TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

1. PROJECT DESCRIPTION AND PURPOSE AND NEED

a. Project Information

County: District 7
Project Name: Northbound Howard Frankland Bridge (I-275/SR 93) Replacement PD&E Study (REGIONAL TRANSIT CORRIDOR)
Project Limits: From one mile south of the bridge to one-half mile north of the 3-mile bridge
Project Numbers:

12539	422799-1-22-01	N/A
ETDM (if applicable)	Financial Management	Federal-Aid

Project Location Map Documentation:
- Attachment 1

b. Proposed Improvements:

Project: Northbound Howard Frankland Bridge (I-275/SR 93) Replacement PD&E Study
Limits: From one mile south of the bridge to one-half mile north of the bridge
Counties: Pinellas and Hillsborough
FM Numbers:
422904-2 (Pinellas County portion including the bridge) & 422904-4 (Hillsborough County portion)
State and Local funds were used to fund this PD&E Study

The Preferred Alternative was presented at the November 14 and 16, 2017 public hearing sessions. It includes the construction of a new bridge to the west side of the existing southbound bridge. The new bridge will include four 12-foot general use lanes (same as the existing bridges), two 12-foot tolled express lane in each direction with barrier separation and a 12-foot shared use path ("trail"), generally located within the project area.

Evaluated Alternatives: As documented in the *Final Preliminary Engineering Report (Final PER)*, several alternatives were considered including a No-build alternative, a Rehabilitation alternative and several different Build alternatives. The Rehabilitation Alternative was dropped from consideration because it was determined it would not be cost effective over a long term period. The No-Build Alternative would not provide needed travel capacity and would require the existing northbound bridge to undergo extensive repairs in the future.

Proposed Improvements - The typical sections for the Preferred Alterative are shown in the Final PER including the bridge typical section **(Figure 8-6)** and the typical sections for the roadway approaches to the bridge **(Figure 8-7)**.The planned bridge will include four 12-foot general use lanes (same as the existing bridges), two 12-foot tolled express lane in each direction and a 12-foot shared use path ("trail"). The proposed tolled express lanes are part of Tampa Bay Next, FDOT's program to modernize portions of Tampa Bay's transportation infrastructure. The tolled express lanes will be barrier separated from the general use lanes and also barrier separated between each direction of travel. The tolled express lanes could be used by express bus and Bus Rapid Transit (BRT) vehicles in addition to private motor vehicles. The shared use path will be barrier separated from the southbound general use lanes. The overall width of the bridge will be approximately 170 feet. The new bridge structure and all approach roadway improvements will be constructed within the existing Florida Department of Transportation (FDOT) right of way. The existing southbound bridge will be retrofitted for northbound traffic. The existing northbound bridge will be demolished as part of this project.

The new replacement bridge would have longer vertical curves than the existing northbound bridge near the center of the bridge to meet current design standards and be more geometrically consistent with the existing southbound bridge. At the navigational channel, the vertical clearance of the new bridge is intended to meet or exceed the vertical clearance of

the existing southbound bridge. In coordination with USCG, this will meet the USCG navigational clearances. Also, the overall profile would be constructed several feet higher than the existing northbound bridge to avoid wave forces during extreme storm events (at least one foot above the predicted 100-year wave crest elevation).

The proposed project includes structural enhancements to strengthen the new bridge to be able to accommodate a potential future light-rail transit system on the bridge.

c. Purpose and Need:

There are two primary **purposes** for this project. One is to replace the northbound span of the HFB due to the existing structure nearing the end of its useful life. Second is to provide additional traffic capacity by adding express lanes to the bridge corridor to enable a future connection on I-275 on either side of Old Tampa Bay. The **need** for the proposed project is explained below.

Structural Condition - An inspection conducted on the existing northbound HFB in September 2010 resulted in a sufficiency rating of 61.8 classifying the bridge as *structurally deficient*. The FDOT performed repairs that improved the sufficiency rating to 81.3 in the 2012 inspection. In the September 2016 inspection, the sufficiency rating decreased to 79.8. The existing northbound HFB is not presently classified as structurally deficient, however is projected to degrade to that point again in the next several years. In the 1950's, when this bridge was originally designed, normal practice was to design bridges for a 50-year life span. While that duration has now been exceeded and the bridge is located in a harsh saltwater environment, major past rehabilitation projects have helped to extend the life of the structure.

System Linkage and Regional Connectivity - I-275 at the HFB is a vital link in the local and regional transportation network and one of only three crossings between Pinellas and Hillsborough Counties over Old Tampa Bay. I-275 is the crossing which carries the most traffic. In addition to being an Interstate highway and part of the National Highway System, I-275 is part of the Strategic Intermodal System (SIS) that provides for the high-speed movement of people and goods. The SIS is a statewide network of highways, railways, waterways and transportation hubs that handle the bulk of Florida's passenger and freight traffic.

Consistency with Transportation Plans - See Part d. Project Planning Consistency below.

Emergency Evacuation and Safety - The HFB is a critical evacuation route for portions of Pinellas County and is shown on the Florida Division of Emergency Management's evacuation route network. I-275 is also designated as an emergency evacuation route by the Hillsborough County Emergency Management Office and the Pinellas County Emergency Management Office.

For the 5-year period 2011 through 2015, a total of 404 crashes were reported for the northbound direction within the study limits. The resulting economic loss of these crashes is estimated to be approximately $46.8 million, based on 2015 National Safety Council unit costs. For just the 3-mile bridge limits, 163 crashes were reported on the northbound bridge compared to 93 crashes on the southbound bridge for this same time period. The crash rate was estimated to be about 75 percent higher on the northbound bridge compared to the newer southbound bridge. The difference in crash rates might be related to the differences in the designs of the older and newer bridges. The vertical alignment on the existing northbound bridge does not meet current design standards for stopping sight distance for a design speed of 70 miles per hour (mph) on an Interstate highway. Based on the as-built plans, the estimated northbound design speed is between 50 and 55 mph, while the bridge is posted with 65 mph speed limit signs (current standards require 70 mph design speed).

This lower design speed results in shorter stopping sight distances for motorists travelling over the "hump" near the center of the bridge, which could be a contributing factor in some of the reported rear-end collisions on the bridge. In addition, at 4-feet wide, the left shoulder is less than the 10-foot standard, and two of the lanes are 11-feet wide which do not meet current Interstate design standards of 12-feet.

Transportation Demand - The existing HFB crossing (both directions) includes a total of six through lanes and two auxiliary lanes which provide room for weaving between the interchanges at SR 686 in St. Petersburg and the SR 60/Memorial Highway interchange in Tampa. The 2016 annual average daily traffic (AADT) on the bridge was 157,500 vehicles per day (VPD) based on the FDOT's 2016 Florida Traffic Online, with approximately half of the traffic in each direction. Based on the existing daily traffic volume, the existing level of service (LOS) is "E" based on the 2013 FDOT Quality/Level of Service Handbook. The Tampa Bay Regional Transit Model for Managed Lanes indicates that the total AADT in 2040 is expected to increase to 229,800 VPD. The projected 2040 two-way AADT of 229,800 VPD would result in LOS "F" traffic conditions without any additional traffic lanes being added to the bridge.

Transit & Multimodal Accommodations - The Pinellas Suncoast Transit Authority (PSTA) operates one express bus route which utilizes the HFB in providing service between Pinellas and Hillsborough Counties. Route 300X provides a connection between the Ulmerton Road Park-N-Ride in Largo and downtown Tampa, with service primarily in the peak periods and with limited intermediate stops. The Hillsborough Area Regional Transit Authority (HART) does not currently operate any buses on the HFB. Various motorcoach services use HFB/I-275 as part of their regional network; for example, Amtrak's Thruway motorcoach service connects Tampa's Union Station to Pinellas Park-St. Petersburg, Bradenton, Sarasota, Port Charlotte, and Ft. Myers. The planned tolled express lanes will accommodate express buses and bus rapid transit (BRT) vehicles if local governments implement BRT in the future. In addition, an envelope for a future light rail transit (or other technology) system will be provided on the west side of the to-be-constructed new bridge should local governments implement such a system in the longer-range future.

I-275 is part of the highway network that provides access to regional intermodal facilities such as the Tampa International Airport, the St. Petersburg-Clearwater International Airport, several general aviation airports, MacDill Air Force Base, the Port of Tampa, Hookers Point, the Port of St. Petersburg, transit stations, cruise ship terminals and major CSX intermodal rail facilities. As noted earlier, I-275 is part of the SIS and is also part of Tampa Bay Area Regional Transportation Authority's (TBARTA) regional freight network, which is considered the backbone of the goods movement system for the TBARTA region. Improvements to the HFB/I-275 within the project limits will maintain access to freight activity centers in the area and facilitate the movement of freight in the greater Tampa Bay region.

This PD&E study only evaluated the replacement of the existing northbound bridge with a new bridge to carry four-lanes of highway traffic in addition to two tolled express lanes in each direction and a shared use trail. This study did not consider the environmental impacts of a future buildout which could include widening the existing southbound bridge to accommodate rail or other transit technology on the new bridge. A future study would be needed to determine the impacts of these potential longer-range transit improvements.

d. Project Planning Consistency:

TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

PINELLAS COUNTY SEGMENT FPN 422904-2

Currently Adopted CFP-LRTP	COMMENTS
Yes	The replacement of the 4-lane northbound Howard Frankland Bridge is consistent with the Pinellas County MPO's (now called Forward Pinellas) 2040 Cost Feasible Long Range Transportation Plan (LRTP) for construction in years 2020-2040. LRTP **Map 5-1** & **Table 5-1** in **Attachment B** show the bridge replacement (including the addition of 4 express lanes and a multi-use trail and footnote that it includes $25 million to enhance replacement structure for future rail) as committed (funded in the TIP 2017/18 to 2021/22).

PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP $	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	$See below	See below	Replacement of the northbound bridge is included in the TIP (Fiscal year 2018 to 2022) for Fiscal Year 2020 as a design/build project (FPN 422904 -2).
R/W	N	N	$N/A	N/A	No R/W Acquisition required.
Construction	Y	Y	$753,584,957	2020	Project programmed for Design/Build

HILLSBOROUGH COUNTY SEGMENT FPN 422904-4

Currently Adopted CFP-LRTP	COMMENTS
Yes	This segment is included in the Hillsborough County MPO's LRTP (as amended February 6, 2018) as the western 1/2 mile of Project 1002 - listed as I-275 from N of Howard Frankland to S of SR 60. Description includes expanding I-275 to include 8 lanes and 4 express toll lanes. **Figures 3-31 and 5-15** in **Attachment B** show Project 1002 as needed and cost feasible (funded with $65,000,000 in the TIP 2017/18 to 2021/22).

PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP $	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	$See below	See below	This segment (FPN 422904-4) goes with the project in Pinellas County (FPN 422904-2) as a design/build project
R/W	N	N	$N/A	N/A	No R/W Acquisition required.
Construction	Y	Y	$23,777,633	2020	Project programmed for Design/Build

**** Include pages from current TIP/STIP/LRTP***

Project Plan Consistency Documentation:

- Attachment 4

TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

2. COOPERATING AGENCY

US Coast Guard

3. ENVIRONMENTAL ANALYSIS

Issues/Resources	Significant Impacts?* Yes	No	Enhance	NoInv	Supporting Information**
A. SOCIAL & ECONOMIC					
1. Social	☐	☒	☐	☐	See Attachment A, Part A1 [3]
2. Economic	☐	☐	☒	☐	See Attachment A, Part A2 [3]
3. Land Use Changes	☐	☒	☐	☐	See Attachment A, Part A3 [3]
4. Mobility	☐	☐	☒	☐	See Attachment A, Part A4 [3]
5. Aesthetic Effects	☐	☐	☐	☒	
6. Relocation Potential	☐	☐	☐	☒	
7. Farmlands	☐	☐	☐	☒	
B. CULTURAL					
1. Section 4(f)	☐	☒	☐	☐	See Attachment A, Part B1 [3]
2. Historic Sites/Districts	☐	☒	☐	☐	See Attachment A, Part B2 [3][6]
3. Archaeological Sites	☐	☒	☐	☐	See Attachment A, Part B3 [3][6]
4. Recreation Areas	☐	☒	☐	☐	See Attachment A, Part B4
C. NATURAL					
1. Wetlands and Other Surface Waters	☐	☒	☐	☐	See Attachment A, Part C1 [3][6]
2. Aquatic Preserves and Outstanding FL Waters	☐	☒	☐	☐	See Attachment A, Part C2 [3]
3. Water Quality and Quantity	☐	☒	☐	☐	See Attachment A, Part C3 [3]
4. Wild and Scenic Rivers	☐	☐	☐	☒	
5. Floodplains	☐	☒	☐	☐	See Attachment A, Part C5 [3]
6. Coastal Zone Consistency	☐	☒	☐	☐	See Attachment A, Part C6 [3]
7. Coastal Barrier Resources	☐	☐	☐	☒	
8. Protected Species and Habitat	☐	☒	☐	☐	See Attachment A, Part C8 [3][6]
9. Essential Fish Habitat	☐	☒	☐	☐	See Attachment A, Part C9 [3][6]
D. PHYSICAL					
1. Highway Traffic Noise	☐	☐	☐	☒	
2. Air Quality	☐	☒	☐	☐	See Attachment A, Part D2 [3]
3. Contamination	☐	☒	☐	☐	See Attachment A, Part D3 [3]
4. Utilities and Railroads	☐	☒	☐	☐	See Attachment A, Part D4 [3]

TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM

5.	Construction	☐	☒	☐	☐	See Attachment A, Part D5 [3]
6.	Bicycles and Pedestrians	☐	☐	☒	☐	See Attachment A, Part D6 [3]
7.	Navigation	☐	☒	☐	☐	See Attachment A, Part D7 [3][6]

a. ☐ A USCG Permit IS NOT required.

b. ☒ A USCG Permit IS required.

*** Impact Determination:** Yes = Significant; No = No Significant Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement. Basis of decision is documented in the referenced attachment(s).

****** Supporting Information is documented in the referenced attachment(s).

E. ENGINEERING ANALYSIS SUPPORT

- Attachment 2

F. ANTICIPATED PERMITS

- US Coast Guard - Bridge Permit
- Southwest Florida Water Management District - Environmental Resource Permit
- US Army Corps of Engineers - Section 404 Permit
- Tampa Port Authority - TPA Standard Work Permit

4. COMMITMENTS - ADDITIONAL INFORMATION

1. The FDOT will conduct benthic surveys during the seagrass growing season (June-September), in order to support the permit approval process.
2. The FDOT proposes utilizing the Old Tampa Bay Water Quality Improvement Project as mitigation for seagrass impacts. Coordination with U.S. Fish and Wildlife Server (USFWS), National Marine Fisheries Service (NMFS), U.S. Army Corps of Engineers (USACE) and Southwest Florida Water Management District (SWFWMD) will continue as seagrass mitigation progresses or other options are proposed.
3. The size/style of piles, quantity of piles, number of piles driven per day, number of strikes per pile, and other information needed in order to determine potential hydroacoustic impacts to the smalltooth sawfish and sea turtles is unknown at this time. Further information will be provided once a design-build team is selected and more details regarding design and construction related to pile driving activities is known. Endangered Species Act Section 7 consultation will be re-initiated with the National Marine Fisheries Service (NMFS) for smalltooth sawfish and swimming sea turtles during the future project phases once more detailed information listed above is known for this project. The FDOT will continue coordination with NMFS on potential impacts associated with pile driving activities.
4. The FDOT will require the contractor to minimize potential impacts of multiple pile driving operations by maintaining a minimum 4,000 feet over the length of the bridge opening as a low-noise travel corridor. This corridor should be continuous to the extent feasible, but no individual component of the corridor will be less than 1,000 feet. Low noise corridors are defined as areas where noise levels are below injury and behavioral disturbance thresholds. This commitment will provide aquatic fauna a sufficiently wide low-noise corridor or corridors through the project area without injury or disturbance.
5. The contractor will be required to use a ramp-up procedure during the installation of piles. This procedure allows for a gradual increase in noise level in order to give sensitive species ample time to flee prior to initiation of full noise levels. This approach can also reduce the likelihood of any secondary or sub-lethal effects from sound impulses associated with pile driving.
6. The FDOT will adhere to the NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* [**Appendix B** of the *Natural Resources Evaluation* (NRE)] during construction of the project.
7. The FDOT will continue informal Endangered Species Act Section 7 consultation with the USFWS for the Gulf Sturgeon and manatee during future project phases.
8. FDOT will incorporate the *Construction Special Conditions for the protection of the Gulf Sturgeon* (**Appendix B** of the NRE).
9. To assure the protection of wildlife during construction, the FDOT will implement a Marine Wildlife Watch Plan (MWWP), which will include the most current version of the Florida Fish and Wildlife Conservation Commission (FWC) *Standard Manatee Conditions for In-Water Work*. The FDOT will require the construction contractor to abide by these guidelines during construction. **Appendix B** of the NRE provides an example of the most current *Standard Manatee Conditions for In-Water Work* (2011).
10. No nighttime in-water work will be performed. In-water work can be conducted from official sunrise until official sunset times.
11. Special conditions for manatees will be addressed during construction and include the following:
    -- Two dedicated (minimum one primary), experienced manatee observers will be present when in-water work is performed. Primary observers should have experience observing manatees in the wild on construction projects similar to this one;
    -- All siltation barriers or coffer dams should be checked at least twice a day, in the morning and in the evening, for manatees that may become entangled or entrapped at the site.
    -- Barges will be equipped with fender systems that provide a minimum standoff distance of four feet between wharves, bulkheads and vessels moored together to prevent crushing manatees. All existing slow speed or no wake zones will apply to all work boats and barges associated with construction; and
    -- Although culverts are unlikely for this project, any culverts larger than eight inches and less than eight feet in diameter should be grated to prevent manatee entrapment. The spacing between the bridge pilings will be at least 60 inches to allow for manatee movement in between the pilings. If a minimum of 60-inch spacing is not provided between piles, further coordination will be conducted with the USFWS.
12. No blasting is proposed for this project. If blasting is required, formal Section 7 Consultation will be initiated with the USFWS for

the manatee and with the NMFS for swimming sea turtles and the smalltooth sawfish. A blast plan and MWWP would be developed and submitted to the USFWS, NMFS and FWC for their approval prior to beginning blasting activities.

13. No dredging is proposed for this project. If dredging is required, Section 7 Consultation will be re-initiated with the USFWS for the manatee.

14. The new replacement bridge will be designed to be able to handle the structural loads of a future Light Rail Transit (LRT) system in the future.

5. PUBLIC INVOLVEMENT

1. ☐ A public hearing is not required.
2. ☐ A public hearing will be held N/A. This draft document is publicly available and comments can be submitted to FDOT until N/A.
   District Contact Information: N/A.
3. ☒ A public hearing was held on 11/16/2017 and the transcript is available.
   - Attachment 5
4. ☐ An opportunity for a public hearing was afforded and was documented N/A .

6. DISTRICT DETERMINATION

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

Kirk Bogen	April 10, 2018
FDOT Project Manager	Date
Robin Rhinesmith	April 10, 2018
FDOT Environmental Manager or Designee	Date

7. OFFICE OF ENVIRONMENTAL MANAGEMENT CONCURRENCE

This action has been determined to be a Categorical Exclusion which meets the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions and this analysis, does not involve significant environmental impacts.

Signature below constitutes Location and Design Concept Acceptance:

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated 12/14/2016 and executed by the Federal Highway Administration and FDOT.

May 4, 2018

Jason Watts
Director of the Office of Environmental Management or Designee

Date

8. SUPPORTING INFORMATION

1 42279912201-CE2-D7-Fig1_ProjectLocation_HFB_PD&E-2017-1016.pdf

2 42279912201-CE2-D7-HFB_Final_PER_20180409_Complete-2018-0409.pdf

3 42279912201-CE2-D7-Type2CE_AttachmentA_20180501-2018-0501.pdf
4 42279912201-CE2-D7-AttachmentB-Planning_Consistency-20180410-2018-0410.pdf
5 42279912201-CE2-D7-AttachmentD-2017_Public_Hearing_Transcript-2017-1220.pdf
6 42279912201-CE2-D7-AttachmentE-Agency_Coordination-2018-0402.pdf