FINAL ENGINEERING AND ENVIRONMENTAL TECHNICAL COMPENDIUM

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY WESTSHORE REGIONAL MULTIMODAL CENTER

WPI Segment No: 415348-1

Hillsborough County, Florida

Prepared for:



Florida Department of Transportation 11201 North McKinley Drive Tampa, Florida 33612

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Prepared by:

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT), District Seven, conducted a Project Development and Environment (PD&E) study to determine the configuration, benefits, costs, and impacts of developing and operating a Westshore Regional Multimodal Center (WRMC) within the Westshore Business District area of Tampa, Florida.

The term "multimodal" facility is generally applied to a facility that serves multiple transit operators and/or modes, such as combined bus and rail stations. For purposes of this study, the term "multimodal" means not only multiple transit modes and operators, but also a high degree of connectivity and interchange between modes.

A well-designed multimodal facility will facilitate transfers and create a more "seamless" transit network. Transfers are optimized by minimizing distances between boarding and alighting points and by providing clearly marked routes for transfers and information. Although it is difficult to predict exactly how much intermodal transfers will increase by co-locating transit functions, it is anticipated that transfers and ridership will increase if the system is easy to use.

A multimodal transportation facility, particularly one offering regional and intercity services, can become a major gateway to the Westshore Business District area. In addition, it creates the first impression of the surrounding community to arriving passengers. Historically, major transportation centers have been signature civic buildings and public spaces that celebrate arrival, the city, and mobility.

The WRMC will be a central hub for public and private local and regional transportation services, including: rail, buses, taxis, hotel shuttles, bicyclists and pedestrians. Plans for the multimodal center may include a park-and-ride facility, bus layover zone, auto drop-off and pick-up facilities, operations control center, operator lounges, police substation, convenience store (as a part of the WRMC joint development effort), public restrooms, and a customer service center that could provide information about local and regional public and private transportation services and to purchase transit passes.

1.1 PURPOSE

The purpose of the study was to provide documented environmental and engineering analyses to assist FDOT in reaching a decision on the location, and conceptual design of the proposed WRMC and associated necessary improvements in order to accommodate future multimodal services in the Tampa Bay region. It is envisioned that the WRMC will provide the opportunity for seamless connections between local and regional transportation systems including airports, seaports, highways, and transit services, such as premium and intercity bus service and future rail systems. As a result, the center will enhance existing and planned transportation systems in the region. Specifically, the WRMC is intended to facilitate better transportation linkages between Hillsborough and Pinellas counties along with the surrounding areas, thereby maximizing the

potential effectiveness of transportation systems in the Tampa Bay region. The WRMC may include retail space in and around the facility. This PD&E study also satisfies the requirements of FDOT and follows the process outlined in the FDOT *Project Development and Environment Manual*, Part 1 Chapter 10: Non-Federal Projects.

This PD&E study documented the need for the improvements and presented the procedures utilized to develop and evaluate the various WRMC site alternatives. Information relating to the engineering, environmental, and social characteristics essential for development of WRMC site alternatives and analytical decisions was collected. Design criteria were established and preliminary alternatives were developed for the four potential sites evaluated in previous planning and feasibility efforts. The comparison of the WRMC site alternatives was based on a variety of parameters utilizing a matrix format. This process identified the Recommended Alternative that minimizes the socio-cultural, economic, natural, and physical impacts while providing the necessary future transportation improvements. The study also solicited input from the community and users of the facility. The design year for the analysis is 2035.

1.2 EXISTING AND PROPOSED IMPROVEMENTS

The "Westshore Multimodal Study and Strategic Transportation Plan", sponsored by the Hillsborough County Metropolitan Planning Organization (HCMPO), FDOT, and Tampa Bay Area Regional Transit Authority (TBARTA), was finalized in February 2012. The initial purpose of the study was to identify a multimodal site(s) within the core Westshore District area that would provide connectivity for all existing and future planned modes of transportation in the Tampa Bay region and to improve the quality of the intermodal passenger connection in Tampa Bay so that regional mobility and accessibility by means other than personal motor vehicles are significantly increased. The WRMC would facilitate improved connections between Hillsborough and Pinellas Counties maximizing the effectiveness of transit in both counties, and would enhance the existing and planned transportation system in the entire Tampa Bay region. The site evaluation and screening process involved a quantitative analysis, as well as a qualitative assessment of each of ten candidate sites. Based on the study evaluation process and community coordination, four sites (A, C, D and S) were identified as viable locations for the future WRMC (see **Figure 1**).

A description of each of the four sites previously identified as viable locations for the future WRMC is provided below:

• **Site A:** The proposed WRMC would be located in the northeast corner of the WestShore Plaza shopping mall, which is located south of I-275 and west of Westshore Boulevard. The area is predominantly commercial with numerous office spaces and restaurants. The mall also abuts the Westshore Palms, North Bon Air, and Beach Park neighborhoods. The WRMC would be located in the area where an existing Hillsborough Area Regional Transit (HART) transfer center and a parking garage are currently situated. It is assumed the parking garage would be replaced. It is important to note that this site could not provide a direct connection to the proposed 1-275 transit platform since the site is located too far to the west of the station.

.evA semiH Location Map Dale Mabry Hwy. Recommended Site - C 9 Acres Site - D 9 Acres Westshore Regional Multimodal Center PD&E Study A netterneM I-275 Transit Platform 60 Trask St. **Tampa International Airport** Westshore Blvd. Site - S 9 Acres Site - A 9 Acres Occident St. Spruce St. 618 Hoover Blvd. 60 15 09A La Salle St.

Figure 1: Project Location Map

- **Site C** (**Recommended Site**): The WRMC would be a part of a redevelopment of the strip of parcels north of I-275 between Trask Street and Manhattan Avenue. Site C would utilize the parcel where Charley's Restaurant and the Double Tree Hotel are currently located. The WRMC and the future I-275 transit platform could be connected by an elevated pedestrian walkway at a later time.
- **Site D:** This site is located between Trask Street and Manhattan Avenue along Cypress Street. It uses the Jefferson High School front parking area for the placement of the WRMC. To replace parking being taken from the school, a parking garage would be built on the east side (Manhattan Avenue and Cypress Street) of the school where currently a surface parking lot exists. The front of the school would be relocated to the east side of the building facing the adjoining neighborhood. The WRMC and the future I-275 transit platform could be connected by an elevated pedestrian walkway. The pedestrian walkway could be constructed over or adjacent to the existing Double Tree Hotel at a later time.
- **Site S:** This site would utilize the parking garages on the west side of Trask Street behind the Austin Property buildings. The WRMC would be located at the corner of Trask Street and Cypress Street. The WRMC and the future I-275 transit platform could be connected at a later time, by an elevated pedestrian walkway located on the west side of Trask Street.

The *Tampa International Airport/Westshore Multimodal Center Technical Feasibility Study* was completed in May 2014, which determined potential Automated People Mover alignment alternatives and reinforced the feasibility of the four potential WRMC sites for future connection to the proposed Tampa International Airport (TIA) Consolidated Rental Car Facility (ConRAC).

For the purposes of this PD&E study, Site C is the Recommended Site. The No-Build Alternative involves not constructing any of the four viable sites. The No-Build or No-Action Alternative remained a valid alternative throughout the PD&E phase including the public hearing and the final selection process. All advantages and disadvantages of this option were considered.

In order to evaluate the four sites and the No-Build Alternative, a qualitative and quantitative evaluation matrix (**Table 1**) was prepared using screening criteria from a multitude of categories including socio-cultural, economic, natural, and physical environmental factors and costs (design, right-of-way [ROW], construction, and construction engineering inspection). The matrix data was developed utilizing raster-based aerial photography depicting the proposed ROW needs for each site. More details on the anticipated engineering and environmental effects are documented in the *Noise Analysis Screening Technical Memorandum* (June 2014), and *Cultural Resource Assessment Survey Technical Memorandum* (June 2014). The traffic analysis is documented in the *Traffic Technical Memorandum* (June 2014).

Table 1: Evaluation Matrix

Westshore Regional Multimodal Center Evaluation Matrix	No-Build	Site A	Site C	Site D	Site S	
Right-of-Way Effects	Right-of-Way Effects					
Number of Parcels	0	2	1	1	6	
Effects to Natural, Environmental, Social a	Effects to Natural, Environmental, Social and Physical Resources					
Species/Habitat	None	Minimal	Minimal	Minimal	Minimal	
Potential Contamination Sites	0	0	1	0	0	
Wetlands	None	Minimal	Minimal	Minimal	Minimal	
Archaeological and Historic Sites	0	0	0	0	0	
Potential Noise Sensitive Sites	0	0	1	11	2	
Community Services	0	0	1	1	1	
Bicycles and Pedestrians	None	Minimal	Minimal	Minimal	Minimal	
Community Cohesion	None	None	None	Significant	Minimal	
Existing Business Community	None	Minimal	Minimal	Minimal	Significant	
Viability of Site (Poor, Fair, Good)						
Proximity to I-275 Transit Platform	N/A	Poor	Good	Poor	Poor	
Potential for Connection to Airport	N/A	Fair	Good	Poor	Fair	
Potential for Transit Oriented Development	N/A	Poor	Good	Poor	Fair	
Traffic Effects	N/A	Poor	Fair	Fair	Fair	
Site Entrance/Exit	N/A	Poor	Good	Good	Fair	
Bicycle Access	N/A	Poor	Good	Good	Good	
Pedestrian Access	N/A	Poor	Good	Good	Good	
Site Configuration	N/A	Poor	Good	Fair	Fair	
Future Expansion Potential	N/A	Poor	Good	Poor	Poor	
Estimated Total Cost (Year 2025 Cost)						
Total Cost Including R/W and Construction	\$0		\$109 -	\$127 Million		

Screening Criteria

This section of the report outlines the screening process used to identify the recommended site for the WRMC in the Westshore Business District area. For the purposes of this evaluation, these guidelines were summarized into four (4) main categories: ROW Impacts, Effects to Natural, Environmental, Social and Physical Resources; Viability of Site; and Estimated Total Cost.

Number of Parcels – The actual number of parcels directly impacted.

Effects to Natural, Environmental, Social and Physical Resources Involvement – The effect on endangered species, potential contamination sites, wetlands, archaeological and historic sites, noise sensitive sites, community services, bicycle and pedestrian facilities, community cohesion, and the existing business community.

Viability of Site – Guidelines for the "Viability of Site" have been developed for the evaluation of each of the viable WRMC sites using the following criteria:

- **Proximity to 1-275 Transit Platform** Site provides easy access to the I-275 platform. This is a critical evaluation criterion since accommodations for the transit platform are currently being incorporated into the I-275 expansion project.
- **Potential for Connection to Airport** The WRMC is expected to provide users a connection between the TIA and the Tampa Bay Area via a regional and local transit network.
- **Potential for Transit Oriented Development** Potential for the site to enhance existing mixed-use development (shopping, businesses, restaurants, residential, etc.) or have the potential to support future mixed-use redevelopment of the area surrounding the site.
- **Traffic Effects** The site's impacts on roadway capacity, level of service and safety.
- **Entrance/Exit** The site will accommodate separate inbound and outbound traffic entrances in accordance with the access policies of the adjacent roadway.
- **Bicycle Access** The site allows ease of direct access for bicyclists from existing and proposed bikeway paths and sidewalks.
- **Pedestrian Access** The site allows ease of direct access for pedestrians from existing and proposed pedestrian trails, paths and sidewalks.
- **Site Configuration** Site has the potential to serve as a regional intermodal passenger terminal for all forms of regional and local transportation systems. Both size and shape of the site are considered.
- **Future Expansions Potential** Site is large enough to accommodate expansion of facilities and parking as ridership grows.

Estimated Total Cost – The cost estimate considers construction of the WRMC, a future transit platform, ROW, Design, and Construction Engineering Inspection (CEI). These costs will be included in the final State Environmental Impact Report and support documentation.

Site Screening Process

Methodology

Each site was given a rating for each criterion or category. The ratings were the result of both qualitative and quantitative analysis. In some instances, the results generated by one site were compared with the results from another. This comparative analysis yielded a relational rating among sites for one or more evaluation factors.

The following four (4) rankings were used: Good, Fair, Poor and N/A:

- "Good" Excellent performance, or better than other sites;
- "Fair" Reasonable performance, or same as other sites;
- "Poor" Low performance, or worse than other sites;
- "N/A" The No-Build was given a ranking of Not Applicable (N/A).

In the end, the consideration of all factors was used to identify which site should be carried forward as the recommended site for the WRMC and which sites should be eliminated from further consideration.

Recommendation

The Evaluation Matrix (Table 1) shows the outcome of the evaluation of the four sites and the No-Build Alternative for ROW Effects; Natural, Environmental, Social and Physical Resources; Viability of Site, and Estimated Total Cost. Based upon the results of the evaluation, Site C is the recommended site for the location of the WRMC. The primary factors that affected the selection of Site C as the Recommended Alternative are:

- Parcels Impacts Site C includes one (1) parcel along with Site D. Placing the WRMC at Site S would require the purchase of six (6) parcels.
- Effects to Natural, Environmental, Social and Physical Resource Involvement The information on the matrix reflects the outcome of the environment documentation outline in the reports attached to this document.
- The proximity to the I-275 transit platform An elevated pedestrian walkway, from the transit platform in the median of I-275, would extend northward to allow direct access to the WRMC at Site C. Site A would have no direct access to the platform. Sites D and S exceed the suggested guiding design criteria to limit passenger walking distance between the I-275 transit platform and the WRMC.
- The potential for future expansion Site C is large enough to accommodate expansion of facilities and parking as ridership grows. Sites A, D and S will likely not be able to accommodate future expansion due to parcel shape, size and location.
- The effects to the existing business community the effects are expected to be minimal with Site C.
- Community Cohesion Site C does not bisect the community, whereas Sites D and S could.

- **Potential for Connection to Airport** The WRMC at Site C could provide premium bus service to and from TIA in the near term and rail or automated people mover service in the future. Airport service from Sites A and S would be limited to only providing premium bus service due to their location. Likewise, airport service may be limited at Site D since there are several schools in close proximity to the site.
- **Site Configuration** Sites A, D and S are situated on properties that are oddly shaped and do not provide for good site design to accommodate a station and parking facilities layout as well as access to any future rail connection. Site C would provide logical site layout providing passengers bus platforms while anticipating possible future implementation of rail service.
- Potential for Transit Oriented Development Development of Site C as a multimodal center may spur development for retail services that supports the WRMC. Likewise, Site C may also spark transit orient development opportunities since there are schools within walking distance of the site. Sites A and S are already located within an area which largely consist of retail stores, businesses, restaurants and hotels. It is doubtful there could be any economic development opportunities on Site D due to the close proximity of the local schools.
- Traffic Effects Sites C, D, and S will have direct access to local streets. There may be a need to improve various intersections to mitigate any possible traffic impacts generated by the WRMC. The WRMC at Site A may disrupt mall operations since it has multi-level access and circulation. It would also require improvements to the intersection of Gray Street and Westshore Boulevard.
- Entrance/Exit Sites C and D can accommodate separate, full-access entrances and exits from each site (Cypress Street). Access for Site S may be limited since entrance/exit access would be from a local street adjacent to local schools (Trask Street). Site A has multi-level access and circulation and as noted above may cause operational challenge at the mall.
- **Bicycle and Pedestrian Access** With the exception of Site A, the remaining sites provide direct access to existing and proposed pedestrian trails, bikeways paths and sidewalks. Site A, being in an existing mall location within a large parking lot, with additional outparcels, includes conflicts with other traffic patterns.

2.0 LAND USE CHANGES

Existing Land Use

The project is within the City of Tampa in Hillsborough County. The project area encompasses the Westshore Business District and neighborhoods. Also, the Westshore Mall is located south of I-275 and the International Plaza and the TIA are located north of Spruce Street/Boy Scout Boulevard.

A review of the City of Tampa Existing Land Use Map (**Figure 2**), in addition to recent field surveys, indicates that the existing land use in the project area consists of mostly light commercial, residential (single family and multi-family), educational, and light industrial.

Future Land Use

A review of the City of Tampa Adopted 2025 Future Land Use Map reveals that the area will consist of mostly regional mixed use, public/semi public, residential, and municipal airport compatibility (**Figure 3**).

Changes in Land Use Patterns

The land use impacts associated with the proposed WRMC Site C are none. The site is consistent with future land use, with an increase in Transit Oriented Development (TOD). TOD is a mixed-use residential and commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership. A TOD neighborhood typically has a center with a transit station or stop (train station, metro station, tram stop, or bus stop), surrounded by relatively high-density development with progressively lower-density development spreading outward from the center. TODs generally are located within a radius of one-quarter to one-half mile from a transit stop, as this is considered to be an appropriate scale for walking pedestrians.

3.0 COMMUNITY SERVICES

Community services typically serve the needs of the surrounding area and provide a focal point for adjacent neighborhoods and communities. Community services include churches, cemeteries, schools, parks, recreational facilities, and public buildings and facilities. There are no cultural centers, parks, recreational facilities, fire stations, or medical facilities in the vicinity. See **Figure 4** for Community Services in the vicinity of WRMC Site C.

Churches and Schools

There is one church and one school in the vicinity:

- Jefferson High School, 4401 West Cypress Street
- Greater Friendship Missionary Baptist Church, 4301 West Cypress Street

The WRMC Site C will have no impact to these community services and facilities.

4.0 BICYCLES AND PEDESTRIANS

A field review of the project area identified one shared-use path along the north side of I-275 from Church Avenue to Lois Avenue. Sidewalks are located along all of the major streets within the study area: Westshore Boulevard, Cypress Street, Lois Avenue, as well as along Manhattan Avenue and the east side of Trask Street. Crosswalks are located at the Cypress Street intersections with Westshore Boulevard and Lois Avenue.

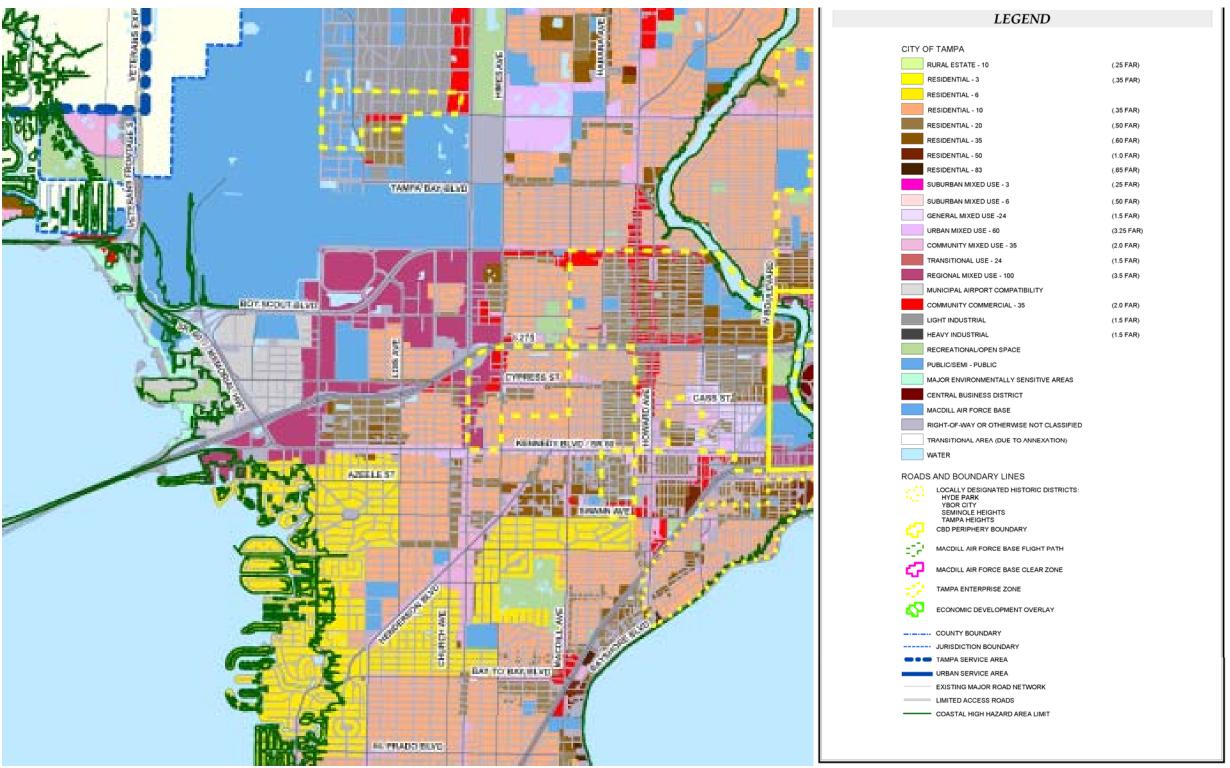
W. Pine Sy W Boy Scout Bivd 16W Spruce St W Spruce St WMain St W La Salle Si W Nassaust W Na saust W Grace S W. Cypress St 1-275 N W North B St W North B ST BNO SR-60 W John r Kennedy blvd SK-60 W SR Sa F W John F Kenn Jeverann Siz A Zeele St W Swann Ave

Figure 2: City of Tampa Existing Land Use Map

Planning Information Map App (PIMA)



Figure 3: City of Tampa Adopted 2025 Future Land Use Map



.evA semiH Community Services Map Dale Mabry Hwy. Lois Ave. Westshore Regional Multimodal Center PD&E Study Manhattan Ave. 109 **Tampa International Airport** Westshore Blvd. 587 Occident 5t. Jefferson High School, 4401 West Cypress Street
 Greater Friendship Missionary Baptist Church, 4301 West Cypress Street 60 La Salle St.

Figure 4: Community Services Map

The WRMC Site C will not result in any change to existing accommodations for bicyclists and pedestrians; therefore, the level of impact will be none.

5.0 UTILITIES AND RAILROADS

In order to evaluate potential surface and subsurface utility conflicts associated with the proposed project, information was collected concerning the location and characteristics of the existing utilities within the vicinity of WRMC Site C.

Existing utilities outside of Site C will not likely be impacted by the project. Impacts resulting from utility adjustments were considered in the selection of WRMC Site C; however, utility relocation costs are not included in the total estimated project costs. **Table 2** indicates utility providers that have facilities within the vicinity of WRMC Site C.

There is no active railroad within the vicinity of WRMC Site C. There is no involvement with utilities and railroads; therefore, the level of impact will be none.

Table 2: Utilities

Provider	Contact	Phone Number	Utility Type
Fiberlight LLC	Chris Pancione	(954) 596 - 2559	Fiber Optic
TW Telecom-Tampa	James McVeigh	(813) 316 - 7763	Fiber
ATT	Nancy Spence	(770) 918 - 5424	Communications/Fiber Optic
FPL Fibernet, LLC	Danny Haskett	(305) 552 - 2931	Fiber
Verizon Florida	David Wynns	(813) 627 - 8343	Cable/Fiber/Phone
Hillsborough County Aviation	Jim Jones	(813) 870 - 8700 x8709	Unknown
Level 3 Communications	Network Relations	(877) 366 - 8344 x2	Fiber Optic
MCI	Verizon Florida	(972) 729 - 6322	Communications/Fiber Optic
TECO Peoples Gas	Luis Castellano	(813) 275 - 3743	Gas
City Of Tampa Transportation	Mike Scanlon	(813) 274 - 8105	Traffic Sign & Signal Infrastructure
City of Tampa Water	Janice Davis	(813) 274 - 7096	Water
City of Tampa Sewer	Jack Ferras	(813) 274 - 8095	Sewer
Tampa Electric Company	Ronnie Alexander	(813) 275 - 3037	Electric
TECO Fiber	Ronnie Alexander	(813) 275 - 3037	Fiber
Tampa Pipeline Corporation	Stuart Papaw	(813) 839 - 0426	Jeta Pipeline
Bright House Networks	Randy Lyle	(813) 684 - 6100 x32143	Cable TV
XO Communications	Jeff Sbrocco	(813) 301 - 4047	Fiber Optic

6.0 ARCHAEOLOGICAL SITES

In accordance with Chapter 267 Florida Statutes (F.S.) and FDOT procedures, the study team conducted a Cultural Resource Assessment Survey (CRAS) Technical Memorandum to locate and identify any archaeological sites occurring within the project area of potential effect (APE) and to assess their significance in terms of their potential eligibility for listing in the National Register of Historic Places. The project APE for the archaeological sites survey was defined as the land within Site C. Work only included background research. Due to the extensive disturbance associated with the developmental history of Site C, no subsurface archaeological field testing was conducted. A review of the information in the Florida Master Site File indicates that the subject site has been associated with eight cultural resource assessment surveys (ACI 1994; Causey 2001; Janus Research 2002a, 2002b, 2005, 2006; Maio and Mohlman 1998; Piper Archaeological Research [Piper] 1990). No previously recorded archaeological sites are located within the project APE. Two archaeological sites are located near Site C but the study area is considered to have a low probability for the occurrence of intact archaeological features or deposits due to the heavily developed nature of Site C, with two structures and paved parking covering almost the entire tract.

The CRAS Technical Memorandum (June 2014) was sent to the State Historic Preservation Officer (SHPO) for approval on June 20, 2014. SHPO concurrence with the finding that this project will have no involvement with archaeological sites that are listed or potentially eligible for listing in the NRHP was provided on June 26, 2014.

7.0 WETLANDS

Pursuant to Presidential Executive Order 11990 entitled "Protection of Wetlands," the United States DOT has developed a policy, (DOT Order 5660.1A), Preservation of the Nation's Wetlands, dated August 24, 1978, which requires all federally funded highway projects to protect wetlands to the fullest extent possible. In accordance with this policy, as well as Part 2, Chapter 18 Wetlands of the FDOT PD&E Manual, the study area was evaluated for any wetlands that have potential involvement with the proposed improvements. Future assessments will document potential impacts of the proposed WRMC Site C and efforts to avoid, minimize, or mitigate those impacts to the greatest extent practicable.

More accurate wetland boundaries will be recorded during field ground-truthing efforts for the future design of WRMC Site C. Ground-truthing of wetland boundaries will be accomplished by implementing the State of Florida wetland delineation methodology (Florida Administrative Code [F.A.C.] 62-340) and the United States Army Corps of Engineers (USACE) methodology (Corps of Engineers Wetlands Delineation Manual, 1987). During the ground-truthing effort, wetland functional assessments will be performed on each wetland based on the state and federal Uniform Mitigation Assessment Method (UMAM).

Wetland area estimates were developed using preliminary reviews and Geographic Information Systems (GIS) technology for the potential footprint of each alternative being considered. The Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) did not identify any natural wetlands within WRMC Site C. However, this site contains a wet ditch with freshwater herbaceous vegetation approximately 910 feet (ft) in total length, with intermittent open and closed/culverted sections (approximately 710 ft and 200 ft, respectively) and an estimated average width of 16 ft. Although this ditch appears to have been constructed in disturbed, upland soils, this ditch appears to have direct hydraulic/hydrologic connectivity to a tributary which outfalls into Tampa Bay near Cypress Point Park (west of SR 60/Memorial Highway). Based on its connectivity to downstream waters, the USACE may assert jurisdiction over this feature under the provisions of Section 404 of the federal Clean Water Act, and permit impacts (if any) under a Nationwide Permit. The Southwest Florida Water Management District (SWFWMD) is not expected to exert regulatory jurisdiction over this ditch or require mitigation for impacts.

Formal wetland delineation and functional analyses have not been conducted to date. More accurate wetland and surface water boundaries will be recorded during field ground-truthing efforts for the future design of WRMC Site C. Habitat type descriptions will be field-verified where applicable during the project design phase using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Handbook (FDOT, January 1999) and the U.S. Fish and Wildlife Service's (USFWS) Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et. al. 1979). Preliminary surface water habitat types and estimated acreages are provided in **Table 3** below.

Table 3: Wetland and Surface Water Communities in the Study Area

SITE	FLUCFCS CODE	FLUCFCS Description	USFWS Code	Acreage in Study Area
С	510	Streams and Waterways	PEM	0.26
			TOTAL	0.26

No natural wetlands (600-series FLUCFCS codes) are evident within WRMC Site C.

Based on the proposed impact footprint shown for WRMC Site C, minor impacts to surface waters are unavoidable. Measures to minimize and avoid these impacts to the greatest extent practicable will be implemented both in the design and the construction phases of the project. Facilities to treat, convey, or attenuate surface waters will be designed at a later phase of the project. Impacts due to the construction of stormwater treatment facilities were not reviewed during this study. However, these are not expected to be of significant size. Therefore, effects to wetlands are expected to be minimal.

Mitigation

No mitigation requirements are anticipated for impacts to surface waters based on current regulations. However, if the USACE requires mitigation for functions associated with the wet ditch currently provided in Site C, mitigation may be provided through the in-kind replacement/recreation of the existing ditch, the purchase of mitigation bank credits (if available at the time of permitting) or through the FDOT Mitigation Program in accordance with Chapter 373.4137 F.S.

8.0 WILDLIFE AND HABITAT

This project was evaluated for potential impacts to wildlife and habitat resources, including protected species in accordance with Title 50 Code of Federal Regulations (CFR) Part 402 of the Endangered Species Act of 1973, as amended; 50 CFR 17 (federal animal list); 379.2291 F.S., Endangered and Threatened Species Act; Chapter 68A-27.003 F.A.C. (Endangered and threatened species list); 68A-27.005 F.A.C. (Species of Special Concern list), and Chapter 27 of the FDOT PD&E Manual, Wildlife and Habitat Impacts.

Agency and GIS database searches, preliminary field reviews and a preliminary review of aerial photography were conducted to identify known and potential occurrences of state and federally protected wildlife species, suitable habitat and designated critical habitat occurring or potentially occurring within WRMC Site C. There is no designated critical habitat for any species within or adjacent to WRMC Site C.

Table 4 below shows federally-listed species identified by the USFWS North Florida Ecological Services Office website as occurring within Hillsborough County.

Table 4: Federally-listed Plant and Wildlife Species Occurring within Hillsborough County

Category	Species Common Name	Species Scientific Name	Code
Mammals	West Indian (Florida) Manatee	Trichechus manatus latirostris	E/CH
	Piping Plover	Charadrius melodus	Т
Birds	Florida Scrub-jay	Aphelocoma coeruluscens	Т
	Wood Stork	Mycteria americana	E
	Red-cockaded Woodpecker	Picoides borealis	E
Fish	Gulf Sturgeon	Acipenser oxyrhynchus desotoi	Т
	Gopher Tortoise	Gopherus polyphemus	С
	Eastern Indigo Snake	Dymarchon corais couperi	Т
Reptiles	Green Sea Turtle	Chelonia mydas	Е
-	Leatherback Sea Turtle	Dermochelys coriacea	E
	Kemp's ridley Sea Turtle	Lepidochelys kempii	Е
	Loggerhead Sea Turtle	Caretta caretta	Т
Amphibians	None		
Mollusks	None		
Crustaceans	None		_
Plants	Florida Golden Aster	Chrysopsis (= Heterotheca) floridana	Е

Code Key: E = Endangered, T = Threatened, CH = Critical Habitat Designated, C = Candidate Note: <u>Candidate species</u> receive no statutory protection under the ESA. The FWS encourages cooperative conservation efforts for these species because they are, by definition, species that may warrant future protection under the ESA.

Although the Florida Fish and Wildlife Conservation Commission (FWC) has not designated particular listed or species of concern specific to Hillsborough County, various state-listed species could occur within or adjacent to WRMC Site C. These will be discussed further in the following sections.

Potential Protected Plant Species

Based on the history and extent of urban development (especially grading, paving and sodding activities) within WRMC Site C, the possibility of any state or federally-listed plant species occurring on-site is extremely low. Adverse impacts to listed/protected plant species are not expected.

Potential Protected Wildlife Species

Based on the history and extent of urban development (especially grading, paving and sodding activities), the possibility of any state or federally-listed wildlife species occurring within WRMC Site C is low. However, it is possible that the surface water features present within WRMC Site C (wet conveyance ditch) could occasionally serve as foraging habitat for the federally-endangered wood stork and state-listed wading bird Species of Special Concern (SSC) including the white ibis (Eudocimus albus), roseate spoonbill (Platalea ajaja), little blue heron (Egretta caerulea), snowy egret (Egretta thula), and tricolored heron (Egretta tricolor). Site C is located within four wood stork Core Foraging Areas, 615333, East Lake/Bellows Lake, L. Hillsborough River/Swamp, and Sheldon Road. It is not known whether there are any downstream and upstream structures/obstacles that may preclude the ability of SSC-listed alligators (Alligator mississippiensis) to access the portion of wet ditch within WRMC Site C. WRMC Site C is not within 660 ft of any known bald eagle (Haliaeetus leucocephalus) nest and impacts to active osprey (Pandion haliateus) nests are not expected. Although the statethreatened gopher tortoise (Gopherus polyphemus) can live in isolated pockets within urban areas, they have not been observed or previously documented within or immediately adjacent to WRMC Site C and their occurrence is highly unlikely.

The surface water habitat within Site C is not locally unique or significant to federal or state-listed/protected species. Further reviews will be completed during project design and construction phases to provide updated observations and verification of the potential for project involvement with listed/protected species and their habitat.

The FDOT submitted a letter presenting the FDOT's effects determinations for federally-listed species involvement with WRMC Site C to the USFWS on June 23, 2014. In this letter, the FDOT proposed a "may affect, not likely to adversely affect" determination for the wood stork and "no effect" determinations for all other state and federally-listed species occurring or potentially occurring within Hillsborough County. Based on current regulations, mitigation requirements are not anticipated for impacts to man-made surface waters. However, if the USACE requires mitigation for functions associated with the wet ditch proposed for impact on Site C, compensation may be provided through the relocation or in-kind replacement of the existing ditch, the purchase of commercial mitigation bank credits, or the provision of credits through the FDOT Mitigation Program in accordance with Chapter 373. 4137, Florida Statutes. There will be no impacts to USFWS-designated critical habitat for any species, as none exists in the vicinity of Site C. The USFWS provided their finding dated August 12, 2014 that the

proposed project is not likely to adversely affect resources protected by the Endangered Species Act. The FWC was also copied on this letter, however did not provide additional response/comments regarding state listed species. The FDOT will coordinate with the USFWS and FWC as appropriate during the design and permitting phase of the project. Therefore, impacts to listed/protected wildlife species are expected to be minimal.

9.0 CONTAMINATION

A contamination screening was performed using the ETDM screening tool in accordance with the FDOT PD&E Manual, Part 2, Chapter 22.

A preliminary evaluation of WRMC Site C was conducted to determine potential contamination concerns from properties or operations located within and the vicinity of the site.

The initial step in the contamination evaluation was the review of a database provided by Environmental Data Management (EDM). The contamination evaluation included the following tasks:

- A search of files available from the Florida Department of Environmental Protection (FDEP).
- A review of historical aerial photographs of the project area was conducted via on-line and other sources of aerial photographs.
- Determining the contamination potential for each property within the project limits.

The final step in the evaluation process was to determine the site rating. The contamination rating system is divided into four degrees of risk: No, Low, Medium, and High. This system expresses the degree of concern for potential contamination problems. A site with a High ranking might not necessarily present a significant cause for concern if the regulatory agencies involved with that site are aware of the situation and if clean-up activities are complete or underway at such a site. Sites were ranked in accordance with Part 2, Chapter 22 of the FDOT PD&E Manual.

Results are included in the project files. There is one potential contamination (Storage Tank Contamination Monitoring) site affected with WRMC Site C. The site is the Double Tree Hotel Tampa Airport (4500 West Cypress Street). The Double Tree Hotel has two active emergency generator above ground storage tanks that are inspected on a regular basis. Based on the review of available data within the FDEP's OCCULUS website, the site does not appear to have had a petroleum discharge and this site receives a preliminary evaluation of "Low." The status of this site, as well as any new sites/discharge events will be reviewed during the project design phase. The Department will oversee contamination remediation as applicable during project design and ROW acquisition. Therefore, the project effect on contamination will be minimal.

10.0 FLOODPLAIN

In accordance with Executive Order 11988, "Floodplain Management," USDOT Order 5650.2, "Floodplain Management and Protection," and Chapter 23, CFR, Part 650A, encroachment to

floodplains from the construction of the proposed project alternatives will be considered later in future project phases.

The entire proposed WRMC Site C is located outside of the base floodplain limits shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panels 12057C0334H (**Figure 5**), and there are no regulatory floodways. Therefore, the project is expected to have no significant involvement with base floodplains. The FIRM also delineates floodplains within the vicinity of the WRMC Site C. It is assumed that the stormwater management systems associated with the improvements will accommodate base floodplain values and provide the best management practices for water quality treatment of stormwater within the improvements on site. These water management systems will be evaluated in the design phase.

The proposed project is consistent with the Hillsborough County Comprehensive Plan. The proposed project will not encourage floodplain development due to local FEMA floodplain and SWFWMD regulations. The project drainage design will be consistent with local FEMA, FDOT, and SWFWMD design guides. Therefore, no significant change in the base flood elevation or limits will occur. The proposed improvements are on a site that is already developed. Therefore, no natural or beneficial floodplain values will be significantly affected.

Based on the information collected during this study, the proposed improvements can be categorized as STATEMENT 4: PROJECTS ON EXISTING ALIGNMENT INVOLVING REPLACEMENT OF EXISTING DRAINAGE STRUCTURES WITH NO RECORD OF DRAINAGE PROBLEMS, as defined in Chap. 24 of the FDOT PD&E Manual, Part 2, Figure 24.1.

The proposed structures will perform hydraulically in a manner equal to or greater than the existing structures, and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant change in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or emergency management evacuation routes. Therefore, it has been determined that there will be no involvement with floodplains encroachment.

11.0 AIR QUALITY

The United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six pollutants: ozone, nitrogen dioxide, particulate matter, sulfur dioxide, carbon monoxide and lead. All of Florida, including Hillsborough County, is designated as in attainment of the NAAQS for ozone, nitrogen dioxide, particulate matter and carbon monoxide. The EPA publication, Green Book, identifies a portion of Hillsborough County as nonattainment for lead and sulfur dioxide.

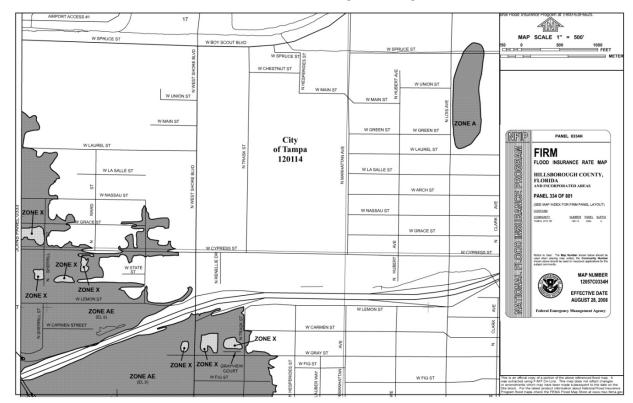


FIGURE 5: Floodplain Map

The lead nonattainment area is associated with a specific facility operated by EnviroFocus Technologies. The facility is located at 1901 N 66th Street in Tampa, Florida with the nonattainment area bounded by a 0.93 mile (mi) radius centered on the facility. The recommended WRMC Site C is located more than 8.5 mi west of the facility well outside the designated nonattainment area. WRMC Site C will not affect nor be affected by the designated nonattainment area.

The sulfur dioxide nonattainment area is generally centered on the Mosaic industrial facility in Riverview, Florida. The nonattainment area extends about 8.0 mi from the southwest edge to the northeast edge and about 5.6 mi from the southeast edge to the northwest edge. The recommended WRMC Site C is located more than 9.5 mi northwest of the industrial facility well outside the designated nonattainment area. WRMC Site C will not affect nor be affected by the designated nonattainment area.

The Transportation Conformity Rule (CFR, Title 40, Part 93, Subpart A) may apply to projects in areas designated as nonattainment for ozone, nitrogen dioxide or particulate matter. The recommended WRMC Site C is located in an area that is designated as in attainment of the NAAQS for ozone, nitrogen dioxide or particulate matter. Therefore, the Transportation Conformity Rule does not apply to this project.