

### DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT CORPS OF ENGINEERS PENSACOLA REGULATORY OFFICE 41 North Jefferson Street, Suite 104 PENSACOLA, FLORIDA 32501-5794

Regulatory Division North Permits Branch 200103186 (NW-ES)

January 17, 2002

Florida Department of Transportation c/o Frank Roberts, Environmental Permit Coordinator P.O. Box 607 Chipley, Florida 32428

Dear Mr. Roberts:

Reference is made to your Department's application requesting authorization to discharge fill rial over 0.5 acres of wetlands for lane additions and interchange improvements to Interchange to Interchange improvements in Interchange in Int material over 0.5 acres of wetlands for lane additions and interchange improvements to Interstates 10 and 110. The project is located between U.S. Highway 29 and County Road 289 on Interstate 10 and from the vicinity of Carpenter's Creek north on Interstate 110, Sections 17, 18, 19, 21, 29, 30, 31, 34, and 35, Township 01 South, Range 30 West, Pensacola, Escambia County, Florida.

The project has been reviewed in accordance with the submitted application and attached drawings. This letter verifies that your proposal is authorized by Nationwide Permit 14 in accordance with our regulations as stated in the March 9, 2000, Federal Register, Final Notice of Issuance, Reissuance, and Modification of Nationwide Permits (65 FR 12818), and the enclosed Regional Conditions and Nationwide Permit Conditions. A separate Department of the Army permit is not required providing the work is done in accordance with the enclosed drawings and the above referenced conditions. Upon completion of the project, please submit the enclosed Nationwide Permit Compliance Certification Form to this office. If the subject property is transferred, please submit the enclosed Request for Permit Transfer Form to this office.

This verification is valid for two years from the date of this letter, unless this Nationwide Permit is modified, reissued, or revoked. In the event that you have not completed construction of your project within the above time limit, a separate application or reverification will be required.

This letter does not obviate the requirement to obtain any State or local permits which may be necessary for your proposed work. Your Nationwide Permit verification is specifically conditioned by the State of Florida with the following language: "Projects qualifying for the Nationwide Permit must be individually reviewed by the State of Florida and received water quality certification and coastal zone consistency as well as any authorizations required for the use of submerged lands." You should review State of Florida permitting requirements with the Florida Department of Environmental Protection (DEP) 850-595-8300 or the appropriate Water Management District (WMD) 850-539-5999.

The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. Information may be requested from the Chief, Flood Control and Floodplain Management Branch, U.S. Army Corps of Engineers, Attn: CESAM-PD-FS, P.O. Box 2288, Mobile, Alabama 36628-0001.

Questions regarding this letter should be directed to Ed Sarfert at the letterhead address or by telephone at 850-439-9533.

Thank you for your cooperation with our regulatory program.

Sincerely,

Marie G. Burns Chief, North Permits Branch

Enclosures:
Special Conditions
Request for Permit Transfer
Nationwide Permit Compliance Certification Statement
Project Drawings (28 pages)
Nationwide Permit 14 Conditions
Nationwide Permit General Conditions
Regional Mitigation Plan
Jones Swamp Preserve Management Plan

### SPECIAL CONDITIONS ISSUED WITH NATIONWIDE PERMIT VERIFICATION 200103186 (NW-ES)

If any work is performed under this permit, the following special conditions <u>must</u> be met:

- (1) The permittee shall ensure that the mitigation project, as described in the attached regional mitigation plan, provided by the Northwest Florida Water Management District, and the attached Jones Swamp Preserve Management Plan is implemented. The mitigation project, as reviewed and approved by the Corps, shall be fully implemented within five years after the initiation of the permitted work.
- (2) To prevent sedimentation into adjacent wetlands, entrenched silt fences with staked haybales shall be installed at the limits of the fill areas. These temporary erosion controls must be installed before commencement of these permitted activities and shall be maintained throughout the duration of the activity.
- (3) No building materials, fill material, tools or other equipment shall be stockpiled in wetlands or other waters of the United States.
- (4) Immediately after completion of the final grades, all slopes and filled areas adjacent to unfilled wetlands shall be stabilized with sod, degradable mats and/or seed and mulch. The temporary erosion controls referenced in Special Condition (2) will be maintained until the vegetative cover is established.
- (5) All contractors involved in this permitted activity shall be provided copies of this permit in its entirety. A copy shall remain on site at all times during construction.

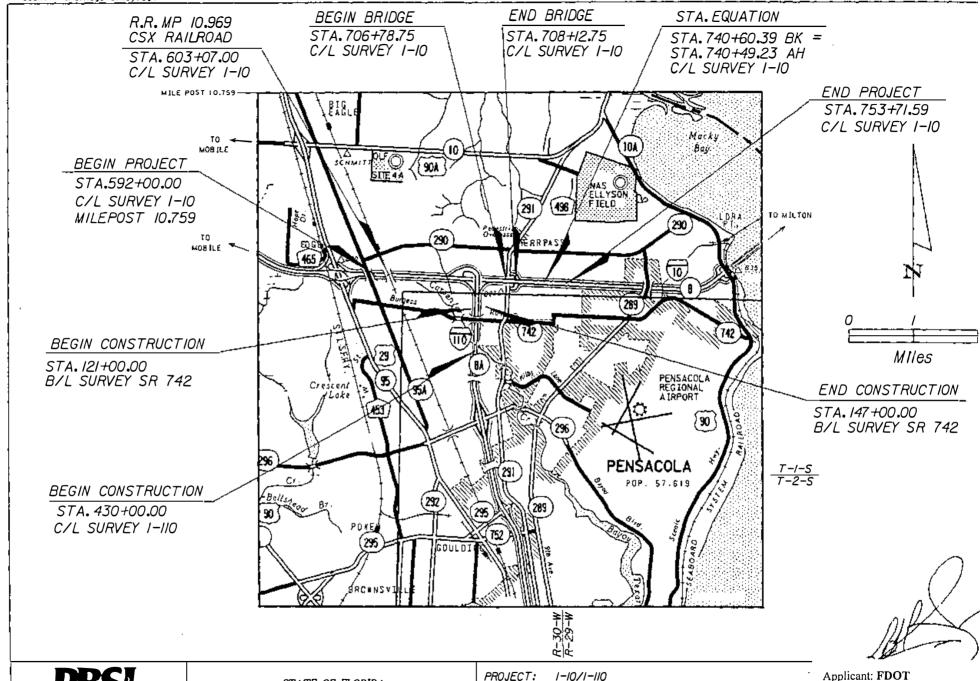
### REQUEST FOR PERMIT TRANSFER 200103186 (NW-ES):

When the structures or work verified by this nationwide are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, the transferee should sign and date below.

(TRANSFEREE)		(DATE)
(Name - Printed)		
,	Lot/Block:	
	_	
(Street Address)		
(City, State, and Zip C	ode)	

## Nationwide Compliance Certification Nationwide Number 200103186 (NW-ES)

Name and Address:	
Telephone Number:	
Location of the Work:	
Description of the Work (e.g. bank stabilization, re	esidential fill etc.):
Type and acreage (or square feet) of the loss of W wetlands)(e.g. 1/10 acre of marsh and 50 square fe	
Description of Mitigation Completed (if applicabl	e):
I,, certify that the work was dated and all work and required mit accordance with the permit conditions.	was done as described in the authorization letterigation (if applicable) was completed in
Sig	gnature of Permittee
	Date



482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbsj.com

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-8	ESCAMBIA	222434-1-52-01

1-10/1-110

PURPOSE: VICINITY MAP

FEET NGVD 1929 DATUM: LOCATION: PENSACOLA, FLORIDA

FDOT APPLICATION BY:

Applicant: FDOT

File: 200103186 (NW-ES)

Date: January 17, 2002

Page 1 of 28

### SUMMARY OF WETLAND IMPACTS

WETLAND	DREDGE		FILL		TEMPORARY IMPACTS		
WLILAND	Sq. Ft.	AC	Cu. Yd.	Sq. Ft.	AC	Sq. Ft.	AC
Wetland 2	857	0.02	16	3006	0.07	1214	0.03
Wetland 3	-	_	_	1/9	0.003	265	0.006
Wetland 5	3,121	0.07	543	-	-	1,377	0.03
Wetland 6	_	-	_	6,348	0.15	98	0.002
Wetland 17	_	-	-	29	0.001	306	0.007
Wetland IB	-		-	-	~	663	0.015
TOTAL	3,978	0.09	559	9,502	0.22	3,923	0.09

### Notes:

I. OSW I and Wetlands 4, I2, I3, I3A, I3B, I4, I5, I6, and I9 are within the project right of way but have no impacts.

2. Wetlands I, 7, 8, 9, 10, and II are Isolated wetlands. These wetlands were not claimed by DEP.



482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbsj.com

# STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-8	ESCAMBIA	222434-1-52-01

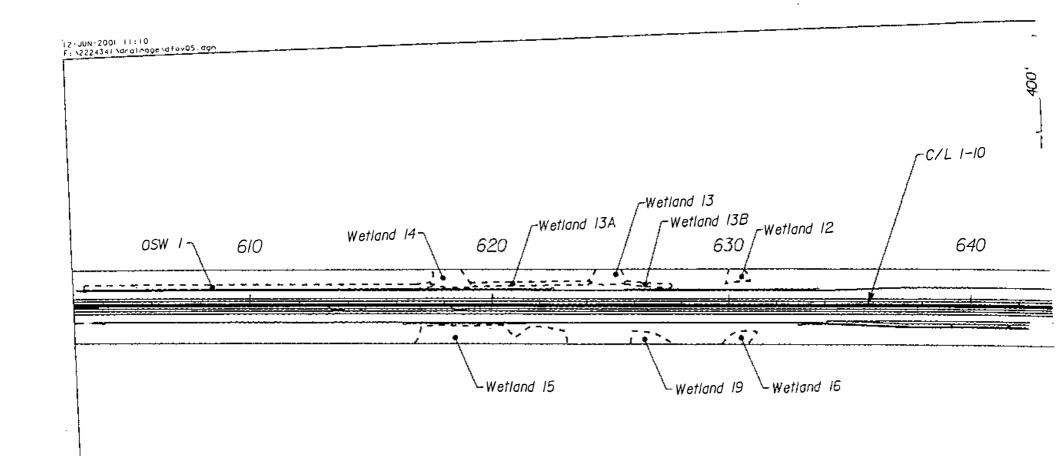
PROJECT: I-IO/I-IIO

PURPOSE: SUMMARY OF WETLAND IMPACTS

DATUM: FEET NGVD 1929 LOCATION: PENSACOLA, FLORIDA APPLICATION BY: FDOT Applicant: FDOT

File: 200103186 (NW-ES)
Date: January 17, 2002

Page 2 of 28



482 South Keller Road Orlando, FL 32810 (407) 647-7275

www.pbsj.com

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID COUNTY ROAD NO. 222434-1-52-01 ESCAMBIA SR-8

1-10/1-110 PROJECT:

PLAN VIEW - OVERVIEW PURPOSE:

FEET NGVD 1929 DATUM:

SECTION 21, TOWNSHIP I S, RANGE 30 W LOCATION:

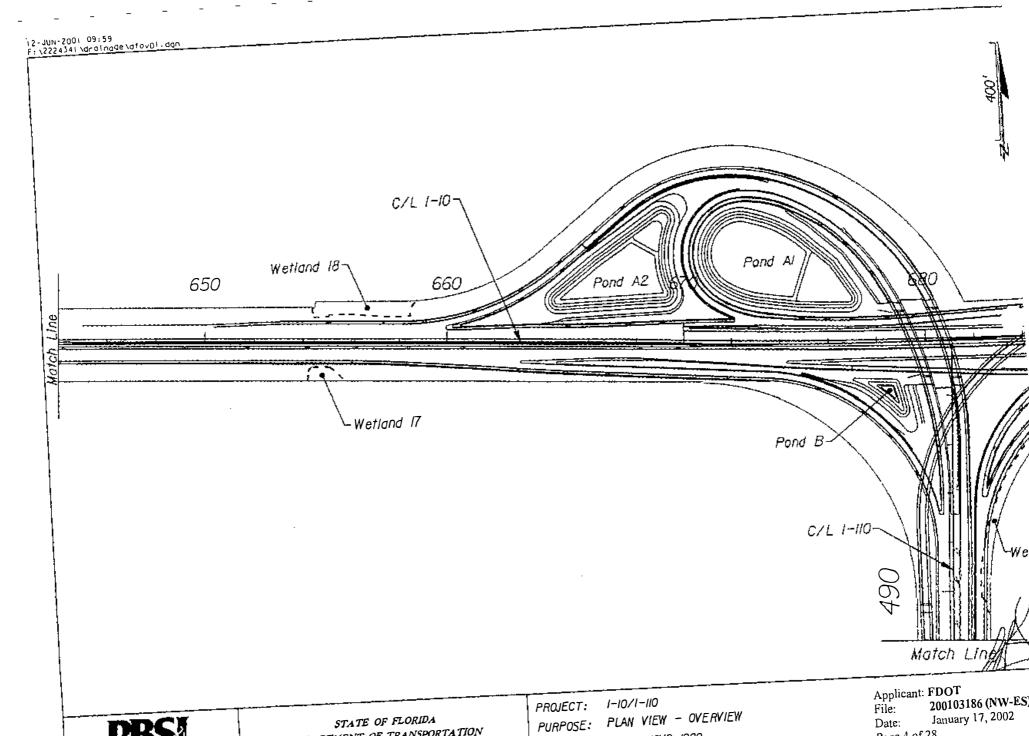
FDOT APPLICATION BY:

Applicant: FDOT

200103186 (NW-ES) January 17, 2002 File:

Date:

Page 3 of 28



482 South Keller Rood Orlando, FL 32810 (407) 647-7275 www.nbs/.com

DEPARTMENT OF TRANSPORTATION

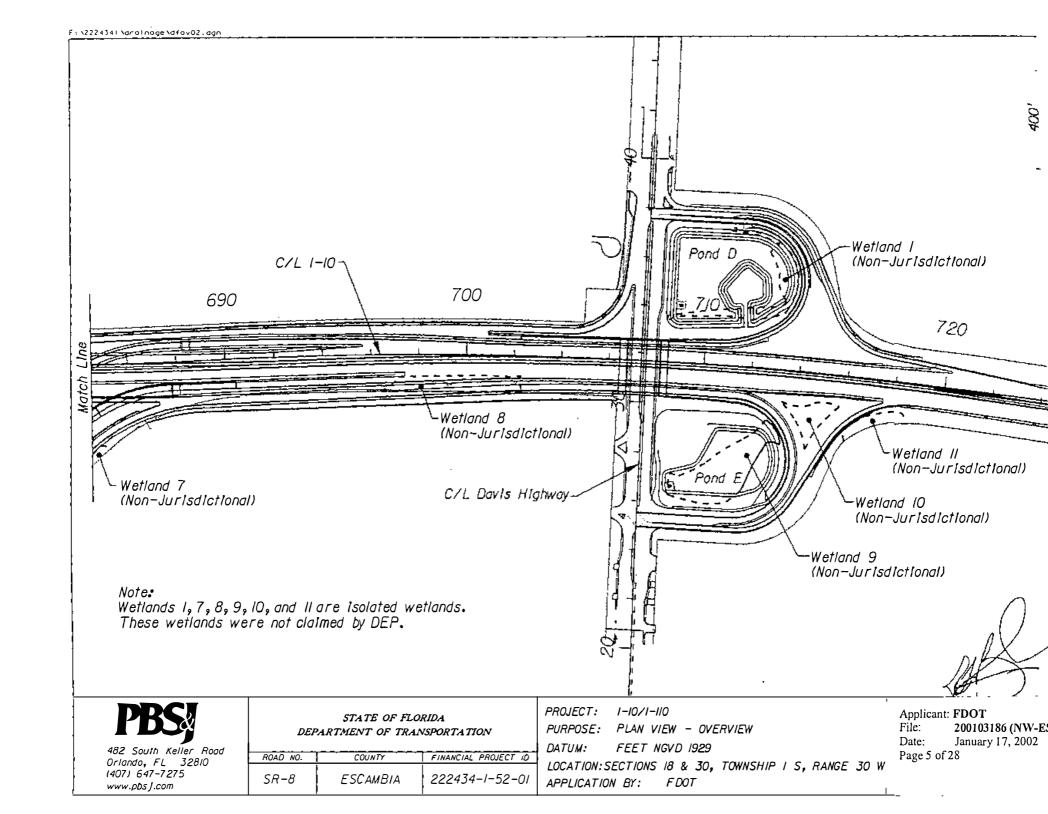
FINANCIAL PROJECT ID COUNTY ROAD NO. 222434-1-52-01 ESCAMBIA SR-8

FEET NGVD 1929 DATUM:

LOCATION: SECTIONS 19 & 29, TOWNSHIP I S, RANGE 30

FDOT APPLICATION BY:

Page 4 of 28

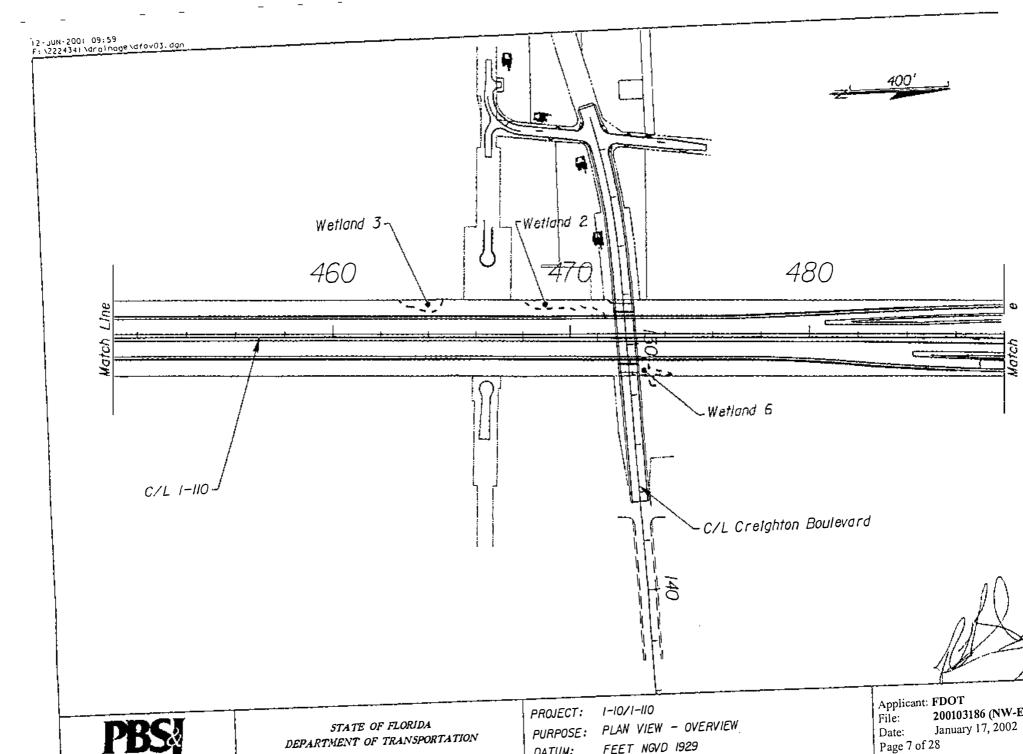


482 South Keller Rood Orlando, FL 32810 (407) 647-7275 www.pbs1.com

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-8	ESCAMBIA	222434-1-52-01

LOCATION: SECTIONS 29 & 30, TOWNSHIP I S, RANGE 30

FDOT APPLICATION BY:



482 South Keller Rood Orlando, FL 32810 (407) 647-7275 www.pbs1.com

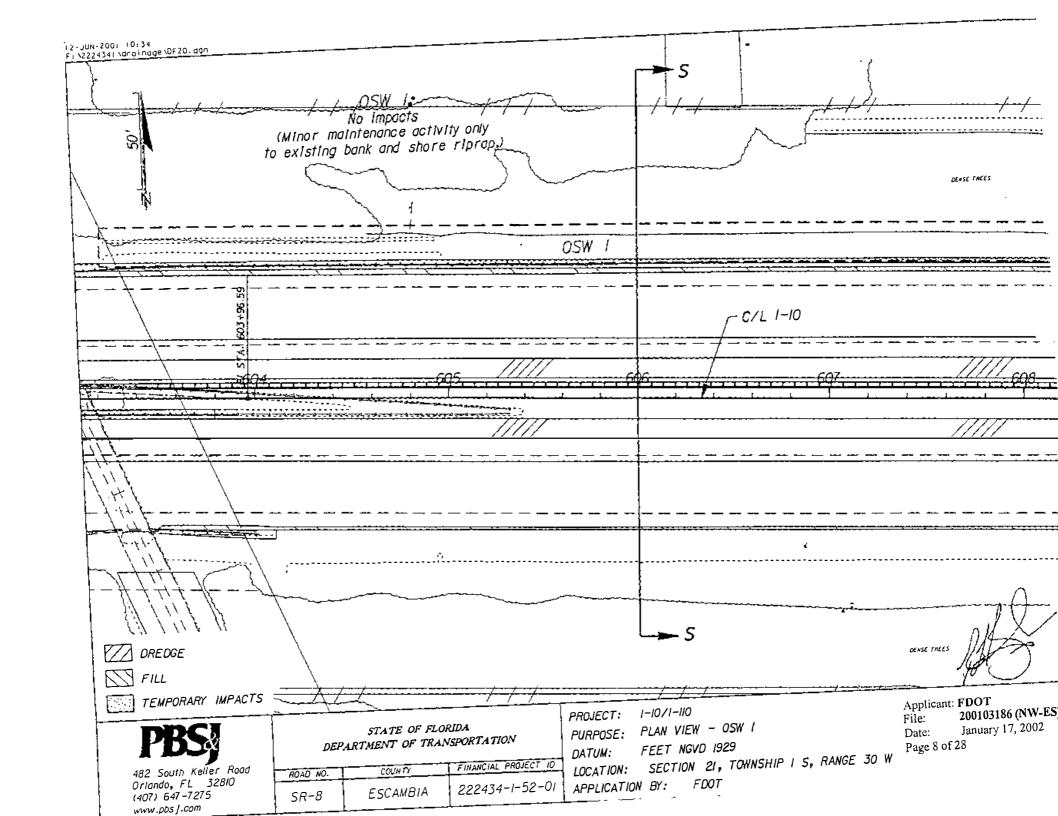
DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID COUNTY ROAD NO. 222434-1-52-01 ESCAMBIA SR-8

FEET NGVD 1929 DATUM:

LOCATION: SECTIONS 29 & 30, TOWNSHIP I S, RANGE 30 W

FDOT APPLICATION BY:



12-JUN-2001 10:34 F: \2224341\droinage\DFxs20.agn EXI:T. L/A F/W 0.5W / LLQ 105 100 95 -P ACE GROUT AS NECESSARY
IN-BAIK-AND-SHORE-RIPRINE
TO TIL INTO PROPOSED
BACK (F GUARDRAIL 90

S-S 607+10.00 1-10

DRE DGE

TEMPORARY IMPACTS

482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbs J.com

### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-8	ESCAMBIA	222434-1-52-01

PROJECT: 1-10/1-110

PURPOSE: CROSS SECTION S-S/ OSW I

DATUM:

FEET NGVD 1929

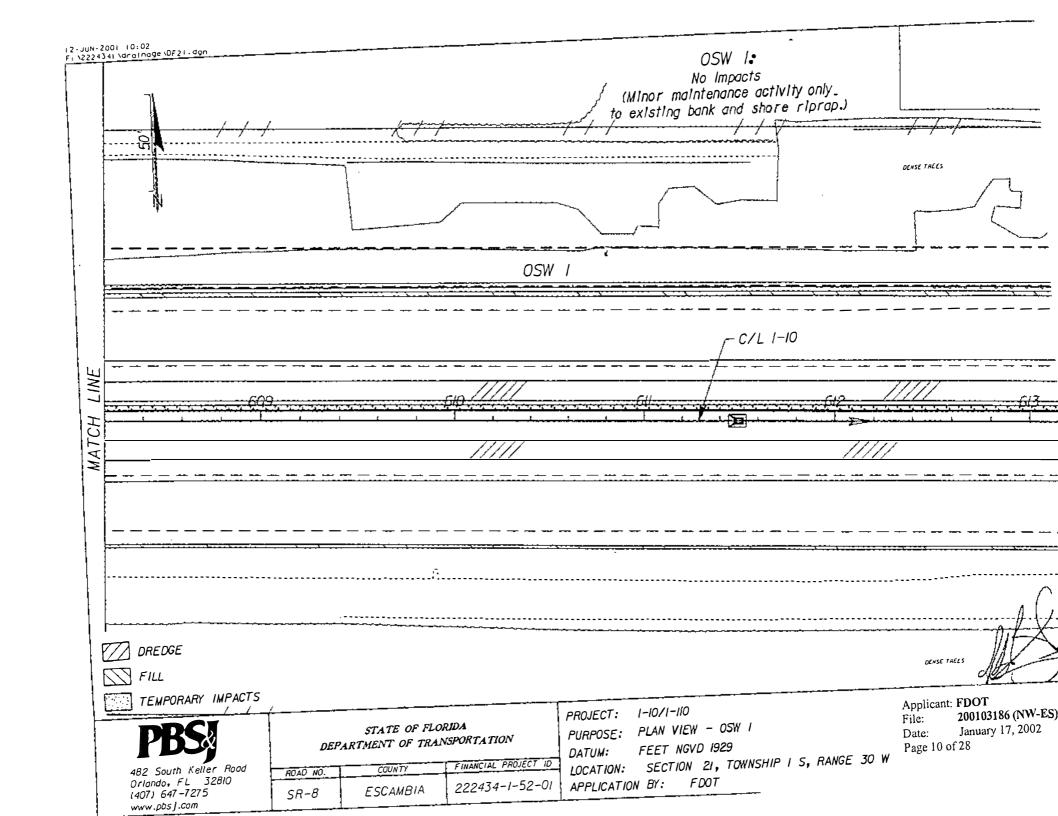
LOCATION: SECTION 21, TOWNSHIP I S, RANGE 30 W APPLICATION BY: F DOT

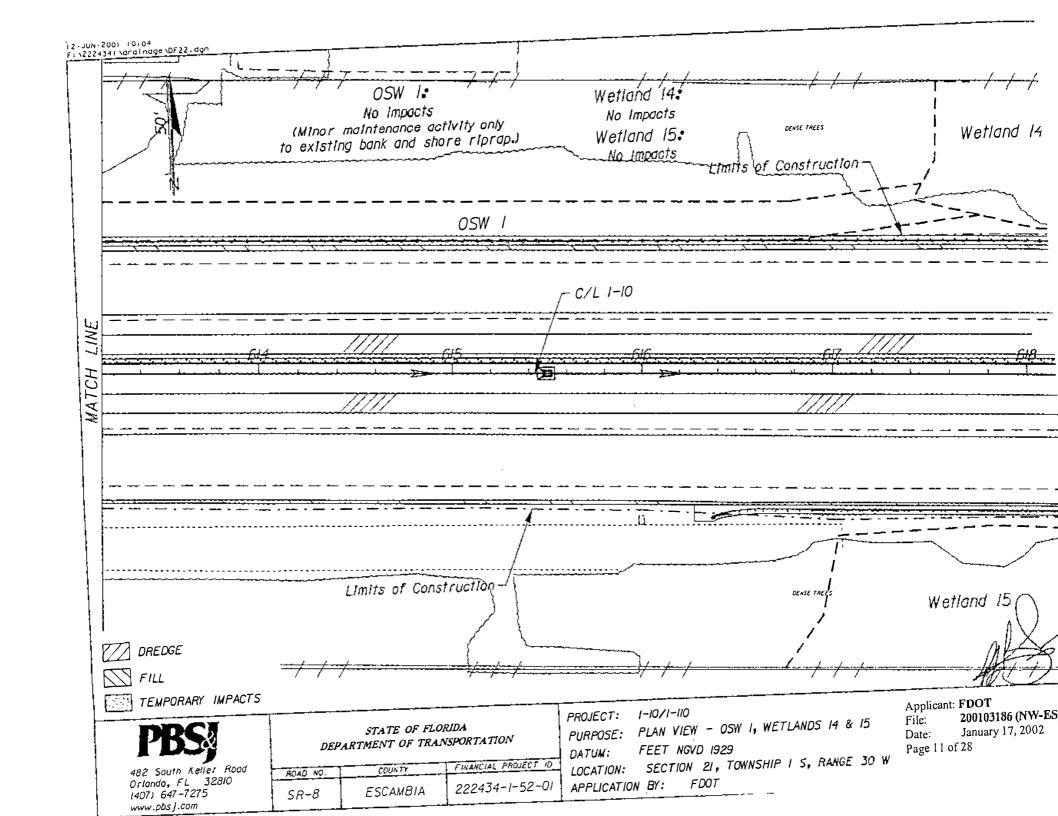
Applicant: FDOT

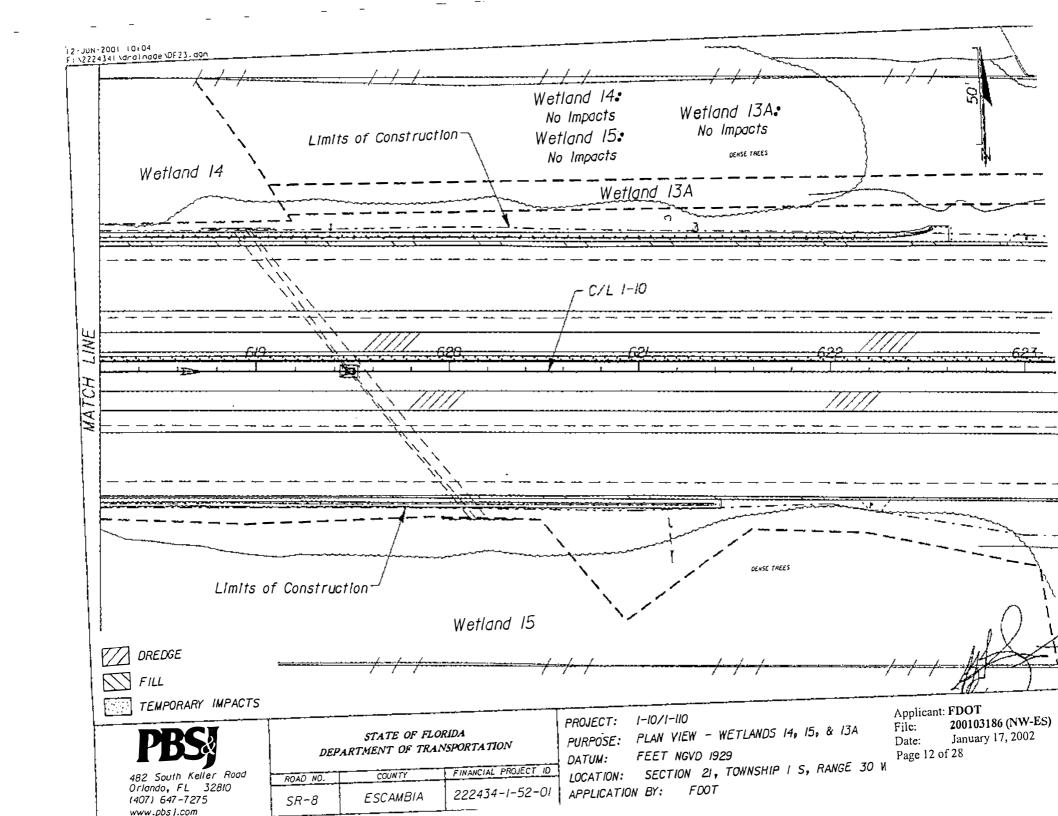
200103186 (NW-ES) File: Date: January 17, 2002

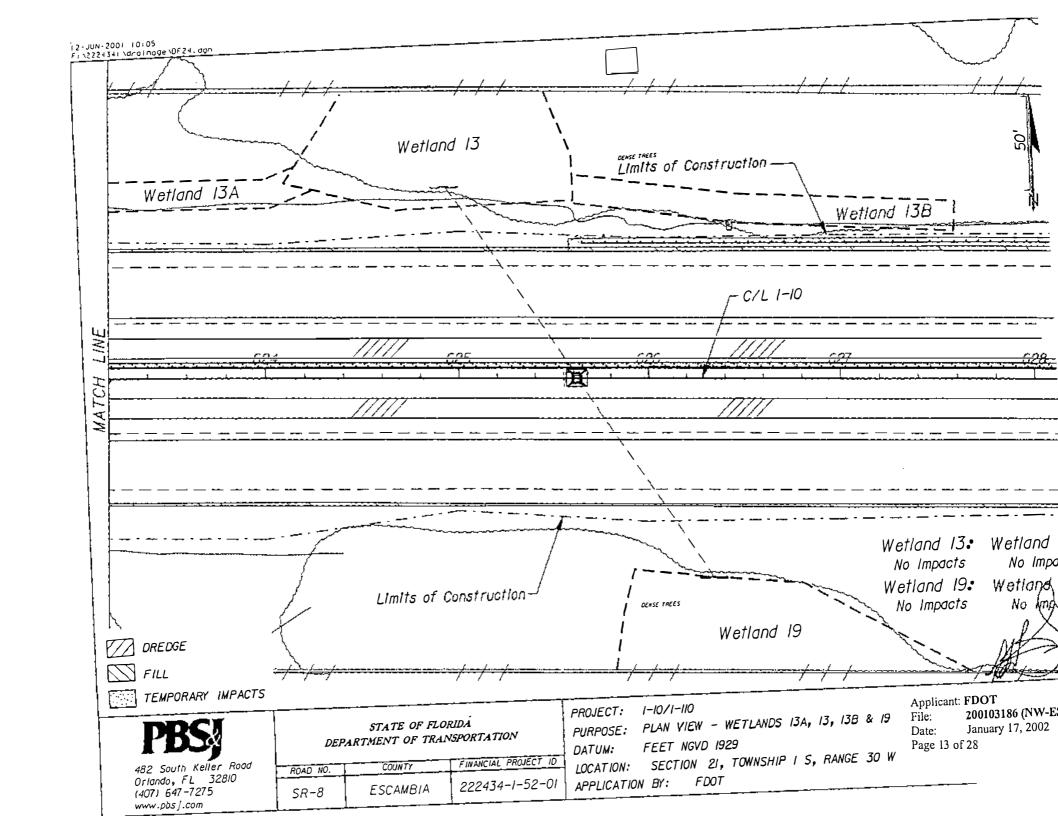
Page 9 of 28

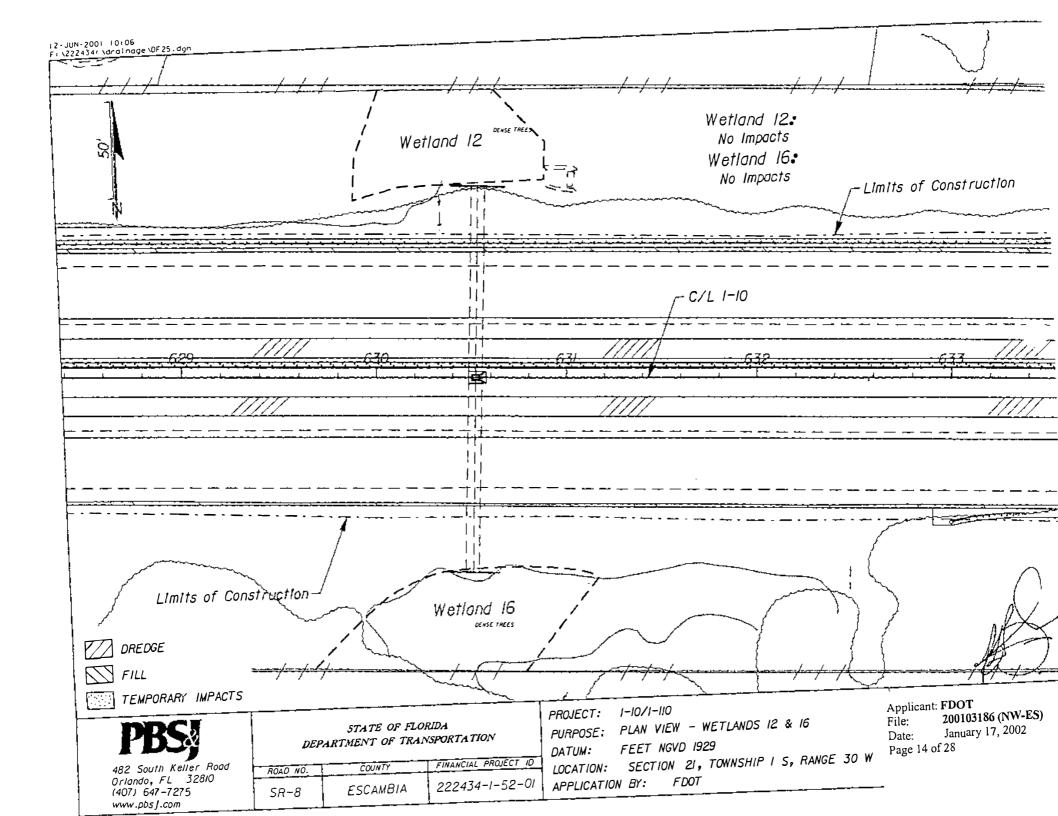
VERT. SCALE: I"

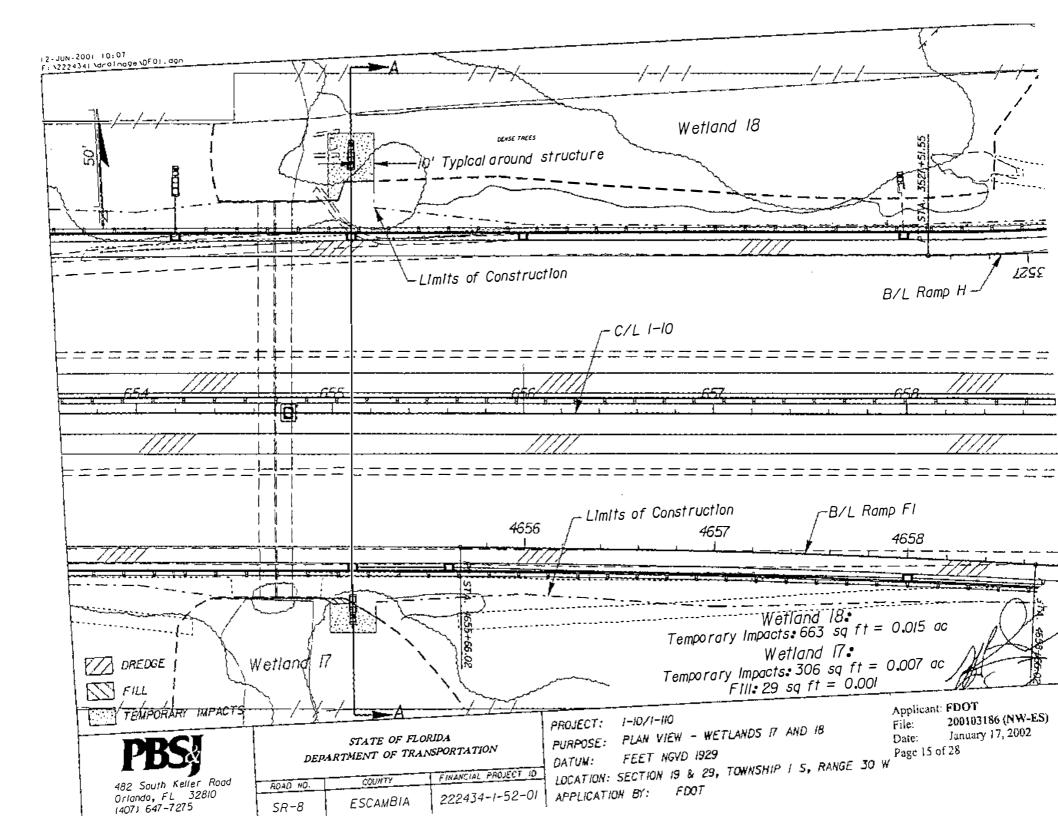


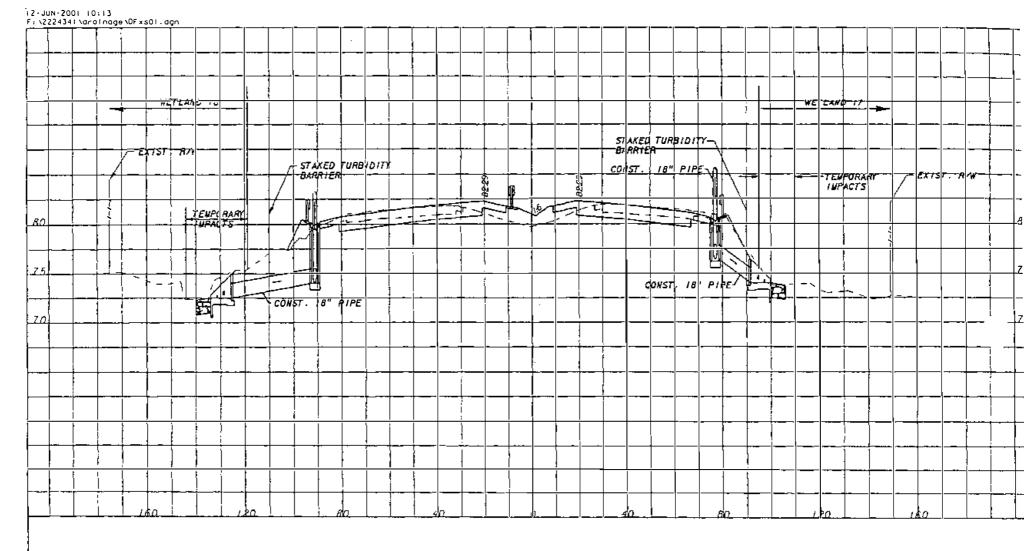












A - A

655+10.00

DREDGE

TEMPORARY IMPACTS

482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbs J.com

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO. COUNTY FINANCIAL PROJECT ID SR-8 ESCAMBIA 222434-1-52-01

PROJECT: I-IO/I-IIO

PURPOSE: CROSS SECTION A-A/ WETLANDS 17 & 18

FEET NGVD 1929 DATUM:

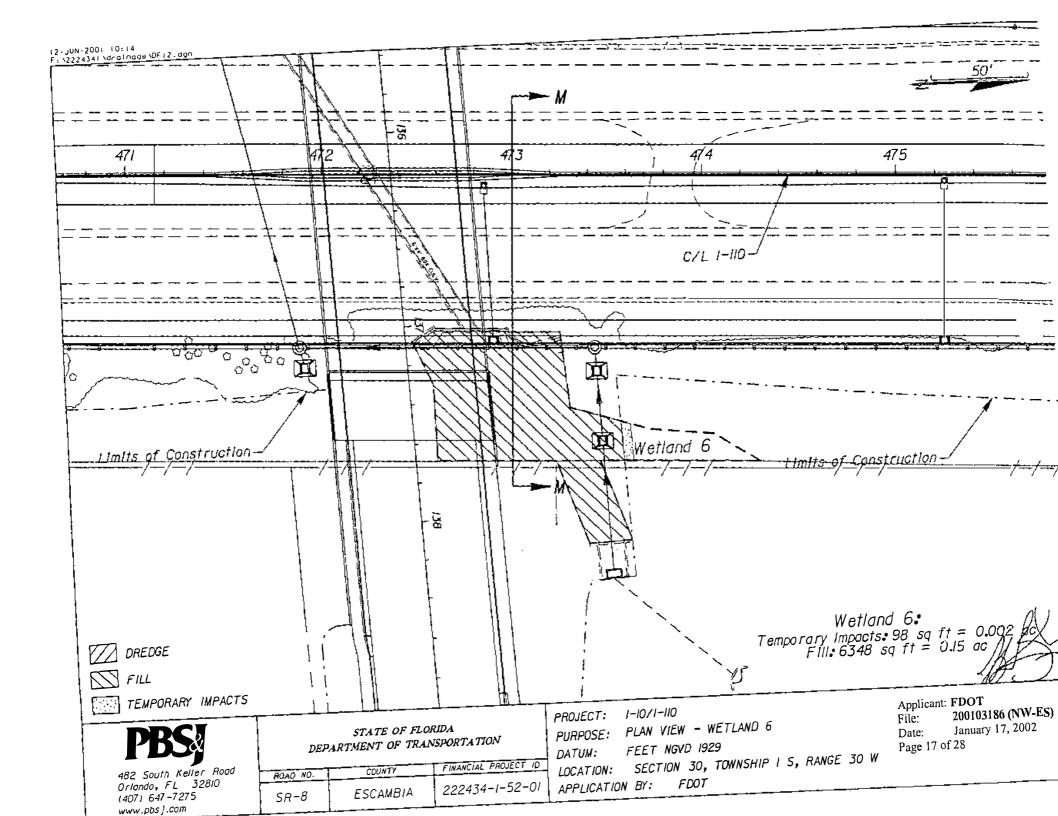
LOCATION: SECTION 19 & 29, TOWNSHIP I S, RANGE 30 V Page 16 of 28

APPLICATION BY: FDOT Applicant: FDOT

200103186 (NW-ES) File: January 17, 2002 Date:

VERT. SCALE: i" = 10





12-JUN-2001 10:18 F: \2224341 \drainage\0Fxs12.dgn WET LAND 6 90. EXIST. LIA RIW 85 80. 

DREDGE

FILL

TEMPORARY IMPACTS

M-M473+00.00 1-110



482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbsj.com

### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO. COUNTY FINANCIAL PROJECT ID SR-8 ESCAMBIA 222434-1-52-01

PROJECT: I-IO/I-IIO

PURPOSE: CROSS SECTION M-M/ WETLAND 6

DATUM: FEET NGVD 1929

LOCATION: SECTION 18 & 30, TOWNSHIP I S, RANGE 30 \

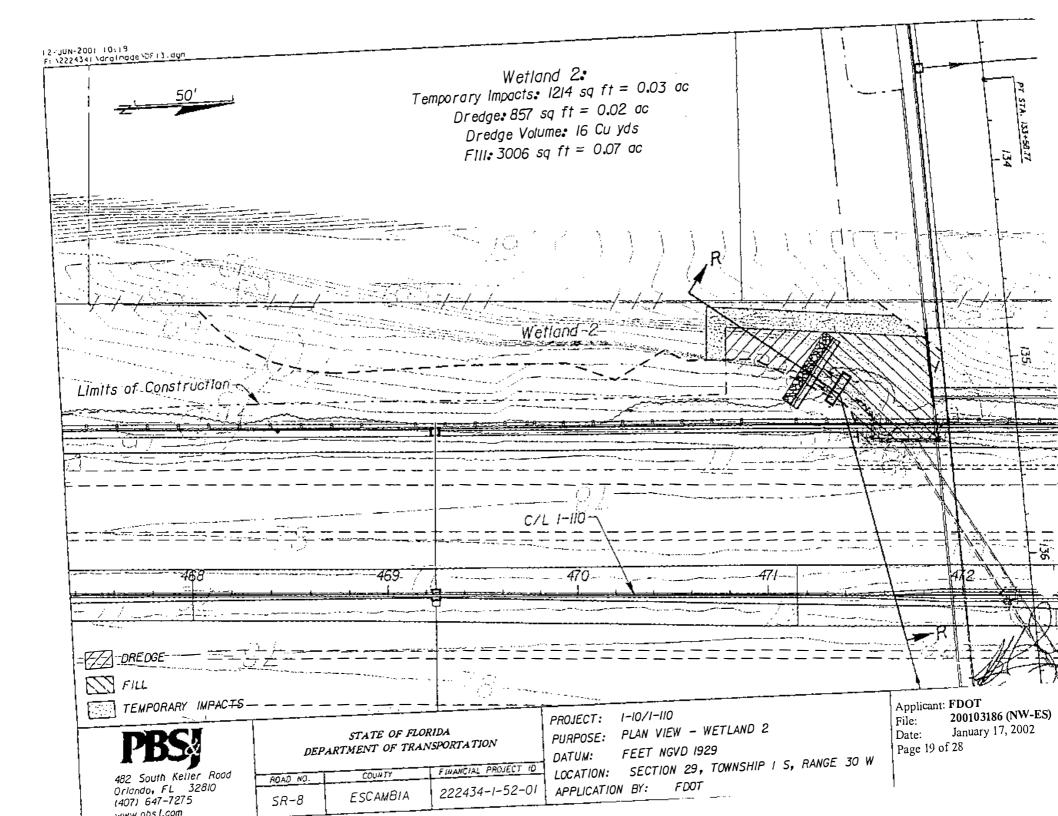
APPLICATION BY: F DOT

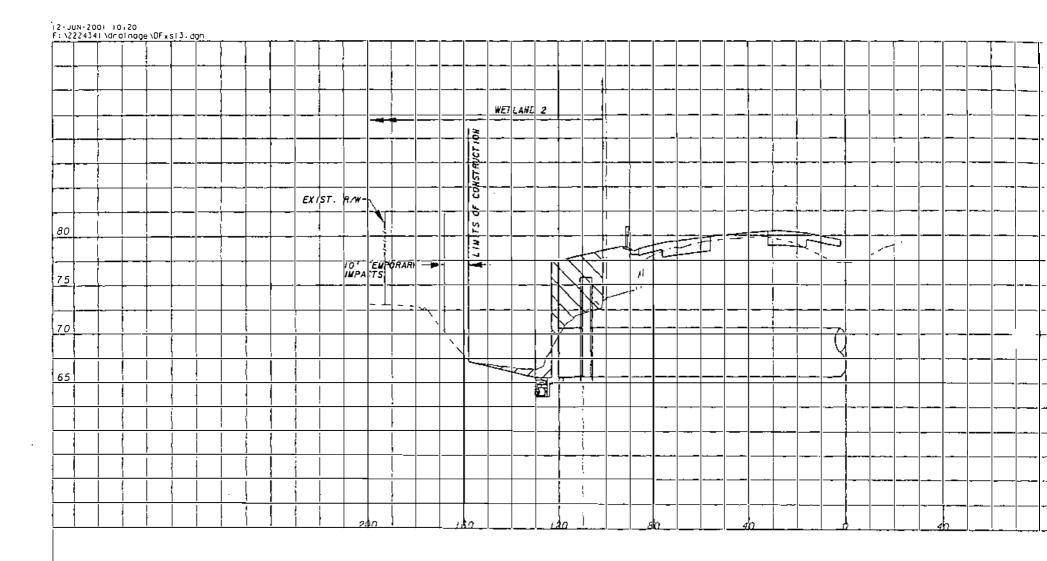
Applicant: FDOT 200103186 (NW-ES) File:

Date: January 17, 2002

VERT. SCALE;

Page 18 of 28





DREDGE

FILL

TEMPORARY IMPACTS

R-R 471+65 1-110



482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbs J.com

### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO. COUNTY FINANCIAL PROJECT ID SR-8 ESCAMBIA 222434-1-52-01

PROJECT: I-IO/I-IIO

PURPOSE: CROSS SECTION R-R/ WETLAND 2

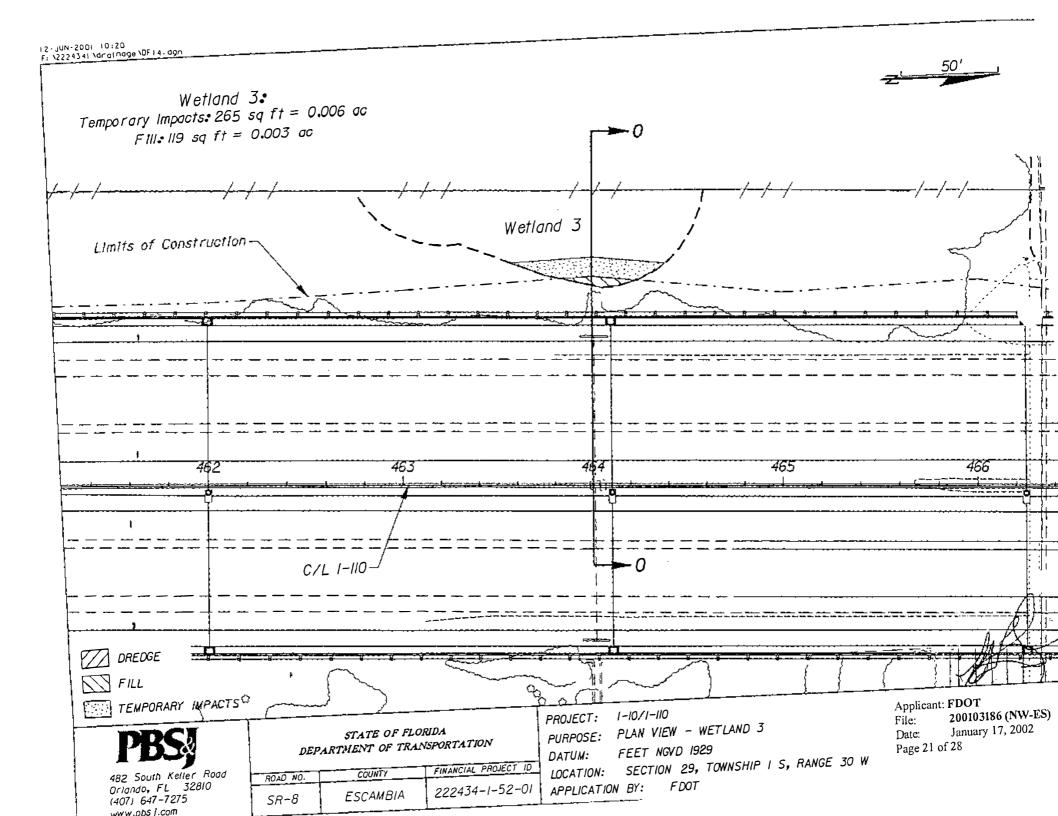
DATUM: FEET NGVD 1929

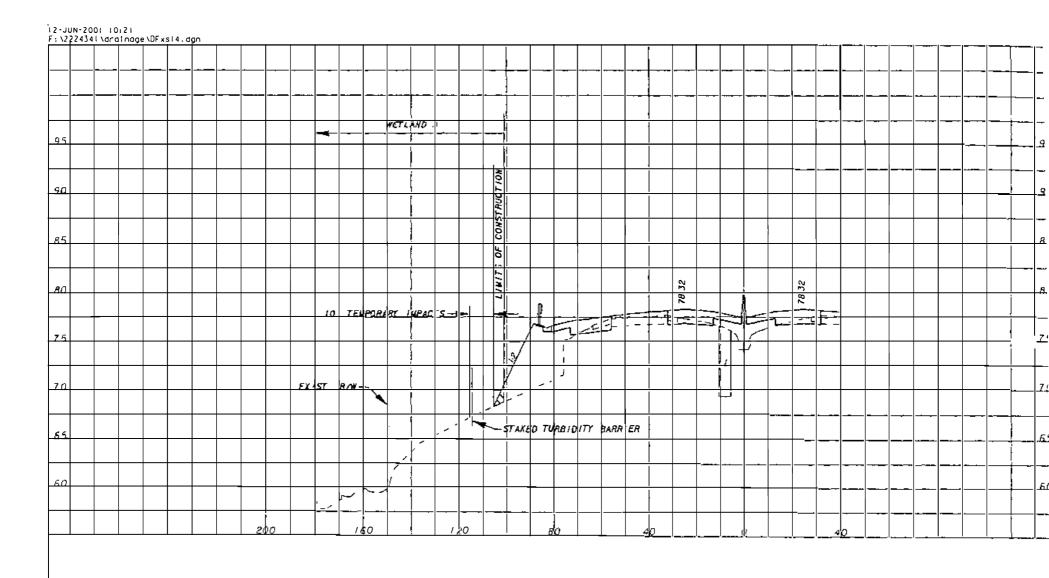
LOCATION: SECTION 29, TOWNSHIP I S, RANGE 30 W

APPLICATION BY: FDOT Applicant: FDOT

200103186 (NW-ES) File: January 17, 2002

Date: Page 20 of 28





DRE DGE

TEMPORARY IMPACTS

0-0 464+00.00 1-110



482 South Keller Road Orlando, FL 32810 (407) 647-7275 www.pbsj.com

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID ROAD NO. COUNTY SR-8 ESCAMBIA 222434-1-52-01

PROJECT: 1-10/1-110

PURPOSE: CROSS SECTION 0-0/ WETLAND 3

DATUM: FEET NGVD 1929

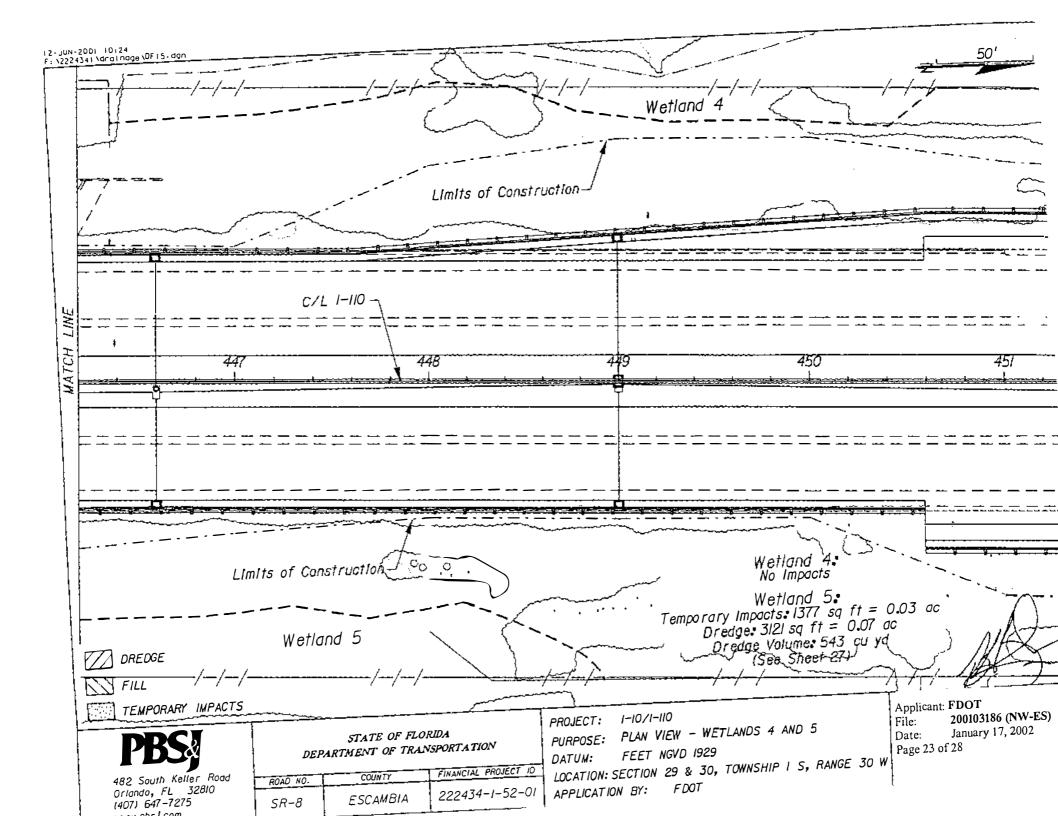
LOCATION: SECTION 29, TOWNSHIP I S, RANGE 30 W

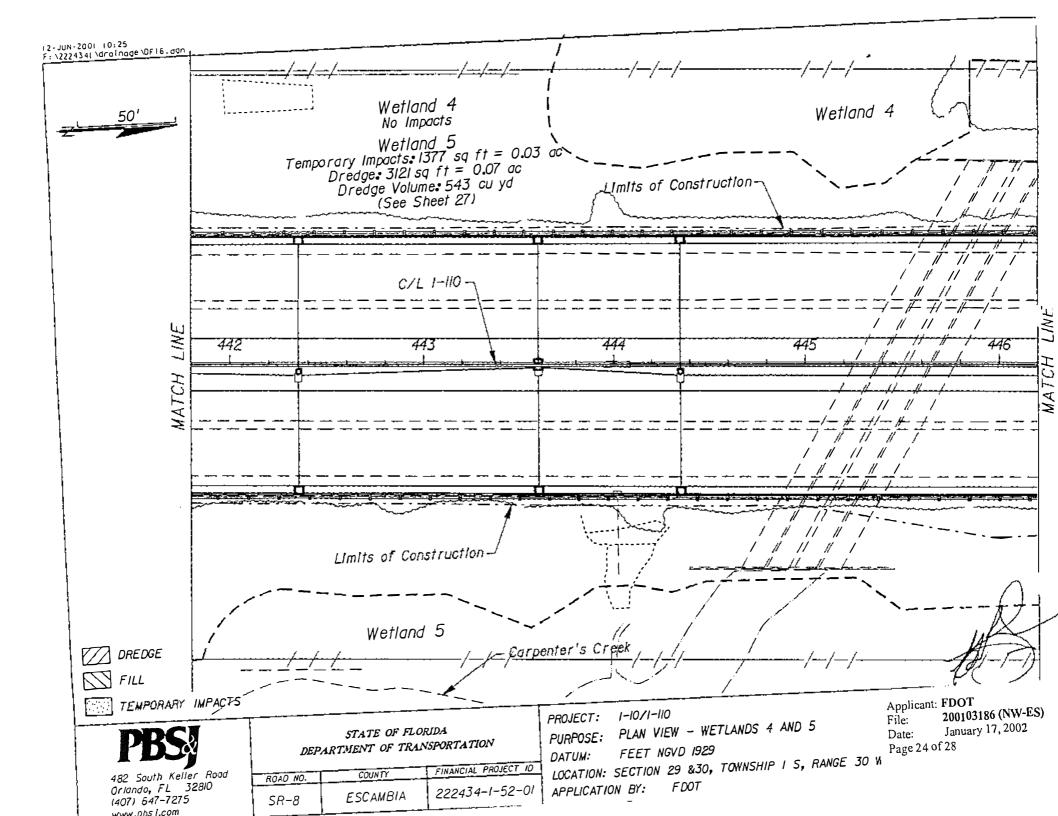
APPLICATION BY: FDOT

Applicant: FDOT

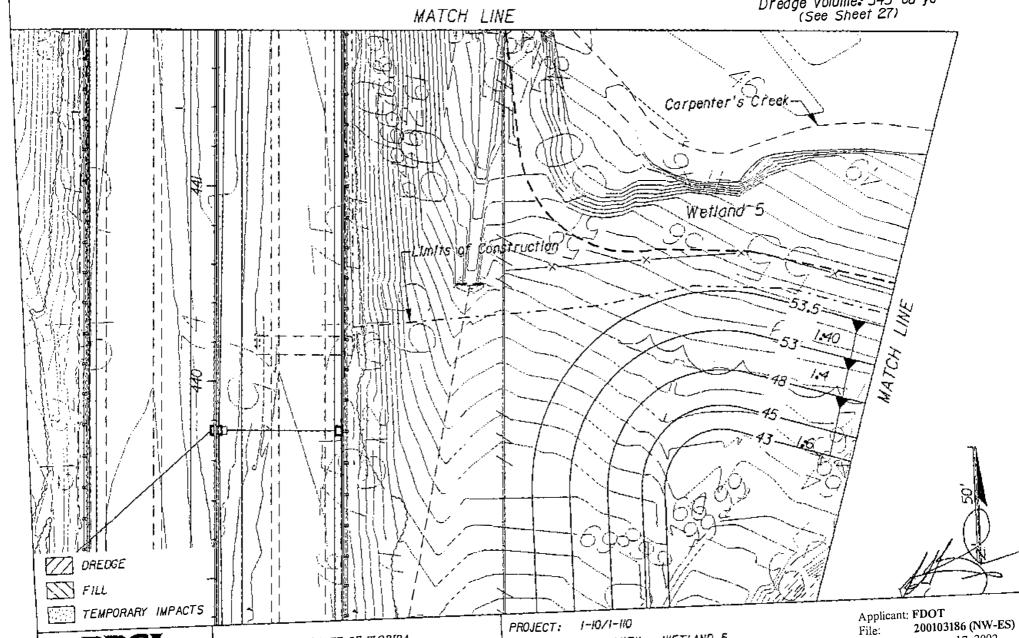
200103186 (NW-ES) File: January 17, 2002 Date:

Page 22 of 28





Wetland 5 Temporary Im acts: 1377 sq ft = 0.03 ac
Dredge: 3121 sq ft = 0.07 ac
Dredge Volume: 543 cu yd
(See Sheet 27)



482 South Keller Rood Orlando, FL 32810 (407) 647-7275 word obst.com

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID COUNTY ROAD NO. 222434-1-52-01 ESCAMBIA SR-8

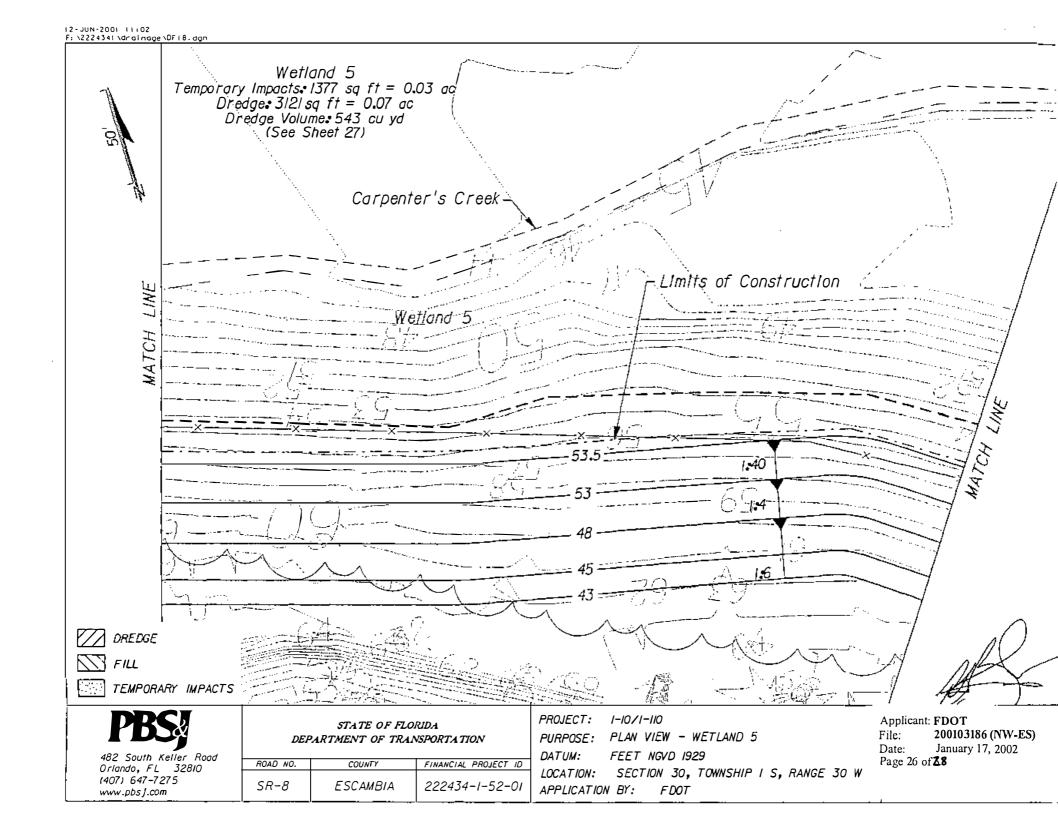
PLAN VIEW - WETLAND 5 PURPOSE: FEET NGVD 1929

DATUM: SECTION 30, TOWNSHIP I S, RANGE 30 W LOCATION:

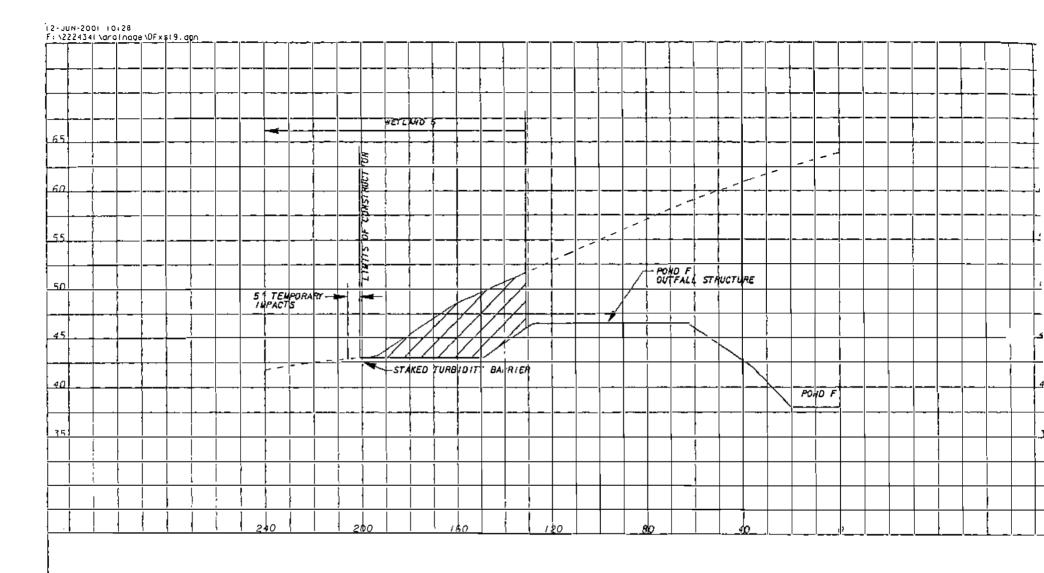
FDOT APPLICATION BY:

January 17, 2002 Date:

Page 25 of 28



www.pbsj.com



DREDGE

TEMPORARY IMPACTS

P-P POND F



482 Orlan (407) 647-7275 www.pbsj.com

# TION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID	-
SR-8	ESCAMBIA	222434-1-52-01	,

PROJECT: I-IO/I-IIO

PURPOSE: CROSS SECTION P-P/ WETLAND 5

DATUM: FEET NGVD 1929

LOCATION: SECTION 29, TOWNSHIP I S, RANGE 30 W

APPLICATION BY: FDOT Applicant: FDOT

200103186 (NW-ES) File: January 17, 2002 Date:

Page 28 of 28

BS	DEPAI	STATE OF FLORIDA DEPARTMENT OF TRANSPORTAT			
South Keller Road ndo. FL 32810	ROAD NO.	COUNTY	FINANCIA		
11000 1 L JEUIU					

# JONES SWAMP PRESERVE MANAGEMENT PLAN October 31, 1997 FCT Project #95-014-P56

Foot access will be established from the residential areas. Identification signs will be installed by the entrance of each path. At this time, there are no plans to restrict foot access, however, hours that the preserve is open will be posted.

Since this Preserve is so close to a residential and commercial area, it is Escambia County's intention to prevent encroachment onto the Preserve property. As each parcels is acquired, potential for encroachment will be identified. Wooden poles will be driven into the ground to prevent access to vehicles and to mark the boundaries. For example, the first parcel to be acquired is the Ciano parcel. This parcel will have wooden poles inserted to prohibit vehicle traffic from the main roadway. However, on the north side of the parcel, PJC fencing allows foot access but not vehicles.

Once acquisition is complete, access points will be selected and forwarded to FCT for approval. Sites will be selected to minimize environmental impacts and maximize access to the Preserve.

### Easements. Concessions and Leases

Easements are being identified as the title for each property is researched. Expected easements include utility easements. For example, title research has shown an existing easement on the Blalock parcel (Priority 3) for Escambia County Utilities Authority (ECUA) for access to the sanitary sewer pump station. Currently, a small road exists with no gate. NESD has requested the installation of a gate to prevent other vehicle access to the site. As proposed easements are identified, NESD will coordinate access and resource management issues with the easement holders.

Greenways and conservation easements in and around the Jones Swamp Preserve are being identified and attempts will be made to incorporate these into the management plan as neighborhood access points.

Escambia County does not anticipate entering into any concession agreements, leases or other such arrangements with a non governmental person or organization regarding the preserve or any use of the preserve other than by a member of the public. However, in the event that such an arrangement should be considered, permission would first be required from the Escambia County NESD to determine if this concession and/or lease was in agreement with the management plan. If so, and prior into entering into such an agreement, the County will provide a minimum of 60 days written notice with complete information concerning the concession/lease and how it was in agreement with the management plan.

### Key Management Activities

### Natural Resource Protection

Identification of Resources

As sites are acquired, a site survey will be conducted. Each parcel is having the jurisdictional

wetlands identified and any endangered and/or threatened species identified. To date, all Priority 1 and 2 parcels have been delineated. This is simply the first step to assist with plan implementation. An overview of the vegetative communities and listed plant species has been compiled and an further assessment will be done on the site. Plants will be identified as well as entire ecosystems. Bird watching and other identification of animals will be encouraged through the SERVE program, Audubon and other environmental groups, residents and students (middle, high school and college level).

The local Audubon Chapter has committed to include Jones Swamp Preserve in its annual bird count this December. Additionally, two botanists associated with this group have volunteered to do a complete plant survey of the Preserve. If any newly identified listed species are identified on the site, this information will be reported to the Florida Natural Areas Inventory, on the Field Report Form - Occurrences of Special Animals<sup>3</sup>

### Fire Management

The initial site review revealed a need for prescribed burning. Prior to the first prescribed burn, Escambia County NESD will develop a detailed prescribed burning plan. In preparation for this, the areas which require periodic burning will be identified during the site survey; and a staff person will be trained in fire management. In anticipation of this additional training requirement, a Conservation Technician II position was promoted to a Conservation Technician III position within Escambia County NESD for the FY 97-98 budget. Additionally, the Northwest Florida Water Management District (NWFWMD), the State Division of Forestry, Florida Game and Freshwater Fish Commission, the Escambia County Soil and Water Conservation District and the local fire department will be consulted for assistance with the prescribed burn.

Fire management will be necessary in both the mesic flatwoods and depression marsh areas. These areas were historically maintained by lightning caused fires which would periodically burn vast areas of the state over a span of days or even weeks. Due to roads and urban infrastructure, this natural process is no longer permitted to occur and prescribed burn management will be necessary. It is anticipated that initial burns may have to be conducted during the winter season to reduce excess fuel loads and underbrush which have built up over many years in the absence of natural fire. Depending on the amount of accumulated fuel and underbrush, one to several fires, over a period of several years, may be required. Eventually, burning will be conducted during the "lightening season" (late April to September) to duplicate more natural conditions. Natural communities subjected to burning will be monitored for changes in species composition, plant cover and density, and effects on listed plant and animal populations to insure that burns are not adversely affecting the continued viability of these ecosystems. According to the Florida Natural Areas Inventory, natural fires historically occurred in mesic flatwoods areas on the order of once every one to eight years. The fire return interval in depression marsh areas is somewhat more frequent, at once every one to five years.

<sup>&</sup>lt;sup>8</sup>Example form included in Appendix.

Protection from the fire will be required for the upland mixed forest and the suburban residences and businesses. The oak hammocks forest will be protected to maintain protection of protected plant species in the hammock areas. Fire management education will be required for the surrounding community to permit these burns. Burns will be coordinated with the community utilizing a residential flyer distribution and local workshops as needed (similar to fire management programs utilized in Dade County, FL).

#### Protection of the Habitat

The vast majority of the project site consists of a complex mosaic of intact and high quality natural communities characteristic of the lower terraces of the Gulf Coastal Plain. These communities vary in species composition and structure along topographical, edaphic (i.e. soils) and hydrological gradients. Within this project site, there are a variety of terrestrial, palustrine and estuarine natural communities, including both forested and non-forested wetland vegetation types. All of the natural communities examined are at least of good quality, with most being good to high quality examples of these systems in Florida. A series of flatwoods (note: all natural community names used are based on the Florida Natural Areas Inventory classification system) dominate the higher ridges throughout the tract, varying from Mesic and Scrubby Flatwoods along the higher portions of the property (25-30' above ms.) that grade into Wet Flatwoods along the lower reaches of these ridges (below 25' msl). The dominant canopy tree in all of these communities is longlead pine (Pinus palustris), and good quality stands of this important arboreal species occur throughout the western two thirds of the project area. As well, very high quality savanna-like Wet Flatwoods and Wet Prairies occur within some of the lower and broader expanses within the site, typically occurring between the 20-25' msl topographic contours. Because it appears that many of these savanna areas (at least along the periphery of their upland contours) receive some lateral seepage of groundwater from the ridges, several areas within the tract could be broadly interpreted as Seepage Slopes. Many of the Wet Prairie and/or Seepage Slope areas encompass large populations of at least three species of pitcher plants (Sarracenia spp - see below). Particularly well developed along the northern, southern and eastcentral portions of the project site, but also at numerous places throughout the property, the Mesic and Wet Flatwoods generally grade into Baygall and/or Floodplain Forest natural communities. Because it appears to be fed primarily by lateral groundwater seepage, the core of Jones Swamp is perhaps best characterized as a dense Baygall community. There are also several well developed Dome Swamp communities that are scattered either within the interior or toward the periphery of the site. As the swamp system narrows and exhibits a more defined drainage channel toward the east (ie. between Fairfield Drive and Navy Boulevard), it is perhaps best characterized as a Floodplain Swamp with a well developed floodplain typically below 15' msl. Toward the very eastern end of the Jones Swamp drainage, at the point where it is better defined as Jones Creek and empties into Bayou Chico, the area is best described as a good quality Estuarine Tidal Marsh. It also appears that Jones Creek itself has several characteristics of a Seepage Stream.

Although the majority of the site is in a natural condition and mostly of good to high quality, there are a few areas of disturbance. Most of the disturbed areas are associated with large power line rights of ways. It appears that all of these power lines are maintained by Gulf Power

Company and according to a Gulf Power representative, all of these rights of way are easements granted to the Company by various land owners. One of these power lines areas runs roughly northeast to southeast and is located just west of Fairfield Drive. Although these power line areas could be considered disturbed, they are periodically mowed, which has the result of somewhat mimicking natural fire events. While natural fire cycles would be preferable, the moving sets back the successional processes in the Wet Prairie and savanna-like Wet Flatwoods and actually helps in maintaining a more open, naturally appearing ecological regime in many of these areas. This periodic disturbance helps to provide habitat for a variety of rare and unusual species, such as the pitcher plants that are so frequently found in these areas.

It is estimated that only about 5% of the project site is disturbed to the extent that it is not recognizable as a natural community or has experienced other kinds of rather minor disturbances. These disturbances consist of seven categories of human induced impact. First, the entire project site is divided by the roughly north south running Fairfield Drive, which apparently acts to disrupt the normal hydrology of the eastern third of the tract. At lease one large culvert runs beneath Fairfield Drive that allows Jones Creek to flow on into Bayou Chico, however there is still some significant impact to the forested wetland floodplain of this system. There is only minor ditching or draining in any area of the project and as a result, there is very little in the way of hydrological restoration that need to be, or realistically can be accomplished within the project. Second, the bulk of the more mesic portions of the site were harvested for their longleaf pine timber value many years ago (as no stands of old growth pines were observed). These upland areas are now well forested with very good stands of ca. 30-40 year old secondary growth pines. The groundcover is intact throughout, with many areas supporting a diverse array of expected fords and a luxuriant growth of wiregrass (Aristida stricta). As stated above, most of the canopy consists of longleaf pines, but in some areas, particularly less frequently burned savanna areas and the wetter edges of the Baygalls - slash pines (Pinnus elliottii) also occurs. No type of forest regeneration or restoration is needed within the project area. Third, although the majority of the project area has been regularly fire managed, there are a few areas that could benefit from the reintroduction of a frequent fire cycle and some carefully planned prescribed burns. Fourth, a very few dirt roads and/or trails are present within the site, a couple of which can be abandoned and re-vegetated naturally, while one or two others should be maintained for. both the recreational access and general management (including fire) access that they can provide. Overall, these roads present few restoration opportunities. Fifth, some areas, particularly the major power line right of way just west of Fairfield Drive, have been subject to rather intense dumping of all sort of household goods, yard refuse, and other kinds of trash. Clean up of these dump sites, especially since one of the largest of them supports a huge population of the rare white-topped pitcher plant (Sarracenia leucophylla) should be pursued. Sixth, as the project site narrows eastward from Fairfield Drive onward, but especially east of Navy Boulevard, the edges of the site (but not the site itself) become highly urban and suburbanized. Although this may be considered somewhat of a drawback from a natural areas viewpoint, the design of the project offers an outstanding opportunity to provide the many residents of the area a fine quality greenway and much needed open space. Seventh, there are some areas of exotics establishment, observed only along the periphery of the more narrow portions of the project. This is one classical example of "edge effect" and is a common, if not

almost expected phenomenon at the disturbed margins of otherwise natural areas. The most troublesome exotic is Chinese tallow tree (Saplum sebiferum) and this species is primarily confined to the disturbed outer edges of the Floodplain Forest of Jones Creek.

Several plant species present at the preserve are listed on the Florida Game and Fresh Water Fish Commissions's "Official lists of Endangered and Potentially Endangered Fauna and Flora in Florida" and will require special protection. Within the project, there are several excellent populations of at least three species of pitcher plants: white topped pitcher plant (FNAI rank of G3/S3; federal category 2 candidate (C2) for listing under the Endangered Species Act, as amended; State of Florida listed as Endangered), parrot pitcher plant (Sarracenia psittacina), and purple pitcher plant (S. purpuree). There is also a record in the FNAI database for southern redlily (Lilium catesbaei, G4/S3; no federal status; state listed as Threatened). It is also possible that two other very rare plant species also occur within the Wet Prairie areas of the site: bogbutton (Lachnocaulon digynum, G3/S2; C2; no listing by state) and Harper's yellow-eyed grass (Xyris scabrifolia, G2G3/S1; C2; state listed as Threatened). It is not known whether any threatened or endangered animal species are present on the preserve, however, it is expected that there could be at least nine that may occur on the site. The following threatened or species of special concern have been reported on the preserve: Little Blue Heron (Egretta caerulea), Snowy egret (Egretta thula), Tricolored Heron (Egretta tricolor), Florida Sandhill Crane (Grus canadenis pratensis) and Bald Eagle (Halizeetus leucocephalus).

Small areas of Scrubby Flatwoods (although somewhat tending toward Mesic Flatwoods) occur in at least four places along the more elevated and sandy ridges within the project area. One of these is just east of Blue Angel Parkway, two others occur in the central portion of the western. two thirds of the project site (i.e., between Blue Angel Parkway and Fairfield Drive), while a fourth occurs just west of Fairfield Drive. This endemic Florida natural community is ranked G3 by the FNAI and as such is considered as "Either very rare and local throughout its range or found locally (even abundantly at some locations) in a restricted range or because of other factors making it vulnerable to extinction throughout its range, 21 to 100 occurrences." The Scrubby Flatwoods primarily differ from the Mesic Flatwoods within the project area by having a more pronounced oak component (particularly some areas with sand live oak - Quercus geminata) and a more frequent and abundant component of ericaceous species (i.e. shiny blueberry - Vaccinium myrsinites). Because of the topography, the project site consists of higher ridges alternating with lower swales, some areas of the site apparently receive seepage of shallow groundwater near the periphery of these ridges. Although no areas have been identified as of extremely high quality and/or unequivocal Seepage Slope natural community, some areas could be broadly characterized as belonging to this state imperited (FNAI rank of S2) community type.

Overall, these areas are better classified as examples of the Wet Prairie natural community, although they definitely belong to the much rarer plant community subtype known as pitcher plant prairies.

Jones Creek receives much of its flow via seepage from the adjacent flatwoods and could probably be defined as a Seepage Stream, which is ranked as S2 by FNAI, meaning that they are state imperiled because of rarity or because of some factor(s) making it vulnerable to extinction throughout its range.

A plant and animal species list for the preserve will be developed as the site surveys are conducted. Visitors will be encouraged to report any newly identified species. These site surveys will again be conducted on a seasonal basis to better assess the habitat to be protected. Maps will be developed depicting locations of listed plant/animal populations and cultural/historical sites.

During construction of park foot trails, picnic areas, etc., impacts to environmentally sensitive areas will be avoided. Education and ecosystem management will be the primary tools used to best protect and enhance existing plants and animals present on the site. Visitors will be educated through interpretive literature and informational signs strategically placed. Ecosystem management, or management to enhance the present state of all habitats on the site, will help provide optimal conditions for the continued survival of the park's listed species. Enforcement can also be aided by environmental code enforcement officers within the Escambia County NESD.

#### Monitoring Activities

Initial site surveys will be conducted to delineate the wetlands and identify endangered and threatened species as well as populations of plants and animals inhabiting the swamp. The site survey will again be conducted seasonally for variations and a year round view of the preserve. This data will be used as the baseline data for monitoring of the natural systems. A biological monitoring program will be developed and implemented after the baseline data is collected during the first year. Based upon the result of the biological monitoring, the management strategies will be adjusted as needed.

Additionally, monitoring of impacts from the surrounding community will be measured and attempts will be made to minimize these impacts. Access to groundwater monitored data (such as with the Warrington Shopping Center) will be reviewed to determine if there are any detrimental impacts to the preserve. The management plan will be adjusted as needed to address these issues.

#### Educational Programs

NESD staff, including SERVE volunteers have met with local educational institutions to coordinate educational programs. Pensacola Junior College (PJC) staff, University of West Florida staff, Roy Hyatt Center staff and Washington High School staff met at the PJC campus during the first week of October to view the site and discuss usage of the site. To date, these educational institutions are interested in testing the water quality of Jones Creek, identifying plant species and utilizing the site for field trips. Additionally, students will be encouraged to participate in the trash clean-ups and exotic removal events.

Mid-October, NESD staff is scheduled to meet with Washington High School students to discuss the Jones Swamp Preserve Project and how the students can get involved. Additionally, NESD has recently met with the Bayou Chico Homeowners Association, the Audubon Society and the EscaRosa Women's Association. NESD will continue to meet with groups both to inform them about this Project and to involve community groups in both educational and maintenance projects on the Preserve. These meetings will be documented in the annual reports.

# VANA LANCE

## REGIONAL ..IITIGATION PLAN

BACKGROUND INFORMATION									
Water Management District: Northwest Florida Water Management District									
Mitigation Project Name: Jones Swamp / Garcon Peninsula Project Number: (to be provided by DEP)									
Project Manager: Duncan Cairns Phone I						ımber:	850-53	9-5999	
County(s): Escambia, Santa Rosa									
Location (central lat/long): 30° 25' North / 87° 10' West									
IMPACT INFORMATION									
DOT Work Progra	ım Item (WI	PI):   FM 2224341 (No WPI #)	ERP #:			COE #:			
Drainage Basin(s): Pensacola Bay Watershed									
Water Body(s): Pensacola Bay SWIM Water Body? Ye						Yes			
Acres and Types of impact to be offset: 2.0 Acres 411 (Fluccs code)								code)	
(Provide the above information for each WPI project, as needed.)									
MITIGATION ENVIRONMENTAL INFORMATION									
Mitigation   Mitigation   Type:   Creation   Restoration   X Enhancement   X Preservation   Area (acres):   TBD									
SWIM Project?									
Mitigation Bank?		yes, give FDEP/WM ermit#:	D Mitigation	Bank {	<i>y</i>	со	E#:		
Drainage Basin(s)	Pensaco	la Bay Watershed							
Water Body(s):	Water Body(s): Escambia Bay, East Bay, Bayou Chico				SWIN	SWIM Water Body? Yes			
Project Description									
A. Overall project goal:  Acquisition, preservation and long-term natural resource management of wetlands at Jones Swamp and/or Garcon Peninsula.									
B. Brief description of current condition:									
Jones Swamp contains FLUCCS 630 (Wetland Forested Mixed) and 690 (Wetland Scrub Shrub) wetlands. It is part of a 2,700 acre watershed that drains into the western arm of Bayou Chico. Although largely intact, development is encroaching upon Jones Swamp, and the system is in need of appropriate ecosystem management activities. Garcon Peninsula, which contains large areas of wet prairie and other wetlands, is threatened by development.									

C. Brief description of proposed work:

Acquisition, preservation and implementation of natural resource management of wetlands at Jones Swamp and/or Garcon Peninsula to offset impacts to wetlands under both state and federal jurisdiction.

D. Brief explanation of how this work serves to offset the impacts of the specified DOT project(s):

Acquisition, preservation and management of wetlands is an accepted method of mitigating for wetland losses. Given the increasing rate of development, it is critical that important wetland resources in this area be preserved. Wetlands acquired at Jones Swamp will be managed by Escambia Co. in accordance with the "Jones Swamp Preserve Management Plan" (see Appendix V). The preservation and management of forested wetlands (FLUCCS 630 & 690) at Jones Swamp should offset the loss of low quality wet pine flatwoods (FLUCCS 411) associated with the DOT project. Wetlands acquired at Garcon Peninsula (mostly FLUCCS 643 – Wet Prairie) would be managed by either the NWFWMD of FDEP.

E. Brief explanation of why a mitigation bank was/was not chosen, including a discussion of cost:

No permitted mitigation banks currently exist in northwestern Florida.

F. Brief explanation of why a SWIM project was/was not chosen as mitigation, in whole or in part, including a discussion of cost, if the anticipated impacts are located within a SWIM water body:

Currently, no approved SWIM project exists for this mitigation work.

MITIGATION PROJECT IMPLEMENTATION								
Entity responsible for construction: Northwest Florida Water Management District								
Contact Name:	Duncan Cairns	Cairns				Phone Number:	850-539-5999	
Entity responsible for monitoring and maintenance: Escambia County								
Proposed timeframe for implementation				Commence Date: ASAP		Complete Date:		
Total Project Co	\$163,43	54			'y			

Attachment includes the following:						
х	1.	Detailed description of existing site and proposed work. Table 3 or Section F of the ERP application may be used as guidelines.				
х	2.	Recent aerial photograph with date and scale.				
x	3.	Location map and design drawings of existing and proposed conditions.				
NA NA	4.	Detailed schedule for work implementation, including any and all phases.				
NA	5.	Proposed success criteria and associated monitoring plan.				
х	6.	Long-term maintenance plan (See <i>Jones Swamp Management Plan</i> , FCT #95-014-P56, pp.12-17 in Appendix V)				
х	7.	Detailed explanation of how this work serves to offset the impacts of the specified DOT project(s).				

# ATTACHMENT FOR FM 2224341 (I 10 / I 110) MITIGATION PLAN (Jones Swamp and Garcon Peninsula)

#### **SCOPE**

The SR 8 / I 10 – SR 8A / I 110 road improvement project (Financial Management Number 2224341) in Pensacola is anticipated to impact 2.0 acres of wetlands. The FDOT District-3 Environmental Impact Inventory (revised 8/31/00) provided to the NWFWMD classifies the impact wetlands as low quality, FLUCCS 411 – Pine Flatwoods. Measures taken to avoid and minimize wetland impacts are the responsibility of FDOT. Currently, private consultants are hired by FDOT to assess and quantify wetland impacts. The NWFWMD is designing and implementing the mitigation for these impacts under Section 373.4137, Florida Statutes. The mitigation is based on estimates of impacts (acreage and FLUCCS type) provided by FDOT.

#### PROJECT GOAL

The goal of this mitigation plan is to adequately compensate for the loss of wetlands and wetland function associated with the FDOT project. To accomplish this, the NWFWMD intends to acquire, preserve in perpetuity, implement long-term natural resource management activities, and/or enhance and restore wetland ecosystems that are proximate to the project area in Pensacola.

Two areas have been identified as having wetlands that may be targeted for acquisition and possible restoration. They are: 1) Jones Swamp, and 2) the Garcon Peninsula. Both the project area and potential mitigation lands are within the Pensacola Bay watershed (Figure C1).

#### **GARCON PENINSULA**

Garcon Peninsula extends into the northern portion of Pensacola Bay, and contains a variety of natural biological communities including estuarine marsh, wet prairie, scrub flatwoods and wet flatwoods. At least thirteen endangered or threatened species, including four orchid varieties, are known to occur on this peninsula. FNAI lists 19 element occurrences including the Panhandle lily, Curtiss' sandgrass, Flatwoods salamander, Pinewoods bluestem, White-top pitcher-plant, Saltmarsh topminnow, Chapman's butterwort, and Kral's yellow-eyed grass. The Conservation and Recreation Lands (CARL) 1999 Annual Report notes that "some of the best pitcher-plant prairies left in Florida" are on Garcon Point peninsula.

Emergent estuarine marsh along the shoreline of Garcon Point provides organic detritus, nutrients and nursery habitat for many species found in Pensacola Bay. These and other wetlands on Garcon Point also filter stormwater runoff, contribute to higher water

quality in Pensacola Bay and provide natural habitat for various animal and plant species. The coastal marshes protect adjacent uplands by providing an essential buffer to absorb wave energy during storms.

Although mostly undeveloped, this area is extremely susceptible to residential or commercial development. With the 1999 completion of the Garcon Point / Pensacola Bay bridge, coupled with easy access to I 10, development pressures have become acute.

The NWFWMD currently owns and manages 3,235 acres at Garcon Point (Figure C2). Several thousand additional acres have been targeted for acquisition by numerous resource agencies including the NWFWMD and FDEP. Details on Garcon Point are given on pages 12, 30-31 in Save Our Rivers, Florida Preservation 2000, Florida Forever, Five Year Plan 2000, NWFWMD, Division of Lands Management and Acquisition, Program Development Series 99-2, December 1999. Although wetland delineations of specific tracts have not been done, preliminary analysis of National Wetland Inventory (NWI) maps and DOQ photography indicate that approximately 80% of these lands are wetland. According to the NWI maps, the dominant wetland type of the proposed acquisition lands is PEM1Dd (Palustrine, Emergent, Persistent, Seasonally Flooded/Well Drained, Partially Drained/Ditched), which is generally equivalent to the FLUCCS 640 – Vegetated Non-Forested Wetlands classification.

Project work will consist of acquiring land for preservation and assuring appropriate natural resource management. A tract on the south side of I 10 (Figure C3) will first be targeted for acquisition at Garcon Peninsula. Other parcels may be targeted as necessary. The soils in this area are dominated by somewhat poorly drained to very poorly drained, sandy and loamy soils.

#### **JONES SWAMP**

Jones Swamp is part of a 2,700-acre watershed in Escambia County that drains into the western arm of Bayou Chico. Industrial, commercial and residential urbanization within the Bayou Chico watershed has led to degraded water and sediment quality in the bayou. Development is now encroaching upon Jones Swamp. The benefits of acquiring Jones Swamp for preservation include: 1) prevention of additional NPS loading from future development, 2) preservation of the flood storage and filtering capacity of the swamp, 3) protection of flora, fauna, and natural habitat, 4) the preservation of high quality wetlands in an urban environment for passive recreation, and 5) the connection to an existing greenway and larger wetland ecosystem preserve.

Using, in part, funding from the Florida Communities Trust (FCT) and the EPA 319(h) program, Escambia County has acquired approximately 400 acres of Jones Swamp for preservation, with the ultimate goal of protecting approximately 1,300 acres. However, due to funding and acquisition constraints of the county and FCT program, gaps remain between preserved areas. The NWFWMD proposes to acquire several parcels within the Jones Swamp to mitigate wetland impacts caused by the I 10/I 110 project (Figure C4).

The wetlands within Jones Swamp are mostly classified as FLUCCS 630 – Wetland Forested Mixed, with some areas being FLUCCS 690 – Wetland Scrub Shrub, and are considered of much higher value than the wetlands impacted by the road project.

Land acquired for mitigation of the I 10 / I 110 project would be turned over to Escambia County for perpetual preservation and management in perpetuity under the *Jones Swamp Preserve Management Plan, October 31, 1997, FCT Project #95-014-P56* (see Appendix V). Necessary agreements with Escambia County would have to be worked out, although there is consensus among state and local agencies that Jones Swamp should be set-aside for preservation. Other parcels in Jones Swamp have also been targeted for acquisition to mitigate for FDOT impacts due to the widening of US 98 from Navy Blvd. to Blue Angel Pkwy.

Funding for land acquisition would come from FDOT. The cost of land acquisition and long-term management is estimated at \$163,454, depending on the appraised values of the property and negotiations with property sellers. All reasonable attempts will be made to maximize cost savings throughout this project.

Acquisition of additional lands at Jones Swamp for preservation is dependent upon willing sellers.

#### LAND ACQUISITION PROTOCOL

The protocol for land acquisition is described generally in the "Northwest Florida Water Management District Acquisition Procedure Guidelines" (see Appendix III).

#### NATURAL RESOURCE MANAGEMENT

Land acquired for mitigation of the I 10 / I 110 project would be turned over to Escambia County for perpetual preservation and management in perpetuity under the *Jones Swamp Preserve Management Plan, October 31, 1997, FCT Project #95-014-P56* (see Appendix V).

Land acquired at Garcon Peninsula would be owned and managed either by FDEP or the NWFWMD.

#### **SUCCESS CRITERIA**

Success criteria will consist of the acquisition and preservation of additional wetland areas at Garcon Point and/or Jones Swamp in conjunction with a long-term management plan that ensures protection of wetland integrity and function. Appropriate monitoring and restoration activities will be conducted as necessary.

#### APPLIED MITIGATION RATIO

Acquiring 20-40 acres (i.e., a 10:1 to 20:1 ratio of preserved wetland to impacted wetland) at Garcon Point peninsula and/or Jones Swamp would assist in protecting the water resources of the Pensacola Bay watershed, and would offset the wetland impacts from the I 10 / I 110 project. Either the NWFWMD, State of Florida or other public entity would manage the acquired land in perpetuity.

#### **FUNDING**

Funding for land acquisition would come from FDOT mitigation funds. At a maximum rate per acre of impacted wetland, 2.0 acres of wetland impact would be \$163,454 in funding. Approximately 80% of the funding would be used for land acquisition with the remaining amount used for administration and management. Fair-market land prices for Jones Swamp are not known at this time.

All reasonable attempts will be made to maximize cost savings throughout this project.

Preliminary Cost Estimates					
Pre-acquisition Costs	15,800				
Acquisition	120,690				
Long-term Management and Monitoring	26,964				
Total	\$163,454				

#### WORK SCHEDULE

2000 Prioritize land acquisitions

Contact landowners

Preliminary design of wetland restoration plans (if needed)

2001 Acquisition of targeted parcels
Implementation of natural resources management

#### NWFWMD PERSONNEL TO IMPLEMENT MITIGATION

Robert F. Lide - Environmental Scientist

Peter A. Krottje – Environmental Scientist

Judy K. Duvall - Associate Hydrologist

Ron R. Potts – Senior Hydrologist

Duncan J. Cairns - Chief, Environmental and Resource Planning Bureau

Dan L. Tonsmeire – Associate Water Resources Planner

V. Mark Herndon – Director of Field Operations, Land Management and Acquisition Div.

Ron Bartel –Director, Resource Management Division William Cleckley –Director, Land Management and Acquisition Division Lee Marchman –Chief, Surface Water Bureau George Fisher – Senior Planner

NWFWMD personnel, including environmental scientists, engineers, foresters and planners may be called upon as needed.

#### LEGALLY BINDING COMMITMENT

The Florida Statues specify how NWFWMD-owned lands must be managed and used:

373.139(1)(a) – Lands titled to the governing boards of the districts shall be managed and maintained to the extent practicable, in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

Lands acquired for mitigation may be turned over to other agencies for management. Acquisitions at Jones Swamp would be turned over to Escambia County for perpetual management under the *Jones Swamp Preserve Management Plan, October 31, 1997, FCT Project #95-014-P56.* Acquisitions at Garcon Peninsula may or may not be turned over to FDEP for perpetual care. Assurances would be obtained that lands would be managed appropriately.

#### **CONTINGENCY PLANS**

If the NWFWMD is unable to acquire a targeted parcel, efforts would be made to acquire other parcels. The acquisition process would continue until enough wetlands were acquired to mitigate for the I 10 / I 110 project.

#### **TASKS**

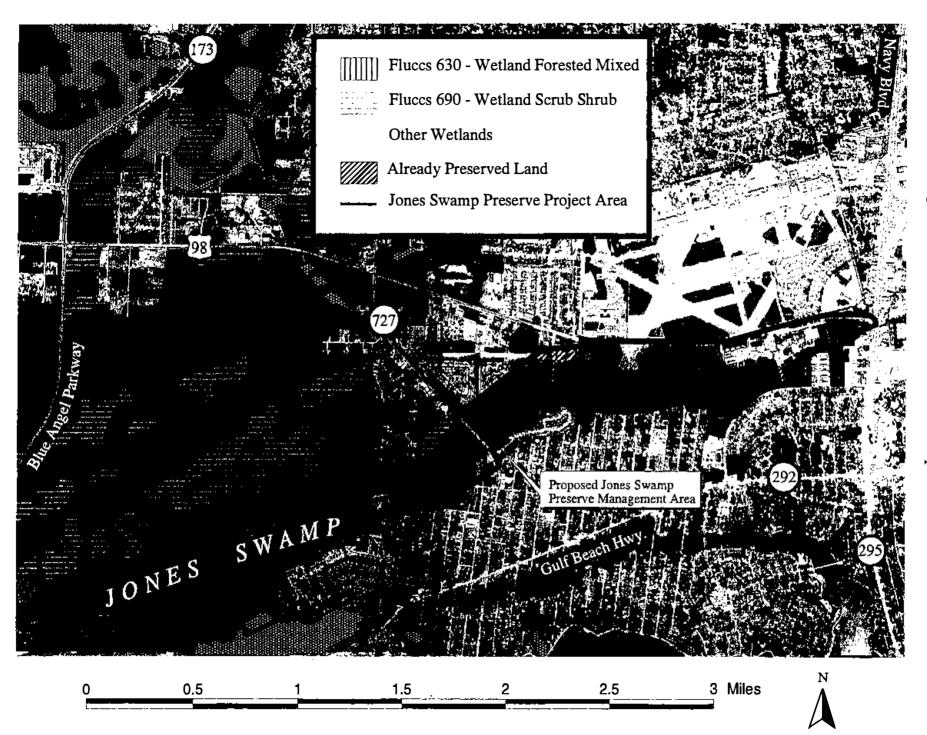
#### Completed:

- 1. A windshield survey of Jones Swamp was performed in 1998.
- 2. Landownership has been identified.
- 3. Escambia County has expressed a willingness to accept and manage in perpetuity any lands in Jones Swamp that are contiguous to lands they already own and are within the boundary of the proposed Jones Swamp Preserve.
- 4. Selected parcels at Garcon Peninsula have been potentially targeted for acquisition

### Anticipated:

- Finalization of lands targeted for acquisition at Jones Swamp and/or Garcon Peninsula.
   Acquisition of lands.
- 3. Implementation of ecological management practices.

15



Wetland Coverage Source: FDEP