



AGENDA
ENVIRONMENTAL ADVISORY BOARD
CITY OF PORT ORANGE

Meeting Date: Wednesday, February 20, 2019
Type of Meeting: Special

Time: 4:00 PM
Location: 2nd Floor Conference Room
City Hall, 1000 City Center Circle

A. CALL TO ORDER

1. Roll Call

B. DISCUSSION/ACTION

2. Consideration of Minutes – January 28, 2019
3. Resolution Relating to List of Trees

C. PUBLIC COMMENTS

D. BOARD COMMENTS

E. NEXT MEETING DATE

4. Next Meeting Date: April 22, 2019
5. Items for Next Agenda

F. ADJOURNMENT

ANY PERSON WHO DECIDES TO APPEAL ANY DECISION MADE BY THE **ENVIRONMENTAL ADVISORY BOARD** WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE HE OR SHE MAY NEED TO ENSURE AT HIS OR HER OWN EXPENSE FOR THE TAKING AND PREPARATION OF A VERBATIM RECORD OF ALL TESTIMONY AND EVIDENCE OF THE PROCEEDINGS UPON WHICH THE APPEAL IS TO BE BASED. **NOTE:** IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PROCEEDING, YOU ARE ENTITLED, AT NO COST TO YOU, TO THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE CITY CLERK FOR THE CITY OF PORT ORANGE, 1000 CITY CENTER CIRCLE, PORT ORANGE, FLORIDA 32129, TELEPHONE NUMBER 386-506-5563, CITYCLERK@PORT-ORANGE.ORG, AS FAR IN ADVANCE AS POSSIBLE, BUT PREFERABLY WITHIN 2 WORKING DAYS OF YOUR RECEIPT OF THIS NOTICE OR 5 DAYS PRIOR TO THE MEETING DATE. IF YOU ARE HEARING OR VOICE IMPAIRED, CONTACT THE RELAY OPERATOR AT 7-1-1 or 1-800-955-8771. UPON REQUEST BY A QUALIFIED INDIVIDUAL WITH A DISABILITY, THIS DOCUMENT WILL BE MADE AVAILABLE IN AN ALTERNATE FORMAT. IF YOU NEED TO REQUEST THIS DOCUMENT IN AN ALTERNATE FORMAT, PLEASE CONTACT THE CITY CLERK WHOSE CONTACT INFORMATION IS PROVIDED ABOVE.

ENVIRONMENTAL ADVISORY BOARD
MEETING MINUTES
CITY OF PORT ORANGE
1000 CITY CENTER CIRCLE – CITY HALL
2nd FLOOR CONFERENCE ROOM
PORT ORANGE, FLORIDA
JANUARY 28, 2019 AT 5:15 P.M.

A Regular Meeting of the Environmental Advisory Board was called to order by Chairman Macaluso at 5:15 p.m.

Present: John Macaluso, Chairman
Kristine Cunningham
Nancy Vaughn
Derek LaMontagne (arrived late)
Philip Klema
Joseph Fazzie

Absent: Newton White (excused)

Also Present: Tim Burman, Community Development Director
Margaret Tomlinson, Construction and Engineering Manager
Shelby Field, Assistant City Clerk

B. ELECTION OF OFFICERS

Motion was made by Member Cunningham to nominate Member Macaluso for Chairman and Seconded by Member Vaughn. Member Macaluso accepted the nomination. Motion carried unanimously by voice vote.

Motion was made by Chairman Macaluso to nominate Member Vaughn for Vice Chairman and Seconded by Member Cunningham. Member Vaughn accepted the nomination. Motion carried unanimously by roll call vote.

C. DISCUSSION/ACTION

2. Consideration of Minutes - October 22, 2018

Motion to approve the October 22, 2018 minutes as presented was made by Member Cunningham and Seconded by Chairman Macaluso. Motion carried unanimously by voice vote.

3. Riverwalk Environmental Concerns

Chairman Macaluso asked the Board to share their thoughts and concerns after visiting Riverwalk. He expressed an appreciation for the work being done. Tim Burman, Community Development Director, explained the City has not currently created any designs for Phase 3 and it is still in the information collection stage.

Member Klema inquired as to a Brownfield designation area (a previously developed area with some contamination that provides incentives to clean up and redevelop it) near Riverwalk. Margaret Tomlinson, Construction and Engineering Manager, responded that the City does have a designated area.

Member Cunningham asked about the River to Sea trail and how it will impact the area. Mr. Burman explained the City's intentions to combine the River to Sea trail with the Halifax right-of-way to preserve the shore line.

Member Vaughn expressed an interest in planting more native plants and showcasing it to educate the public on plant options. Ms. Tomlinson responded that the City would investigate interactive signage to educate the public visiting Riverwalk.

Member Klema inquired as to whether any discharge structures for storm water are being constructed for Riverwalk. Staff does not have plans for any new outfalls currently.

Member LaMontagne asked staff if there was anything in writing about how the shoreline must be maintained. Mr. Burman replied that he could look into the Comprehensive Plan and the Living Shoreline Study to find out. Ms. Tomlinson explained that the City would be happy to find out about how the Board can work with the City to reduce invasive plants and maintain native plants to preserve the shoreline.

Member Cunningham inquired as to the budget for the project. Ms. Tomlinson stated currently the design and permit is funded at \$100,000 but the whole project is currently not funded and estimated at around \$2.5 million.

4. Resolution relating to list of trees

Ms. Tomlinson provided the Board the current plan for the Resolution regarding the list of trees. She suggested the board look through the list and bring any suggested comments or changes to a special meeting in February (date to-be-determined) to discuss before the recommendations go to Council.

5. Environmental Summit

Chairman Macaluso would like to create an environmental summit to discuss water, air, and other environmental issues regarding neighboring cities and industries. He would like to draft something to bring to future meetings for Board input. Chairman Macaluso requested this be a repeat item for the meeting agendas.

6. Raintree Subdivision Entrance Historic Tree Removal

Ms. Tomlinson gave a presentation on the pros and cons of removing the Live Oak tree at the Raintree Subdivision Entrance and the issues it is causing to the roads. The estimated cost to preserve the tree is around \$400,000. Ronny Buttrum, Deputy Director Public Works, explained that it would cost the City more money to repeatedly prune the roots and repave the road than to remove it. Member Fazzie suggested removing the tree and replacing it with a more sustainable one. Member LaMontagne is against removing the tree. Chairman Macaluso suggested the Board go look at the tree and bring back suggestions to the next meeting.

Member LaMontagne made a motion to investigate all other means of preserving the tree before deciding on the Raintree tree removal and bringing the decision back to the next meeting, seconded by Member Vaughn. Motion carried unanimously by voice vote.

D. PUBLIC COMMENTS

Johnathan Foley, Citizen, agreed with Member LaMontagne and sees the value in preserving the historic tree but also sees the financial strain on the city it could cause to keep the tree.

E. BOARD COMMENTS

Member Cunningham brought back the discussion at the previous meeting about having an informational booth at Family Days. Mr. Burman suggested putting it on the April agenda to plan and prepare for the Fall Family Days. Member Cunningham requested bringing in the City's waste management staff to talk to the Board about recycling.

Member LaMontagne expressed a desire to see City site plans come before the Board. Mr. Burman replied that if they are within Code guidelines the process does not include them needing to come before the Board.

F. NEXT MEETING DATE

7. Next Meeting Date: April 22, 2019

8. Items for Next Agenda

Environmental Summit
Raintree Subdivision Entrance Historic Tree Removal
Planning for a booth at Family Days

G. ADJOURNMENT – 7:00pm

Chairman John Macaluso

Resolution 19-xx

Landscape Materials

(1) *Shade trees.* Shade tree species shall be a minimum of two and one-half-inch caliper and ten feet in height at the time of planting. For purposes of this paragraph, the caliper shall be measured at six inches above the ground for trees up to four inches in diameter at planting and 12 inches above the ground for trees over four inches in diameter at planting. Palms may be used for up to 25 percent of required shade trees when planted in the quantities specified in the chart below. Understory trees may be substituted for up to 25 percent of required shade trees when planted in groups of two or more per required tree. All shade trees shall be staked and guyed at the time of planting in accordance with the details of this section LDC, Ch. 13, Sec. 6 (c). Below is a list of approved native shade trees and palm tree equivalents.

Common Name		Botanical Name
(X)	Ash, Green (D)	Fraxinus pennsylvanica
	Ash, Water (D)	Fraxinus caroliniana
(XX) (N)	Red Bay (E)	Persea borbonia
(N)	Bay, Loblolly (E)	Gordonia lasianthus
(XX)	Camphor Tree (E)	Cinnamomum camphora
(XX) (N)	Cedar, Red (E)	Juniperus silicicola
(XX) (N)	Cypress, Bald (D)	Taxodium distichum
	Cypress, Leyland (E)	Cyressocyparis leylandii
(XX) (N)	Cypress, Pond (D)	Taxodium ascendens
(X)	Elm, American (D)	Ulmus americana
(XX)	Elm, Chinese (D)	Ulmus parvifolia
(XX)	Golden Rain Tree (D)	Koelreuteria elegans
(XX)	Hickory, Pignut (D)	Carya glabra
	Hickory, Water (D)	Carya aquatica
(XX)	Loquat, Japanese Plum (E)	Eriobotrya japonica
(XX) (N)	Magnolia, Southern (E) Blanchard, Bracken Brown Beauty, Little Gem, Miss Chloe and other cultivars	Magnolia grandiflora
(N)	Maple, Red (D)	Acer rubrum
	Maple, Silver (D)	Acer saccharinum
(XX) (N)	Oak, Laurel (E)	Quercus laurifolia
(XX) (N)	Oak, Live (E)	Quercus virginiana
(XX)	Oak, Pin (E)	Quercus palustris
	Oak, Nuttall	
(XX)	Oak, Shumard Red (D)	Quercus shumardii
(XX)	Oak, Turkey (D)	Quercus laevis
(XX)	Oak, Water (E)	Quercus nigra
(XX)	Oak, Willow (E)	Quercus phellos
	Palm, Bismark (1)	
(XX) (N)	Palm, Cabbage (2)	Sabal palmetto

(XX)	Palm, Canary Island Date (1)	Phoenix canariensis
(XX)	Palm, Chinese Fan (1)	Livistona chinensis
	Palm, Cliff Date (1)	Phoenix rupicola
(XX)	Palm, European Fan (1)	Chamerops humilis
(XX)	Palm, Medjool Date (1)	Phoenix dactylifera "Medjool"
(X) (N)	Palm, Paurotis (2)	Acoelorrhaphe wrightii
(XX)	Palm, Pindo (1)	Butia capitata
(XX)	Palm, Queen (2)	Syagrus romanzoffiana
	Palm, Ribbon (1)	Livistona decipiens
(X)	Palm, Royal (2)	Roystonea regia
	Palm, Senegal Date	Phoenix reclinata
(XX)	Palm, Washington (2)	Washingtonia robusta
(XX)	Palm, Wild Date (1)	Phoenix sylvestris
(XX)	Palm, Windmill (2)	Trachycarpus fortunei
(XX)	Pine, Loblolly (E)	Pinus taeda
(XX) (N)	Pine, Long-leaf (E)	Pinus palustris
(XX) (N)	Pine, Slash (E)	Pinus elliottii
(XX) (N)	Pine, Sand (E)	Pinus clausa
	Riverbirch, Duraheat	Betula nigra 'BNMTF'
(XX)	Sugarberry (D)	Celtis laevigata
(N)	Sweetbay (D)	Magnolia virginiana
(XX)	Sweetgum (D)	Liquidambar styraciflua
(N)	Sycamore (D)	Platanus occidentalis
	Willow, Weeping (D)	Salix babylonica

KEY:

(X) Xeriscape moderate drought tolerance

(XX) Xeriscape high drought tolerance

(N) Native

(D) Deciduous

(E) Evergreen

(2) Number of palm trees equivalent to one shade tree

(2) *Understory trees.* Understory tree species shall be a minimum of one and one-half-inch caliper and eight feet in height at the time of planting. For purposes of this paragraph, the caliper shall be measured at six inches above the ground for trees up to four inches in diameter at planting and 12 inches above the ground for trees over four inches in diameter at planting. Multi-trunk species shall be full and upright. All understory trees shall be staked and guyed at the time of planting in accordance with this section LDC, Ch. 13, Sec. 6 (c). Below is a list of approved understory trees.

Common Name	Botanical Name	
(X)	Blueberry, Japanese	<i>Elaeocarpus decipiens</i>
(XX)	Cedar, Red (E)	<i>Juniperus virginiana silicicola</i>
(X)	Cherry Laurel (E)	<i>Prunus caroliniana</i>
(XX)	Crape Myrtle (D)	<i>Lagerstroemia indica</i>
(XX)	Cypress, Italian (E)	<i>Cupressus sempervirens</i>
(XX)	Dogwood, Flowering (D)	<i>Cornus florida</i>
(XX)	Elm, Winged (D)	<i>Ulmus alata</i>
(XX)	Holly, American (E)	<i>Ilex opaca</i>
(X) (N)	Holly Dahoon (E)	<i>Ilex cassine</i>
(X)	Holly, Eagleston (E)	<i>Ilex x attenuata 'Eagleston'</i>
(XX)	Holly, East Palatka (E)	<i>Ilex attenuata</i>
	Holly, Nellie R. Stevens (E)	
	Holly, Oakleaf (E)	
(XX) (N)	Holly, Yaupon (E)	<i>Ilex vomitoria</i>
(XX)	Jerusalem Thorn (D)	<i>Parkinsonia aculeata</i>
	Juniper, Hollywood (E)	
	Juniper, Spartan (E)	
(XX)	Oak, Myrtle (E)	<i>Quercus myrtifolia</i>
(XX)	Oak, Sand Live (E)	<i>Quercus geminata</i>
(XX)	Oleander (E)	<i>Nerium oleander</i>
(XX)	Olive, European (E)	<i>Olea europaea</i>
(XX)	Palm, Chinese Fan	<i>Livistona chinensis</i>
	Palm, Copernicia Alba Caranday	
	Palm, Mule	
(XX)	Palm, Pindo	<i>Butia capitata</i>
(XX)	Palm, Pygmy Date	<i>Phoenix roebelinii</i>
(XX)	Palm, Windmill	<i>Trachycarpus fortunei</i>
(X)	Podocarpus, Nagi (E)	<i>Podocarpus nagi</i>
(X)	Podocarpus, Yew (E)	<i>Podocarpus macrophyllus</i>
	Privet, Glossy (E)	<i>Ligustrum lucidum</i>
(X)	Privet, Japanese (E)	<i>Ligustrum japonicum</i>
(XX)	Redbud (D)	<i>Cercis canadensis</i>
(XX) (N)	Stopper, Simpson's (E)	<i>Myrcianthes fragrans</i>
(XX) (N)	Wax Myrtle (E)	<i>Myrica cerifera</i>
(N)	Willow, Coastal-Plain (E)	<i>Salix caroliniana</i>

KEY:

(X) Xeriscape moderate drought tolerance

(XX) Xeriscape high drought tolerance

(N) Native

(D) Deciduous

(E) Evergreen

(3) *Shrubs*. Shrubs shall be a minimum of three-gallon container 18 to 24 inches in height immediately after planting. Shrubs shall be planted no more than 30 inches apart on centers, and in groups of no less than three each. Alternate spacing and grouping, when appropriate to ensure proper growth and screening, may be approved through the administrative variance procedure specified in section 9 of this chapter LDC, Ch. 13, Sec. 9. Below is a list of approved shrubs. Variegated and other similar variations of species shall also be permitted provided identical dimensional and functional results are achieved.

Common Name	Botanical Name
	Abelia, Pink
	Abelia 'Edward Goucher'
(N)	Anise, Florida (E)
	Illicium floridanum
(X)	Arborvitae, Oriental (E)
	Platycladus orientalis
	Azalea (E)
	Rhododendron hybrids
(X)	Boxwood, Japanese (E)
	Buxus microphylla
(XX) (N)	Coontie
(X)	Crape Myrtle (D)
	Lagerstroemia indica
(X)	Cypress, Leylandii (E)
	Cyressocyparis leylandii
	Fakahatchee Grass (E)
(X)	Feijoa (E)
	Feijoa sellowiana
(X)	Holly, Ambigua (D)
	Ilex ambigua
(X)	Holly, American (E)
	Ilex opaca
(X)	Holly, Burford (E)
	Ilex cornuta
(XX)	Holly, Yaupon (E)
	Ilex vomitoria
(XX)	Juniper (E)
	Juniperus spp.
	Ligustrum, Japanese Privet (E)
	Ligustrum japonicum
	Lorapetalum
	Lorapetalum chinense
(N)	Mangrove, Black
	Avicennia germinans
(N)	Mangrove, Red
	Languncularia racemosa
(N)	Mangrove, White
	Rhizophora mangle
(XX)	Olive, European (E)
	Olea europaea
(XX)	Palmetto, Saw
	Serenoa repens
(XX)	Palmetto, Scrub
	Sabal etonia
(X)	Photinia, Red-leaf (E)
	Photinia glabra
(X)	Photinia, Red-tip Fraserii (E)
	Photinia fraserii
(X)	Pittosporum, Japanese (E)
	Pittosporum tobira
(X)	Podocarpus, Nagi (E)
	Podocarpus nagi
(XX)	Podocarpus, Yew (E)
	Podocarpus macrophyllus
(X)	Privet, Chinese (E)
	Ligustrum sinense
(X)	Privet, Florida (D)
	Forestiera segregata
(XX)	Privet, Japanese (E)
	Ligustrum japonicum
(XX)	Sage, Texas (E)
	Leucophyllum frutescens
(XX)	Silverthorn (E)
	Elaeagnus pungens

	Viburnum, Sandankwa (E)	Viburnum suspensum
(X)	Viburnum, Sweet (E)	Viburnum odoratissimum
(X) (N)	Viburnum, Walter's (E)	Viburnum obovatum
(XX)	Wax Myrtle (E)	Myrica cerifera

KEY:

(X) Xeriscape moderate drought tolerance

(XX) Xeriscape high drought tolerance

(N) Native

(D) Deciduous

(E) Evergreen

(4) *Ornamentals*. Ornamental plantings as defined below, shall be minimum one-gallon container grown species, unless otherwise noted below, and spaced on centers necessary to provide 100 percent aerial coverage within a maximum of two years, applicable to each plant type. Where this code permits shrub equivalency, the quantity listed in the chart below shall be required to equal one shrub. The following is a list of approved ornamentals. Variegated varieties and other similar variations shall also be permitted provided identical dimensional and functional results are maintained.

	Common Name	Botanical Name
(XX)	Asparagus Fern (3)*	Asparagus densiflorus
(X)	Cast Iron Plant (2)	Aspidistra elatior
(XX)	Coontie (1)**	Zamia floridana
(X)	Crinum Lily (1)**	Crinum asiaticum
(XX)	Crown of Thorns (3)**	Euphorbia milli
(XX)	Day Lily (3)	Hemerocallis spp.
	Dwarf Fakahatchee Grass (2)	
	Dwarf Schilling Holly (2)	
	Flax Lily (1)	
(X)	Garlic, Society (3)	Tulbaghia violacea
(XX)	Hawthorn, Indian (1)**	Rapheolepis indica
	Iris, African	
(X)	Jasmine, Confederate (4)**	Trachelospermum jasminoides
(X)	Jasmine, Small-leaf Confederate (4)	Trachelospermum asiaticum
(XX)	Juniper (2)**	Juniperus spp.
(XX)	Lily Turf, Creeping (4)	Liriope spicata
(XX)	Liriope (3)	Liriope muscari
(X)	Mondo Grass (4)	Ophiopogon japonicus
(XX)	Morning Glorys (4)	Ipomoea spp.
	Muhly Grass (2)	

(XX)	Palm, Sago (1)**	Cycas spp.
(X)	Pampas Grass (1)**	Cortaderia selloana
(X)	Pittosporum, Dwarf (1)**	Pittosporum tobira "Wheeleri"
	Sand Cordgrass (2)	
(XX)	Sunflower, Beach (2)	Helianthus debilis

KEY:

(X) Xeriscape moderate drought tolerance

(XX) Xeriscape high drought tolerance

* Number in parentheses denotes shrub equivalency

** Minimum three-gallon container growth specification

(5) *Lawn grass.* All grassed areas, except large open turf areas such as retention area bottoms and play fields, shall be sodded with any species of grass common to Central Florida. The use of St. Augustine sod is recommended for areas subject to regular manicuring and heavy pedestrian traffic. Generally, this type of grass should be used in areas which are viewed at a close distance. Bahia sod is recommended for retention areas, slopes, repair of rights-of-way, overflow grassed parking, play fields and other large turf areas which are not generally manicured. Below is a list of approved lawn grasses.

	Common Name	Botanical Name
(X)	Bahia	Paspalum notatum
(X)	Bermuda	Cynodon dactylon
	Centipede	Eremochloa ophiuroides
	St. Augustine	Stenotaphrum secundatum
(X)	Zoysia	Zoysia spp.

The city may approve other lawn grasses in addition to those listed above, providing that documentation defining the characteristics of the proposed grass, including appearance, growing requirements, and growth rate, substantiate its suitability for its intended purpose.

(6) *Alternative landscaping materials.* The city may approve alternative landscape materials to satisfy xeriscape requirements when such materials are determined to be drought resistant. Determination shall be based on certified documentation provided by a registered landscape architect or printed in a recognized professional or informational publication.

(7) *Prohibited vegetative species:* The following species shall not be included in any landscaping design due to their aggressive, invasive nature:

Common Name	Botanical Name
Australian Pine	Casuarina equisetifolia

Australian Pine	Casuarina leucophloia
Brazilian Pepper	Schinus molle
Camphor Tree	Cinnamomum camphora
Pink Tree	Maleuca leucadendron

In addition, no plant species prohibited by the Florida Department of Environmental Protection (DEP) or listed as Category I, List of Invasive Plant Species by the Florida Exotic Pest Plant Council (Internet: www.fleppc.org) shall be included in any landscape design.