## 12. VEGETATION AND WILDLIFE

## A. Identify the dominant species and other unusual or unique features of the plant communities on Map F. Identify and describe the amount of all plant communities that will be preserved in a natural state following development as shown on Map H.

The project site will be a mixed retail/office/residential/hotel uses in an area that has been the subject of urban development for more than 50 years; as such there are no remaining natural vegetative communities or plant associations. The existing plant association found throughout the project area consists primarily of sodded yards and landscape plants installed as part of the past development of the area. Individual mature native trees and shrubs exist in sporadic areas within the limits of the project area but unique features or large associations are not found anywhere within the project limits. Therefore, given the fact that no native plant communities remain onsite, no preservation of native vegetation associations is proposed. Map F is a map of the site with important plant communities and unique features identified, no unique or important plant communities were observed onsite except the riverine littoral area adjacent to the north property line. The areas that were evaluated as part of this project that contain unique features or important plant communities are the littoral area of Delevoe Park which is offsite, but adjacent to the north property line and the North Fork of the New River shore zone in the extreme northeast corner of the project area, see map F for the location of Delevoe Park and the "riverine area". Neither of these areas is proposed to be affected by the project development plan. The list of dominant plants identified during the project surveys is shown below as Table 12-1.

Table 12-1   Dominant Plant Taxa Identified Within the Riverbend DRI Site					
Botanical Name	Common Name	Special Status	Notes		
Pinus elliottii	slash pine	None	Isolated mature trees located in residential areas south of Broward Boulevard		
Bucida buceras	black olive	None	Dispersed throughout the area in residential yards and street landscape plots		
Calophyllus antillanum	Brazilian beauty leaf	None	Few individuals in residential lots		
Delonia regia	royal poinciana	None	Few individuals in residential lots		
Ficus benjamina	weeping fig	None	Few individuals in residential lots		
Mangifera indica	mango	None	Few individuals in residential lots		
Pondgamia pinnata	pongam	None	Few individuals in residential lots		
Quercus spp.	oaks	None	Few individuals in residential lots		
Hibiscus rosa-sinensis	hibiscus	None			
Ixora spp.	Ixora	None	None Planted by developer		
Jasminum spp.	jasmine	None			
Ligustrum japonicum	wax privet	None	Planted by developer		
Roystonia elata	royal palm	FDA endangered <i>(Florida taxon)</i>	Planted by developer, few individuals in residential lots		
Sabal palmetto	cabbage palm	State tree	Few individuals in residential lots		
Swietenia mahagoni	mahogany	FDA Endangered	Few individuals in residential lots		
Panicum repens	torpedo grass	Invasive Exotic	Around Delevoe Park pond and North Fork of the New River		

Table 12-1Dominant Plant Taxa Identified Within the Riverbend DRI Site					
Botanical Name	Common Name	Special Status	Notes		
Tillandsia spp.	Air plants	FDA Threatened and Endangered	Various individuals found in trees and shrubs in residential development		
<i>Typhu</i> s spp.	cattail	Invasive Native	Around Delevoe Park pond and North Fork of the New River		
Phragmites australis	giant reed	None	Around Delevoe Park pond and North Fork of the New River		
Rhizophora mangle	red mangrove	None	Adjacent to North Fork of the New River		
Laguncularia racemosa	white mangrove	None	Adjacent to North Fork of the New River		

B. Discuss what survey methods were used to determine the absence or presence of state or federally listed wildlife and plants. (Sampling methodology should be agreed to by the regional planning council and other reviewing agencies at preapplication conference stage.) State actual sampling times and dates, and discuss any factors that may have influenced the results of the sampling effort. Show on Map G the location of all transects, trap grids, or other sampling stations used to determine the on-site status of state or federally listed wildlife and plant resources.

The methodology proposed during the preapplication conference, and provided to the South Florida Regional Planning Council (SFRPC) for consideration during the preapplication conference, was used during all surveys and a summary of that methodology is again provided as follows:

The methodologies included three phases of field analysis: 1) reconnaissance, 2) pedestrian and vehicular transects through all areas of the project and 3) targeted analysis of specific locations within the project area. The reconnaissance surveys were conducted during the months of January and February 2008 and were utilized to evaluate the overall natural system condition and extent and to identify specific locations that should be targeted for additional pedestrian and vehicular surveys. The pedestrian and vehicular were conducted during the months of February, March and April 2008 and consisted of transects designed to further evaluate the project area with respect to the natural system, ensure that all community types and taxa were surveyed and to refine the species and community lists for the site. Subsequent to the vehicular and pedestrian site reviews, additional surveys were conducted of areas that were identified as potential or actual important specific natural systems or communities. These target specific surveys were conducted during April and May 2008. The targeted analysis provided additional onsite analysis of areas and natural systems, or their attributes, so that additional existing conditions in the native natural systems or their associated wildlife could be determined and recorded. The surveys identified two areas that provided possible important natural system attributes and as such these areas were included in the targeted analyses. The two areas are, 1) along the North Fork of the New River in the extreme northeast corner of the property and, 2) Delevoe Park to the north of the project area. While Delevoe Park is actually offsite, this area and the North Fork of the New River area warranted additional in-depth review of the conditions present there as well as the potential secondary interaction with the subject project. The following Table 12-2 shows the actual dates, times and types of surveys that were conducted of the project area:

Table 12-2						
Environmental site review and survey dates and times						
Survey Type	Survey Date	Survey Time	Communities Evaluated			
Reconnaissance	January 4, 2008	0900 – 1300	Entire Project Site and adjacent North Fork of the New River and Delevoe Park			
Reconnaissance	January 15, 2008	1100 – 1300	Entire Project Site and adjacent North Fork of the New River and Delevoe Park			
Reconnaissance	February 8, 2008	0930 – 1230	Entire Project Site and adjacent North Fork of the New River and Delevoe Park			
Pedestrian / Vehicular	February 15, 2008	0930 – 1230	Entire Project Site and adjacent North Fork of the New River and Delevoe Park			
Pedestrian / Vehicular	February 29, 2008	0700 – 0900	Entire Project Site and adjacent North Fork of the New River and Delevoe Park			
Pedestrian / Vehicular	March 20, 2008	0900 – 1200	Entire Project Site and adjacent North Fork of the New River and Delevoe Park			
Pedestrian / Vehicular	April 7, 2008	0900 – 1100	North Fork of the New River and Delevoe Park			
Pedestrian / Vehicular	April 15, 2008	1000 – 1300	North Fork of the New River and Delevoe Park			
Targeted Community	April 29, 2008	1100 – 1430	North Fork of the New River and Delevoe Park, additional site review conducted via vehicle			
Targeted Community	May 5, 2008	0900 – 1300	North Fork of the New River and Delevoe Park			

The sampling transects and targeted community evaluation sites are shown on Map G and are more generally defined as the primary roadways and adjacent pedestrian areas within the project limits. No traps or sampling stations were utilized in the conduct of these evaluations due to the relatively urbanized conditions of the project area.

As a result of the field surveys, a comprehensive vegetation and wildlife species list has been generated and is provided in later sections of this Application for Development Approval (ADA). Listed or important wildlife associations identified within the project area were mapped and are shown on a map of the project area. None of the areas within the project site contain or represent important nesting or burrowing areas and no important native communities or populations of fauna were identified during the site evaluations. The species lists that have been generated as a result of the site evaluations include generally type of natural system or community type, relative abundance and quality of the individuals within the specific community type.

C. List all state or federally listed wildlife and plant resources that were observed on the site and show location on Map G. Given the plant communities on-site, list any additional state or federally listed wildlife and plant resources expected to occur on the site and show the location of suitable habitat on Map G. Additionally, address any unique wildlife and plant resources, such as colonial bird nesting sites and migrating bird concentration areas. For species that are either observed or expected to utilize the site, discuss the known or expected location and population size on-site, existence (and extent, if known) of adjacent, contiguous habitat off-site, and any special habitat requirements of the species.

Listed plant resources identified onsite include various species of air plant (*Tillandsia* spp.) that are found as commensals on various native and exotic trees and shrubs. A single loggerhead shrike (Lanius ludovicianus) was observed on an overhead power line and although not actually listed, this bird has been identified by the US Fish and Wildlife Service (FWS) as C2<sup>1</sup>. The extent of actual sightings of listed species within the proposed project limits was very low with only sporadic presence of various wading birds such as white ibis (Eudocimus albus) SSC<sup>2</sup> and little blue heron (Egretta thula) SSC. Other wading birds and water dependant birds such as puddle ducks, coots or cormorants, may also utilize the adjacent parksite due to the large open water area. The relatively poor littoral area, however, would severely reduce the potential for significant use by the wading bird contingent. No known or expected populations, bird nesting areas or migrating bird concentrations utilize the site or adjacent areas and none were documented during any of the site natural system surveys.

## D. Indicate what impact development of the site will pose to affected state or federally listed wildlife and plant resources.

Development of the site should not negatively impact any state or federally listed wildlife or plant resources, as this site has already been the subject of urbanization and the project is actually a re-development project. Those few listed fauna and flora identified during the surveys were primarily found in adjacent lands that will not be impacted or altered as a result of the project. The listed air plants will continue to grow on trees and shrubs within the project site and in adjacent lands. The large number of native oak trees planted as part of the ongoing development of the parcel by the Applicant will provide suitable growth habitat for air plants. Oak trees are known to provide a high quality substrate for attachment and growth of the air plants found in Florida and the trees are proposed to be installed throughout the project limits and will provide compensatory growth areas for the air plants in the area. These trees will become naturally seeded by the spores of existing air plants so collection and artificial attachment of existing plants will not be necessary.

E. Discuss what measures are proposed to be taken to mitigate impacts to state and federally listed wildlife and plant resources. If protection is proposed to occur on-site, describe what legal instrument will be used to protect the site, and what management actions will be taken to maintain habitat value. If protection is proposed to occur off-site, identify the proposed amount and type of lands to be mitigated as well as whether mitigation would be through a regional mitigation land bank, by acquisition of lands that adjoin existing public holdings, or by other means.

As no negative impacts to state and federally listed wildlife or plant resources are expected as a result of this project, no mitigation is proposed.

<sup>&</sup>lt;sup>1</sup> FWS C2 = "A candidate for federal listing with some evidence of vulnerability, but for which not enough information exists to justify listing." <sup>2</sup> SSC = Florida Fish and Wildlife Commission, Species of Special Concern