

I-75 (SR 93A)

FINAL WETLAND EVALUATION REPORT

***PD&E Study from South of Fowler Avenue, Hillsborough
County, to South of SR 56, Pasco County***

*WPI Segment No.: 408459 1
Federal Aid Project Number: 0751 105 I*

***Reevaluation Study from South of SR 56 to CR 54,
Pasco County***

*WPI Segment No.: 258736 1
Federal Aid Project Number: NH-75-1(91)275*

**Florida Department
of Transportation
District Seven**



August 2004

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I-75 Hillsborough and Pasco Counties Project Development & Environment Study

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South of SR 56, Pasco County**

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to CR 54, Pasco County**

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The proposed action involves improvements to I-75 from south of Fowler Avenue to County Road 54, a distance of approximately 13.9 miles.

**Florida Department of Transportation
District Seven**

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July 2004

TABLE OF CONTENTS

| <u>Section</u> | <u>Page</u> |
|---|-------------|
| EXECUTIVE SUMMARY | III |
| 1.0 INTRODUCTION | 1-1 |
| 2.0 PROJECT DESCRIPTION | 2-1 |
| 3.0 EXISTING ENVIRONMENTAL CONDITIONS | 3-1 |
| 4.0 WETLANDS | 4-1 |
| 4.1 METHODOLOGY | 4-1 |
| 4.2 WETLAND TYPES WITHIN THE PROJECT STUDY AREA | 4-6 |
| 4.2.1 Emergent Marshes | 4-6 |
| 4.2.2 Scrub-Shrub Wetlands | 4-6 |
| 4.2.3 Scrub-Shrub/Emergent Wetlands | 4-7 |
| 4.2.4 Forested Broad-Leaved Deciduous | 4-7 |
| 4.2.5 Forested Needle-Leaved Deciduous | 4-8 |
| 4.2.6 Unconsolidated Bottom Wetlands | 4-8 |
| 4.2.7 Riverine Wetlands | 4-8 |
| 4.3 POTENTIAL WETLAND EFFECTS | 4-9 |
| 5.0 CONCLUSIONS | 5-1 |
| 6.0 REFERENCES | 6-1 |

LIST OF FIGURES

| <u>Figure</u> | | <u>Page</u> |
|---------------|----------------------------|-------------|
| Figure 1-1 | Project Location Map | 1-2 |
| Figure 4-1 | Wetland Location Map | 4-2 |

LIST OF TABLES

| <u>Table</u> | | <u>Page</u> |
|--------------|--|-------------|
| Table 4-1 | Wetland Types and WRAP Scores. | 4-5 |
| Table 4-2 | Approximate Wetland Effects..... | 4-10 |
| Table 4-3 | Approximate Wetland Effects by Wetland Type..... | 4-11 |

APPENDICES

| <u>Appendix</u> | | <u>Page</u> |
|-----------------|--|-------------|
| A | Representative Photographs of Wetland Types | A-1 |
| B | WRAP Data Sheets for Representative Wetlands | B-1 |

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) is conducting studies to evaluate and document the proposed improvements to I-75 from south of Fowler Avenue in Hillsborough County to CR 54 in Pasco County. A PD&E Study is being conducted for the I-75 segment from south of Fowler Avenue to south of Cypress Creek in Hillsborough and Pasco Counties, Florida. A Design Change Reevaluation is being prepared for the remaining I-75 segment from south of Cypress Creek to CR 54 in Pasco County. The Reevaluation Study compares and documents the present proposed design concepts to those contained in the I-75 PD&E Study that was approved by the Federal Highway Administration on November 27, 2000. The combined length of these studies is approximately 13.9 miles.

The general objective of the PD&E Study is to provide documented information necessary for the FDOT to reach a decision on the type, design and location of improvements to the transportation facility. This study will incorporate the recommended improvements proposed in the Preliminary Interchange Modification Report for I-75 at CR 581 (Bruce B. Downs Boulevard), prepared by URS Corporation in December 2002, hereinafter referred to as the I-75/CR581 IMR).

This Wetland Evaluation Report has been prepared to aid in determining the type, design and location of improvements to the existing facility and to evaluate the wetland effects, if any, associated with the alternatives for the proposed improvements. For the extent of the project, the majority of the improvements will occur within the existing FDOT right-of-way. For detailed engineering information, please refer to the Preliminary Engineering Report prepared for this project under separate cover.

Seventy-seven (77) wetlands have been identified within the project study area. These wetlands are located within and adjacent to the proposed right-of-way. Fifty-seven (57) wetlands exist within Hillsborough County, and 20 wetlands are located within Pasco County. Wetlands within the project area are comprised largely of palustrine forested systems (PFO1C/PFO2C), most of which are dominated by cypress (*Taxodium* sp.) or deciduous hardwoods such as red maple (*Acer rubrum*) and sweetgum (*Liquidambar styraciflua*). Other wetland types include palustrine emergent marsh (PEM1H) and palustrine scrub-shrub wetlands (PSS1/3C) dominated by Carolina willow (*Salix caroliniana*) and primrose willow (*Ludwigia peruviana*). Interstate 75 crosses riverine systems (R2UBH) at Cowhouse Creek (a tributary of the Hillsborough River), the Hillsborough River, and Cypress Creek (at two locations). All three riverine systems are

classified as Class I waterbodies. Two of these waterbodies, the Hillsborough River and Cypress Creek, are also designated as Outstanding Florida Waters.

Two build alternatives are being considered for the project; Option 1 is anticipated to affect approximately 81.3 acres of wetlands, and Option 3 is anticipated to affect approximately 83.9 acres of wetlands. The vast majority of direct wetland effects resulting from the proposed improvements are within I-75's existing right-of-way, involving previously disturbed, lower quality wetland fringes.

Based upon the information detailed in this assessment, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

Wetland effects that will result from the construction of this project will be mitigated pursuant to Chapter 373.4137 F.S. to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C. Other options that may be explored during the final design phase of the project include mitigation banking, upland and/or wetland preservation, wetland restoration, enhancement, and creation.

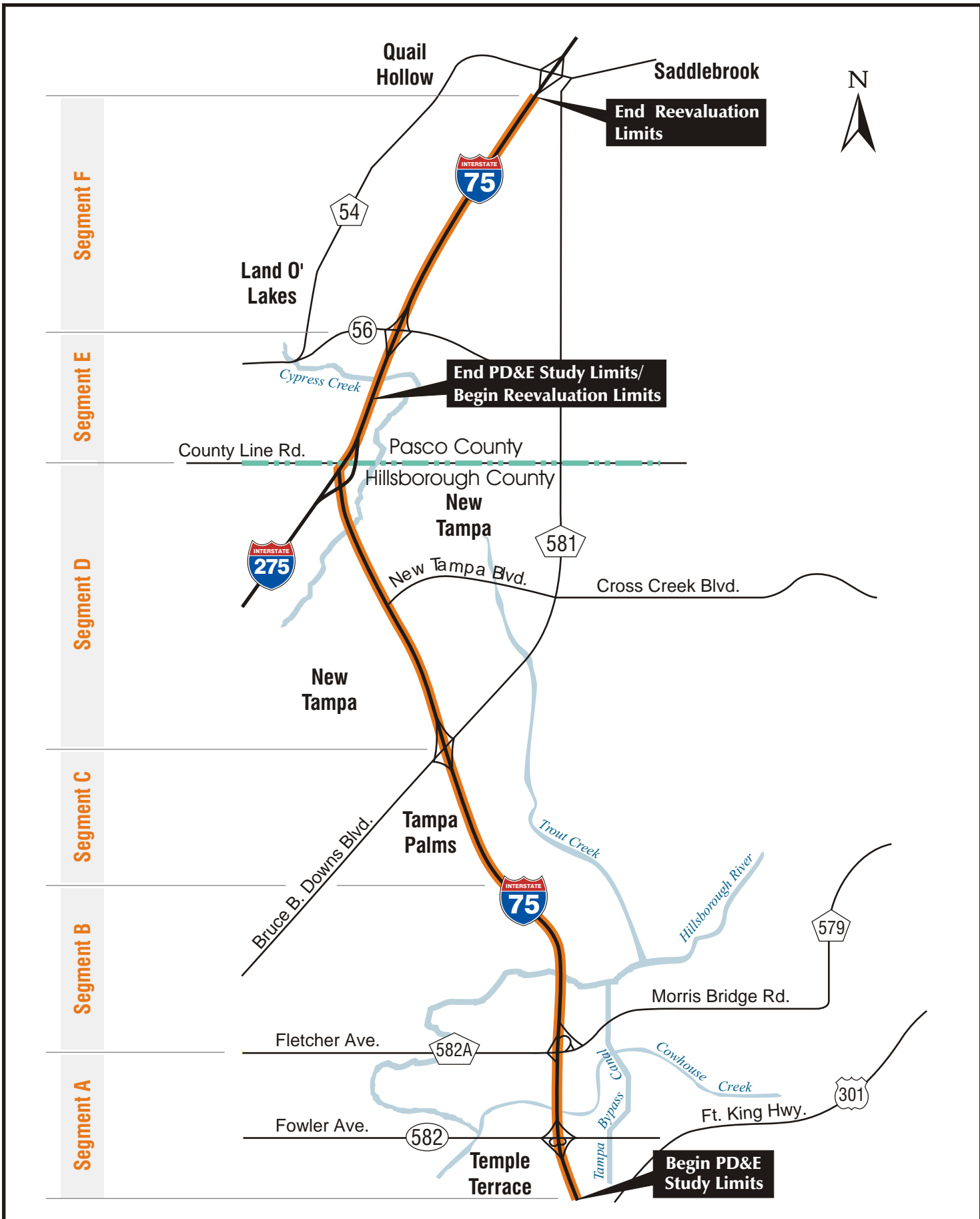
1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) has conducted studies to evaluate and document the proposed improvements to Interstate 75 (I-75) from south of Fowler Avenue in Hillsborough County to County Road (CR) 54 in Pasco County. A Project Development and Environment (PD&E) Study was conducted for the I-75 segment from south of Fowler Avenue to south of SR 56 in Hillsborough and Pasco Counties, Florida. A Design Change Reevaluation has been approved by the Federal Highway Administration (FHWA) for the remaining I-75 segment from south of SR 56 to CR 54 in Pasco County. The Reevaluation Study compared and documented the new approved design concepts to those contained in the I-75 PD&E Study that was approved by the FHWA on November 27, 2000. The combined length of these studies was approximately 13.9 miles. Figure 1-1 indicates the limits of the PD&E and Reevaluation Studies.

The general objective of both Studies was to provide documented information necessary for the FDOT to reach a decision on the type, design and location of improvements to I-75. This study incorporated all recommended improvements contained in the FHWA approved Interchange Modification Report for I-75 at CR 581 (Bruce B. Downs Boulevard), hereinafter referred to as the I-75/CR 581 IMR.

This Wetland Evaluation Report has been prepared to aid in determining the type, design and location of improvements to the existing facility and to evaluate the wetland effects, if any, associated with the alternatives for the proposed improvements. The purpose of this report is to evaluate the wetlands located within or adjacent to the project corridor for habitat type and degree of proposed effects. For the extent of the project, the majority of the improvements will occur within the existing FDOT right-of-way.

For engineering information and preliminary plans, please refer to the Preliminary Engineering Report prepared for this project under separate cover.



I - 75 PD&E Study
 from south of Fowler Avenue to south of CR 54
 Hillsborough and Pasco Counties
 WPI Seg. No: 408459 1 / FAP No: 0751 105 I

PROJECT LOCATION MAP

Figure 1-1

2.0 PROJECT DESCRIPTION

The PD&E Study addressed proposed improvements to I-75 from south of Fowler Avenue in Hillsborough County to south of SR 56 in Pasco County. The existing facility is typically a four-lane limited access highway. This Study evaluated six-lane and six-lane with auxiliary lanes typical section alternatives and a No-Build Alternative.

A Design Change Reevaluation of Work Program Item Segment No. 258736 1 was approved by the FHWA for the I-75 section from south of SR 56 to CR 54. The previous PD&E Study, approved by the FHWA on November 27, 2000, evaluated adding two lanes (one lane in each direction) to the existing roadway from south of SR 56 to north of SR 52. This Reevaluation Study evaluated design changes within a portion of this original Study.

In order to simplify the alternatives analysis, the I-75 project corridor was divided into the following study segments:

- Segment A – from south of Fowler Avenue to Fletcher Avenue
- Segment B – from Fletcher Avenue to 3,000 feet north of the Hillsborough River
- Segment C – from 3,000 feet north of the Hillsborough River to Bruce B. Downs Boulevard
- Segment D – from Bruce B. Downs Boulevard to the I-275 interchange
- Segment E – from the I-275 interchange to SR 56
- Segment F – from SR 56 to CR 54

All segments were evaluated to determine the effects of providing additional capacity to accommodate future traffic demand.

3.0 EXISTING ENVIRONMENTAL CONDITIONS

Natural/biological features and land use within the project area were analyzed using the 1999 Florida Land Use, Cover, Forms and Classification System (FLUCFCS) GIS data layer provided by the Southwest Florida Water Management District (SWFWMD). Wetlands (500 and 600 series) cover approximately one-third of the study area, more than any other land cover. Agricultural (210) and rangeland (320 and 330) occupy one-quarter of the surrounding land. Upland hardwood/conifer mixed forest (434) and pine flatwoods (411) cover another one-quarter of the project study area. The remaining 20 percent of land cover/uses are open land (190 and 260), developed and disturbed land (100 series and 740), and utilities (830). Developed land includes that for residential (low and medium density), commercial and services, extractive, and recreational uses.

Natural communities within the study area include shrub and brushland, upland hardwood/conifer mixed forest, pine flatwoods, and herbaceous, shrub, and forested wetlands. The shrub and brushland habitat is characterized by unforested shrubby areas with clumps of saw palmetto (*Serenoa repens*), gallberry (*Illex glabra*), winged sumac (*Rhus copallinum*), and persimmon (*Diospyros virginiana*), along with open pockets of grassy species. Pine flatwoods consist of scattered to dense pines (*Pinus* spp.) with an understory similar in composition to the shrub and brushland habitat. Upland hardwood/conifer mixed forests consist of a mix of pines and oaks (*Quercus* spp.), where neither hardwoods nor conifers achieve an overall 66 percent crown canopy dominance. Understory species in these mixed forests are commonly beautyberry (*Callicarpa americana*), saw palmetto, and small herbaceous species. Descriptions of the wetland habitats in the study corridor are provided in the following section.

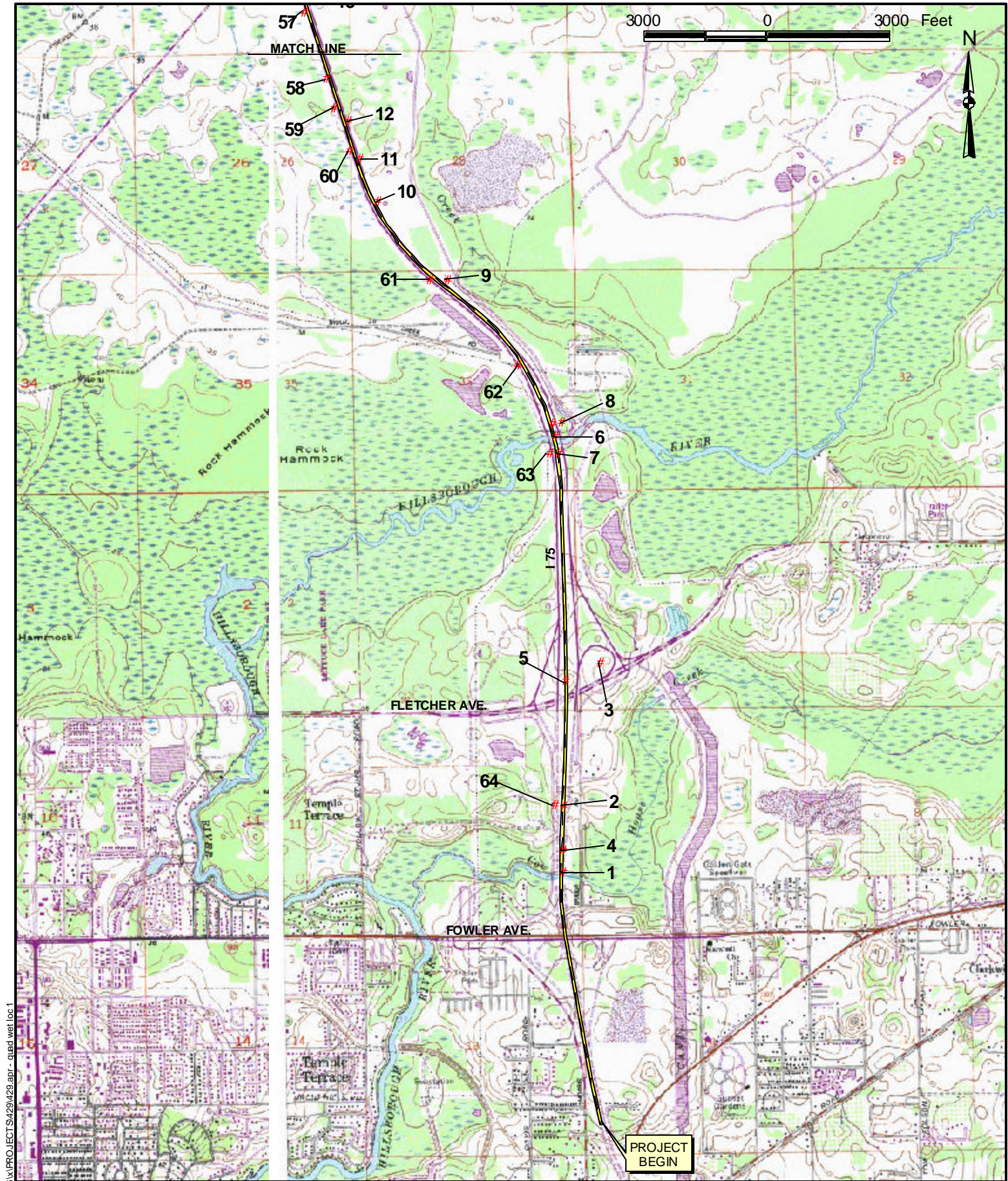
4.0 WETLANDS

4.1 METHODOLOGY

Wetlands within the study area were initially identified through review of mapping resources including the Natural Resource Conservation Service Soil Survey of Hillsborough County (1989) and Soil Survey of Pasco County (1982), National Wetlands Inventory (NWI) mapping, and year 2000 infrared aerial photography available from SWFWMD. For the purposes of wetland evaluation, the project study area included everything within the ROW as well as everything within 25 feet of the existing ROW. Wetlands were identified in the field on November 14 and 19, 2002, December 11, 19, and 20, 2002 and January 2, 2003 utilizing the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987). These wetland locations are shown in Figure 4-1. The wetlands were classified according to the United States Fish and Wildlife Service (USFWS) methodology (Cowardin et al., 1979).

Wetland effects were calculated by approximating the limits of the jurisdictional wetlands on field aerials. These lines were then digitized and polygons created for each identified wetland area within existing and proposed ROW. For preliminary evaluation purposes, a worst-case assumption was made that all wetlands within existing and proposed ROW would be affected. The exception to this worst-case scenario occurred where riverine systems were bridged, and at these locations, the typical bridge sections were utilized for calculating potential wetland effects. Additionally, sinkhole wetlands were fully avoided, and therefore, wetland effects were noted as zero.

For the purposes of this report, wetlands were grouped by type, resulting in seven categories. These categories include palustrine emergent marsh, permanent (PEM1H), palustrine scrub-shrub, seasonal (PSS1C), palustrine scrub-shrub/emergent, permanent (PSS1/3C/PEM1H), palustrine broad-leaved deciduous swamp, seasonal (PFO1C), palustrine needle-leaved deciduous swamp, seasonal (PFO2C), sinkhole wetlands, permanent (PUBH), and riverine lower perennial unconsolidated bottom, permanent (R2UBH). Representative wetland photographs are presented in Appendix A. Additionally, a Wetland Rapid Assessment Procedure (WRAP) was performed for each wetland type (Table 4-1). WRAP scores ranged from 0.89 (emergent marsh) to 0.51 (scrub-shrub/emergent marsh). The WRAP field data sheets are presented in Appendix B.



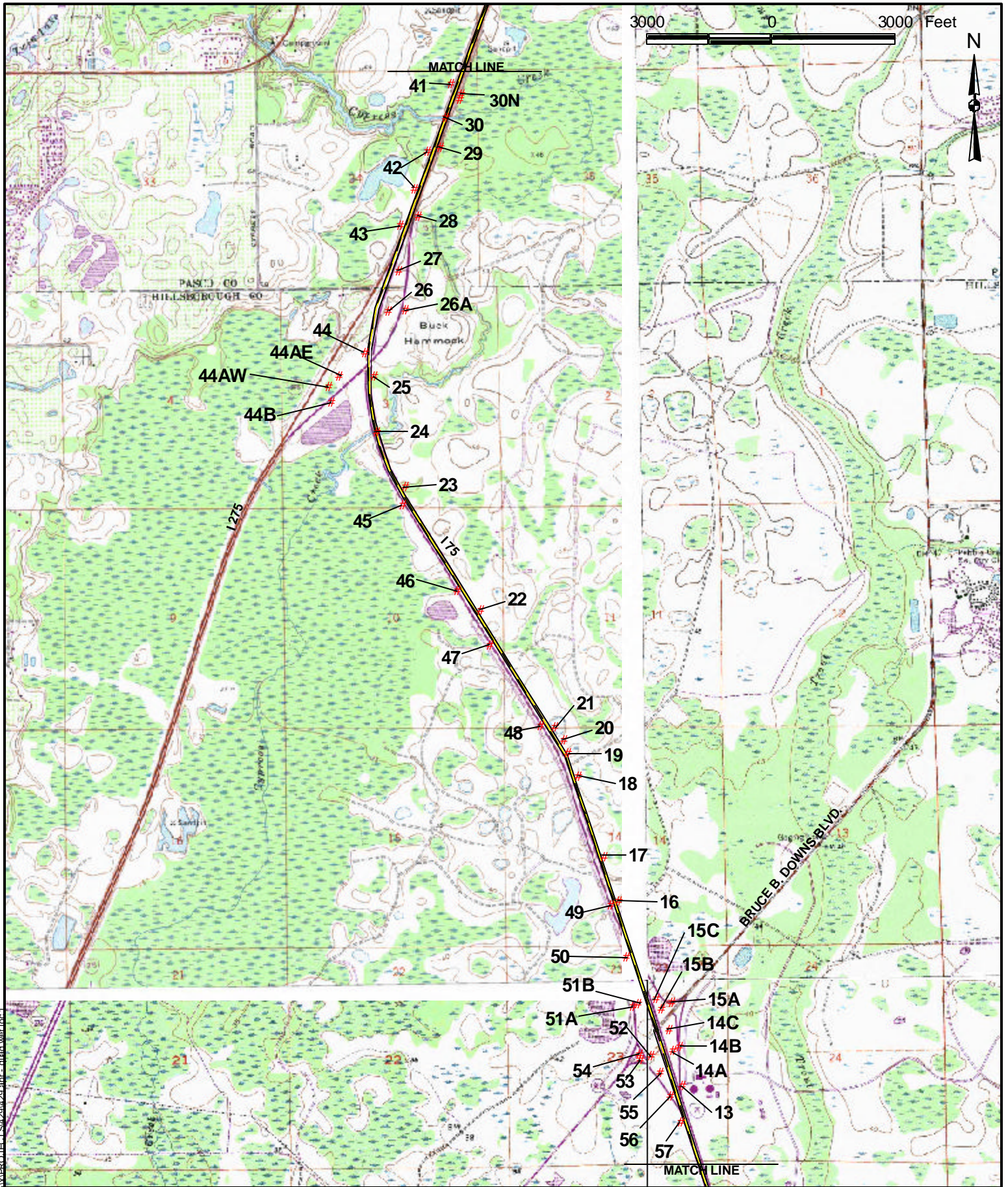
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WETLAND EVALUATION REPORT
 I-75 from South of Fowler Ave. to South of CR 54
 FDOT DISTRICT 7 PD&E STUDY
 Hillsborough and Pasco Counties, FL

WETLAND LOCATION MAP

Figure 4-1
 Page 1 of 3

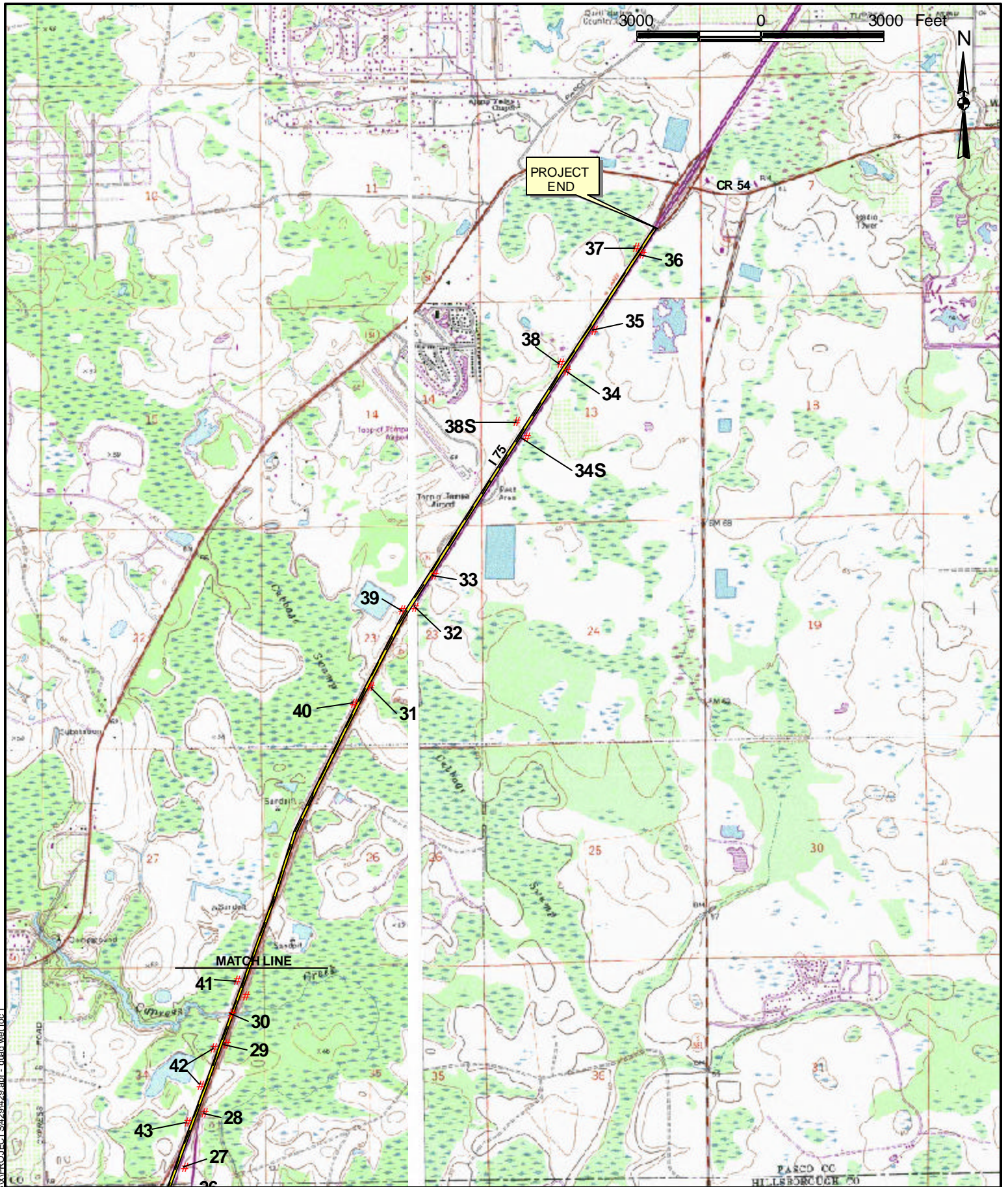


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WETLAND EVALUATION REPORT
 I-75 from South of Fowler Ave. to South of CR 54
 FDOT DISTRICT 7 PD&E STUDY
 Hillsborough and Pasco Counties, FL

WETLAND LOCATION MAP

Figure 4-1
Page 2 of 3



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WETLAND EVALUATION REPORT
 I-75 from South of Fowler Ave. to South of CR 54
 FDOT DISTRICT 7 PD&E STUDY
 Hillsborough and Pasco Counties, FL

WETLAND LOCATION MAP

Figure 4-1
 Page 3 of 3

Table 4-1. Wetland Types and WRAP Scores for I-75 from South of Fowler Ave. to South of CR 54.

| Wetland Type (NWI Code) | Wetland Type Description | Wetland Numbers | Representative WRAP Score |
|--------------------------------|---|---|----------------------------------|
| PEM1H | Palustrine Emergent Marsh, Permanent | 10,12,18,20,33,35,39,44AE | 0.89 |
| PSS1/3C | Palustrine Scrub-Shrub, Seasonal | 4,11,15A,15B,26A,27,44,54,55,62,63 | 0.71 |
| PSS1/3C/PEM1H | Palustrine Scrub-Shrub, Seasonal/Emergent Marsh, Permanent | 22,26,60 | 0.51 |
| PFO1C | Palustrine Broad-Leaved Deciduous Forested, Seasonal | 2,9,17,19,21,23,25,28,30N,31,32,40-42,44AW,44B,45,50,59,61,64 | 0.62 |
| PFO2C | Palustrine Needle-Leaved Deciduous Forested, Seasonal | 7,8,8A,13,14A,14B,14C,15C,16,29,34,34S,36,37,38N,38S,43,46-49,51A,51B,52,53,56-58 | 0.83 |
| PUBH | Palustrine Unconsolidate Bottom (Sinkhole), Permanent | 3,5 | 0.72 |
| R2UBH | Lower Perennial Riverine System, Unconsolidated Bottom, Permanent | 1,6,24,30 | 0.79 |

4.2 WETLAND TYPES WITHIN THE PROJECT STUDY AREA

Seventy-seven (77) wetlands have been identified within the project study area. These wetlands are located within and adjacent to the proposed ROW. Fifty-seven (57) wetlands exist within Hillsborough County, and 20 wetlands are located within Pasco County. Wetlands within the project area are comprised largely of palustrine forested systems, most of which are dominated by cypress (*Taxodium* spp.) or deciduous hardwoods such as red maple (*Acer rubrum*) and sweetgum (*Liquidambar styraciflua*). Other wetland types include palustrine emergent marsh and palustrine scrub-shrub wetlands dominated by Carolina willow (*Salix caroliniana*) and primrose willow (*Ludwigia peruviana*).

Potential involvement of OFW and Aquatic Preserves, pursuant to Florida Administrative Code (F.A.C.) 62-302.700 has also been investigated. Interstate 75 crosses riverine systems at Cowhouse Creek (a tributary of the Hillsborough River), the Hillsborough River, and Cypress Creek (two locations). All three riverine systems are classified as Class I waterbodies. The Hillsborough River and Cypress Creek are also designated as Outstanding Florida Waters (OFW). Interstate 75 does not cross or border any Aquatic Preserves.

4.2.1 Emergent Marshes

Eight (8) persistent emergent marshes with permanent hydrology (PEM1H) exist within the project study area. Most of them are fringed by scattered red maple and wax myrtle (*Myrica cerifera*), but some of the marshes make up the wetland fringe around forested cypress swamps. In general, the emergent marshes are dominated by maidencane (*Panicum hemitomon*) and broomsedge (*Andropogon virginicus*). Pickerelweed (*Pontederia cordata*), dog fennel (*Eupatorium capillifolium*), and various sedges (*Rhynchospora* sp. and *Carex* sp.) are common. These wetlands often contain scattered shrubs of wax myrtle and saltbush (*Baccharis angustifolia*), and small red maple trees. Generally, the emergent marshes within the project corridor contained 4 to 12 inches of standing water at the time of field visits.

4.2.2 Scrub-Shrub Wetlands

Eleven (11) scrub-shrub wetlands with broad-leaved deciduous and evergreen species and seasonal hydrology (PSS1/3C) are located within the project study area. Carolina willow, saltbush, primrose willow, and wax myrtle dominate these swamps. Elderberry (*Sambucus canadensis*) and red maple are common. These shrub swamps may also

contain scattered laurel oaks (*Quercus laurifolia*), American elm (*Ulmus americana*), or sweetgum. The groundcover species within these swamps consist mostly of broomsedge, sawgrass (*Cladium jamaicense*), broadleaf cattail (*Typha latifolia*), soft rush (*Juncus effusus*), Mexican seedbox (*Ludwigia octovalvis*), beaksedges (*Rhynchospora* spp.), and marsh pennywort (*Hydrocotyle umbellata*). Blackberry (*Rubus betulifolius*) is common along the fringes of the shrub wetlands. The water depth in these wetlands ranged from approximately 4 to 15 inches at the time of site visits.

4.2.3 Scrub-Shrub/Emergent Wetlands

Three (3) wetlands occur within the project study area which contain both seasonal scrub-shrub and permanent emergent marsh components (PSS1/3C/PEM1H). These generally exhibit a wide fringe of shrubby vegetation with an open water center containing emergent vegetation. The fringing shrubs are comprised of wax myrtle, Carolina willow, saltbush, and elderberry. The emergent marsh component is generally dominated by broadleaf cattail, rushes (*Juncus* spp.), red ludwigia (*Ludwigia repens*), primrose willow, and broomsedge. Arrowhead (*Sagittaria* spp.) ranges from occasional to dominant in these emergent marsh areas. Pickerelweed and smartweed (*Polygonum hirsutum*) are found occasionally in these systems as well. At the time of site visits, standing water at the wetland edges was approximately 6 to 8 inches in depth, but appeared much greater in the center of the wetlands.

4.2.4 Forested Broad-Leaved Deciduous

Twenty-one (21) broad-leaved deciduous forested (PFO1C) seasonal wetland systems exist within the project study area. These hardwood swamps are characterized by a dominance of red maple and sweetgum, but laurel oaks and sabal palms (*Sabal palmetto*) are also common. One of these wetlands is a tupelo (*Nyssa sylvatica* var. *biflora*) dominated swamp. These swamps may also contain occasional red bay (*Persea borbonia*), American elm, or bald cypress (*Taxodium distichum*). The shrub layer often contains Carolina willow and wax myrtles. The groundcover in these swamps is dominated primarily by swamp fern (*Blechnum serrulatum*), with common fireflag (*Thalia geniculata*), maidencane, cinnamon fern (*Osmunda cinnamomea*), arrowhead and narrowfruit horned beaksedge (*Rhynchospora inundata*). Occasionally, sawgrass and broadleaf cattail are present. Most of these systems contained 4 to 10 inches of standing water at the time of site visits. Some wetlands are ditched or contain meandering ephemeral flowways.

4.2.5 Forested Needle-Leaved Deciduous

Twenty-eight (28) seasonally flooded cypress swamps (PFO2C) are located within the project study area. These wetlands are dominated by bald cypress and often contain a fringe of red maples, although sometimes the maples are scattered throughout. The subcanopy commonly consists of laurel oaks, pop ash (*Fraxinus caroliniana*), and sabal palms with occasional American elm. The shrub layer is generally composed of wax myrtle, Carolina willow, elderberry, and primrose willow, with occasional silverling (*Baccharis glomeruliflora*). The majority of the groundcover, when present, is swamp fern, with scattered fireflag, broomsedge, cinnamon fern, and smartweed. The standing water in the cypress swamps is deeper than in the hardwood swamps, with depths reaching 10 inches to greater than 20 inches, although inundation is sporadic in some swamps.

4.2.6 Unconsolidated Bottom Wetlands

Two (2) sinkhole wetlands (PUBH - palustrine unconsolidated bottom, permanent hydrology) are present within the project ROW. Both are located just north of the bridges spanning Fletcher Avenue. These sinkholes currently are surrounded mainly by large laurel oaks, with occasional live oak (*Quercus virginiana*), red maple, and bald cypress. Within the sinkhole wetlands themselves, Carolina willow and primrose willow are dominant, with scattered common buttonbush (*Cephalanthus occidentalis*). At the wetland edge, there exist low densities of red ludwigia, carpetgrass (*Axonopus fissifolius*), and smartweed. Water hyacinth (*Eichhornia crassipes*) and cattail are also common on the water surface.

4.2.7 Riverine Wetlands

Interstate 75 crosses 3 riverine systems at a total of four locations: at Cowhouse Creek (a tributary of the Hillsborough River), the Hillsborough River, and Cypress Creek (two locations). All three riverine systems are classified as Class I waterbodies. Two waterbodies, the Hillsborough River and Cypress Creek, are also designated as OFWs.

These riverine systems (R2UBH - lower perennial riverine unconsolidated bottom, permanent hydrology) generally are bordered by a forested floodplain swamp, with emergent and floating vegetation present in places with a slower current. The forested component is composed of a mixture of species including American elm, laurel oak, red maple, bald cypress, and sweetgum. Cowhouse Creek also contains a significant amount of sugarberry (*Celtis laevigata*) and swamp dogwood (*Cornus foemina*) in the

subcanopy. The groundcover in these riverine systems is made up of several vine species including trumpet creeper (*Campsis radicans*), greenbrier (*Smilax* sp.), and peppervine (*Ampelopsis arborea*). Marsh pennywort is also common near the water's edge. The aquatic vegetation includes maidencane, water hyacinth, pickerelweed, and torpedograss (*Panicum repens*). At the time of field visits, no perceptible stream flow was observed at Cowhouse Creek, but water was flowing fairly rapidly at the Cypress Creek and Hillsborough Creek crossings.

4.3 POTENTIAL WETLAND EFFECTS

The project team has studied various options to reduce wetland effects to the maximum extent practicable. Options considered include various typical section alternatives, alignment alternatives, and minimization of additional ROW acquisition. The build alternatives under consideration entail wetland effects. However, there is no opportunity to completely avoid effects to wetlands.

Potential wetland effects for the proposed alignment options are summarized in Table 4-2, where effects are provided for each wetland individually, and in Table 4-3 where effects are totaled for each wetland type. The main difference between the two options lies within the I-75 and I-275 interchange. Option 1 is anticipated to affect approximately 81.3 acres of wetlands. Option 3 is anticipated to affect approximately 83.9 acres of wetlands. Forested systems, hardwood and cypress swamps, constitute three-fourths of the potential wetland effects. Most of the remaining one-fourth of wetland effects is to shrub and herbaceous wetlands. Very little effect will occur to riverine systems. The vast majority of direct wetland effects resulting from the proposed improvements are within the existing ROW, involving previously disturbed, lower quality wetland fringes.

Table 4-2. Approximate Wetland Impacts for I-75 from South of E. Fowler Ave. to South of CR 54.

| WETLAND NUMBER | NW I CLASSIFICATION | TOTAL ACREAGE WITHIN EXISTING ROW | ESTIMATED WETLAND IMPACT (ACRES) | | | | COMMENTS |
|----------------|---------------------|-----------------------------------|----------------------------------|---------------------|---------------------|---------------------|------------------------------------|
| | | | OPTION 1 | | OPTION 3 | | |
| | | | WITHIN EXISTING ROW | WITHIN PROPOSED ROW | WITHIN EXISTING ROW | WITHIN PROPOSED ROW | |
| 1 | R2US | 1.11 | 0.15 | | 0.15 | | Cowhouse Creek |
| 2 | PFO1 | 1.75 | 1.75 | | 1.75 | | |
| 3 | PUB | 0.99 | | | | | sinkhole wetland |
| 4 | PSS | 1.28 | 1.28 | | 1.28 | | |
| 5 | PUB | 0.94 | | | | | sinkhole wetland |
| 6 | R2US | 1.55 | 0.20 | | 0.20 | | Hillsborough River |
| 7 | PFO2 | 1.02 | 1.02 | | 1.02 | | |
| 8 | PFO2 | 0.51 | 0.51 | | 0.51 | | |
| 8A | PFO2 | 1.36 | 1.36 | | 1.36 | | |
| 9 | PFO1 | 0.08 | 0.08 | | 0.08 | | |
| 10 | PEM | 0.59 | 0.59 | | 0.59 | | |
| 11 | PSS | 0.51 | 0.51 | | 0.51 | | |
| 12 | PEM | 0.27 | 0.27 | | 0.27 | | |
| 13 | PFO2 | 0.39 | 0.39 | | 0.39 | | |
| 14A | PFO2 | 1.98 | 1.98 | | 1.98 | | |
| 14B | PFO2 | 0.62 | 0.62 | | 0.62 | | |
| 14C | PFO2 | 3.69 | 3.69 | | 3.69 | | |
| 15A | PSS | 0.09 | 0.09 | | 0.09 | | |
| 15B | PSS | 0.81 | 0.81 | | 0.81 | | |
| 15C | PFO2 | 0.37 | 0.37 | | 0.37 | | |
| 16 | PFO2 | 0.24 | 0.24 | | 0.24 | | |
| 17 | PFO1 | 0.72 | 0.72 | | 0.72 | | |
| 18 | PEM | 0.14 | 0.14 | | 0.14 | | |
| 19 | PFO1 | 0.28 | 0.28 | | 0.28 | | |
| 20 | PEM | 0.00 | | | | | wetland evaluated, but outside ROW |
| 21 | PFO1 | 0.30 | 0.30 | | 0.30 | | |
| 22 | PSS/PEM | 0.57 | 0.57 | | 0.57 | | |
| 23 | PFO1 | 0.24 | 0.24 | | 0.24 | | |
| 24 | R2US | 0.70 | 0.06 | | 0.08 | 0.03 | Cypress Creek south crossing |
| 25 | PFO1 | 3.17 | 3.17 | | 3.17 | 1.65 | |
| 26 | PSS/PEM | 6.92 | 6.92 | | 6.92 | | |
| 26A | PSS | 0.00 | | | | | wetland evaluated, but outside ROW |
| 27 | PSS | 1.31 | 1.31 | | 1.31 | | |
| 28 | PFO1 | 1.25 | 1.25 | | 1.25 | 0.16 | |
| 29 | PFO2 | 0.47 | 0.47 | | 0.47 | 0.51 | |
| 30 | R2US | 0.67 | 0.11 | | 0.21 | 0.07 | Cypress Creek north crossing |
| 30N | PFO1 | 1.06 | 1.06 | | 1.06 | 0.02 | |
| 31 | PFO1 | 5.21 | 5.21 | 0.69 | 5.21 | 0.69 | |
| 32 | PFO1 | 0.00 | | | | | wetland evaluated, but outside ROW |
| 33 | PEM | 0.00 | | | | | wetland evaluated, but outside ROW |
| 34 | PFO2 | 0.00 | | | | | wetland evaluated, but outside ROW |
| 34S | PFO2 | 1.04 | 1.04 | 1.44 | 1.04 | 1.44 | |
| 35 | PEM | 0.00 | | | | | wetland evaluated, but outside ROW |
| 36 | PFO2 | 0.58 | 0.58 | | 0.58 | | |
| 37 | PFO2 | 1.04 | 1.04 | | 1.04 | | |
| 38N | PFO2/POW | 1.04 | 1.04 | | 1.04 | | |
| 38S | PFO2/POW | 0.67 | 0.67 | | 0.67 | | |
| 39 | PEM | 0.00 | | | | | wetland evaluated, but outside ROW |
| 40 | PFO1 | 1.18 | 1.18 | | 1.18 | | |
| 41 | PFO1 | 0.25 | 0.25 | 0.37 | 0.25 | 0.37 | |
| 42 | PFO1/PEM | 0.79 | 0.79 | 0.10 | 0.79 | 0.10 | |
| 43 | PFO2 | 0.49 | 0.49 | 0.01 | 0.49 | 0.01 | |
| 44 | PSS | 0.80 | 0.80 | | 0.80 | | |
| 44AE | PEM | 2.73 | 2.73 | | 2.73 | | |
| 44AW | PFO1/2 | 10.52 | 10.52 | | 10.52 | | |
| 44B | PFO1 | 1.18 | 1.18 | | 1.18 | | |
| 45 | PFO1 | 1.19 | 1.19 | | 1.19 | | |
| 46 | PFO2 | 1.56 | 1.56 | | 1.56 | | |
| 47 | PFO2 | 1.09 | 1.09 | | 1.09 | | |
| 48 | PFO2 | 2.75 | 2.75 | | 2.75 | | |
| 49 | PFO2 | 0.38 | 0.38 | | 0.38 | | |
| 50 | PFO1/2 | 0.91 | 0.91 | | 0.91 | | new mitigation site |
| 51A | PFO2 | 0.46 | 0.46 | | 0.46 | | |
| 51B | PFO2/1 | 1.10 | 1.10 | | 1.10 | | |

Table 4-2. Approximate Wetland Impacts for I-75 from South of E. Fowler Ave. to South of CR 54.

| WETLAND NUMBER | NWJ CLASSIFICATION | TOTAL ACREAGE WITHIN EXISTING ROW | ESTIMATED WETLAND IMPACT (ACRES) | | | | COMMENTS |
|--|--------------------|-----------------------------------|----------------------------------|---------------------|---------------------|---------------------|--|
| | | | OPTION 1 | | OPTION 3 | | |
| | | | WITHIN EXISTING ROW | WITHIN PROPOSED ROW | WITHIN EXISTING ROW | WITHIN PROPOSED ROW | |
| 52 | PFO2 | 1.18 | 1.18 | | 1.18 | | |
| 53 | PFO2 | 0.70 | 0.70 | | 0.70 | | |
| 54 | PSS | 0.06 | 0.06 | | 0.06 | | |
| 55 | PSS | 0.69 | 0.69 | | 0.69 | | |
| 56 | PFO2 | 0.61 | 0.61 | | 0.61 | | excavated stormwater pond on north end |
| 57 | PFO2 | 0.44 | 0.44 | | 0.44 | | |
| 58 | PFO2 | 0.71 | 0.71 | | 0.71 | | |
| 59 | PFO1 | 0.20 | 0.20 | | 0.20 | | |
| 60 | PSS/PEM | 2.56 | 2.56 | | 2.56 | | |
| 61 | PFO1 | 0.59 | 0.59 | | 0.59 | | |
| 62 | PSS | 0.38 | 0.38 | | 0.38 | | |
| 63 | PSS | 0.28 | 0.28 | | 0.28 | | |
| 64 | PFO1 | 0.84 | 0.84 | | 0.84 | | |
| TOTAL ACREAGE | | | 78.68 | 2.61 | 78.80 | 5.06 | |
| TOTAL APPROXIMATE ACRES (Rounded to the nearest tenth) | | | 78.70 | 2.60 | 78.80 | 5.10 | |
| Grand Total (Approximate Acres) | | | 81.30 | | 83.90 | | |
| PD&E Segment | | | 65.24 | | 67.15 | | |
| Reevaluation Segment | | | 16.06 | | 16.75 | | |

5.0 CONCLUSIONS

Based upon the information detailed in this assessment and the Preliminary Engineering Report, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

Wetland effects resulting from the construction of this project will be mitigated pursuant to Chapter 373.4137 F.S. to satisfy all mitigation requirements of Part IV. Chapter 373, F.S. and 33 U.S.C. 1344. Funds will be transferred from FDOT to the Florida Department of Environmental Protection (FDEP) to finance a wetland mitigation program, at the current cost of \$86,149 (FY 2003/2004) per acre of impact. On-site mitigation in the form of upland and/or wetland preservation, wetland restoration, enhancement, and creation may also be an available option. These and other mitigation options will be explored further during the final design phase of the project. At that time, all appropriate regulatory agencies will be contacted to discuss required mitigation and to perform on-site investigations if necessary.

Three agencies regulate wetlands within the project study area: the U.S. Army Corps of Engineers (USACE), SWFWMD, and the Environmental Protection Commission of Hillsborough County (EPCHC). Other agencies, including the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the FDEP, and the Florida Fish and Wildlife Conservation Commission review and comment on wetland permitting. Any wetland effects associated with this project will be permitted through the following agencies:

| | |
|---|--------|
| Environmental Resource Permit | SWFWMD |
| Section 404, Dredge and Fill Permit | USACE |
| Wetland Impact Authorization | EPCHC |

6.0 REFERENCES

- Carlisle, V. W. et al. 1995. Hydric Soils of Florida Handbook. Florida Association of Environmental Soil Scientists, Gainesville, Florida. 409 pp.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services. Technical Publication FWS/OBS-79/31. 131 pp.
- Environmental Laboratory. 1987. U.S. Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Federal Interagency Committee for Wetland Delineation. 1987. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. US Army Corps of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Cooperative Technical Publication. 76 pp.
- Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System, Second Edition. 91 pp.
- Miller, R.E., Jr., and B. Gunsalus. 1997. Wetland Rapid Assessment Procedure (WRAP). South Florida Water Management District Technical Publication REG-001. 36pp.
- U.S. Department of Agriculture. 1982. Soil Survey of Pasco County Area, Florida. Soil Conservation Service, U.S. Government Printing Office. 231 pp.
- U.S. Department of Agriculture. 1989. Soil Survey of Hillsborough County Area, Florida. Soil Conservation Service, U.S. Government Printing Office. 185 pp.
- Wunderlin, R. P. 1998. Guide to the Vascular Plants of Florida. University Press of Florida. Tampa, Florida.