/landscaping, air and water pollution, climate change, energy use, walkable/bikeable transit friendly communities, stormwater and flooding, garbage and recycling. If any member has any thoughts or input, he'd be glad to receive it or get to him by the end of the month.

Member Bennett asked if Christian is aware of anyone applying for a Seagrass Consortium grant opportunity to look at climate change, flooding and sea level more locally. One of the things they suggested was sea level sensors. He offered to help with grant writing.

Christian also mentioned that St. Petersburg is one of the first cities in Florida to pledge to go to 100% renewable energy and received a \$2.5 million dollar Bloomberg grant.

Member Butts mentioned some of his observations about having trash cans placed along walkways and being emptied, stormwater vaults cleaned on a regular basis, in order to keep the bays and waterways clean. Eliminate plastic straws and putting in trash bag holders that the Scouts make as a service project to help eliminate trash on the ground.

MINUTES OF THE ENVIRONMENTAL ADVISORY BOARD

January 3, 2018

Page 4

Chair Richards mentioned that the EAB has talked about adopting a roadway, adopting a neighborhood, and adopting a stream throughout the City. Perhaps have citizens be responsible for this effort, with an official sign etc. might be something to consider.

He also mentioned the recent reopening of Bruce Beach and the environmental education aspects of that area.

Christian Wagley indicated that the Urban Core Community Redevelopment Plan is the guiding document for Bruce Beach and what is suppose to go there. It envisions a public use, public access, recreational/conservation education kind of area, park space and maybe some buildings on the property near Main Street. The living shoreline, what is there now, wasn't put in as a living shoreline. It was put in as a mitigation site, when other parts of the waterfront and wetlands were filled, Living shorelines are still in their early phases, there are still some growing pains with them. Navy Point is one example of that. There have been some successes as well as failures.

6. Climate Mitigation and Adaptation Task Force Report

Chair Richards asked if there were any thoughts on how the report should be addressed as an action item.

Member Horning indicated that one of the reasons she did her presentation was to add social impact and prevention. That was her feedback on the report. We are at a reaction state and have to get in a prevention mode. Need to look at outreach, outside of downtown. Need to think about the vulnerable populations here and the impacts they have.

Chair Richards asked if there had been any guidance from City Council with regard to the Task Force Recommendations.

Council Executive indicated that the Report has been given to the EAB to review and make recommendations to them. He suggested that the EAB review the document part by part through several meetings and determine what recommendations the Board wants to make to City Council.

Further discussion occurred on how the Environmental Advisory Board will review the report and make recommendations. Board Members were encouraged to review the report and to come prepared to discuss at the next meeting.

MINUTES OF THE ENVIRONMENTAL ADVISORY BOARD

January 3, 2019

Page 5

7. New Business

Chair Richards asked for an update from Laurie Murphy on the Tree Ordinance

Laurie Murphy indicated that she had a meeting with Mayor Robinson and that there were some components in the proposed Tree Ordinance that may need to be addressed by the Planning Board or ARB and they would be left out. They were now looking at having it ready by March.

Council Executive indicated that the Tree Ordinance was included in the Land Development Code and would be required to go to the Planning Board for review.

With regard to clean-ups mentioned by Member Butts, the City did sponsor neighborhood clean-ups in the Hayward administration and perhaps the adopt programs could be included somehow with the regularly scheduled clean-up efforts.

Council Executive indicated that there would be an item going to City Council in January to reduce and remove Styrofoam cups, plastic bottles and other non-environmentally friendly items from use in City Hall.

8. Board Member Comments

Member Bennett reported that Kenya has issued a national ban on the manufacture, ownership and use of single use plastic bags. The fine is \$38,000 or four years in jail. It's had a tremendous impact in cleaning up the waterways, roadways, etc. They have replaced it with bio-degradable bags. He also had an opportunity to meet with a man who runs a charity in the UK. The UK charges for the single use bags. All the money that is raised is given to charity and then those charities use that money to do things that benefit the local community. The man he met with spends \$50 million a year to do community improvement projects funded by plastic bags.

Council Executive indicated that the State legislature has preempted cities from making any laws dealing with plastic bags.

Member Butts inquired as to whether the EAB could encourage initiatives for the State legislature, i.e, like the one that is getting publicity to change electric utilities to make it easier to use solar power.

Council Executive indicated that the EAB could send a recommendation to the City Council or Mayor asking to pass a resolution. Getting one of the legislators on board would be the easiest step and then once the legislator is on board to file legislation.

MINUTES OF THE ENVIRONMENTAL ADVISORY BOARD

January 3, 2019

Page 6

9. Reports and Announcements

Member Butts announced the January 16, 2019 meeting the Sierra Club is sponsoring on local water quality conversation on the Bay at the main Library at 6 p.m.

10. Public Comments—Open Forum

Ms. Dottie Dubuisson expressed how important it is to capture comments for the record of the Transition Team for specific recommendations and concerns. Don't be silent, show up at the meeting. She further inquired as to whether the EAB has ever looked into solar operated street lights vs. electrical ones. Also a lot of cities are using these electric generated turbines that are buried in the stormwater drains and that might be something to look into. Further, people have informally adopted drains and in those areas where water quickly rises, if they get out and clear the drains ahead, it helps a lot with preventing backups. She further indicated that there seems to be a high rate of trees dying in the area and wanted to know if any arbor study had been done. In addition, she mentioned that there are a lot of unknowns at Bruce Beach in the bay, to get reports that were prepared by the Army Corps of Engineers to see what is below the surface.

Member Bennet responded to concerns about the street lights. The first issue is who owns the lines. There are very strict rules on the lighting. The pay back period would be five to seven years.

With regard to informally adopted drains, Member Horning indicated that she would be delighted to come out to her community. She just got 50 placards and 60 more cans of paint.

Ms. Dubuisson also mentioned that an individual addressed the Transition Team regarding noise pollution due to leaf blowers and also a group appeared that wants to be a Smart City, where wi-fi connectivity would be all around and have street lights that would turn on and off when you went by. They appeared to be a start up company with no proven track record but they intend to create a business here in Pensacola.

Ms. Melissa Pino and Mr. Tim Smith spoke about living shorelines and the use of oyster shell breakwaters being placed next to areas of human recreation and public swimming, especially in Navy Point in Bayou Grande. There have never been oyster colonies in Bayou Grande. Further research and more public input should be given on the project.

11. Adjourn: There being no further business to come before the Board, the meeting was adjourned at 3:37 p.m.

Jan 16 local water quality @ library 6:00
Feb



	2017	2018
Chimney/Bay Bluffs Parks	2757	3829
Pensacola Visitor Center /Bartram Park/Hobo	2238	5013
Payne Bridge/Bayou Texar	0	1026
Bruce Beach	0	710
Total	4995	10578

27 events with average of 28 volunteers per cleanup site (945 hours)

Projects:

- Solar Trash cans along Bayfront Parkway
- Brochure for Water Bottle Fill Stations' location
- Brochure for Toy Borrow Bins
- Recruit more entertainment venues to eliminate straws (10+ so far)
- Installation of free Trash Bag Boxes at parks

Website: www.oceanhourfl.com

FaceBook: www.facebook.com/pg/oceanhourfl

Instagram: [@oceanhourfl](https://www.instagram.com/oceanhourfl)

Managed Retreat & Climategation

What is Managed Retreat?

A strategy to move human development (structures and infrastructure) out of harms way, from places that are so vulnerable to natural hazards they are very likely to be damaged or rendered unfit in the future.

Examples of Managed Retreat

- *Single public assets
- *Single private assets
- *Neighborhoods

Mechanisms for Managed Retreat

- *Buyouts: Federal (mostly FEMA), state, and local governments fund projects and/or buy-outs**
- *Land swaps**
- *Transfers of development rights**

Benefits of Managed Retreat

- *Reduce risk**
- *Save money**
- *Restore natural areas**
 - *Plant and wildlife habitat**
 - *Provide protections (buffers) for remaining development**

Challenges of Managed Retreat

Financial:

- *Government dollars in post-disaster relief
- *Local governments cash-strapped
- *Individuals can't afford to leave

Challenges of Managed Retreat

Social/psychological/emotional:

- *Emotional connections
- *Dependent on community
- *Inequitable legacies

Challenges of Managed Retreat

Structural:

- *Collective problem; private solutions
- *Community discussion challenging
- *Lacks advocates

People and Retreat

* The movement of people is and will continue to be affected by natural disasters and environmental degradation. Climate change is expected to have major impacts on human mobility.

* Environmental migration may take many complex forms; forced and voluntary, temporary and permanent, internal and international.

People and Retreat

- * The concept of “vulnerability” needs to be put at the center of current and future responses to environmental migration. The most vulnerable may be those who are unable to or do not move (trapped populations).
- * Environmental migration should not be understood as a wholly negative or positive outcome – migration can amplify existing vulnerabilities but can also allow people to build resilience.

Climategation

.... later in the century, Miami, as we know it, is going to be unlivable. So in reality, in south Florida, we're just going to be leaving. We don't have the problem. You, up in Orlando, you'd better set aside your groundwater resources. And you'd better plan for us. You really better plan.

Because we are coming.

Key Messages

The movement of people is and will continue to be affected by natural disasters and environmental degradation. Climate change is expected to have major impacts on human mobility.

- * Environmental migration may take many complex forms; forced and voluntary, temporary and permanent, internal and international.
- * The concept of “vulnerability” needs to be put at the center of current and future responses to environmental migration. The most vulnerable may be those who are unable to or do not move (trapped populations).
- * Environmental migration should not be understood as a wholly negative or positive outcome – migration can amplify existing vulnerabilities but can also allow people to build resilience.

How Flooding Affects You

There has been conversation nationally and locally on the impact of climate change on coastal communities, and the risk of rising sea levels, storm surges and hurricanes causing increased flooding. Scientists have linked these risks to global warming, caused by the burning of fossil fuels such as petroleum.

I am working with a 501c3 nonprofit called Anthropocene Alliance, and their initiative, Flood Forum USA, to understand the views of residents in this community regarding these concerns, and to find out what residents might – and might not – be interested in doing to address them. The information that you share will help us identify the kind of support that we should be giving residents, and the local and federal programs that might be suited to meeting your needs.

Note that we will be sharing the findings with the research partners. However, so that you can talk freely, your name, address and contact details will not be shared or attributed in any way.

YOUR CONCERNS

1. How concerned are you about these issues?

....flooding

Not concerned

1 2 3 4 5 6 7 8 9 *Very concerned*
10

....storm surge/hurricanes

Not concerned

1 2 3 4 5 6 7 8 9 *Very concerned*
10

....sea level rise

Not concerned

1 2 3 4 5 6 7 8 9 *Very concerned*
10

....climate change

Not concerned

1 2 3 4 5 6 7 8 9 *Very concerned*
10

Please tell us more.

2. When thinking of the issues above, which effects (if any) are you most concerned about?

Please check up to 5 that are most important to you:

- ☐ The threat to life/health/feelings of security
- ☐ The damage to private houses, businesses etc
- ☐ The damage to public buildings (school, library etc)
- ☐ The damage to outdoor spaces (eg gardens, playing fields)
- ☐ The effect on being able to walk/drive/cycle through/within the town
- ☐ The effect on insurance coverage/prices
- ☐ The effect on property values
- ☐ The effect on tourism
- ☐ Other (please specify) _____
- ☐ I have no concerns

Please tell us more:

3. Have you personally experienced any of these effects already? If yes, please say a bit more:

4. What would you say has effected your life the most?

SOLUTIONS

5. Do you think something needs to be done to reduce the risks of climate-related flooding to residents in your community?

<i>Definitely not</i>						<i>Don't know</i>				<i>Definitely yes</i>
1	2	3	4	5	6	7	8	9	10	

6. What sorts of things (if anything) do you think should be done?

7. And who (if anyone) do you think should take the lead?

8. Below is a list of possible actions that could be taken to reduce residents' risks. What do you think about:

	Would not support this	Don't know/would want to hear more	Would definitely support this
Improving and expanding the capacity of the local drainage and sewer system to manage the water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protect green spaces and expand areas of wetlands to help absorb and slow flood waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Build levees and dams to block the flow of flood waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elevate homes so they are higher than flood waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buy out <i>individual</i> properties in areas of high risk so residents can move to a home out of the flood risk area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buy out/relocate <i>multiple</i> homes in neighborhoods of high flood risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introduce programs and legislation that would reduce the burning of fossil fuels and slow the pace of global warming.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Please add any comments
below:**

- a) Improving and expanding the capacity of the local drainage and sewer system to manage the water.*

What do you think of this option?

What would make this option more attractive to you?

- b) Protect green spaces and expand areas of wetlands to help absorb and slow flood waters.*

What do you think of this option?

What would make this option more attractive to you?

- c) Build levees and dams to block the flow of flood waters.*

What do you think of this option?

What would make this option more attractive to you?

- d) Elevate homes so that they are higher than the flood waters.*

What do you think of this option?

What would make this option more attractive to you?

- e) Buy out individual properties in areas of high risk so residents can move to a home out of the flood risk area

What do you think of this option?

What would make this option more attractive to you?

- f) *Relocate multiple homes in areas of the neighborhood that are high risk.*

What do you think of this option?

What would make this option more attractive to you?

- g) *Introduce programs and legislation that would reduce the burning of fossil fuels and slow the pace of global warming.*

What do you think of this option?

What would make this option more attractive to you?

YOUR VIEWS ON THE WAY FORWARD

If further discussion was to be held on how best to manage or reduce the risk, what do you think **MUST be taken into consideration?**

ABOUT YOU

Your name: _____

Address: _____

Phone: _____ Email: _____

Employment status:

- ☐ Employed for wages
- ☐ Self-employed
- ☐ Out of work and looking for work
- ☐ Out of work but not currently looking for work
- ☐ A homemaker
- ☐ A student
- ☐ Military
- ☐ Retired
- ☐ Unable to work

Household size: _____

Education level:

- ☐ No schooling completed
- ☐ Elementary school to 8th grade
- ☐ Some high school, no diploma
- ☐ High school graduate, diploma or the equivalent (for example: GED)
- ☐ Some college credit, no degree
- ☐ Trade/technical/vocational training
- ☐ Associate degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Professional degree
- ☐ Doctorate degree

Annual income:

- ☐ Below \$10k
- ☐ \$10k - \$50k
- ☐ \$50k - \$100k
- ☐ \$100k - \$150k
- ☐ Above \$150k

Home Ownership:

I own my home _____ I rent _____ Other _____

Thank you for participating in this interview!

Footnotes:

--- (4) ---

Editor's note—Ord. No. 31-09, § 1, adopted Sept. 10, 2009, amended Ch. 12-6, in its entirety to read as herein set out. Prior to inclusion of said ordinance, 12-6, pertained to similar subject matter. See also the Code Comparative Table.

Sec. 12-6-1. - Purpose.

The purpose of this chapter is to establish protective regulations for trees and landscaped areas within the city. Such areas preserve the ecological balance of the environment, control erosion, sedimentation and stormwater runoff, provide shade and reduce heat and glare, abate noise pollution, and buffer incompatible land uses. The intent of this chapter is to encourage the preservation of existing trees. It is critical that a balance be maintained between developed areas and natural/landscaped areas with appropriate existing and/or newly planted trees and other vegetation. The intent is also to provide for the future of our citizens through maintaining vital vegetative species that will reproduce for future generations.

(Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-2. - Applicability.

(A) *Zoning districts.* The provisions of this chapter shall be applicable within the following zoning districts:

- (1) *Residential districts.*
 - (a) R-1AAAAA through R-1A districts
 - (b) R-ZL (zero lot line dwelling district)
 - (c) R-2A and R-2B (multiple-family)
- (2) *Mixed residential districts.*
 - (a) R-2 (residential/office)
 - (b) R-NC (residential/neighborhood commercial)
- (3) *Commercial districts.*
 - (a) C-1 (local commercial)
 - (b) C-2 (general commercial)
 - (c) R-C (residential commercial)
 - (d) C-3 (general commercial and limited industry)
- (4) *Industrial districts.*
 - (a) M-1 (wholesale/light industry)
 - (b) M-2 (light industry)

- (5) *Other districts.* The provisions of this chapter shall also be used as guidelines in reviewing site plans in site specific zoning and development (SSD) amendment applications, airport transition zone (ATZ-1 and ATZ-2) districts and in applications for special planned developments.
- (B) *Public institutional uses and churches.* The provisions of this chapter shall be applicable to public institutional uses and churches. Public institutional uses and churches located in R-1AAAAA through R-1A zones shall not be exempt from the provisions of this chapter. In addition, these uses shall conform with the requirements of subsection 12-6-3(A) and all other sections of this title applicable to the R-ZL, R-2A, R-2B and R-2 zones.
- (C) *Exemptions.* All single-family and duplex uses are exempt from the provisions of this chapter, except as provided for in section 12-2-32 (buffer yards), subsection 12-6-2(D) (heritage trees) and subsection 12-6-6(D) (new subdivisions). The C-2A downtown retail commercial district is exempt from the provisions of this chapter, except as provided for in subsections 12-6-6(A), (E), (F), and (G). All healthcare related uses of property owned or controlled by an entity which is licensed as an acute care hospital under F.S. Ch. 395, owned or controlled by a parent company of an entity which is licensed as an acute care hospital under F.S. Ch. 395 are exempt from the provisions of this chapter, except as provided for in section 12-6-3 and subsections 12-6-6(A), (C), (E), (F), and (G). In conjunction with the development of any such healthcare related use, a payment of five thousand dollars (\$5,000.00) per acre of new developed impervious surface area shall be made to the tree planting trust fund. The designated clear zone areas around the Pensacola Regional Airport and any other area identified by the airport manager and approved by the city council as critical to aircraft operations shall be exempt from this chapter.
- (D) *Heritage trees.* A protected tree identified by species in Appendix A of this chapter which is twelve ~~(12)~~ {34} inches or greater in diameter as measured at Diameter Breast Height (DBH). Heritage trees are protected in all the zoning districts listed in section 12-6-2, and for all land uses. Removal, cutting, *relocating* or pruning of heritage trees on proposed development sites may be permitted upon approval of a landscape and tree protection plan (section 12-6-4) *and review by the Parks and Recreation Board (section 12-6-7)*. Removal, cutting, *relocating* or pruning of heritage trees on developed property may be authorized upon issuance of a permit per section 12-6-7. A permit will be required for removal of a heritage tree in all zoning districts listed in section 12-6-2, and for all land uses, including single-family or duplex as set out in section 12-6-7.
- (E) *Removal of protected trees in connection with conservation easements, conservation management areas or parcels managed as nature parks or preserves.* No live preserved trees may be removed, pruned or relocated in these protected areas unless it is done to further the restoration towards the improvement of soils or remnant vegetation, streambank stabilization, hydrological systems or geological conditions.
- (F) *DBH.* All tree measurements shall be taken at Diameter Breast Height (DBH), which is the diameter of the tree at four and one-half (4½) feet (54 inches) above ground. If the tree has a bump or branch at four and one-half (4½) feet above ground then DBH shall be measured immediately below the bump or branch. If the tree is growing vertically on a slope, DBH shall be measured from the midpoint of the trunk along the slope. If the tree is leaning, DBH shall be measured from the midpoint of the lean. If the tree forks below or near DBH the tree shall be measured at the narrowest part of the main stem below the fork. If the tree splits into more than one (1) trunk close to ground level, DBH shall be determined by measuring each of the trunks separately and then taking the square root of the sum of all squared stem DBHs.
- (G) Notwithstanding any other provision of this chapter, the mitigation cost to a residential property owner (single-family and duplex uses) shall not exceed one thousand dollars (\$2,000.00).

(Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09; Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-3. - Landscaping requirements.

The following landscaping requirements apply to all types of land uses and zoning districts listed in section 12-6-2 of this chapter:

- (A) *Landscape area requirements.* The minimum percentage of the total developable site, which shall be devoted to landscaping, unless otherwise specified in this chapter, shall be as follows:

ZONING DISTRICT		PERCENT
R-ZL, R-2A, R-2B, R-2	25
R-NC, C-1, C-2, R-C	25
C-3, M-1, M-2	20
SSD, ATZ-1, ATZ-2	25

- (B) *Off-street parking and vehicle use areas.* Off-street parking regulations apply to all parking facilities of twenty (20) spaces or more. Off-street parking facilities and other vehicular use areas shall meet the following requirements:

- (1) *Perimeter requirements.* A ten-foot wide strip of privately owned land, located along the front and/or side property line(s) adjacent to a street right-of-way shall be landscaped. In no case shall this strip be less than ten (10) feet wide. Width of sidewalks shall not be included within the ten-foot wide perimeter landscape area. This perimeter landscape requirement shall be credited toward the percentage required for the total developable site in subsection 12-6-3(A), above. Material requirements in perimeter area are as follows:

- (a) One (1) *high quality shade tree* for each thirty-five (35) feet of linear foot frontage along the right-of-way shall be preserved or planted. Trees planted to meet this requirement shall measure a minimum of ~~six (6)~~ [3] inches DBH. The trees shall be container grown if planted during the months of March through October. During the remaining months, balled and burlapped (B&B) material may be used. Appropriate documentation shall be provided to the parks and recreation department. An automatic irrigation system shall be required with a separate zone with bubblers to each tree planted on site. When multiple trunk trees are specified, such as crape myrtle, each stem must be a minimum of ~~two (2)~~ [4-5] inches DBH, with a minimum of three (3) stems. These type trees shall not be cut back prior to planting. Seventy (75) percent of the trees for any site shall be shade trees, unless a lesser percentage is approved by the parks and recreation department. The remaining area within the perimeter strip shall be landscaped with other landscape materials.
- (b) Trees and other landscaping required in the perimeter strip shall be maintained to assure unobstructed visibility between three (3) [feet] and nine (9) feet above the average grade of the adjacent street and the driveway intersections through the perimeter strip.

- (c) If trees are required where overhead utilities exist, and such trees may create a maintenance potential, *only species* whose expected height at maturity will not create interference may be planted.

in Appendix B, 11-34 may be planted.

- (d) A minimum ten-foot separation shall be provided between street trees and street stormwater inlets, except where bioretention inlets that incorporate trees are utilized.
 - (e) Where possible, developments shall be designed to preserve as street trees any existing champion or high quality heritage trees which are located in the right-of-way or on private property within 20 feet of the right-of-way. Where these trees are preserved, no new construction or grading shall occur within the tree root plate and new buildings shall to be designed so that no more than 25 percent of the crown of the trees is removed.
- (2) *Interior planting areas.* Interior planting areas within parking lots shall be determined by subtracting the area set aside in the ten-foot perimeter strip from the total minimum area required to be landscaped in subsection 12-6-3(A), above. This remaining percentage shall be allocated throughout the parking lot or in areas, which are adjacent to the parking lot other than in the perimeter strip. Interior planting areas shall be located to most effectively accommodate stormwater runoff and provide shade in large expanses of paving and contribute to orderly circulation of vehicular and pedestrian traffic. Minimum sizes of interior planting areas are as follows:
- (a) A minimum of one hundred (100) square feet of planting area shall be required for each new species type A tree identified in Appendix "A" and small species identified in Appendix "B".
 - (b) A minimum of two hundred (200) square feet of planting area shall be required for each new species type B and type C tree identified in Appendix "A" and medium and large species identified in Appendix "B".
 - (c) A twelve-foot by thirty-six-foot planting island shall be required on each end of every double row of parking and a twelve-foot by eighteen-foot island on each end of a single row of parking shall be required. Also, a minimum of one (1) additional island at the midpoint of the parking bays for rows having over ten (10) parking spaces shall be required. The additional island shall be centered in each row. At no time shall a row of parking have landscape islands greater than 126 feet apart or closer than 36 feet apart. Each required landscape island shall contain at least one high quality shade tree listed in Appendices A** and B** as a species appropriate for lot planting. Such tree(s) shall be located within the landscaped area of at least 140 square feet to maximize the shading of the pavement. Any adjustment to this requirement must have written approval from the building official.
 - (d) A minimum planting area of seventy-five (75) percent of the dripline area of the tree shall be required for all existing trees. If conditions warrant that an area greater than seventy-five (75) percent is needed to preserve the tree, the city shall have the right to require up to one hundred (100) percent of the dripline. Approved pavers may be used in certain situations, if approved by the building official. Pervious surfaces are strongly encouraged.
- (3) *Vehicle overhang.* Vehicles shall not overhang any interior planting area or perimeter strip. Tire stops are required to be used in these situations.
- (4) *Curbs; protection of vegetation.* Where landscaping is installed in interior or perimeter strip planting areas, a continuous curb or other acceptable means of protection shall be provided to prevent injury to the vegetation. Such curb shall be designed to allow percolation of the water to the root system of the landscape material. Where existing trees are preserved, tree wells, tree islands or a continuous curb shall be utilized to protect the trunk and root system from alterations to surrounding grade elevations and damage from automobiles. A drainage system, sufficient enough to allow percolation into permeable soil, shall be provided in the area defined by the dripline of the tree(s).
- (5) Head-to-head parking rows shall contain eight foot wide landscape strips between the rows allowing for two-foot vehicle overhangs on each side. Shade trees shall be planted every

50 feet on average within these landscaped areas, but outside of the two-foot vehicle overhangs. As an alternative, every other row of head-to-head parking may provide a 16-foot-wide curbed landscape strip with shade trees every 35 feet on average and may contain sidewalks. Each landscape strip must contain a curb-cut design or made into an attractive ditch, channel or culvert that contains appropriate vegetation for stormwater reduction. See Appendix C.

(6) The Parks and Recreation board may allow the relocation of interior landscaped areas to preserve existing trees, or where it is determined upon review and recommendation of the community development department inspection services division, that the relocation is necessary for the safe maneuvering of vehicles or pedestrians.

(7) In those vehicular use areas including, but not limited to auto dealerships, storage of service or delivery vehicles, or attendant parking where interior landscaping would interfere with the customary storage or display of vehicles, the Parks and Recreation board or appropriate review board may allow some or all of the required interior landscaping to be located near the perimeters of the paved area, including such perimeters which may be adjacent to a building on the site. Such landscaped area would be in addition to required perimeter landscaping in the amount of one square foot of landscaped area for each 60 square feet of paved area. For each 140 square foot of relocated landscaped area, a high quality shade tree shall be provided.

(C) Buffer yards between zoning districts and uses. Regulations applicable to buffer yards are specified in section 12-2-32 of this Code and may not impede the development of appropriate pedestrian, handicapped and bicycle accessways between these uses.

(Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-4. - Landscape and tree protection plan.

A landscape and tree protection plan shall be required as a condition of obtaining any building permit or site work permit for townhouse residential, multi-family residential, commercial and industrial development as specified in section 12-6-3. The plan shall be submitted to the community development department inspection services division. A fee shall be charged for services rendered in the review of the required plan (see chapter 7-14 of this Code).

No building permit or site work permit shall be issued until a landscape and tree protection plan has been submitted and approved. Clearing and grubbing is only permitted after a site has received development plan approval and appropriate permits have been issued. The building official may authorize minimal clearing to facilitate surveying and similar site preparation work prior to the issuance of permits. No certificate of occupancy shall be issued until the building official has determined after final inspection that required site improvements have been installed according to the approved landscape and tree protection plan. In lieu of the immediate installation of the landscaping material and trees, the city may require a performance bond or other security in an amount equal to the cost of the required improvements in lieu of withholding a certificate of occupancy, and may further require that improvements be satisfactorily installed within a specified length of time.

(A) Contents of landscape and tree protection plan. The landscape and tree protection plan shall be drawn to scale by a landscape architect, architect or civil engineer licensed by the State of Florida, and shall include the following information unless alternative procedures are approved per sections 12-6-8 or 12-6-9:

- Location, size and species of all trees and shrubs to be planted showing the botanical name, size, spacing and number of plant materials. Architectural symbols depicting trees to be installed shall not exceed the scale equivalent of five feet in diameter with a solid line; a hatched line around the solid line shall show the expected canopy dimension after twenty (20) years.

- Location of proposed structures, driveways, parking areas, utilities, lighting systems, required perimeter and interior landscaped areas, and other improvements to be constructed or installed.
 - Location of irrigation system to be provided. All planted areas shall have an underground irrigation system designed to provide one hundred-percent coverage.
 - Landscape and tree protection techniques proposed to prevent damage to vegetation, during construction and after construction has been completed.
 - Location of all protected trees noting species and DBH.
 - Identification of protected trees to be preserved, protected trees to be removed, including dead trees, and trees to be replanted on site.
 - Proposed grade changes which might adversely affect or endanger protected trees with specifications on how to maintain trees.
 - Stormwater basins shall be designated as wet or dry.
 - Certification that the landscape architect, architect or civil engineer submitting the landscape and tree protection plan has read and is familiar with Ch. 12-6 of the Code of the City of Pensacola, Florida, pertaining to Tree and Landscape Regulation.
- (B) *Installation period.* All landscape materials and trees depicted on the approved landscape plan shall be installed within one (1) year of the date of issuance of the building permit for the site.
- (C) *Quality.* All plant materials used shall conform to the standards for Florida No. 1 or better as given in "Grades and Standards for Nursery Plants", current edition, State of Florida, Department of Agriculture and Consumer Services, Division of Plant Industry, Tallahassee, Florida, a copy of which shall be maintained for public inspection in the department of leisure services.
- (D) *Notice.* If removal is sought for two (2) or more heritage trees or for more than ten (10) protected trees (including heritage trees sought to be removed) and/or if removal of more than fifty (50) of existing protected trees is sought within any property in any zoning district identified in section 12-6-2, a sign shall be posted no further back than four (4) feet from the property line nearest each respective roadway adjacent to the property. One (1) sign shall be posted for every one hundred (100) feet of roadway frontage. Each sign shall contain two (2) horizontal lines of legible and easily discernable type. The top line shall state: "Tree Removal Permit Applied For." The bottom line shall state: "For Further Information Contact the City of Pensacola." The top line shall be in legible type no smaller than six (6) inches in height. The bottom line shall be in legible type no smaller than three (3) inches in height. There shall be a margin of at least three (3) inches between all lettering and the edge of the sign. The signs shall be posted at by the applicant at their expense, and shall remain continuously posted until the requisite building, site work, or tree removal permit has issued.
- (E) All stormwater basins shall be designed and landscaped to meet the following criteria:
- (1) Shade trees shall be planted at an average of one tree for every 35 linear feet of the basin perimeter. Spacing of trees may be closer when trees are planted in groups for aesthetic effect, but the minimum distance between the trees shall be ten linear feet. Trees shall be selected from the Gainesville tree list that are appropriate for use within stormwater areas, and all landscaping shall be selected according to the function as a wet or dry basin. Trees shall be located at least 20 feet away from inflow and outflow structures. Bioretention swales and exfiltration facilities are exempt from these tree planting requirements.
 - (2) Twenty-five percent or more of the appropriate planting area of the basin perimeter or littoral zone shall be landscaped with shrubs, groundcover, native perennials, or aquatic plants.

- (a) Individual stormwater basins that are greater than 5,000 square feet in total area shall be designed with curvilinear sides that mimic a natural wetland, lake, or stream. The landscaping for these basins shall be integrated with the other required site landscaping. As an alternative, the city manager or designee or reviewing board may approve basins that have parallel sides where they are designed with pedestrian amenities and are directly integrated into a streetscape, park, or plaza.
- (b) Individual stormwater basins that are greater than 40,000 square feet in total area shall also be designed to meet at least one of the following criteria:
- (1) Provide a recreational or functional pathway for pedestrians or bicyclists and an aesthetic focal point such as a water feature or pedestrian structure; or
 - (2) Be designed to preserve and incorporate a significant tree or tree grouping; or
 - (3) Be designed to maintain an existing wetland function or to preserve or establish habitat for native animal species.
- (F) Design principles and standards. All landscaped areas required by this article shall conform to the following general guidelines:
- a. The preservation of structurally sound native trees of high quality shade tree species and shrubs is strongly encouraged to maintain healthy, varied and energy-efficient vegetation throughout the city, and to maintain habitat for native wildlife species. Developments should be designed to preserve existing high quality heritage trees, especially those located within 20 feet of the public right-of-way.
 - b. The landscaping plan should integrate the elements of the proposed development with existing topography, hydrology and soils in order to prevent adverse impacts such as sedimentation of surface waters, erosion and dust.
 - c. The functional elements of the development plan, particularly the drainage systems and internal circulation systems for vehicles and pedestrians, should be integrated into the landscape plan. The landscaped areas should be integrated, especially to promote the continuity of on-site and off-site open space and greenway systems, and to enhance environmental features, particularly those features regulated by the environmental overlay districts (Article VIII).
 - d. The selection and placement of landscaping materials should maximize the conservation of energy through shading of buildings, streets, pedestrian ways, bikeways and parking areas. Where possible, shade trees should be planted along internal sidewalks that connect buildings to the street sidewalk and to other buildings on the site.
 - e. Landscaping design should consider the aesthetic and functional aspects of vegetation, both when initially installed and when the vegetation has reached maturity. Newly installed plants should be placed at intervals appropriate to their expected function as short-term or long-term elements. The natural and visual environment should be enhanced through the use of materials which achieve a variety with respect to seasonal changes, species of living material selected, textures, colors and size at maturity.
 - f. The placement of trees around buildings should permit access to the building by emergency vehicles.
 - g. The installation of the following invasive nonnative species is prohibited as is installation of any species labeled as "Prohibited" in the most recently published version of the Institute of Food and Agricultural Science (IFAS) Invasive Species Assessment:

INVASIVE, NONNATIVE
PLANT SPECIES

<u>Common Name</u>	<u>Scientific Name</u>
<u>Air potato</u>	<u>Dioscorea bulbifera</u>
<u>Arrow bamboo</u>	<u>Pseudosasa japonica</u>
<u>Brazilian pepper</u>	<u>Schinus terebenthifolius</u>
<u>Catclaw vine</u>	<u>Macfadyena unguis-cati</u>
<u>Chinaberry</u>	<u>Melia azedarach</u>
<u>Chinese privet</u>	<u>Ligustrum sinense</u>
<u>Chinese tallow tree</u>	<u>Sapium sebiferum</u>
<u>Chinese wisteria</u>	<u>Wisteria sinensis</u>
<u>Climbing fern</u>	<u>Lygodium japonicum and</u> <u>Lygodium microphyllum</u>
<u>Cogon grass</u>	<u>Imperata cylindrica</u>
<u>Coral ardesia</u>	<u>Ardisia japonica</u>
<u>Coral berry</u>	<u>Ardisia crenata</u>
<u>Elephant's ears</u>	<u>Xanthosoma sagittifolium</u>
<u>Glossy privet</u>	<u>Ligustrum lucidum</u>

<u>Golden raintree</u>	<u>Koelreuteria paniculata and Koelreuteria bipinnata</u>
<u>Golden bamboo</u>	<u>Phyllostachys aurea</u>
<u>Henon bamboo</u>	<u>P. nigra cv. "Henon"</u>
<u>Hydrilla</u>	<u>Hydrilla verticillata</u>
<u>Hygrophia</u>	<u>Hygrophia polysperma</u>
<u>Japanese ardisia</u>	<u>Ardisia japonica</u>
<u>Japanese honeysuckle</u>	<u>Lonicera japonica</u>
<u>Japanese paper mulberry</u>	<u>Broussonetia papyrifera</u>
<u>Kudzu</u>	<u>Pueraria lobata</u>
<u>Mimosa</u>	<u>Albizia julibrissin</u>
<u>Miramar weed</u>	<u>Hygrophila polysperma</u>
<u>Oyster plant</u>	<u>Tradescantia spathacea</u>
<u>Palm leaf bamboo</u>	<u>Sasa palmata (Arundinaria palmata)</u>
<u>Skunk vine</u>	<u>Paederia foetida</u>

<u>Tropical soda apple</u>	<u>Solanum viarum</u>
<u>White- flowered small- leaved spiderwort</u>	<u>Tradescantia fluminensis</u>
<u>Wandering spiderwort</u>	
<u>Water hyacinth</u>	<u>Eichornia crassipes</u>
<u>Wild taro</u>	<u>Colocasia esculenta</u>

- h. For all new development, or redevelopment of existing property, the applicant shall remove invasive nonnative plant species listed on the Florida Prohibited Aquatic Plants List or the Florida Noxious Weed List from the property in accordance with the management plan prior to issuance of the certificate of occupancy. On property with invasive nonnative plant species, a plan shall be submitted with the development application that includes a timeline, success criteria, treatment recommendations, and identifies methods that will have minimal impact on non-target species. All herbicide applications to control invasive, nonnative plants in wetland or upland set-aside areas (including buffers) shall be applied by a contractor licensed by the Florida Department of Agriculture and Consumer Services, Division of Agricultural Environmental Services, with a current certification in Natural Areas Weed Management. The city manager or designee should inspect such sites for a minimum of three years after completion to verify effectiveness of control efforts. The plan shall state the entity responsible for additional treatments during the three-year follow-up if the populations of invasive nonnative plants rebound and cover more than ten percent of any previously infested area within the wetland or upland set-aside areas.*
- i. Loblolly and slash pines should be at least 25 feet apart post-development to reduce southern pine beetle infestation outbreaks.*

(Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-5. - Maintenance.

The legal owner of record as appears on the current tax assessment roll or the designated lessee or agent shall be responsible for the maintenance of all landscape areas which shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free from refuse and debris. Within three (3) months of a determination by the building official or other city-designated official, that a protected tree required to be retained on a development site (as part of an approved site development

plan) or required landscaping is dead or severely damaged or diseased, the protected tree or landscaping shall be replaced by the owner in accordance with the standards specified in this chapter (chapter 12-6). The building official may approve additional time appropriate to the growing season of the species in question, not to exceed one (1) year.

All portions of any irrigation system shall be continuously maintained in a condition such that the intent of an irrigation design is fulfilled. Such irrigation shall promote water conservation by such methods as as drip irrigation and/or sprinkler zoning, as well as reducing the amount of irrigation as plants become established. Each required tree shall be served by a drip ring or bubblers or other appropriate means necessary to ensure that the entire rootball is irrigated. The irrigation system should be designed and located to minimize the watering of impervious surfaces. After the successful establishment of trees, the use of the automatic irrigation system may be discontinued. Uncontrolled emission of water from any pipe valve, head, emitter, or other irrigation device shall be considered evidence of non-maintenance.

Landscape areas that are not planted shall be grassed or mulched with organic materials. Grassed areas shall be planted with sod that has been certified free of noxious weeds by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry.

(Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-6. - Protected trees.

Protected trees are those trees identified by species and size in Appendix A of this chapter if living and viable. Where protected trees are identified on a site proposed for lot clearing within the applicable zoning districts identified in section 12-6-2, the number of protected trees to be preserved on the site shall be determined based upon the final approved location of proposed structures, driveways, parking areas, and other improvements to be constructed or installed.

(A) *Preservation Incentives.*

- (1) *Parking space reduction.* A reduction of required parking spaces may be allowed when the reduction would result in the preservation of a protected tree with a trunk of twelve (12) inches DBH or greater. Such reduction shall be required when the reduction would preserve a heritage tree. The following reduction schedule shall apply:

REDUCTION SCHEDULE

Number of Required Parking Spaces	Reduction of Required Parking Spaces Allowable
1—4	0
5—9	1
10—19	2
20 or above	10 percent of total number of spaces (total reduction regardless of number of trees preserved).

- (2) *Consideration of park and open space requirement.* A reduction or waiver of the required park and open space (or payment in lieu of land dedication) for new residential subdivisions specified in section 12-8-6 may be approved by the mayor or their designee when it is determined that said waiver will result in the preservation of five (5) or more protected trees with a trunk of twelve (12) inches DBH or greater.
 - (3) *Sidewalks.* Modifications to sidewalks, their required location, and width and curb requirements, may be allowed as necessary to facilitate the preservation of any protected tree.
 - (4) *Credit for additional landscaping.* The mayor or his or her designee may authorize up to one-half ($\frac{1}{2}$) of the total calculated mitigation cost (as determined according to subsection 12-6-6(B)(4), (5)) to be used by the applicant for additional landscaping, which is defined as landscaping that is not required by this chapter or any other law. Additional landscaping shall meet the following minimum standards:
 - (a) A minimum of seventy-five (75) percent of all required plant material shall consist of evergreen species.
 - (b) All landscape material shall be placed so as to maximize its screening and/or coverage potential at maturity.
 - (c) All shrub material shall be a minimum height of thirty (30) inches and have a minimum crown width of twenty-four (24) inches when planted and shall be a species capable of achieving a minimum height of eight (8) feet at maturity.
- (B) *Retention, relocation, removal, replacement, and mitigation of protected trees.*
- (1) *Retention of protected trees.* Every effort must be made to protect and retain existing protected trees on proposed development sites. A minimum of twenty-five (25) [40] percent of the total combined trunk diameter of protected trees on a proposed development site not located within jurisdictional wetlands shall be retained in place or relocated on site.
 - (a) Credit for retention of protected trees above minimum requirements. For each inch of trunk diameter above the minimum twenty-five (25) [40] percent requirement that is protected in place or relocated on site, an equivalent trunk diameter inch credit shall be given against replacement and mitigation requirements as provided in subparagraphs (4) and (5) below.
- (C) *Barrier zones.* All regulated trees in areas of demolition or construction that have not been permitted nor designated for removal by either the terms of the permit or approved development order shall be protected by barrier zones erected and inspected prior to construction of any structures, road, utility service or other improvements. Barricades shall comply with the following:
- (1) Protective barriers shall be plainly visible and shall create a continuous boundary around trees or vegetation clusters in order to prevent encroachment by machinery, vehicles or stored materials. To further protect tree roots, a layer of wood chips at least eight inches thick shall cover the soil within the barricade. Barricades must be at least three feet tall and must be constructed of either wooden corner posts at least two by four inches buried at least one foot deep, with at least two courses of wooden side slats at least one by four inches with colored flagging or colored mesh attached, or constructed of one-inch angle iron corner posts with brightly colored mesh construction fencing attached. High quality heritage trees shall be protected by galvanized chain link fencing a minimum of 48 inches high, 11-gauge wire, two-inch mesh size secured with 1 7/8 inch line posts no further than 10 feet apart secured at a depth of three feet below soil line. Corners shall be secured with 2 3/8 inch line posts secured to a depth of four feet below soil line.
 - (2) Barriers shall be placed at the greater of the following:
 - a. At or outside the dripline for all heritage and champion trees and all regulated pine and palm trees;

- b. At a minimum of two-thirds of the area of the dripline for all other regulated species; or
- c. At the tree root plate.

- (3) If complying with the above placement of barriers is found to unduly restrict development of the property, the city manager or designee, or the appropriate reviewing board may approve alternative barrier placements or methods of protection provided that at least 50 percent of the area under the canopy dripline remains undisturbed (no grade change or root cut) and further provided that there shall be no disturbance to the tree root plate. Protective barriers may not be removed or relocated without such approval.
- (4) No grade changes shall be made within the protective barrier zones without prior approval of the city manager or designee. Where roots greater than one inch in diameter are damaged or exposed, they shall be cut cleanly and re-covered with soil within one hour of damage or exposure.
- (5) Protective barriers shall remain in place and intact until such time as landscape operations begin. If construction needs dictate a temporary removal (for less than 24 hours), the city manager or designee, may approve or deny the temporary removal of protective barriers.
- (6) Landscape preparation in the protected area shall be limited to shallow discing of the area. Discing shall be limited to a depth of four inches unless specifically approved otherwise by the city manager or designee.
- (7) No building materials, machinery or harmful chemicals shall be placed within protective barriers, except short-duration placements of clean fill soil that will not harm the tree. Such short-duration placements shall not exceed seven days. The city manager or designee shall be notified of the dates the short duration placement will begin and end. The original soil grade that existed within the protected areas prior to the placement of such fill shall be restored.
- (8) The American National Standards Institute A-300 Part V: Management of Trees and Shrubs During Site Planning, Site Development, and Site Construction or other nationally recognized arboricultural standards approved by the city manager or designee shall be used as guidelines for tree protection, planting, pruning and care during development and construction.

(D) *Preservation generally.* Trees may be preserved on development sites in locations where a new tree would be required. Credit for the preservation of such a tree will be given if the requirements listed below are met. During construction, if the requirements are not being met and/or the preserved tree is unlikely to survive in satisfactory condition, the owner shall apply for a tree removal permit in accordance with the requirements of this code.

- (1) 50 percent of the area within the dripline of the tree shall be naturally preserved, both above- and below-ground. Under no circumstances shall permission be given for any construction activity within the tree root plate. The 50 percent protection zone must include the entire tree root plate. Landscape materials are permitted within the 50 percent protection zone but only mulch is permitted within the tree root plate. Within the 50 percent protection zone there shall be no alteration to the existing grade, no trenching or cutting of roots, nor shall there be any storage of materials or fill. No heavy equipment shall be permitted within the protection zone. All work must be done by hand. There shall be no compaction of the soil, as from heavy construction equipment, and no concrete, paint, chemicals or other foreign substances placed within this protection zone.
- (2) The city manager or designee may approve paving blocks within the protection zone, provided that all work is done by hand (no machinery), and that the soil area under the pavers is not compacted beyond the bulk density limits of 1.40 g/cc in clay, 1.50 g/cc in loam, or 1.70 g/cc in sand. No lime rock or other material shall be used underneath the pavers. Pavers may not be placed within the tree root plate.
- (3) There shall be no evidence of active insect infestation potentially lethal to the trees, and no damage from skinning, barking or bumping.

(4) The root plate of regulated trees within the public right-of-way should not be impacted by adjacent development, even where the tree root plate encroaches on the private property. The installation of new utilities or improvements to public utilities required to serve the development should not require the removal of trees on the public right-of-way, where the required separations from the utilities can be met.

(5) If any preserved tree is not alive and healthy three years after the certificate of occupancy is granted, it shall be removed and replaced with the tree or trees which originally would have been required by this code. The area that was preserved to accommodate the preserved tree shall be maintained in an unpaved condition and the replacement trees established in this area.

(6) The planning and development services department shall maintain, and make available to the public, descriptions and illustrations of tree preservation and protection practices which will assist in assuring that preserved trees survive construction and land development.

(E) *Inspections.* The city manager or designee shall conduct periodic inspections of the site before work begins and/or during clearing, construction and/or post-construction phases of development in order to ensure compliance with these regulations and the intent of this section.

(F) *Denial; conditions.* The reviewing board or city manager or designee may deny a proposal for development because one or more champion or high quality heritage trees have not been preserved or adequately protected, or may require special conditions of approval that may include but are not limited to the following:

(1) Requiring the trees to be protected with chainlink barricades.

(2) Requiring a soil aeration system in the vicinity of tree roots as needed, particularly where fill will be added over roots of preserved trees or where compaction may reduce the availability of water and oxygen to tree roots.

(G)

Removal of protected trees. Subject to the requirements of (1) above, protected trees may be approved for removal if one (1) or more of the following conditions are present:

- (1) *Visibility hazard.* Necessity to remove trees which will pose a safety hazard to pedestrians or vehicular traffic upon completion of the development.
- (2) *Safety hazard.* Necessity to remove trees which will threaten to cause disruption of public services or which will pose a safety hazard to persons or buildings or adjacent property or structures.
- (3) *Construction of improvements.* Necessity to remove trees in order to construct proposed improvements as a result of the location of driveways, if the location of a driveway or ingress/egress is specified and required by DOT or other regulations, buildings, utilities, stormwater/drainage facilities, or other permanent improvements. The architect, civil engineer, or planner shall make every reasonable effort to locate such improvements so as to preserve any existing tree.
- (4) *Site conditions.* Necessity to remove trees as a result of characteristics of the site such as site dimensions, topographic conditions and grading requirements necessary to implement standard engineering and architectural practices. Grading shall be as limited as possible. In order to justify the removal of protected trees on the ground of site conditions, the request must be reviewed by the appropriate city staff and must be approved by the mayor or his or her designee. Appeals from the decision of the mayor or his designee shall be to the Zoning Board of Adjustment.
- (5) *Diseased or weakened trees.* Necessity to remove diseased trees or trees weakened by age, storm, fire or other injury;
- (6) *Compliance with other ordinances or codes.* Necessity for compliance with other city codes such as building, zoning, subdivision regulations, health provisions, and other environmental ordinances.

- (H) *Relocation of protected trees.* Where feasible, when conditions necessitate removal of protected trees, said trees shall be relocated on the site in the required perimeter or interior landscaped areas. Should the relocated tree expire within a specified period of time, the appropriate mitigation (planting of replacement trees or payment to the tree planting trust fund) shall be required. For each protected tree that cannot feasibly be relocated (or all of them), a written statement from a qualified professional shall be provided stating for each tree (or all of them) that relocation is not feasible and briefly explaining why relocation is not feasible.
- (I) *Replacement of protected trees.* When a protected tree is approved for removal, it shall be replaced with a like species of the tree removed. The prescribed number of trees shall be planted for each tree removed. The minimum diameter of a replacement tree shall be six ~~(6)~~ [3] inches DBH. The replacement formula is:
- (a) A trunk diameter of four (4) inches to eleven (11) inches = Two (2) six [3]-inch DBH trees planted for each one removed.
 - (b) A trunk diameter of twelve (12) inches to nineteen (19) inches = Three (3) six [3]-inch DBH trees planted for each one removed.
 - (c) A trunk diameter of twenty (20) inches to twenty-nine (29) inches = Five (5) six [3]-inch DBH trees planted for each one removed.
 - (d) A trunk diameter of thirty (30) inches to thirty-five (35) inches = Eight (8) six [3]-inch DBH trees planted for each one removed.
 - (e) A trunk diameter of thirty-six (36) inches to forty-three (43) inches = Ten (10) six [3]-inch DBH trees planted for each one removed.
 - (f) A trunk diameter of forty-four (44) inches or greater = Eleven (11) six [3]-inch DBH trees planted for each one removed.
 - (g) Replacement trees must be exact replacements of the species removed to preserve the natural tree community.
- (5) *Mitigation of protected trees.* Any replacement trees that cannot be planted on site because of lack of space, once agreed to by the city, shall be valued at eight ~~[four]~~ hundred dollars (\$800.00) ~~[400.00]~~ each and the owner shall pay that total to the tree planting trust fund. Trees identified as dead and verified as such in writing by the city shall not be required to be replaced or mitigated.
- (J) *New planting of protected trees.* On sites proposed for development or redevelopment where no existing protected trees are identified, the owner or his agent shall be required to plant one (1) new tree species identified in the protected tree list (Appendix "A") or the tree replant list (Appendix "B"), a minimum of six ~~(6)~~ ~~[three-(3)]~~ inches DBH, for each one thousand (1,000) square feet of impervious surface area. *Seventy-five percent of these trees must be a high quality shade tree.* New trees or replacement trees shall be planted during the year as indicated in subsection 12-6-3(B)(1)(a) of this chapter.
- (K) *New residential subdivisions.* In new residential subdivisions the private property owner of each lot shall plant one (1) tree in the front yard within ten (10) feet of the right-of-way, provided there is no existing tree in the front yard. If the existing tree is not within ten (10) feet of the right-of-way, then one (1) additional tree shall be required (sized as noted in (1) below).
- (1) Where a protected or replant tree species is required to be replanted, such tree shall be a minimum of six ~~(6)~~ ~~[three-(3)]~~ inches DBH.
 - (2) The location of an existing protected tree on the lot or the proposed location of a new protected or replant species, where required in this subsection, shall be identified on the plot plan submitted as part of the information submitted for a building permit.
- (L) *Road right-of-way tree protection.* No person or agency shall cut, prune, remove, or in any way damage any protected tree in any street right-of-way or create any condition injurious to any

such tree without first obtaining a permit to do so from the parks and recreation department as specified in section 12-6-7.

- (1) The parks and recreation department may issue an annual permit to public utility companies exempting them from the provisions of this subsection concerning tree preservation. In the event of flagrant or repeated disregard for the intent and purpose of this chapter, the department may revoke said permit. The reasons for revoking such a permit shall be provided in writing to the offender.
 - (2) Prior to entering a targeted area for pruning by the utility, the utility representative shall submit for approval to the city a clearly marked plan of the area, showing location of trees and noting what is being requested by the utility company. The parks and recreation department shall approve the plan and an additional permit fee of seventy-five dollars (\$75.00) shall be paid to the City of Pensacola for the specific area noted on the plan submitted (see chapter 7-14 of this Code).
 - (3) All public utilities, governmental agencies and their subcontractors shall comply with the American National Standards Institute, ANSI A300-1995, Tree, Shrub and Other Woody Plant Maintenance—Standard Practices, when pruning trees on public or private property. Notice shall be provided to landowners at least one (1) week in advance of pruning and/or removing landowners' trees on private property. Emergency removal requiring immediate action to protect the health and safety of the public is not subject to this chapter. In no case shall the utility company be permitted to prune more than thirty (30) percent of the existing tree canopy.
- (M) *Tree protection.* Removing, pruning, or cutting tree growth away from a permanent nonaccessory sign (billboard) on public or private property shall be permitted only if a permit is obtained from the parks and recreation department. All agencies and their subcontractors shall comply with the American National Standards Institute, ANSI A300-1995, Tree, Shrub and Other Woody Plant Maintenance—Standard Practices, when pruning trees.
- (N) *Canopy road tree protection zone.* All lands within ten (10) feet of the outer boundary of the right-of-way of the below described roads are hereby declared to be canopy tree protection zones:
- Blount Street from "A" Street to Bayview Park.
 - Lakeview Avenue from 9th Avenue to 20th Avenue.
 - Garden Street from Alcaniz Street to Jefferson Street and from "J" Street to "N" Street.
 - 17th Avenue from Gregory Street to Texar Drive.
 - 12th Avenue from Barcia Drive to Fairfield Drive.
 - Baylen Street from LaRua Street to Jordan Street.
 - Spring Street from LaRua Street to Jordan Street.
 - Bayou Boulevard from Lee Street to Strong Street.
 - Cervantes Street/Scenic Highway from the eastern side of Bayou Texar to the city limits.

No person or agency shall cut, remove, prune or in any way damage any protected tree in any canopy road tree protection zone or create any condition injurious to any such tree without first obtaining a permit to do so from the parks and recreation department as specified in section 12-6-7. The exemption for utility companies noted in subsection (E), above shall also apply to the canopy road tree protection zone.

- (O) *Heritage trees.* No person or agency shall cut, remove, prune or in any way damage any heritage tree in any zoning district without first obtaining approval of a landscape and tree protection plan per section 12-6-4 for new development sites or a permit from the parks and recreation department as specified in section 12-6-7 for developed property. The provisions of this subsection related to pruning do not apply to existing single-family and duplex uses.

(Ord. No. 31-09, § 1, 9-10-09; Ord. No. 16-10, § 217, 218, 9-9-10)

Sec. 12-6-7. - Tree removal and pruning permit in right-of-way and canopy road tree protection zones and heritage trees on developed property.

No person shall cut, remove, prune, or in any way damage any heritage tree on developed property or protected tree within the road right-of-way and canopy road tree protection zones identified in subsections 12-6-6(E) and (G), without first obtaining a tree removal and pruning permit from the parks and recreation department as provided below. An inspection fee of seventy-five dollars (\$75.00) shall be charged for services rendered by the parks and recreation department in the required review and on-site inspection for tree removal or pruning permits (see chapter 7-14 of this Code).

- (A) *Canopy road tree protection zone and road right-of-way tree protection zone.* Prior to cutting, removing, pruning or in any way damaging a protected tree in the canopy road tree protection zone and road right-of-way tree protection zone, an owner, developer or his agent must submit a copy of an accurately scaled drawing including the following information:
- (1) Location of the subject protected tree, noting species, size and general condition.
 - (2) The parks and recreation department may issue an annual permit to public utilities exempting them from this requirement as specified in subsection 12-6-6(E).
- (B) *On-site inspection.* Prior to the issuance of a tree removal and pruning permit, the parks and recreation department shall conduct an on-site inspection and shall issue a written report setting forth a recommendation for granting or denying the permit including any explanation necessary to clarify the basis for the recommendation.
- (C) *Conditions of approval.* The parks and recreation department may approve the permit if one (1) or more of the conditions set forth in subsections 12-6-6(B)(2)(a)—(f) is present.
- (D) *Review.* In the event an application is denied, the parks and recreation department shall specify to the applicant in writing the reason for said action.
- (E) *Heritage tree removal mitigation.* In the event that a heritage tree is approved for removal, tree replacement shall be provided per subsection 12-6-6(B)(4)(f) or a fee shall be paid into the tree planting trust fund per subsection 12-6-6(B)(5).
- (F) *Pruning permitted on residential properties.* Notwithstanding any contrary provision, pruning of heritage trees on properties with existing single-family and duplex land uses shall not require compliance with this section. However, no more than one-third (1/3) of the existing, healthy tree crown may be removed. If trimming of any heritage tree on a residential property results in substantial and irreparable harm or death to the heritage tree, such trimming shall be deemed an unauthorized and unpermitted removal of such heritage tree and shall be subject to penalties as such.

(Ord. No. 44-99, § 5, 11-18-99; Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-8. - Best management practices.

The mayor or his or her designee may determine that the required irrigation or mitigation percentage for a site may be reduced, and may also reduce the required mitigation payment into the Tree Planting Trust Fund when it has been demonstrated and set forth in writing that Best Management Practices have

exceeded the requirements of this article. In the proposed plans for development of a site, areas in which the utilization of Best Management Practices would be applicable include, but are not limited to: Enviroscaping; Xeriscaping; Landscape Irrigation; and LEED/Green Building Techniques such as, but not limited to, green roofs, rain garden landscape design, shading constructed surfaces on the site with landscape features, and minimizing the overall building footprint and parking area; which are designed to reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on the environment.

Best Management Practices for a site include a demonstrating to the mayor or his or her designee, that the property owner has met the minimum requirements of this section in addition to the proposed best management practices to be utilize.

** "Waterwise Florida Landscapes" is the required reference guide for Xeriscaping and irrigation techniques.

(Ord. No. 31-09, § 1, 9-10-09; Ord. No. 16-10, § 219, 9-9-10)

Sec. 12-6-9. - Modifications.

Under certain circumstances, the application of the standards of this chapter may be either inappropriate or ineffective in achieving the purpose of this chapter. When planting is required by this chapter or by other provisions herein, and the site design, topography, unique relationships to other properties, natural vegetation or other special considerations exist relative to the proposed development; the developer may submit a specific alternate plan for the planting. This plan must demonstrate how the purposes and standards of this chapter will be met by measures other than those in sections 12-6-3 and 12-6-6. The building official shall review the alternate proposal and advise the applicant of the disposition of the request within fifteen (15) working days of submission by the applicant. Any appeals by the applicant shall be in accordance with section 12-6-11 of this chapter.

(Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09)

Sec. 12-6-10. - Enforcement.

(A) *Stop work order.* Whenever the building official determines that a violation of this chapter has occurred, the following actions shall be initiated:

- (1) *Written notice.* Immediately issue written notice by personal delivery or certified mail to the person violating this chapter of the nature and location of the violation, specifying what remedial steps are necessary to bring the project into compliance. Such person shall immediately, conditions permitting, commence the recommended remedial action and shall have ten (10) working days after receipt of said notice, or such longer time as may be allowed by the building official, to complete the remedial action set forth in said notice.
- (2) *Remedial work and stop work orders.* If a subsequent violation occurs during the ten (10) working days referred to in subsection (A)(1) above, or if remedial work specified in the notice of violation is not completed within the time allowed, or if clearing and development of land is occurring without a permit, then the building official shall issue a stop work order immediately. Said stop work order shall contain the grounds for its issuance, and shall set forth the nature of the violation. The stop work order shall be directed not only to the person owning the land upon which the clearing and development is occurring, but also a separate stop work order shall be directed to the person or firm actually performing the physical labors of the development activity or the person responsible for the development activity, directing him forthwith to cease and desist all or any portion of the work upon all or any geographical portion of the project, except such remedial work as is deemed necessary to bring the project into compliance. If such person fails to complete the recommended remedial action within the time allowed, or fails to take the

recommended action after the issuance of such stop work order, then the building official may issue a stop work order on all or any portion of the entire project.

(3) *Notice of compliance.* Upon completion of remedial steps required by notice the building official shall issue a notice of compliance and cancellation of said notice or stop work order.

(B) *Penalty.* The fine for violating this chapter shall be based on the size of limb(s) or the tree(s) removed without a permit. The measurement to establish said fine shall be based on the remaining tree material left intact on the site. If a tree is removed, the trunk caliper shall be measured at DBH and at the point of removal for a limb or each limb. If, in the opinion of the parks and recreation department, the tree has been substantially damaged so that its normal growth character will never return, i.e., a tree is topped and will never recover the original character, then the fine may be based upon the caliper of the tree trunk or each limb removed, whichever is the greater. Each day a violation of a stop work order continues shall constitute a separate offense (see subsection 7-14-6(2), penalty fees, of this Code). Each protected tree removed without a permit or in violation of a permit shall constitute a separate offence. Any person may seek an injunction against any violation of this chapter, and recover such damages as he may suffer. In addition to the fines and prohibitions contained herein, the provisions of section 1-1-8 of the Code shall apply applicable to willful violations of this chapter.

(C) *Tree planting trust fund.* A tree planting trust fund has been established and funded by the fines pursuant to subsection (B) and mitigation fees paid pursuant to section 12-6-6. Expenditures from the tree planting trust fund are hereby authorized and may be made by the mayor for projects up to five thousand dollars (\$5,000) [~~\$25,000~~] to replant trees, or to plant new trees and other appropriate landscape vegetation, purchase irrigation supplies and purchase equipment dedicated to the planting and maintaining of the city's trees. The first priority for expenditure of funds deposited in the tree planting trust fund is for restoration of the tree canopy in the area where trees generating the funds were removed. Any expenditure in excess of five thousand dollars (\$5,000) [~~\$25,000~~] must be approved by the city council following review by the environmental advisory board.

A grant program is hereby established for community organizations such as neighborhood associations, civic organizations, and garden clubs, according to the following criteria:

- Each grant is limited to seventy-five (75) percent of the cost of the proposed project up to seven thousand five hundred dollars (\$7,500.00);
- The required twenty-five (25) percent grant match may be waived for projects deemed as a high priority canopy restoration project by the city council;
- The tree planting trust fund must have sufficient funds for the project requested;
- Grant requests must be submitted to the environmental advisory board for review prior to consideration by the city council;
- The city council must approve each grant request; and
- The funds must be utilized for providing trees or other appropriate vegetation along with associated irrigation that will help restore the tree canopy as deemed appropriate by proper planting location requirements and may enhance the natural beauty of the community, serve to deter graffiti or the defacement of public or private property, and may create sound buffers where desirable.

(Ord. No. 50-00, § 5, 10-26-00(Ord. No. 44-99, § 5, 11-18-99; Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09; Ord. No. 16-10, § 220, 9-9-10; Ord. No. 21-15, § 1, 12-9-15)

Sec. 12-6-11. - Appeal.

Any person directly and adversely affected by a decision of the parks and recreation department, the building official, or the mayor or his or her designee in the interpretation or enforcement of the provisions

of this chapter may appeal such decision to the zoning board of adjustment. Such appeal shall be submitted in writing to the planning administrator within thirty (30) days of the rendering of the subject order, requirement, decision or determination.

(Ord. No. 50-00, § 5, 10-26-00(Ord. No. 44-99, § 5, 11-18-99; Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09; Ord. No. 16-10, § 221, 9-9-10)

APPENDIX A
PROTECTED TREE LIST*

<i>Species Type A (Small, 4" + diameter trunk)</i>	
1.	Dogwood (<i>Cornus florida</i>)
2.	Redbud (<i>Cercis canadensis</i>)
3.	Crape Myrtle (<i>Lagerstroemia indica</i>)
4.	Fringe Tree (<i>Chionanthus virginicus</i>)
5.	Flatwoods Plum (<i>Prunus umbellata</i>)
6.	Crabapple (<i>Malus angustifolia</i>)
7.	Sand Oak (<i>Quercus geminata</i>)
<i>Species Type B (Medium, 6" + diameter trunk)</i>	
1.	American Holly (<i>Ilex opaca</i>)
2.	Dahoon Holly (<i>Ilex cassine</i>)
3.	Southern Magnolia (<i>Magnolia grandiflora</i>) **
4.	Eastern Red Cedar (<i>Juniperus virginiana</i>) **
5.	Southern Red Cedar (<i>Juniperus silicicola</i>) **
6.	White Cedar (<i>Chamaecyparis thyoides</i>)
7.	River Birch (<i>Betula nigra</i>)
<i>Species Type C (Large, 8" + diameter trunk)</i>	
1.	Live Oak (<i>Quercus virginiana</i>)**
2.	Laurel Oak (<i>Quercus laurifolia</i>)**
3.	Sweet Gum (<i>Liquidambar styraciflua</i>)**
4.	Sycamore (<i>Platanus occidentalis</i>)**
5.	Pecan (<i>Carya illinoensis</i>)**
6.	Red Maple (<i>Acer rubrum</i>)**
7.	Hickory (<i>Carya spp.</i>)**
8.	White Oak (<i>Quercus alba</i>)**

9.	Southern Red Oak (<i>Quercus falcata</i>)
10.	Florida Sugar Maple (<i>Acer barbatum</i>)
11.	Black Tupelo (<i>Nyssa sylvatica</i>)
12.	Silver Maple (<i>Acer saccharinum</i>)
13.	<u>Longleaf Pine (<i>Pinus palustris</i>)**</u>

B. When measuring a tree to determine if it meets the trunk diameter criteria, it shall be measured at Diameter Breast Height (DBH), which is the diameter of the tree at four and one-half (4½) feet (fifty-four (54) inches) above ground. The scientific name controls for compliance purposes. Common names are furnished for reference purposes only.

** Shade trees.

APPENDIX B TREE REPLANT LIST

A. Small Trees:	
1.	Crape Myrtle (<i>Lagerstroemia indica</i>)
2.	Holly, Dahoon (<i>Ilex cassine</i>) **
3.	Hop-hornbeam (<i>Ostrya virginiana</i>)
4.	Hornbeam (<i>Carpinus caroliniana</i>)
5.	Fringe Tree (<i>Chionanthus virginicus</i>)
6.	Smooth Redbay (<i>Persea borbonia</i>) **
7.	Glossy Privet (<i>Ligustrum lucidum</i>)
8.	Loquat (<i>Eriobotrya japonica</i>)
9.	Red Buckeye (<i>Aesculus pavia</i>)

10.	Hawthorne (<i>Crataegus spp.</i>)
11.	American Holly (<i>Ilex opaca</i>)
12.	Savannah Holly (<i>Ilex 22ortune2222/cassine</i> × <i>opaca</i>)
13.	East Palatka Holly (<i>Ilex 22ortune2222/cassine</i> × <i>opaca</i>)
14.	Eagleston Holly (<i>Ilex 22ortune2222/cassine</i> × <i>opaca</i>)
15.	Fineline Holly (<i>Ilex cornuta</i>)
16.	Emily Bruner Holly (<i>Ilex latifolia</i> × <i>cornuta</i>)
17.	East Bay Holly (<i>Ilex latifolia</i> × <i>cornuta</i>)
18.	Mary Neil Holly (<i>Ilex/cornuta</i> × <i>pernyi</i>)
19.	Nellie R. Stevens Holly (<i>Ilex aquifolium</i> × <i>cornuta</i>)
20.	Green Japanese Maple (<i>Acer palmatum</i>)
21.	Eastern Red Bud (<i>Cercis 22ortune222222</i>)
22.	Drake Elm (<i>Ulmus parvifolia</i>)
23.	Yaupon Holly (<i>Ilex vomitoria</i>)
24.	Ashe Magnolia (<i>Magnolia ashei</i>)
25.	Wax Myrtle (<i>Myrica cerifera</i>)
26.	Flatwoods Plum (<i>Prunus 22ortune2222</i>)
27.	Myrtle Oak (<i>Quercus myrtifolia</i>)
28.	Rusty Blackhawk (<i>Viburnum rufidulum</i>)
29.	Dogwood (<i>Cornus florida</i>)

30.	Red Bud (<i>Cercis 23ortune232323</i>)
Trees listed 13 through 34 are native. [*Note discrepancy in number 34 here and below.]	
Trees listed 11 through 34 are suitable for planting beneath utility lines.	
<i>B. Medium and Large Trees:</i>	
1.	American Sycamore (<i>Plantanus occidentalis</i>)
2.	Ash, White (<i>local</i>) (<i>Fraxinus 23ortune2323</i>) **
3.	Birch, River (<i>Betula nigra</i>) **
4.	Cedar, Atlantic White (<i>Chamaecyparis thyoides</i>)
5.	Cedar, Southern Red (<i>Juniperus silicicola</i>)
6.	Chalkbark Maple (<i>Acer leucoderme</i>)
7.	Chinese Pistache (<i>Pistacia chinensis</i>)
8.	Bald Cypress (<i>Taxodium distichum</i>)
9.	Eastern Poplar (<i>Populus 23ortune23</i>)
10.	Elm, Florida (<i>Ulmus 23ortune2323 var. floridana</i>) **
11.	Elm, Winged (<i>Ulmus alata</i>) **
12.	Hickory (<i>Carya spp.</i>) **
13.	Holly, American (<i>Ilex opaca</i>)
14.	Loblollybay (<i>Gordonia lasianthus</i>) **
15.	Loblolly Pine (<i>Pinus taeda</i>)
16.	Maple, Florida Sugar (<i>Acer barbatum floridanum</i>) **

17.	Mulberry, Red (<i>Morus rubra</i>)
18.	Oak, Nuttall (<i>Quercus nuttallii</i>)
19.	Oak, Post (<i>Quercus 24ortune24</i>) **
20.	Oak, Shumard (<i>Quercus shumardii</i>) **
21.	Oak, Southern Red (<i>Quercus 24ortune</i>) **
22.	Oak, White (<i>Quercus alba</i>) **
23.	Oak, Overcup (<i>Quercus lyrata</i>)
24.	Live Oak (<i>Quercus virginiana</i>) **
25.	Palm, Cabbage (<i>Sabal palmetto</i>)
26.	Palm, Pindo (<i>Butia capitata</i>)
27.	Red Maple (<i>Acer rubrum</i>)
28.	Swamp Red Maple (<i>Acer rubrum</i> var. <i>drummondii</i>)
29.	Sweetbay (<i>Magnolia virginiana</i>) **
30.	Sweet Gum (<i>Liquidambar styraciflua</i>)
31.	Tulip Tree (<i>Liriodendron tulipifera</i>)
32.	Tupelo, Water (<i>Nyssa 24ortune</i>)
33.	Walnut, Black (<i>Juglans nigra</i>) **
34.	Willow Oak (<i>Quercus phellos</i>)
35.	Windmill Palm (<i>Trachycarpus 24ortune</i>)
36.	Southern Magnolia (<i>Magnolia grandiflora</i>) **

Appendix CAppropriate vegetation for stormwater managementTreesDeciduousRed Maple – *Acer rubrum* (s-sh)River Birch – *Betula nigra* (s)Black Gum – *Nyssa sylvatica* (s-sh)Bald Cypress – *Taxodium distichum* (s/sh) EvergreenDahoon Holly – *Ilex cassine* (s-sh)Yaupon Holly – *Ilex vomitoria* (s-sh)Sweetbay Magnolia – *Magnolia virginiana* (s-sh) Longleaf Pine – *Pinus palustris* (s)Cabbage Palm – *Sabal palmetto* (s)ShrubsDeciduousBeautyberry – *Callicarpa americana* (s-sh) Buttonbush – *Cephalanthus occidentalis* (s-sh) VirginiaWillow – *Itea virginica* (sh)Snowbell – *Styrax americana* (sh)EvergreenGallberry – *Ilex glabra* (s-sh)Wax Myrtle – *Myrica cerifera* (s-sh)Dwarf Palmetto – *Sabal minor* (sh)Palmetto – *Serenoa repens* (s-sh)Walter's Viburnum – *Viburnum obovatum* (s-sh)PerennialsSwamp Milkweed – *Asclepias incarnata* (s) Climbing Aster – *Aster carolinianus* (s-sh) Tickseed –*Coreopsis lanceolata* (s)Swamp Sunflower – *Helianthus angustifolius* (s) Scarlet Hibiscus – *Hibiscus coccineus* (s)Blue Flag Iris – *Iris virginica* (s-sh)Cinnamon Fern – *Osmunda cinnamomea* (sh) Royal Fern – *Osmunda regalis* (s)Rudbeckia – *Rudbeckia hirta* (s-sh)Blue-eyed Grass – *Sisyrinchium angustifolium* (s) Ironweed – *Vernonia gigantea* (s-sh) OrnamentalGrassesRiver Oats – *Chasmanthium latifolium* (s) Muhly Grass – *Muhlenbergia capillaries* (s) Sand Cordgrass –*Spartina bakeri* (s)

* When measuring a tree to determine if it meets the trunk diameter criteria, it shall be measured at Diameter Breast Height (DBH), which is the diameter of the tree at four and one-half (4½) feet (fifty-four (54) inches) above ground. The scientific name shall control for compliance purposes. Common names are furnished for reference purposes only.

** Shade Trees.

Source: Native Trees for North Florida, Florida Cooperative Extension Service, University of Florida. Florida-Friendly Plant List 2006, Florida Yards and Neighborhoods, Cooperative Extension Service, University of Florida.

(Ord. No. 50-00, § 5, 10-26-00(Ord. No. 44-99, § 5, 11-18-99; Ord. No. 50-00, § 5, 10-26-00; Ord. No. 31-09, § 1, 9-10-09)
