SOUTH FLORIDA
FREIGHT & PASSENGER
RAIL ENHANCEMENT PROJECT

Phase 1B · IRIS NE Connection

November 2013

Natural Resources Technical Memorandum

U.S. Department of Transportation
Federal Railroad Administration

TECHNICAL MEMORANDUM

South Florida Freight and Passenger Rail Enhancement Study
Phase 1B - IRIS NE Connection; FPID: 433514-1
Miami-Dade County, Florida

PREPARED FOR:	Amie Goddeau Florida Department of Transportation – District 4
PREPARED BY:	Erik Neugaard Reynolds Smith and Hills, Inc.
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The Florida Department of Transportation (FDOT), in coordination with the Federal Railroad Administration, is conducting the South Florida Freight and Passenger Rail Enhancement Study to evaluate improved freight connectivity between the existing South Florida Rail Corridor (SFRC) and the Florida East Coast (FEC) Railway. The project will enhance freight connectivity between the existing SFRC and the FEC Railway to accommodate existing freight traffic and the projected growth in freight rail operations following the expansion of the Panama Canal and freight intermodal improvements at the Port of Palm Beach, Port Everglades, and PortMiami. The study is being conducted in compliance with federal and state regulations that require engineering and environmental analysis in compliance with the National Environmental Policy Act (known as NEPA).

The South Florida Freight and Passenger Rail Enhancement Study project involves three interrelated and independent projects being studied concurrently including:

- Phase 1A: Rehabilitate Existing Northwood Connection, Financial Project Number: 434948-1; ETDM Number: N/A; Palm Beach County, Florida
- Phase 1B: IRIS Northeast Connection, Financial Project Number: 433514-1; Miami-Dade County, Florida
- Phase 2: New Northwood Connection, Financial Project Number: 434948-2; ETDM: 14093; Palm Beach County, Florida

The Phase 1B proposed action for the IRIS NE Connection involves the construction of a single track connection within the existing FDOT right-of-way between the SFRC and FEC Railway. The Phase 1B proposed improvements include: the construction of approximately 1,700 linear feet of new single track providing a new connection to the FEC and SFRC and a modified grade crossing at NW 37th Avenue/FEC Railway to accommodate the new track.

While the South Florida Freight and Passenger Rail Enhancement project would facilitate future passenger rail serve by providing connections between the SFRC and the FEC Railway, the project does not involve the development of a station or passenger rail service. The Tri-Rail

Coastal Link Study (http://www.Tri-RailCoastalLinkStudy.com) proposes reintroducing passenger service along an 85-mile stretch of the FEC Railway corridor between Jupiter and Miami.

Introduction

The purposed of this technical memorandum is to document the existing natural environment conditions (including wetlands and wildlife or wildlife habitat) and document any potential effects to natural environment resources.

The project study area was based on a 1000-foot buffer from the proposed improvements to evaluate the surrounding environmental conditions. The actual construction limits will involve approximately 50 feet within the existing FDOT right-of-way (25 ft. on either side of the track centerline). Potential impacts to natural resources were evaluated by a Professional Wetland Scientist and Certified Wildlife Biologist. **Figure 1** shows the location of the project and the 1000-foot buffer (study area) that extends from it.

Wetlands

The project corridor was evaluated for wetlands following the methods established in the Federal Highway Administration (FHWA) Technical Advisory T6640.8A, to fulfill the requirements of USDOT Order 5660.1A. The purpose of this section is to document wetlands in the project study area, the measures implemented to avoid and minimize impacts, the unavoidable impacts, and mitigation for the unavoidable wetland impacts.

This project was developed in accordance with the Presidential Executive Order 11990 dated May 23, 1977. In September 2013, a field reconnaissance to locate and delineate wetlands within the 1000-foot study area was conducted according to the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands" (United States Army Corps of Engineers (USACE), 1987), "The Florida Wetlands Delineation Manual" (Florida Department of Environmental Protection (FDEP), 1995), the Florida Land Use Cover Classification System (FLUCCS), and the United States Fish and Wildlife Service (USFWS) classification system as described in "Classification of Wetlands and Deepwater Habitats of the United States". The field reconnaissance was conducted with the aid of United States Geological Survey topographic maps, National Wetlands Inventory maps, Natural Resource Conservation Service soil surveys, and aerial photos.

The 1000-foot study area is heavily urbanized with few open areas, and no wetlands or other surface waters were identified within it.

The Advance Notification stated; "According to the National Wetlands Inventory, limited to no wetlands coverage is located within the 500 foot buffer distance."

Based on the desktop analysis and field reconnaissance, no involvement with wetlands is anticipated for this project.

Wildlife and Habitat

The purpose of this section is to present the findings of the evaluation of potential effects to protected wildlife and/or wildlife habitat for the proposed project and to meet the requirements

of Section 7 of the Endangered Species Act of 1973, as amended. This assessment was completed in accordance with Part 2, Chapter 27 of FDOT's *PD&E Manual* (last updated 10/01/91). As such, a Biological Assessment (in accordance with 50 CFR 402.12) was conducted for all species with the potential for involvement. The Biological Assessment included an analysis of the effects of the proposed action on the species and habitat and is documented within this memo.

The Endangered Species Act requires federal agencies, in consultation and with the assistance of the Secretaries of the Departments of Interior and Commerce, to insure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. Under the law, the Secretary of the United States Department of Interior, acting through the USFWS and the Secretary of the United States Department of Commerce, acting through the National Marine Fisheries Service (NMFS), have broad powers to protect and conserve all forms of wildlife, plants, and marine life they find in serious jeopardy.

The Advance Notification stated; "Due to the developed nature of the area, limited threatened and/or endangered species and associated habitat exist within the 500 foot buffer distance. Additionally, according to the Geographic Information System (GIS) data in the FDOT Environmental Screening Tool, the project falls within Wood Stork Core Foraging Areas and the South Florida Ecosystem Management Area."

The potential involvement with listed species and critical habitat was determined through a GIS analysis; review of existing data and literature, and a field reconnaissance conducted in September 2013. Literature reviewed included FFWCC's "*Florida's Endangered and Threatened Species*" (2013), Florida Natural Areas Inventory's (FNAI's) "*Field Guide to Rare Plants and Animals of Florida*" (2000), and USFWS' "*South Florida Multi-species Recovery Plan*" (1999). All GIS species occurrence data available from the USFWS, FFWCC, and FNAI was also evaluated; including the FFWCC wading bird colony records.

Appendix A contains a list of the species recorded by FNAI in Miami-Dade County. The only protected species identified by the GIS as potentially occurring in the vicinity of the 1000-foot study area is the rim rock crowned snake (*Tantilla oolitica*, a state-listed threatened species), which requires pinelands and tropical hardwood hammocks for habitat. None of these species, nor their required habitat, were observed within the 1000-foot study area.

FDOT has determined that there will be *no effect* on any protected species. As there is no wetland involvement with the project, there is no anticipated loss of foraging habitat for the wood stork and no direct impacts to existing nesting colonies within the Core Foraging Area. Because the project corridor is abutted by commercial development on both sides, and the primary protected species of concern are avian, it is not anticipated that the mobility or habitat connectivity of avian species will be affected by the proposed project.

Other Protected Natural Resources

The following natural resources do not occur within the 1000-foot study area, and therefore, will not be impacted by the project:

- Aquatic Preserves
- Coastal Barrier Resources
- Coastal Zone Management Area
- Essential Fish Habitat
- Floodplains
- Outstanding Florida Waters
- Wild and Scenic Rivers

References

Florida Department of Environmental Protection. 1995. "The Florida Wetlands Delineation Manual." Tallahassee.

Florida Department of Transportation. 1991. "Project Development and Environment Manual," Part 2, Chapter 18. Tallahassee.

Florida Department of Transportation. 1991. "Project Development and Environment Manual," Part 2, Chapter 27. Tallahassee.

Florida Department of Transportation. 1999. "Florida Land Use, Cover and Forms Classification System". Tallahassee.

Florida Fish and Wildlife Conservation Commission. 2011. "Florida's Endangered and Threatened Species." Tallahassee.

Florida Natural Areas Inventory. 2000. "Field Guide to Rare Plants and Animals of Florida." Tallahassee.

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SOUTH FLORIDA FREIGHT AND PASSENGER RAIL ENHANCEMENT PROJECT

FIGURE 1
PHASE 1B IRIS CONNECTION
NATURAL RESOURCES TECHNICAL MEMORANDUM

Appendix A

Miami-Dade Species - 123 Matches Found

Invertebrate
Insect - Heraclides aristodemus ponceanus - Schaus' swallowtail
Mollusk - Liguus fasciatus septentrionalis - Florida tree snail

Plant
Dicot - Aeschynomene pratensis - meadow joint-vetch
Dicot - Alvaradoa amorphoides - Everglades leaf lace
Dicot - Amorpha herbacea var crenulata - crenulate lead-plant
Dicot - Argythamnia blodgettii - Blodgett's wild-mercury
Dicot - Bourreria cassinifolia - little strongbark
Dicot - Brickellia mosieri - Florida thoroughwort brickell-bush
Dicot - Calyptranthes zuzygium - myrtle-of-the-river
Dicot - Chamaesyce deltoidea ssp deltoidea - deltoid spurge
Dicot - Chamaesyce deltoidea ssp pinetorum - pinelands spurge
Dicot - Chamaesyce garberi - Garber's spurge
Dicot - Chamaesyce porteriana - Porter's sandmat
Dicot - Colubrina cubensis var floridana - Cuban snake-bark
Dicot - Dalea carthagenensis var floridana - Florida prairie clover
Dicot - Ernodea cokeri - Coker's beach creeper
Dicot - Eugenia rhombea - red stopper
Dicot - Eupatorium frustratum - Cape Sabel thoroughwort
Dicot - Exostema caribaeum - princewood
Dicot - Galactia smallii - Small's milk pea
Dicot - Guaiacum sanctum - lignum-vitae
Dicot - Hippomane mancinella - manchineel
Dicot - Hypelate trifoliata - white ironwood
Dicot - Indigofera mucronata var keyensis - decumbent indigo
Dicot - Ipomoea microdactyla - wild potato morning glory
Dicot - Jacquemontia pentanthos - skyblue clustervine
Dicot - Jacquemontia reclinata - beach jacquemontia
Dicot - Lantana canescens - small-headed lantana
Dicot - Lantana depressa var depressa - Florida lantana
Dicot - Lechea divaricata - pine pinweed
Dicot - Licaria triandra - Gulf licaria
Dicot - Linum arenicola - sand flax
Dicot - Linum carteri - Carter's flax
Dicot - Passiflora multiflora - whitish passionflower
Dicot - Passiflora pallens - pineland passion-flower
Dicot - Peperomia humilis - terrestrial peperomia
Dicot - Peperomia obtusifolia - blunt-leaved peperomia
Dicot - Picramnia pentandra - bitter bush
Dicot - Polygala smallii - tiny polygala
Dicot - Psidium longipes - reclining myrtle
Dicot - Psychotria ligustrifolia - Bahama wild coffee
Dicot - Rhipsalis baccifera - mistletoe cactus
Dicot - Savia bahamensis - maiden bush
Dicot - Stylosanthes calcicola - pineland pencil flowers
Dicot - Tephrosia angustissima var angustissima - narrowleaf hoary pea
Dicot - Tephrosia angustissima var corallicola - coral hoary pea
Dicot - Tephrosia angustissima var curtissii - Curtiss' hoary pea
Dicot - Vallesia antillana - pearl berry
Dicot - Zanthoxylum coriaceum - Biscayne prickly ash

Fern (Pteridophytes) - Anemia wrightii - Wright's anemia
Fern (Pteridophytes) - Asplenium dentatum - slender spleenwort
Fern (Pteridophytes) - Asplenium serratum - bird's nest spleenwort
Fern (Pteridophytes) - Campyloneurum angustifolium - narrow-leaved strap fern
Fern (Pteridophytes) - Odontosoria clavata - wedgelet fern
Fern (Pteridophytes) - Pecluma ptilodon - swamp plume polypoda fern
Fern (Pteridophytes) - Tectaria fimbriata - least halberd fern
Fern (Pteridophytes) - Thelypteris reptans - creeping fern
Fern (Pteridophytes) - Thelypteris sclerophylla - hard-leaved shield fern
Fern (Pteridophytes) - Thelypteris serrata -
Fern (Pteridophytes) - Trichomanes krausii - Kraus' bristle fern
Fern (Pteridophytes) - Trichomanes punctatum ssp floridanum -
Monocot - Basiphyllaea corallicola - rockland orchid
Monocot - Calopogon multiflorus -
Monocot - Catopsis floribunda - many-flowered catopsis
Monocot - Cyrtopodium punctatum - cow horn orchid
Monocot - Eltroplectris calcarata - spurred neottia
Monocot - Encyclia boothiana var erythronioides - dollar orchid
Monocot - Encyclia cochleata var triandra - clamshell orchid
Monocot - Epidendrum nocturnum - night-scented orchid
Monocot - Guzmania monostachia - Fakahatchee Guzmania
Monocot - Halophila johnsonii - Johnson's seagrass
Monocot - Oncidium floridanum - Florida dancing-lady orchid
Monocot - Ponthieva brittoniae - Britton's shadow-witch
Monocot - Pteroglossaspis ecristata - giant orchid
Monocot - Sacoila lanceolata var paludicola - Fahkahatchee ladies' -tresses
Monocot - Spiranthes polyantha - green ladies'-tresses
Monocot - Spiranthes torta - southern ladies'-tresses
Monocot - Vanilla barbellata - worm-vine orchid

Vertebrate
Bird - Ajaia ajaja - roseate spoonbill
Bird - Ammodramus maritimus mirabilis - Cape Sable seaside sparrow
Bird - Aramus guarauna - limpkin
Bird - Athene cunicularia floridana - Florida burrowing owl
Bird - Buteo brachyurus - short-tailed hawk
Bird - Charadrius melodus - piping plover
Bird - Charadrius wilsonia - Wilson's plover
Bird - Coccyzus minor - mangrove cuckoo
Bird - Columba leucocephala - white-crowned pigeon
Bird - Egretta caerulea - little blue heron
Bird - Egretta rufescens - reddish egret
Bird - Egretta thula - snowy egret
Bird - Egretta tricolor - tricolored heron
Bird - Elanoides forficatus - swallow-tailed kite
Bird - Eudocimus albus - white ibis
Bird - Grus canadensis pratensis - Florida sandhill crane
Bird - Haliaeetus leucocephalus - bald eagle
Bird - Mycteria americana - wood stork
Bird - Pandion haliaetus - osprey
Bird - Pelecanus occidentalis - brown pelican
Bird - Rostrhamus sociabilis plumbeus - snail kite
Bird - Rynchops niger - black skimmer
Bird - Sterna maxima - royal tern
Bird - Sternula antillarum - least tern

Mammal - Eumops glaucinus floridanus - Florida mastiff bat
Mammal - Mustela vison mink pop 1 - southern mink (s. Florida pop.)
Mammal - Neofiber alleni - round-tailed muskrat
Mammal - Puma concolor coryi - Florida panther
Mammal - Trichechus manatus - manatee
Mammal - Ursus americanus floridanus - Florida black bear
Reptile - Caretta caretta - loggerhead
Reptile - Chelonia mydas - green turtle
Reptile - Crocodylus acutus - American crocodile
Reptile - Crotalus adamanteus - eastern diamondback rattlesnake
Reptile - Dermochelys coriacea - leatherback
Reptile - Drymarchon couperi - eastern indigo snake
Reptile - Eretmochelys imbricata - hawksbill turtle
Reptile - Eumeces egregius egregius - Florida Keys mole skink
Reptile - Gopherus polyphemus - gopher tortoise
Reptile - Lepidochelys kempii - Kemp's ridley
Reptile - Malaclemys terrapin - diamondback terrapin
Reptile - Pituophis melanoleucus mugitus - Florida pine snake
Reptile - Tantilla oolitica - rim rock crowned snake