ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation
In cooperation with the US Coast Guard

SR 401 BRIDGE REPLACEMENT

District: FDOT District 5

County: Brevard County

ETDM Number: 14397

Financial Management Number: 444787-1-22-01

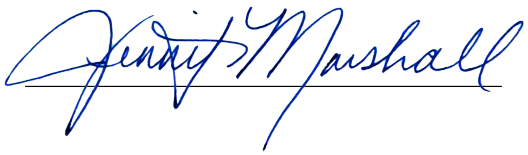
Federal-Aid Project Number: N/A

Project Manager: David Graeber

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 the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding (MOU) dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

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 supported by this analysis, does not involve significant environmental impacts.

Signature below constitutes Location and Design Concept Acceptance:



May 20, 2024

Director Office of Environmental Management
Florida Department of Transportation

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This document was prepared in accordance with the FDOT PD&E Manual.

This project has been developed without regard to race, color or national origin, age, sex, religion, disability or family status (Title VI of the Civil Rights Act of 1964, as amended).

On 11/04/2020 the State of Florida determined that this project is consistent with the Florida Coastal Zone Management Program.

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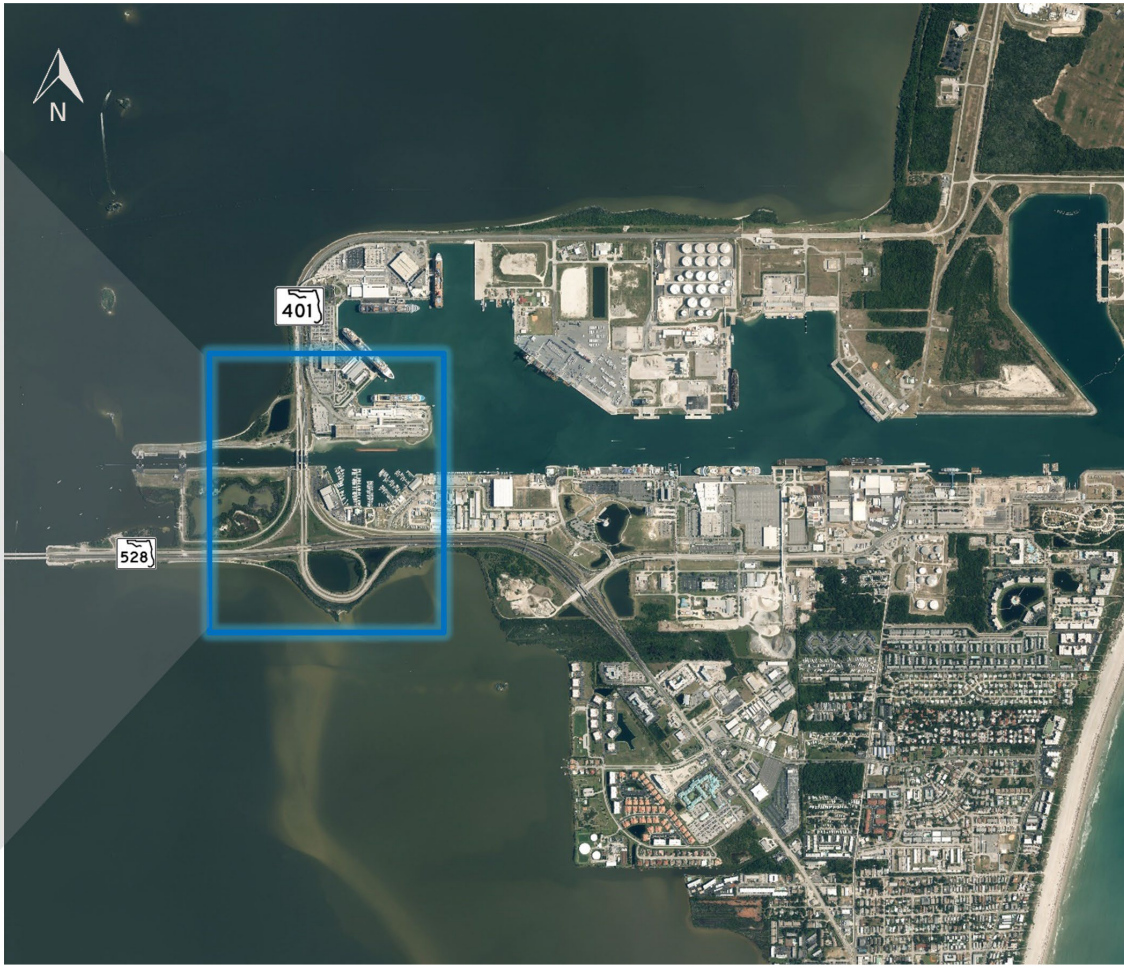


444787-1 S.R. 401 Bridge Replacement
Project Development & Environment (PD&E) Study
Brevard County, Florida

Project Location Map

1. Project Information

1.1 Project Description

The Florida Department of Transportation (FDOT), District Five, is conducting a Project Development and Environment (PD&E) Study to evaluate replacement alternatives for the three existing bascule bridges over the Canaveral Barge Canal at Port Canaveral in Brevard County, Florida.

As shown inthe **Project Location Map**, the study area project limits are approximately 500 feet south of the S.R. 528 bridges to 3,500 feet north of the S.R. 401 bridges to Charles Rowland Dr. The S.R. 401 bridges over the Canaveral Barge Canal provide a vital connection to Port Canaveral's operations including major cruise and cargo terminals. The bridges also serve as the primary access to Cape Canaveral Air Force Station, Naval Ordinance Test Unit, facilities for the U.S. Coast Guard, and access to Space Florida operations.

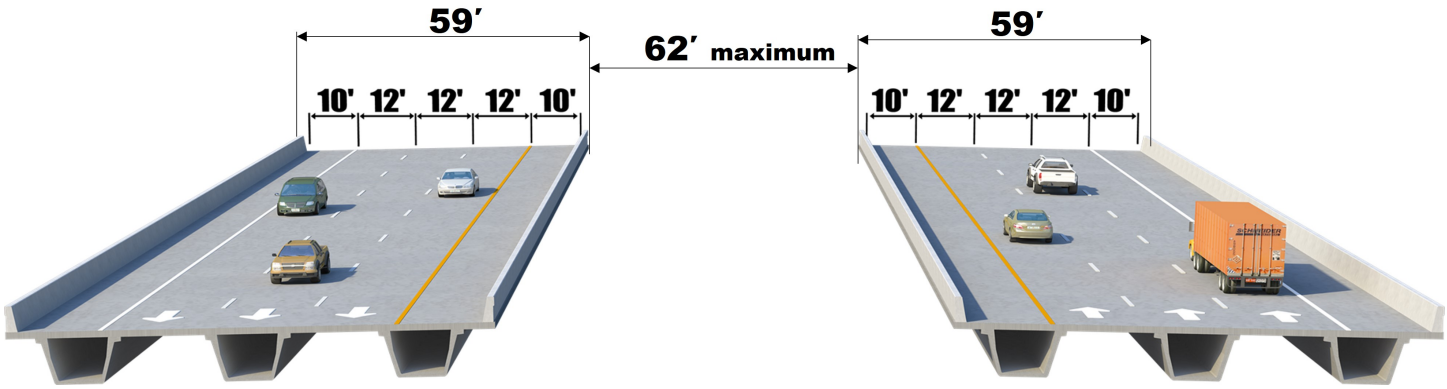
Within the study limits, S.R. 401 is functionally classified as an Urban Minor Arterial (Functional Classification 16). Currently there are no pedestrian and bicycle accommodations on the bridges. S.R. 401 has a context classification of C3C-Suburban Commercial. As defined by the FDOT Context Classification Guidebook, corridors with a C3C context classification are typically commercial featuring "mostly non-residential land uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network". The access management classification for S.R. 401, within the study area, is Access Classification 4, Non-Restrictive.

The existing 354-foot single-leaf bascule bridges consist of three separate structures accommodating southbound and northbound traffic with three travel lanes in each direction:
Bridge No. 700030 (southbound), constructed in 1963
Bridge No. 700031 (southbound), constructed in 1963
Bridge No. 700117 (northbound), constructed in 1972

Description of the Preferred Alternative

The preferred alternative consists of two High-Level Fixed Bridges replacing the existing three bascule bridges with two separate three-lane high-level, fixed span concrete bridges located on the existing bridge alignment. This improvement would provide a maximum 65-foot vertical clearance above mean high water and a 90-foot horizontal clearance at the main navigational channel. There are two bridges, each of which is 1,065.5 feet in length, for a total bridge length of 3,211 feet. The maximum grade is 6% and design speed is 45 mph.

The typical sections for the proposed S.R. 401 bridges, shown below, will feature three 12-foot-wide travel lanes and 10-foot-wide inside and outside shoulders on each bridge. Since S.R. 401 is a limited access facility at this location, there are no provisions for bike lanes nor sidewalks. The width of each bridge will be 59 feet, and there will be a 62-foot maximum separation between the bridges.



1.2 Purpose and Need

The purpose of the project is to evaluate improvements to, or replacement, of the existing bascules bridges over the Canaveral Barge Canal. The primary need for the project is based on system linkage, and modal interrelationships.

Project Status

The S.R. 401 Bridge over the Canaveral Barge Canal is within the jurisdiction of the Space Coast Transportation Planning Organization (TPO). The 444787-1 S.R. 401 Bridge PD&E study is listed in the September 2022 Amendment of the Regionally Significant Cost Feasible Plan within the 2045 Long Range Transportation Plan (LRTP). The S.R. 401 Bridge project was identified in the LRTP as "one of the major projects on the Strategic Intermodal System that extend beyond the timeframe of the TIP that will be implemented with reasonably anticipated revenue."

1.2.1 System Linkage

S.R. 401 is part of the State Highway System (SHS) and the National Highway System (NHS) and is designated a Strategic Intermodal System (SIS) as a connector, providing access to Port Canaveral, a SIS Seaport. Port Canaveral's operations include major cruise terminals, cargo terminals, and substantial tanker truck traffic.

Additionally, S.R. 401 is classified as a part of the State Strategic Highway Network (STRAHNET) connector by the Military Surface Deployment and Distribution Command as a connection to an ocean terminal to deploy and sustain U.S. forces on a global basis. The two southbound bridges (700030 and 700031) were constructed in 1963 and the northbound bridge (700117) was constructed in 1972. The bridges are the primary access to Cape Canaveral Space Force Station and Space Florida operations, Naval Ordinance Test Unit (NOTU), facilities for the U.S. Coast Guard, and access to Space Florida operations. The 2011 Spaceport Area Transportation Infrastructure Assessment by the Space Coast Transportation Planning Organization (TPO) identified the weight limit as an impediment to expanding port freight operations and maximizing military uses.

1.2.2 Modal Interrelationships

The 2019-2020 Port Directory shows that Port Canaveral accommodated approximately 4.5 million passengers and approximately 6,400,000 tons of overall cargo in 2018, in addition to outdoor recreation such as fishing and boating. The S.R. 401 bridges provide access to/from Port Canaveral. As the second largest cruise port in the world today, Port Canaveral's 30-year Strategic Vision Plan identifies the Port's successful growth as rooted in the link between Central

Florida theme parks and the cruise industry.

The 2017, FDOT S.R. 401 Bridge Alternatives Analysis Study showed 14,900 annual average daily traffic (AADT) with 13% truck traffic. The truck traffic includes fuel transport, which accounts for about 40% of the supply for Central Florida. While the Port Canaveral 30-Year Strategic Vison Plan notes that petroleum cargo may level off as the U.S. transitions to more renewable energy sources, overall cargo is expected to grow to more than three times the current tonnage by 2048. The primary transportation options to distribute cargo is via truck or barge. Minimizing delays for the road and vessel usage will better position Port Canaveral to provide economic growth. The S.R. 401 bridges opening to marine vessels create traffic delays to the port and cruise terminal. Similarly, marine vessels are delayed based on operation restrictions. Traffic evaluations and a vessel survey has been completed that determined factors to reducing delays. Finally, Port Canaveral's Vision Plan considers the sector north of the S.R. 401 bridges as having more demand for growth than land available, which further adds to the importance of this distribution connectivity.

1.3 Planning Consistency

The 444787-1 S.R. 401 Bridge project is funded for PD&E, Preliminary Engineering (PE), and Design as an SIS project in the July 2023 State Transportation Improvement Program (STIP) under Financial Project Identification (FPID) Number 444787-1.

Currently Adopted LRTP-CFP	COMMENTS
Yes	The S.R. 401 Bridge Replacement Project is identified in Amendment One of the Space Coast Transportation Planning Organization's (TPO's) 2045 Long Range Transportation Plan as one of three projects advanced on February 10, 2022 due to developments in the FDOT STIP. Design funding for 444787-1 was included in the FY22-26 TIP.

	Currently Approved	$	FY	COMMENTS
PE (Final Design)				
TIP	Y	NA	NA	PE was funded prior to FY 2024
STIP	Y	NA	NA	PE was funded prior to FY 2024
R/W				
TIP	N			
STIP	N			
Construction				
TIP	N			
STIP	N			

2. Environmental Analysis Summary

Issues/Resources	Significant Impacts?* Yes	No	Enhance	NoInv
3. Social and Economic				
1. Social	☐	☒	☐	☐
2. Economic	☐	☒	☐	☐
3. Land Use Changes	☐	☒	☐	☐
4. Mobility	☐	☐	☒	☐
5. Aesthetic Effects	☐	☒	☐	☐
6. Relocation Potential	☐	☐	☐	☒
7. Farmland Resources	☐	☐	☐	☒
4. Cultural Resources				
1. Section 106 of the National Historic Preservation Act	☐	☒	☐	☐
2. Section 4(f) of the USDOT Act of 1966, as amended	☐	☒	☐	☐
3. Section 6(f) of the Land and Water Conservation Fund	☐	☐	☐	☒
4. Recreational Areas and Protected Lands	☐	☒	☐	☐
5. Natural Resources				
1. Protected Species and Habitat	☐	☒	☐	☐
2. Wetlands and Other Surface Waters	☐	☒	☐	☐
3. Essential Fish Habitat (EFH)	☐	☒	☐	☐
4. Floodplains	☐	☒	☐	☐
5. Sole Source Aquifer	☐	☐	☐	☒
6. Water Resources	☐	☒	☐	☐
7. Aquatic Preserves	☐	☒	☐	☐
8. Outstanding Florida Waters	☐	☒	☐	☐
9. Wild and Scenic Rivers	☐	☐	☐	☒
10. Coastal Barrier Resources	☐	☐	☐	☒
6. Physical Resources				
1. Highway Traffic Noise	☐	☒	☐	☐
2. Air Quality	☐	☒	☐	☐
3. Contamination	☐	☒	☐	☐
4. Utilities and Railroads	☐	☒	☐	☐
5. Construction	☐	☒	☐	☐

USCG Permit

☐ A USCG Permit IS NOT required.

☒ 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 following sections.

3. Social and Economic

The project will not have significant social and economic impacts. Below is a summary of the evaluation performed.

3.1 Social

There are no residential land uses within one-quarter mile of the project and no potential for the project to affect neighborhoods. There is also limited potential for the project to affect area community facilities, including the Canaveral Barge Canal and Port Authority's Rodney S. Ketcham Park and boat ramp.

The sociocultural effects evaluation included an analysis of U.S. Census Data. Based on the Efficient Transportation Decision-Making (ETDM) Environmental Screening Tool (EST) Sociocultural Data Report (SDR) (see Project File), 2010 Census Block Groups 120099800001, 120090686021 were within the study area. These block groups feature less than 4% minority, 7.14% of households living below the poverty level, and 0% of households have Limited English Proficiency (LEP) or "Speak English Not Well or Not At All".

No minority or low-income populations have been identified that would be adversely impacted by the proposed project, as determined above. Based on the above discussion and analysis, the preferred alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a.

3.2 Economic

The 2017, FDOT S.R. 401 Bridge Alternatives Analysis Study showed 14,900 annual average daily traffic (AADT) with 13% truck traffic. The truck traffic includes fuel transport, which accounts for about 40% of the supply for Central Florida. While the Port Canaveral 30-Year Strategic Vison Plan notes that petroleum cargo may level off as the U.S. transitions to more renewable energy sources, overall cargo is expected to grow to more than three times the current tonnage by 2048.

Based on the *Economic Contribution of Port Canaveral to Florida in 2018 Report* prepared for the Canaveral Port Authority by Business Research & Economic Advisors (BREA), Port Canaveral's total contribution was evaluated based on three elements: i) the direct economic contribution, ii) the indirect economic contribution and iii) the induced economic contribution. The study found that Port Canaveral generates more than 32,000 jobs (full-time equivalent/FTE) with more than $1.3 billion in wages for the region. The referenced report is available in the project file.

The contributions are led by the cruise segment, which accounts for 67 percent of the total expenditures related to Port Canaveral throughout the state, and 73 percent of the jobs. Cargo is second in its contribution, generating 21 percent of the total expenditures across the state related to the port, and 14 percent of all jobs. The real estate segment contributes about nine percent of all expenditures and 10 percent of all jobs related to the port throughout the state.

The primary transportation options to distribute cargo is via truck or barge. Minimizing delays for the road and vessel usage will better position Port Canaveral to provide economic growth. The S.R. 401 bridges opening to marine vessels create traffic delays to the port and cruise terminal. Similarly, marine vessels are delayed based on operation restrictions. Traffic evaluations and a vessel survey were conducted during the PD&E Study to determine factors to reduce delays.

Finally, Port Canaveral's Vision Plan considers the sector north of the S.R. 401 bridges as having more demand for growth than land available, which further adds to the economic importance of this distribution connectivity.

3.3 Land Use Changes

There are no residential uses in the study area. Based on the Brevard County Open Geographic Information System Open Data Hub, data dated April 24, 2020, the existing and future land use within and adjacent to the project corridor has been designated Port Land Use, which includes transportation and Port facilities. (See Land Use Map Attachment). There are no anticipated changes in land use as a result of this project.

3.4 Mobility

The 2019-2020 Port Directory shows that Port Canaveral accommodated approximately 4.5 million passengers and approximately 6,400,000 tons of overall cargo in 2018, in addition to outdoor recreation such as fishing and boating. As the second largest cruise port in the world today, Port Canaveral's 30-year Strategic Vision Plan identifies the Port's successful growth as rooted in the link between Central Florida theme parks and the cruise industry.

The study team conducted a detailed Marine Navigation and Vessel Survey to determine both the number of bridge openings that would be required in the future based on the size and type of marine vessels traveling through the Canaveral Barge Canal and the potential impact of a fixed height bridge to current marine navigation. The study determined that sailboat traffic through the bridge was currently constrained by the clearance heights of the fixed bridges in the surrounding waterways west of the project which ultimately limited the number of boats transiting the Canaveral Barge Canal with mast clearance requirements greater than 65 feet. Further, adequate marina capacity outside of the Canaveral Barge Canal exists which mitigates the need for transiting the Canaveral Barge Canal. Although the preferred alternative could impact a small number of sailboats with mast height clearances exceeding 65 feet, the number of necessary openings required by the existing bascule bridge would be reduced by over 99 percent. This study was reviewed by USCG who provided a preliminary clearance determination that vertical fixed clearance of 65 feet above mean high water would be adequate to meet the reasonable needs of present and prospective navigation at this location. A copy of this study and USCG correspondence is provided in the Project File.

The study also found that in the no-build condition the S.R. 401 bridge must be opened for marine vessels taller than 25 feet resulting in an estimated annual delay of 138 hours to vehicular traffic. The preferred alternative, consisting of two high-level fixed bridges, offers the benefit of continuous, free-flowing traffic on S.R. 401 and overall improved marine navigation through the Canaveral Barge Canal.

The existing S.R. 401 bridges provide vehicular access to/from Port Canaveral, but there are neither sidewalks nor bike lanes currently existing on S.R. 401. Within the project limits, S.R. 401 is a limited access facility. Bicycle lanes and pedestrian sidewalks will not be provided on the preferred alternative as S.R. 401 is a limited access facility and stakeholders expressed safety and security concerns with having bicyclists and pedestrians in the area.

3.5 Aesthetic Effects

The existing S.R. 401 Bridge aesthetic is purely functional and utilitarian. The existing landscape within the study area consists of sod and volunteer sabal palms. The S.R. 528 interchange has two distinct aesthetic treatments consisting of

the northern portion with regularly spaced date and sabal palms and a bridge treatment accented with clusters of date palms. The southern portion of the interchange includes an infield retention area ringed with sabal palms. A preliminary Landscape Opportunity Plan has been developed for the PD&E Study, and this plan is included in the Preliminary Engineering Report. Coordination between FDOT and the Canaveral Port Authority and project stakeholders with regard to aesthetics and potential landscaping treatments is ongoing.

There is one two-sided FDOT-permitted Outdoor Advertising Sign Structure located northeast of the Canaveral Barge Canal (Tag Ci117 - facing south and Tag Ci118 - facing north). This sign structure is owned by Clear Channel Communications under a permit with the Canaveral Port Authority. Potential view-shed impacts were coordinated with Canaveral Port Authority.

3.6 Relocation Potential

The proposed project, as presently conceived, will not displace any residences or businesses within the community. Should this change over the course of the project, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

3.7 Farmland Resources

Lands within the project vicinity do not meet the definition of farmland as defined in 7 CFR § 658 and the provisions of the Farmland Protection Policy Act of 1981 do not apply because the entire project area is located in the urbanized area of Brevard County with no designated farmlands adjacent to the project corridor.

4. Cultural Resources

The project will not have significant impacts to cultural resources. Below is a summary of the evaluation performed.

4.1 Section 106 of the National Historic Preservation Act

A Cultural Resource Assessment Survey (CRAS), conducted in accordance with 36 CFR Part 800, was performed for the project, and the resources listed below were identified within the project Area of Potential Effect (APE). FDOT found that some of these resources meet the eligibility criteria for inclusion in the National Register of Historic Places (NRHP), and State Historic Preservation Officer (SHPO) has concurred with this determination. After application of the Criteria of Adverse Effect, and in consultation with SHPO, FDOT has determined that the proposed project will have No Adverse Effect on these resources.

A cultural resource assessment survey (CRAS) was completed for the S.R. 401 Bridge Replacement PD&E Study in January 2022, and is located in the project file. To encompass all potential improvements, the area of potential effects (APE) was defined to include the existing right-of-way where improvements are proposed, including the three bridges spanning the Canaveral Barge Canal, as well as the right-of-way along the S.R. 401 (SR A1A) interchange with SR 528 Causeway for a total length of approximately 0.7 miles (1.1 kilometers) of S.R. 401 (SR A1A) and 0.5 miles (0.8 kilometers) of the S.R. 528 Causeway. This APE was extended to the back or side property lines of parcels adjacent to the right-of-way or a distance of no more than 100 meters (330 feet) from the right-of-way line. Given the absence of natural soils within the project right-of-way, no archaeological survey was conducted. The historic structure survey was conducted within the entire APE.

The architectural survey resulted in the identification and evaluation of five previously recorded historic resources within the SR 401 Bridge Replacement APE (8BR03009, 8BR03010, 8BR02936, 8BR03394, and 8BR03395). Resources 8BR03009 (FDOT Bridge No. 700030), 8BR03010 (FDOT Bridge No. 700031), and 8BR03395 (FDOT Bridge No. 700117) are historic bridges and had previously been recommended ineligible for inclusion in the NRHP by the Florida SHPO in 2019. The SR 528 Causeway (8BR03394) was also recommended ineligible for inclusion in the NRHP by the Florida SHPO in 2019. Finally, the Canaveral Lock (8BR02936) resource group had previously been recommended eligible for listing in the NRHP by the Florida SHPO in 2012 and again in 2017.

The vast majority of the Canaveral Lock (8BR02936) is located to the west and outside the SR 401 Bridge Replacement APE. The section of Resource 8BR02936 within the SR 401 Bridge Replacement APE does not contain any buildings or parts of the lock structure. Within the SR 401 Bridge Replacement APE, the Canaveral Lock (8BR02936) contains a section of the waterway with stone-covered earthen embankments and concrete retaining walls. Since much of the resource is located outside the SR 401 Bridge Replacement APE, a full survey of the entire resource was not undertaken as part of the current study. Based on the results of the current and previous surveys, the Canaveral Lock (8BR02936) is significant for listing in the NRHP under Criterion A for its association with the Florida space industry and NASA, as well as its transportation associations. Within the APE, the segment of the overall Canaveral Lock (8BR02936) also retains sufficient historic integrity to convey its significance. The Canaveral Lock retains a high level of integrity of association since it continues to operate in its historic role as a canal lock for guiding boats into and out of the Cape Canaveral area, and it maintains its original location, design, materials, setting, feeling and association. Therefore, FDOT determined that Resource 8BR02936 remains eligible for NRHP listing.

The bridge replacement project is in keeping with the modernized SR 401 corridor. The improvements will not visually affect Resource 8BR02936 such that its NRHP-eligible status would be compromised, as it is the resource's associations with NASA and transportation that has contributed to the development of the area that determines its NRHP-eligible status. FDOT determined that that the project would have no adverse effect on 8BR02936 and recommended no further cultural resources survey or documentation in support of the project.

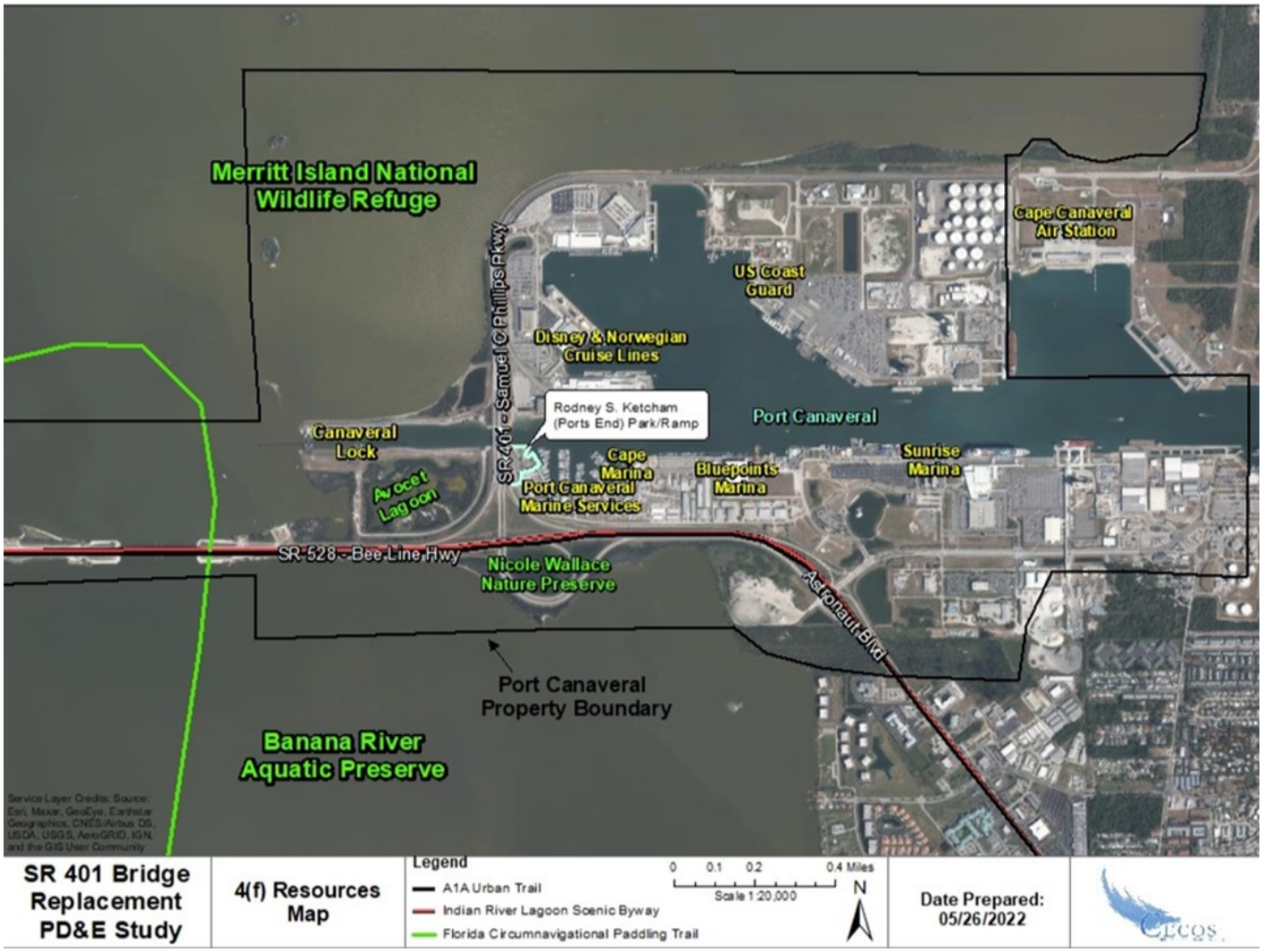
The Florida SHPO concurred with the results and recommendations of the survey. Refer to the letter transmitted to the Florida SHPO in February 2022, and returned concurrence on March 1, 2022 (see attachment in the Cultural Resources Appendix).

4.2 Section 4(f) of the USDOT Act of 1966, as amended

The following evaluation was conducted pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, and 23 CFR Part 774.

The Rodney S. Ketcham Park is located directly east of S.R. 401 and northeast of Mullet Road. It is a 4-acre park owned by the Canaveral Port Authority. This park includes boat-launch ramps, fish cleaning tables, picnic tables with pavilions, a restroom, and parking. Although the park is located directly adjacent to the proposed construction, no work is proposed within the park. Access will continue to be maintained during construction as the access point is east of the project limits and through A1A, which has no proposed work. It was confirmed and approved by OEM on October 27, 2022 that Rodney S. Ketcham Park is considered "No Use" with respect to Section 4(f). The Section 4(f) No Use determination (Section 4(f) Resources Form) is included in this document as an attachment in the Cultural Resources Appendix. The location of the park is shown in the Figure below.

Note: the A1A Urban Trail and Florida Circumnavigational Paddling Trail shown on this map are 4(f) Resources, but are outside of the study area and were therefore not evaluated.



4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965

There are no properties in the project area that are protected pursuant to Section 6(f) of the Land and Water Conservation Fund of 1965.

4.4 Recreational Areas and Protected Lands

The project is located adjacent to the Indian River Lagoon. Other major natural features within and adjacent to the project area were mapped using the Florida Natural Areas Inventory (FNAI) Conservation Lands GIS Data Catalog, and the Comprehensive Everglades Restoration Plan (CERP) GIS Data Catalog. There are two natural features within a quarter mile of the project area. These areas are managed for public recreation and wildlife observation and preservation. The sites include the Merritt Island National Wildlife Refuge and the Banana River Aquatic Preserve. These recreational resources are depicted in the Section 4(f) Resources Map above. In addition, there are state-owned conservation lands in the project area subject to review and approval by the Acquisition and Restoration Council (ARC).

Work will be limited to the footprint of the existing bridges and approaches and will not affect the recreational functions of these resources. As described in the previous section, the Rodney S. Ketcham Park is located directly east of SR 401 and northeast of Mullet Road. Although the park is located adjacent to proposed construction, no work is proposed within the park. Access will continue to be maintained during construction as the access point is east of the project limits and through A1A, which has no proposed work. The Rodney S. Ketcham Park is considered "No Use" with respect to Section 4(f) (see attachment provided in the Cultural Resources Appendix).

5. Natural Resources

The project will not have significant impacts to natural resources. Below is a summary of the evaluation performed:

5.1 Protected Species and Habitat

The following evaluation was conducted pursuant to Section 7 of the Endangered Species Act of 1973 as amended as well as other applicable federal and state laws protecting wildlife and habitat.

A combination of windshield surveys and pedestrian transects were used to conduct the field reviews for species, habitat, wetlands, and other surface waters (OSWs) on August 17, 18, and 19, 2021. Follow up surveys were conducted on February 24, 2022, to review additional wetland areas and confirm vegetation present. Surveys also included a benthic resources survey. A Final Natural Resource Evaluation (NRE) report dated 12/14/22 was prepared for the project and is provided in the Project File. The NRE contains additional details of effects of the project on protected species and habitat, wetlands and other surface waters, and essential fish habitat.

5.1.1 Protected Species

The project was evaluated for impacts to wildlife and habitat resources. Eighteen federally listed species and eight state listed species were identified to potentially occur in the project area. This project resulted in an effect determination of May Affect, Not Likely to Adversely Affect on the federally listed green sea turtle, loggerhead sea turtle, hawksbill sea turtle, leatherback sea turtle, Kemp's ridley sea turtle, west Indian manatee, giant manta ray, and smalltooth sawfish. This project resulted in an effect determination of No Effect on the eastern indigo snake, Atlantic salt marsh snake, piping plover, wood stork, rufa red knot, eastern black rail, Florida scrubjay, southeastern beach mouse, Carter's mustard, and Lewton's polygala.

The Wood Stork Determination Key for Central and North Peninsular Florida was used in the determination of the wood stork for this project. The USFWS Manatee Key was also used in the determination of the manatee.

Swimming Sea turtles

Sea turtles that have the potential to exist within the project area include the loggerhead (*Caretta caretta*), green turtle (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), Kemp's ridley (*Lepidochelys kempii*), and Hawksbill (*Eretmochelys imbricata*). The green and loggerhead sea turtles are listed as Threatened and the hawksbill, leatherback, and Kemp's Ridley turtles are listed as Endangered by National Marine Fisheries Service (NMFS). These sea turtles, when swimming, are regulated by NMFS. These marine turtles are often found in the coastal waters of Florida, although leatherbacks are rarely seen in coastal waters except when hatchlings are dispersing from nesting beaches. Swimming sea turtles have the potential to exist within the project construction area. Juvenile green turtles, Kemp's Ridley, and loggerheads are known to frequent bays or inlets. Juvenile sea turtles have the potential to exist within the project study limits, where they may seek calmer waters and forage in seagrass beds. Three juvenile green turtles were observed at the S.R. 401 bridges during field surveys.

Sea Turtle and Smalltooth Sawfish Construction Conditions will be followed during construction. As of 2021, these conditions are replaced by the NMFS Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office and the NFMS Vessel Strike Avoidance Measures, NOAA Fisheries Southeast Regional Office.

Given the potential for sea turtle movement through the Canaveral Barge Canal and waterways west of Port Canaveral, in-water work, and also the use of Sea Turtle and Smalltooth Sawfish Construction Conditions, FDOT assigned a determination of **May Affect, Not Likely to Adversely Affect** for all five swimming sea turtle species.

Nesting Sea Turtles

The green and loggerhead sea turtles are listed as Threatened and the hawksbill, leatherback, and Kemp's Ridley turtles are listed as Endangered by USFWS. These sea turtles, when nesting, are regulated by USFWS. Sea turtles generally nest on sandy beaches near the dune lines, away from areas that are disturbed by tidal influences. These five sea turtles are known to nest on the east coast of Florida. No nesting habitat exists within the project footprint for these sea turtles. The Florida Sea Turtle Nesting Beach Monitoring Program has documented sea turtle nesting and classified nesting densities on the coastal beach north of the Canaveral Barge Canal as high for green sea turtles, and medium for loggerhead and leatherback. Kemp's ridley is listed as present, and hawksbill is listed as not present. For the coastal beach south of the Canaveral Barge Canal, nesting density is classified as low for green sea turtle, low for loggerhead, and low for leatherback. Both hawksbill and Kemp's ridley are listed as not present. Due to the lack of nesting habitat within the project footprint, FDOT assigned a determination of **No Effect** for all five nesting sea turtle species.

Eastern indigo snake

The eastern indigo snake (EIS) is designated as Threatened by the USFWS. This species may inhabit a variety of natural areas including forested uplands and wetlands as well as wet and dry prairies. These snakes often inhabit gopher tortoise burrows, although no burrows were observed within the area. No habitat for the gopher tortoise exists in the study area and none were observed during field reviews. There is negligible suitable habitat for eastern indigo snake within the project footprint and none were observed during field reviews. Given the lack of potential suitable habitat, a determination of **No Effect** was assigned to this species.

Atlantic salt marsh snake

The Atlantic salt marsh snake is listed as Threatened by the USFWS. Atlantic salt marsh snakes inhabit saltmarsh tidal flats that contain grasses such as glasswort (*Salicornia*), *Spartina*, and *Juncus*, as well as scattered black mangroves. According to FWC's Atlantic Salt Marsh Snake Habitat Map, the snake is not found in Brevard County. Negligible suitable habitat exists within the project footprint or surrounding area, therefore, FDOT determined this project will have **No Effect** to the Atlantic salt marsh snake.

Piping plover

The piping plover is listed as Threatened by USFWS. This species is found on open, sandy beaches as well as tidal flats and mudflats. Piping plover are found on both the Atlantic and Gulf coasts but are more common on the Gulf coast. This project is located within the USFWS Consultation Area for the piping plover, but no USFWS Critical Habitat is identified within the project study limits. Marginal suitable habitat in the form of tidal flats adjacent to the S.R. 401 bridges surrounded by developed land and mangroves is present adjacent to the project footprint. No beach habitat is present and no direct impact to tidal flats are anticipated. Additionally, piping plover were not observed during field reviews but have been recorded in the Avocet Lagoon according to eBird. Based on the above information, FDOT determined this project will have **No Effect** to the piping plover.

Rufa red knot

The rufa red knot is listed as Threatened by the USFWS. These migratory shorebirds need to encounter favorable habitats, food, and weather conditions within narrow seasonal windows along migration stopovers between wintering and breeding areas. This species is highly dependent on feeding on horseshoe crab eggs, particularly along the northeastern Atlantic coast. Three dead horseshoe crabs were observed in the area during field surveys. Potential suitable habitat for

foraging exists adjacent to the project footprint in the form of tidal flats. Tidal flats will not be impacted and rufa red knots were not observed during field reviews. Based on the above information, FDOT determined this project will have **No Effect** to the rufa red knot.

Wood stork

Wood storks are listed as Threatened by USFWS. Wood storks utilize freshwater and estuarine habitats for nesting, foraging, and roosting. Wood storks are typically colonial nesters and construct their nests in medium to tall trees located within inundated forested wetlands including cypress swamps, mixed hardwood swamps, mangroves, and sloughs. No rookeries are present within the project footprint; however, the project is within the core foraging area (CFA) (18.6-mile radius) of two wood stork colonies. As defined by the USFWS, suitable foraging habitat (SFH) includes wetlands and surface waters which have areas of water that are relatively calm, uncluttered by dense thickets of aquatic vegetation, and have permanent or seasonal water depth between 2 and 15 inches. Wetlands and OSWs that meet the criteria of SFH generally include herbaceous and saltwater marshes, herbaceous ditches/swales, ponds, and riverine systems. Lagoons adjacent to the project provide SFH habitat and about 10 wood storks were observed in the Avocet Lagoon, located just west of the project during field reviews. While some wetlands will be impacted, the area that will be impacted is forested mangroves adjacent to the roadway with no standing water. Therefore, the impacted mangroves are not SFH for the wood stork and no SFH will be impacted. Temporary impacts during construction may occur (i.e., noise disturbance during construction activities). Additionally, the Wood Stork Determination Key for Central and North Peninsular Florida was reviewed for this project. Based on the above information and the Key, the FDOT has determined the project will have **No Effect** tothe wood stork.

Eastern black rail

The Eastern black rail is designated as Threatened by the USFWS. It is a wetland dependent bird primarily associated with herbaceous, persistent, emergent wetland plant cover and requires dense overhead cover and soils that are moist to saturated (occasionally dry) and interspersed with or adjacent to very shallow water. Specifically, this species may inhabit marshes and coastal prairies that can be tidally or non-tidally influenced, and range in salinity from salt to brackish to fresh. No marsh or coastal prairie habitat that meets the above requirements exists within the project footprint and no species were observed during field reviews. Based on the lack of potential suitability of habitat, FDOT determined the project will have **No Effect** on this species.

Florida scrub-jay

The Florida scrub-jay is listed as Threatened by the USFWS. This species inhabits sand pine, xeric oak scrub, and scrubby flatwoods. The project is within the USFWS scrub-jay consultation area; however, no suitable habitat is present within the project footprint or surrounding area, and no species were observed during field visits. Therefore, FDOT determined this project will have **No Effect** on the Florida Scrub-Jay.

West Indian (Florida) Manatee

The Florida manatee is listed as Threatened by the USFWS. Florida manatees utilize coastal waters, bays, estuaries, rivers and occasionally lakes. Manatees are known to utilize the Barge Canal to move to and from the Indian River Lagoon (IRL)/ocean although none were observed during field reviews. Discussions with the USACE Canaveral Lock staff revealed that they observe manatees traversing the canal and sometimes open the lock to allow manatees through, even though no boats are present. The USFWS Manatee Key (USFWS, 2013) was also reviewed to determine effect. Standard manatee conditions for in-water work will be followed during construction. Based on the key, the likelihood of the presence of manatee, and due to in-water work, FDOT has determined the project **May Affect Not Likely to Adversely Affect** the Florida manatee.

Southeastern beach mouse
The southeastern beach mouse is listed as Threatened by the USFWS. This species inhabits sand dunes along the Florida Atlantic coast from Volusia to Martin County. Their diet primarily consists of dune plant seeds and insects. No dunes are present within the project footprint or surrounding area and no species were observed during field reviews therefore, a determination of **No Effect** was given to the southeastern beach mouse.

Giant manta ray
The giant manta ray is listed as Threatened by NMFS. This species is pelagic and primarily inhabits near-shore waters, near coral and rocky reefs. They are also found in estuarine waters, oceanic inlets, and within bays and intercoastal waterways, all of which are found within or adjacent to the project footprint. Although they are primarily associated with deep water areas, they exhibit high plasticity in relation to the depth of water they will inhabit. NMFS has not developed Giant manta ray construction guidelines, however FDOT will apply the Sea turtle and Smalltooth Sawfish Construction Conditions during construction which should also help minimize impacts to the manta ray. Manta rays could inhabit the Port/Barge Canal and in water work will be performed. However, since construction conditions will be followed, FDOT has determined the project **May Affect, Not Likely to Adversely Affect** the giant manta ray.

Smalltooth sawfish
The smalltooth sawfish is listed as Endangered by the NMFS. They typically inhabit shallow, tropical coastal waters and estuarine habitats such as seagrass beds, mangroves, and inshore sand bars. They can be found in sheltered bays, estuaries, and mouths of rivers, and migrate to deeper waters as they mature. Development of Florida's shallow estuarine habitat has altered or reduced the amount of habitat available as nursery areas to young smalltooth sawfish, particularly areas containing habitat fringed with vegetation such as mangroves. Moderate foraging habitat is present in the IRL in the form of mangrove estuarine habitats, therefore the smalltooth sawfish may migrate through the Barge Canal. The NMFS Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office will be utilized during construction. Due to the potential presence of smalltooth sawfish and use of the above construction conditions during in-water work, FDOT has determined this project **May Affect, Not Likely to Adversely Affect** smalltooth sawfish.

Carter's mustard
Carter's mustard is listed as Endangered by the USFWS. This species is a fire-dependent annual herb occurring in xeric, shrub-dominated habitat. No suitable habitat exists within or adjacent to the project therefore, a determination of **No Effect** was given to Carter's Mustard.

Lewton's polygala
Lewton's polygala is listed as Endangered by the USFWS. This species is a short-lived perennial herb found in oak scrub and high pine habitat. No suitable habitat exists within, or adjacent to, the project therefore a determination of **No Effect** was given to Lewton's Polygala.

The potential effects on federally listed species are summarized in **Table 5-1.**

Table 5-1 Federally Listed Species Determination of Effect

Scientific Name	Common Name	Listing Status*	Determination of Effect**	Jurisdictional Agency	Potential of Occurrence***
Reptiles					

Chelonia mydas	Green sea turtle	FT	MANLAA	NMFS/ USFWS	High (swimming) None (nesting)
Caretta caretta	Loggerhead sea turtle	FT	MANLAA	NMFS/ USFWS	High (swimming) None (nesting)
Eretmochelys imbricata	Hawksbill sea turtle	FE	MANLAA	NMFS/ USFWS	Low (swimming) None (nesting)
Dermochelys coriacea	Leatherback sea turtle	FE	MANLAA	NMFS/ USFWS	Low (swimming) None (nesting)
Lepidochelys kempii	Kemp's ridley sea turtle	FE	MANLAA	NMFS/ USFWS	Moderate (swimming) None (nesting)
Drymarchon corais couperi	Eastern indigo snake	FT	NE	USFWS	None
Nerodia clarkii taeniata	Atlantic salt marsh snake	FT	NE	USFWS	Low
Birds					
Charadrius melodus	Piping plover	FT	NE	USFWS	Moderate
Calidris canutus rufa	Rufa red knot	FT	NE	USFWS	Moderate
Mycteria americana	Wood stork	FT	NE	USFWS	High
Laterallus jamaicensis spp. Jamaicensis	Eastern black rail	FT	NE	USFWS	None
Aphelocoma coerulescens	Florida scrub-jay	FT	NE	USFWS	None
Mammals					
Trichechus manatus latirostris	West Indian (Florida) Manatee	FT	MANLAA	USFWS	High
Peromyscus polionotus niveiventris	Southeastern beach mouse	FT	NE	USFWS	None
Fish					
Manta birostris	Giant manta ray	FT	MANLAA	NMFS	Moderate
Pristis pectinata	Smalltooth sawfish	FE	MANLAA	NMFS	Moderate
Plants					
Warea carteri	Carter's mustard	FE	NE	USFWS	None
Polygala lewtonii	Lewton's polygala	FE	NE	USFWS	None

Table Notes:

**FT = Federally designated Threatened; FE* = Federally designated Endangered*

*** NE = No Effect; MANLAA = May Effect, Not Likely to Adversely Effect*

****Potential of Occurrence:*

None = Species has been documented in Brevard County or the bio-region, but due to complete absence of suitable habitat, could not be naturally present within the project corridor.

Low = Species with a low likelihood of occurrence within the project corridor are defined as those species that are known to occur in Brevard County or the bio-region, but preferred habitat is limited on the project corridor, or the species is rare.

Moderate = Species with a moderate likelihood for occurrence are those species known to occur in Brevard County or the bio-region, and for which suitable habitat is well represented on the project corridor, but no observations or positive indications exist to verify presence.

High = Species with a high likelihood for occurrence are suspected within the project corridor based on

known ranges and existence of sufficient preferred habitat on the corridor; are known to occur adjacent to the corridor; or have been previously observed or documented in the vicinity.
Observed = Species were seen during field assessments.

5.1.1.2 State Listed Species

The potential effect on each state-only listed species is summarized in **Table 5-2**. A total of eight state only listed species were identified to potentially occur in the project area. Each species and their habitat requirements are discussed below.

Table 5-2 State Listed Species Determination of Effect

Scientific Name	Common Name	Listing Status*	Determination of Effect	Jurisdictional Agency	Potential of Occurrence**
Reptiles					
Gopherus polyphemus	Gopher tortoise	ST	**No Effect Anticipated**	FWC	None
Birds					
Rynchops niger	Black skimmer	ST	**No Effect Anticipated**	FWC	Low
Haematopus palliatus	American oystercatcher	ST	**No Effect Anticipated**	FWC	Low
Sternula antillarum	Least tern	ST	**No Effect Anticipated**	FWC	Low
Egretta rufescens	Reddish egret	ST	**No Adverse Effect Anticipated**	FWC	Moderate
Egretta caerulea	Little blue heron	ST	**No Adverse Effect Anticipated**	FWC	Moderate
Egretta tricolor	Tricolored heron	ST	**No Adverse Effect Anticipated**	FWC	Moderate
Ajaja ajaja	Roseate spoonbill	ST	**No Adverse Effect Anticipated**	FWC	Moderate

Table Notes:
** ST= State-designated Threatened*
***Potential of Occurrence:*
None = Species has been documented in Brevard County or the bio-region, but due to complete absence of suitable habitat, could not be naturally present within the project corridor.
Low = Species with a low likelihood of occurrence within the project corridor are defined as those species that are known to occur in Brevard County or the bio-region, but preferred habitat is limited on the project corridor, or the species is rare.
Moderate = Species with a moderate likelihood for occurrence are those species known to occur in Brevard County or the bio-region, and for which suitable habitat is well represented on the project corridor, but no observations or positive indications exist to verify presence.
High = Species with a high likelihood for occurrence are suspected within the project corridor based on known ranges and existence of sufficient preferred habitat on the corridor; are known to occur adjacent to the corridor; or have been previously observed or documented in the vicinity.
Observed = Species were seen during field assessments.

Gopher Tortoise

Gopher tortoises are listed as Threatened by FWC. This species is a long-lived, terrestrial tortoise that primarily inhabit upland areas with well-drained, sandy soils. No suitable habitat exists within the project footprint or surrounding area and no gopher tortoises or burrows were observed during field visits. Therefore, a determination of **No Effect Anticipated** was assigned to this species.

State Listed Avian Species

State-listed species which were identified to have potential to occur are a variety of avian species including the black skimmer (*Rynchops niger*), American oystercatcher (*Haematopus palliatus*), least tern (*Sternula antillarum*), reddish egret (*Egretta rufescens*), little blue heron (*Egretta caerulea),* tricolored heron (*Egretta tricolor*), and roseate spoonbill (*Ajaia ajaja*). These species are all state listed as Threatened. They utilize a combination of freshwater, brackish and saltwater habitats for feeding, mainly in shallow waters. Nesting occurs in a variety of habitats from freshwater forested wetlands to mangrove islands. FWC Wading Bird Rookeries mapping and data indicates that there is one wading bird rookery (Atlas #612307) located approximately 3.5 miles north of the project study limits, and another rookery (Atlas #612003) is located approximately 3.5 miles south of the project limits. The species listed as present in Atlas #612307 include great blue heron and double crested cormorant and this rookery was last active in the 1990's. A species list was not included in the data for Atlas #612003 and the rookery was inactive as of the 1990's. Additionally, least terns have been documented within Avocet Lagoon and Rodney Ketchum Park.

Wetlands that provide potential marginal foraging habitat for some of these species are present within and adjacent to the project footprint within mangrove swamps and freshwater marshes. Due to the impacts to marginal foraging habitat, a determination of **No Adverse Effect Anticipated** was given to the little blue heron, tricolor heron, roseate spoonbill, and reddish egret.

While there is presence of potential foraging habitat and previous documentation of rookeries, no potential foraging or nesting habitat is located within the project footprint or will be impacted for the black skimmer, American oystercatcher, and least tern. Therefore, a determination of **No Effect Anticipated** was assigned for the black skimmer, American oystercatcher, and least tern.

5.1.1.3 Other Species

Incidental species observed throughout the project area during field reviews are listed in **Table 5-3** along with the locations observed. These species are protected by the Migratory Bird Treaty Act (MBTA). The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by USFWS.

All species mentioned in **Tables 5-1 and 5-2** above could be potentially found foraging within features such as wetlands and OSWs adjacent to the area. Approximately 1.18 acres of wetlands and 0.09 acres of OSWs will be directly impacted by the proposed improvements and mitigation options are being reviewed to offset these impacts. Therefore, this project is not anticipated to adversely affect these species.

Table 5-3 - Other Protected Species Observed			
Scientific Name	Common Name	Location	Listing Status*
Birds			
Ardea alba	Great egret	Avocet Lagoon	MBTA
Ardea herodias	Great blue heron	Avocet Lagoon	MBTA

Anhinga anhinga	Anhinga	Avocet Lagoon	MBTA
Eudocimus albus	American white ibis	Avocet Lagoon	MBTA

Note: *MBTA: Migratory Bird Treaty Act

5.1.2 Habitat

Wetland habitats exist within the project, providing potential nesting and foraging habitat for federal and state-listed species. Fringe mangrove swamps within and adjacent to the project area provide both EFH and potential suitable foraging habitat for listed species. Tidal flats and salt marshes are also present by the bridge (north side) and may also provide foraging habitat for listed bird species. The Avocet Lagoon may provide foraging and nesting habitat for listed bird species as well. It should be noted that no seagrass or corals were found under or adjacent to the bridge. The Canaveral Barge Canal also provides potential habitat and access to and from the Indian River Lagoon (IRL)/ocean for manatees, sea turtles, giant manta ray, and smalltooth sawfish. The project is within the core foraging area (CFA) (18.6-mile radius) of two wood stork colonies. Consultation areas are present for scrub-jay and piping plover.

The project is located within the USFWS critical habitat for the Florida manatee and the west side of the project (IRL) is in an Important Manatee Area (IMA); designated by USFWS. Based on review of the USFWS Manatee Critical Habitat Mapper, the western S.R. 401 bridge appears to be partially located within designated manatee critical habitat. The manatee critical habitat extends westward through the Barge Canal and into the Indian River Lagoon/Banana River. Port Canaveral, to the east of the bridge, is outside the designated critical habitat. Although manatees are known to be present in the Barge Canal, as they move to/from the ocean and Indian River Lagoon, there are no seagrasses for foraging within the Barge Canal and limited other foraging resources (i.e., algae) may be available. No long-term impact to the designated critical manatee habitat will occur. Temporary, short-term impacts due to bridge construction (i.e., removal of existing bridges) are anticipated. The construction of the new bridge will result in 0.09 acres of impacts from the total area of new pilings in the water, however, the total number of pilings in the water is less. Additionally, manatee critical habitat does not appear to extend underneath the entire bridge. Due to nominal permanent impacts (0.09 acres) to critical habitat due to larger pilings and the area under the bridge providing negligible foraging habitat for the manatee, FDOT has determined the project **May Affect Not Likely to Adversely Affect** manatee critical habitat.

Avoidance and minimization will continue to be incorporated as practical throughout the PD&E and Design processes. The proposed roadway improvements will use BMPs in accordance with the current FDOT's Standard Specifications for Road and Bridge Construction. Additionally, sea turtle and smalltooth sawfish construction conditions will be followed during construction. Standard manatee conditions for in-water work will be followed during construction as well. A Natural Resource Evaluation (NRE) report dated 12/14/22 was prepared for the project. The NRE addresses effects of the project on protected species and habitat, wetlands and other surface waters, and essential fish habitat. Once further design details are available, consultation with NMFS will occur on EFH impacts.

5.1.3 Concurrence and Commitments

The NMFS Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office and the NFMS Vessel Strike Avoidance Measures, NOAA Fisheries Southeast Regional Office will be utilized during construction. The USFWS and FWC Standard Manatee Construction Conditions for In-Water Work will be utilized during construction. Concurrence from FWC was received on January 6, 2023. USFWS concurrence was received on January 19, 2023. NMFS provided technical assistance and concurrence will be received during design when more specific construction information is available. FWC, USFWS, and NMFS correspondence and concurrence letters are included in the Natural Resources Appendix.

During the final design/permitting phase, FDOT commits that the NMFS Vibratory Pile Driving Report Calculator will be used to determine potential noise impacts to marine species (sea turtles, smalltooth sawfish, giant manta ray, other fish, and marine mammals), as there is currently insufficient information at this time. FDOT commits to further coordination with NMFS during the design/ permitting phase. Species determinations will be reassessed as necessary during final design.

5.2 Wetlands and Other Surface Waters

The following evaluation was conducted pursuant to Presidential Executive Order 11990 of 1977 as amended, Protection of Wetlands and the USDOT Order 5660.1A, Preservation of the Nation's Wetlands.

A Natural Resources Evaluation was completed for this project. There are 14 wetlands and six other surface waters located within the project area. Approximately 1.18 acres of wetlands and 0.09 acres of OSWs would be directly impacted by the project. The wetlands and OSWs are located directly adjacent to the project area and since the proposed new bridges will span the Canaveral Barge Canal, complete avoidance to these resources is not possible. Additionally, the existing bridges over the Barge Canal have a current shading area of 0.56 acres and the shading area for the proposed bridges is approximately 0.55 acres. Therefore, negligible shading impacts are anticipated. No other secondary impacts are anticipated.

It is anticipated that mitigation for impacts to wetlands will be at a permitted mitigation bank. Impacts to surface waters do not require a functional assessment as mitigation for these impacts is not anticipated. There are three mitigation banks in the project area: Webster Creek, Green Wings, and Neoverde. These banks do not sell mangrove credits and according to the Florida Department of Environmental Protection (FDEP) Mitigation Bank Service Area Map, do not serve the entire project area.

Wetland impacts that will result from the construction of this project will be mitigated pursuant to Section 373.4137 F.S. to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C.s. 1344. Mitigation options are limited and at this time there are no mangrove credits available from surrounding mitigation banks as of this report date. The only option currently available is utilizing Section 373.4137 F.S., which provides for mitigation of FDOT wetland impacts through a regional mitigation program implemented by the St. John's River Water Management District (SJRWMD) with funding from the FDOT for specific FDOT project impacts. If the SJRWMD is unable to provide appropriate mitigation, other options will be identified during the design/permitting phase. A Uniform Mitigation Assessment Method (UMAM) analysis was conducted to determine the mitigation credits needed. A total of 0.62 mitigation credits are needed. See the mitigation table below.

Mitigation Credits			
FLUCCS Code	**Description**	**Acres of Impact**	**Number of Mitigation Credits Needed**
612	WL-1 Mangrove Swamps	0.10	0.067
612	WL-9 Mangrove Swamps	0.44	0.23
631	WL-10 Wetland Scrub	0.50	0.25
641	WL-11 Freshwater Marsh	0.14	0.07

The Preferred Alternative has been evaluated in accordance with Federal Executive Order 11990 "Protection of Wetlands". Based on the above considerations, it is determined that there are no practicable measures to minimize harm to wetlands which may result from such use. As the project advances through subsequent phases, avoidance and minimization of wetland impacts will continue to be considered to the maximum extent practicable. Therefore, with proper mitigation, the proposed project is expected to result in no significant impacts to wetlands.

5.3 Essential Fish Habitat (EFH)

Based on coordination with the National Marine Fisheries Service to comply with Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), FDOT commits to reinitiate consultation and provide information necessary to complete consultation on the mangroves and sand/shell bottom prior to advancing the project to construction. The letter from National Marine Fisheries Service is intended to provide reasonable assurance, per 23 CFR § 771.133, that requirements of the MSFCMA are able to and will be met prior to construction. The status of this commitment will be updated in any subsequent project re-evaluations.

Essential Fish Habitat (EFH) present in the project area includes mangroves, sand/shell bottom, and seagrass. However, it is anticipated that only about 0.10 acres of mangrove EFH and only about 0.09 acres of sand/shell bottom EFH will be impacted. The mangrove EFH that will be impacted provides little to no foraging habitat due to its location and limited connection to the Indian River Lagoon. These impacts are unavoidable and will be minimized to the greatest extent possible. No seagrass or corals were found under or adjacent to the bridge. No impacts to seagrass EFH or tidal flats EFH are anticipated.

Additional temporary impacts to sand /shell bottom will occur due to construction activities. FDOT should avoid and minimize impacts to EFH within and adjacent to the project area by reducing the project area to the extent practicable, selecting construction methods and staging areas that cause the least disruption to benthic habitats and surrounding wetlands. Anchoring, spudding or grounding barges and work vessels in areas of mapped seagrass should be avoided. Unavoidable impacts to EFH should be fully offset with appropriate mitigation, preferably in the same waterbody. Proposed Uniform Mitigation Assessment Method functional assessment scores are provided in the NRE (see Project File). NMFS recommends revised scoring be provided for review once final project design and impact estimates have been calculated. FDOT proposes to employ best management practices (BMPs), such as turbidity curtains around inwater work to control turbidity and silt fencing at staging areas to prevent sediments disturbed by the project from affecting areas outside of the project site.

Due to the nature of the minor EFH impacts being a total of approximately 0.19 acres and the use of BMPs, FDOT has determined that the project will have a minimal effect on EFH.

As noted in Section 5.1, project coordination with NMFS has been initiated, and the Department has received technical assistance and comments (see attachment in the Natural Resources Appendix). Per NMFS' recommendation, FDOT commits to complete consultation during design.

5.4 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management.

FEMA publishes flood hazard maps and flood elevations for areas subject to 100-year flood risks. The FEMA Floodplain Flood Hazard Layer FIRMette map (see attached map in the Natural Resources Appendix) for the Canaveral Barge Canal has a still water 100-year flood elevation of 7.2 feet North American Vertical Datum (NAVD) and in the Banana River, the 100-year flood elevation is 4 feet NAVD. The Brevard County Floodplain Administration and Community Rating System section is the local agency and manages the National Flood Insurance Program. Anticipated floodplain encroachments are insignificant and directly connected to the Atlantic Ocean which comply with Brevard County policies. Design of the project will be coordinated with Brevard County to maintain compliance.

The elevation difference is determined by the side of the canal's lock. The lock protects the Banana River from tidal currents, high storm surge and salt water. The project work area is compared to the floodplain limits to determine the potential encroachments. Encroachments occur where floodplain volume loss is anticipated. If the impact adversely effects adjacent properties, the impact is deemed significant. No significant impacts were identified on this project.

The proposed bridge adequately clears the 100-year flood elevation but minor encroachments occur in the proposed stormwater management facilities along the northbound roadside swales located north of the barge canal. The encroachments are considered a **Minimal Encroachment** due to the very low probability for potentially causing adverse impacts to adjacent land uses including residential, business and transportation uses based on the barge canal's unrestricted hydraulic connection with the Atlantic Ocean. Adhering to applicable permitting and regulatory requirements will provide reasonable assurance that the project will not result in adverse impacts to affected floodplains.

The proposed bridge structure and swales will perform hydraulically in a manner equal to or greater than the existing structure and swales, and backwater surface elevations are not expected to increase. Thus, 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 evacuation routes. Therefore, it has been determined that this encroachment is not significant.

The wave crest elevation is 10 feet (NAVD) and is defined as the 100-year storm surge with wind setup at the bridge location. With sea level rise factored in, the wave crest elevation is 10.86 feet (NAVD). Refer to the Bridge Hydraulics Report in the Project File for additional information on the wave crest evaluation. The vertical clearance of the bridge must be a minimum of one foot above the wave crest elevation (11.86 feet NAVD). The proposed bridges, with 65 feet of vertical clearance, satisfy this criteria.

Based on the FDEP Sea Level Impact Projection (SLIP) Study Tool (https://floridadep-slip.org/Map.aspx) the project is located outside of the Coastal Building Zone Boundary that requires a SLIP study. Therefore, a SLIP study was not prepared for the project.

5.5 Sole Source Aquifer

There is no Sole Source Aquifer associated with this project.

5.6 Water Resources

A Pond Siting Report (PSR) and a Water Quality Impact Evaluation (WQIE) were prepared for this study (see Project File for both reports). In accordance with state criteria, water will be collected and treated prior to discharge to receiving waters

including the Indian River Lagoon and the Barge Canal. This will be accomplished by using wet detention stormwater management facilities (SWMFs) in the infield areas south of the barge canal and dry retention/detention SWMFs along the roadway swales north of the barge canal. Therefore, neither direct nor indirect impacts to receiving waters are anticipated. The proposed roadway improvements' SWMFs for the project will meet FDOT drainage criteria, St. John's River Water Management District (SJRWMD) permit criteria and use of BMPs in accordance with the current FDOT's Standard Specifications for Road and Bridge Construction. BMPs are Best Management Practices used to improve stormwater quality prior to discharge and include wet detention ponds, dry detention ponds, dry retention ponds and exfiltration. Additional BMPs used during construction to control erosion and sedimentation include devices such as silt fencing, floating turbidity barriers, runoff control structures, and temporary ground covers. To protect surface waters, these devices will remain in place until the drainage basin has been stabilized.

An Individual Environmental Resource Permit will be required from the SJRWMD. Additionally, a National Pollutant Discharge Elimination System (NPDES) Construction permit is required from the FDEP. Erosion and sediment control details will be prepared along with a Stormwater Runoff Control Concept to comply with permitting requirements from both agencies.

5.7 Aquatic Preserves

The project is adjacent to the Banana River Aquatic Preserve/OFW or Banana River Lagoon (BRL) located to the south and west of the project and is part of the Indian River Lagoon (see attached map in the Natural Resources Appendix). The proposed stormwater management facilities for the project will meet FDOT drainage criteria, SJRWMD permit criteria and use BMPs in accordance with the current FDOT's Standard Specifications for Road and Bridge Construction.

As an avoidance/minimization measure, discharges to the BRL will be required to meet peak requirements for the mean annual storm to reduce freshwater flows. This will be accomplished through discharge rate control in wet detention SWMFs. Other avoidance and minimization measures will continue to be incorporated as practical throughout project development and design. Therefore, no impacts to the aquatic preserve are expected.

5.8 Outstanding Florida Waters

The Banana River Lagoon is both an Aquatic Preserve and Outstanding Florida Waters (OFW). The project is also adjacent to the Merritt Island National Wildlife Refuge OFW located to the north and west of the project and is also part of the Indian River Lagoon. The proposed stormwater management facilities for the project will meet FDOT drainage criteria, SJRWMD permit criteria and use BMPs in accordance with the current FDOT's Standard Specifications for Road and Bridge Construction. Avoidance and minimization measures will continue to be incorporated as practical throughout the Design processes. Therefore, no impacts to Outstanding Florida Waters are expected.

5.9 Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers or other protected rivers in the project area.

5.10 Coastal Barrier Resources

There are no Coastal Barrier Resources in the project area.

6. Physical Resources

The project will not have significant impacts to physical resources. Below is a summary of the evaluation performed for these resources.

6.1 Highway Traffic Noise

The following evaluation was conducted pursuant to 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, and Section 335.17, F.S., State highway construction; means of noise abatement.

A Type 1 Noise Study Report (NSR) dated July 2022 was prepared pursuant to 23 Code of Federal Regulations (CFR) part 772 and Section 335.17, Florida Statutes (F.S.) for the Preferred Alternative (High Level Fixed Bridge). Twelve noise sensitive receptor locations were evaluated, all of which were located at the Rodney S. Ketcham Park/Boat Ramp area and at an adjacent marina which contains liveaboard tenants. The traffic noise levels predicted at the twelve noise sensitive receptor locations under evaluation approached or exceeded the applicable noise abatement criteria at one single receptor location, an outdoor pavilion sitting area. However, potential noise abatement measures were determined to be not feasible based on the Department's Feasibility Factor (Noise Reduction Factor). Detailed information about the noise analysis can be found in the Noise Report located in the project file.

6.2 Air Quality

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to improve the Level of Service (LOS) and reduce delay and congestion on all facilities within the study area.
Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

6.3 Contamination

A Level 1 Contamination Screening Evaluation was conducted for this study. The screening is documented in the Contamination Screening Evaluation Report (CSER) (provided in the Project File). As part of this evaluation, a preliminary review of potential contamination sites located within the search distances for the project alignment was conducted. A map of the potential contamination sites is provided as an attachment in the Physical Resources Appendix. The following six sites, five petroleum tank facilities and one hazardous material generator, were determined to be low risk due to their distance from the proposed construction. Therefore, no impacts due to contamination are anticipated.

1. Cape Marina Services
2. Ocean Club at Port Canaveral
3. New Port Marina
4. Unknown Release

5. Canaveral Port Authority Cruise Terminal 8 Garage
6. Canaveral Landfill

6.4 Utilities and Railroads

UTILITIES

A Utility Assessment Report has been completed for this project, and coordination with Utility Agencies/Owners (UAOs) is ongoing. This report is provided in the Project File and is summarized in the Preliminary Engineering Report (PER).

UAOs with potential involvement include:

- AT&T Distribution
- Charter Communications (Spectrum)
- Crown Castle Fiber
- City of Cocoa, Florida
- City of Cocoa Beach, Florida
- Florida Power & Light (FP&L) Transmission
- FP&L Distribution

It is anticipated that the proposed project will result in utility conflicts and will require adjustments and relocations.

AT&T Florida (telephone)

- A 1-4" PVC BT Duct crosses S.R. 401 approx. 600 feet south of the Canaveral Barge Canal.
- A 2-4" PVC Duct runs north-south along the east LA R/W to a BT Manhole (P-1) located 10 ft south of Mullet Road.
- A 600-pair 2" subaqueous copper BT crosses the Canaveral Barge Canal approximately 100 feet west of S.R. 401 to a BT Manhole (P-2) located approximately 350 feet north of the Canaveral Barge Canal adjacent to northbound S.R. 401.

Charter Communication/ Spectrum (CATV)

- Per correspondence from the Construction Specialist at Spectrum, the UAO, Spectrum has no facilities within the study limits; however, in February 2022 and again in February 2023, Charter Communications contacted the study team to inquire about placing a pipe in the head wall on the bridge during the construction of the bridge for future fiber.

City of Cocoa (Water)

- South of the S.R. 401 Bridges, a City of Cocoa 24" water main runs along the western edge of Mullet Road. At about 500 feet North of the bridges, the water main is 60-80 feet east of the S.R. 401 edge of pavement.
- A 6" asbestos concrete water main (out of service) runs along western edge of the S.R. 528 WB on ramp right of way, crossing S.R. 401 approximately 250 feet south of Mullet Road and running along eastern edge of the S.R. 528 EB off ramp.
- 36" Concrete WM that runs along western edge of the R/W for the S.R. 528 WB on ramp (approx. 10-15 feet west of the 6" AC WM), crossing S.R. 401 approx. 675 feet south of Mullet Road and running along the western edge of Mullet Road. Discussions between the City of Cocoa and design team have ensued. Adjustment of this utility may be limited to casing sections of the WM.

Florida Power & Light (FP&L)

- The FP&L Transmission pole line has three high-voltage 69kV OE Transmission lines run north-south just west of the LA right of way within an easement. The Transmission lines cross S.R. 401 approximately 175 feet north of the S.R. 528 overpass. FP&L Distribution has three 12.6kV OE Distribution underlines on the existing FP&L Transmission Pole Line within an easement.
- A Transmission Power Pole located just south of Mullet Road on the west side of the S.R. 401 Bridge could potentially conflict with construction of the southbound bridge.
- The FP&L OE Transmission and Distribution (under lines) that cross S.R. 401 on Transmission poles approximately 175 feet north of the S.R. 528 overpass will likely conflict with the new S.R. 401 profile at this location.
- Approximately 650 feet north of the S.R. 401 Bridges, an FP&L distribution service connection crosses the LA R/W and will conflict with the higher S.R. 401 profile.

Coordination with UAOs to identify and minimize conflicts is continuing through the design phase.

RAILROADS

There are no existing or planned rail facilities within the study limits.

6.5 Construction

Construction activities for the proposed project may have temporary air, noise, vibration, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the project. Air quality impacts will be temporary and will primarily be in the form of emissions from diesel-powered construction equipment and dust from road areas. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other controlled materials in accordance with FDOT's Standard Specifications for Road and Bridge Construction as directed by the FDOT Project Engineer.

Noise and vibration impacts will be from the heavy equipment movement and construction activities such as pile driving and vibratory compaction of embankments. Noise control measures will include those contained in FDOT's Standard Specifications for Road and Bridge Construction. Adherence to local construction noise and/or construction vibration ordinances by the contractor will also be required where applicable.

Water quality impacts resulting from erosion and sedimentation during construction will be controlled in accordance with FDOT's Standard Specifications for Road and Bridge Construction and through the use of Best Management Practices (BMPs).

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling. Traffic delays will be controlled to the extent possible where many construction operations are in progress at the same time.

Construction of the project may require excavation of unsuitable material (muck), placement of embankments, and use of materials, such as limerock, asphaltic concrete, and portland cement concrete. Any demucking will be controlled by adherence to Section 120 of FDOT's Standard Specifications for Road and Bridge Construction. Disposal will be on-site in

detention areas or offsite.

The removal of structures and debris will be in accordance with local and state regulatory agencies permitting this operation. The contractor is responsible for the methods of controlling pollution on haul roads; in borrow pits, other materials pits, and areas used for disposal of waste materials from the project.

Temporary erosion and sediment control features as specified in the FDOT's Standard Specifications for Road and Bridge Construction, Section 104, will consist of temporary grassing, sodding, mulching, sandbagging, slope drains, sediment basins, sediment checks, artificial coverings, and berms. A National Pollutant Discharge Elimination System (NPDES) Construction permit is required from the FDEP. Also called the FDEP Generic Permit for Stormwater Discharges, erosion and sediment control details will be prepared along with the required Stormwater Runoff Control Concept to comply with permitting requirements. The Stormwater Runoff Control Concept will include a narrative description of the site, controls, maintenance, and inspection requirements.

7. Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the Preliminary Engineering Report.

8. Permits

The following environmental permits are anticipated for this project:

Federal Permit(s)	Status
USACE Section 10 or Section 404 Permit	To be acquired
USACE Section 408 Permit	To be acquired
USCG Bridge Permit	To be acquired

State Permit(s)	Status
DEP or WMD Environmental Resource Permit (ERP)	To be acquired
DEP National Pollutant Discharge Elimination System Permit	To be acquired

9. Public Involvement

The following is a summary of public involvement activities conducted for this project:

Summary of Activities Other than the Public Hearing

This PD&E Study was conducted by FDOT in coordination with local agencies and organizations that have a stake in this project, including, but not limited to the Canaveral Port Authority, U.S. Army Corps of Engineers (USACE), and U.S. Coast Guard (USCG).

PUBLIC INVOLVEMENT PLAN

The S.R. 401 PD&E Study Public Involvement Plan (PIP) was prepared in June of 2021. This document is available in the Project File. The purpose of the PIP is to assist in providing information to and obtaining input from concerned citizens, agencies, private groups (residential/business), and governmental entities. The overall goal of the plan was to help ensure that the study reflects the values and needs of the communities it is designed to benefit.

PROJECT KICKOFF NOTICE

A Project Kickoff Notice was sent to project stakeholders on September 3, 2021. This notice included a Project Information Handout and FDOT Project Manager's contact information. A copy of the notice is provided in the Project File.

TECHNICAL ADVISORY COMMITTEE AND AGENCY COORDINATION

At the beginning of this study, a technical advisory committee (TAC) was organized, consisting primarily of members of the Canaveral Port Authority staff. There have been numerous meetings and presentations to engage agency and private organizational stakeholders and garner input (see Table 9-1 below).

Table 9-1 Agency and Stakeholder Meetings

Date	Type	Category	Organization	Key Decisions
9/13/2021	Meeting	TAC	Technical Advisory Committee (TAC)	Establish TAC, project overview, schedule
9/16/2021	Meeting	Agency	Space Coast TPO	SLR - SCTPO Resiliency Plan
10/6/2021	Meeting	Stakeholder	Canaveral Port Authority	Project update presentation
10/7/2021	Meeting	Agency	U.S. Army Corps of Engineers (USACE)	Canaveral Lock discussion. Existing Bascule Foundations, Section 408 Permit, Design Issues
10/18/2021	Meeting	Stakeholder	NASA	No feasibility issues
10/21/2021	Meeting	Stakeholder	SpaceX	Preferred bascule bridge due to future potential payload heights (230'). Did not have objections to 6 percent grade
10/26/2021	Meeting	Stakeholder	U.S. Space Force (USSF)	No feasibility issues. Suggested coordination with Navy, need to review, Provided list of staff that need to be included.
10/28/2021	Meeting	Stakeholder	Space Florida	Mentioned tall rockets by Space X and Blue Origin. SpaceX subsequently preferred unlimited clearance. Blue Origin subsequently did not have objections to 65' VC
11/2/2021	Meeting	TAC	TAC #2	FDOT to include CPA in coordination with SLR, requested copy of Geotech report,
11/5/2021	Meeting	Agency	USCG	Alternatives - vertical clearance discussion
11/9/2021	Meeting	Agency	Naval Ordinance Test Unit	No Specific Concerns at this time

11/9/2021	Meeting	Agency	Space Force	Grade needed to be researched by SLD 45, ULA and Space X
11/10/2021	Meeting	Stakeholder	Blue Origin	Bridge Grade Requirements
11/17/2021	Meeting	Stakeholder	Astrotech	No requirements for SR 401
11/23/2021	Meeting	Stakeholder	Port - Security	No feasibility issues
11/23/2021	Meeting	Stakeholder	Port - Cargo Tenants	No feasibility issues. No concerns about a 6% grade
11/23/2021	Meeting	Stakeholder	Canaveral Port Authority	No feasibility issues
11/30/2021	Meeting	Stakeholder	Florida Power and Light	Discussion of potential conflicts
1/31/2022	Meeting	Agency	USCG	Further discussion of alternatives
2/1/2022	Meeting	Stakeholder	Port - Ground Transportation	No feasibility issues
2/10/2022	Meeting	Stakeholder	Port Canaveral #3	Preview of Public Workshop Presentation
3/7/2022	Meeting	Agency	SCTPO - TAC and CAC	Project update presentation
3/10/2022	Meeting	Agency	SCTPO - Governing Board	Project update presentation
6/13/2022	Meeting	TAC	TAC #3	PCA suggested entertaining public comment for aesthetics. Alternatives to be shown at public hearing
6/22/2022	Meeting	Agency	USCG	Project update
8/23/2022	Meeting	Agency	USCG	Project update
9/14/2022	Meeting	Stakeholder	Canaveral Port Authority	Shrimping Trawlers Comments, Aesthetics
12/20/2022	Meeting	Stakeholder	Canaveral Port Authority	Trawler Comments; Design Coordination
1/12/2023	Meeting	TAC	TAC #4	Project update presentation. Public Hearing overview
4/7/2023	Meeting	Agency	NASA and USSF	Discussed future infrastructure needs
8/30/23	Meeting	Stakeholder	Launch Service Providers	Discussed future infrastructure needs
9/20/23	Meeting	Stakeholder	Space Perspective	Discussed future infrastructure needs
10/31/23	Meeting	Agency	NASA and USSF	Discussed future infrastructure needs

PUBLIC MEETING

Details of the S.R. 401 PD&E Study Alternatives Public Meeting are provided in the Public Meeting Summary (see Project File). The following is a summary of this public meeting:

The Department held a hybrid Public Information Meeting for this PD&E Study on February 23, 2022. Notices of the public meeting were sent to all property owners, business owners, interested persons and organizations to provide the opportunity to offer comments and express their views regarding this project and the proposed improvements. Participants joined the virtual public meeting on GoTo Webinar, and the in-person meeting was held as an open house at the Port Canaveral Maritime Center at 445 Challenger Road, Cape Canaveral. A recording of the public meeting presentation and copies of the meeting exhibits are available on the project website at www.cflroads.com/project/444787-1.

Attendees (not including FDOT/study team members)

While 48 stakeholders registered for the virtual public meeting, 16 attended online. A total of 18 stakeholders attended the in-person open house. Stakeholders in attendance included representatives of: Space Coast TPO, Space Florida Brevard County, Canaveral Port Authority Staff and Commission, City of Cape Canaveral, U.S. Coast Guard, Department of State, FAA, and NASA, as well as private entities such as 888 Transportation (cargo), Blue Origin, SpaceX, Kennedy Marina, Charter Communications, and the Radisson Resort at the Port.

Comments/Questions
The public comment period for this public meeting was open until March 9, 2022. Stakeholder comments and Department responses are provided in the Public Meeting Summary (see Project File). In summary, stakeholders expressed the desire for the project to be fast-tracked. We received a comment in support of the Fixed Bridge Alternative, and one stakeholder expressed concern that the 65-foot height of the Fixed Bridge Alternative would limit taller (70-foot) marine vessel travel. The Canaveral Port Authority subsequently provided a letter of support for the High-level Fixed Bridge Alternative.

Date of Public Hearing: 02/01/2023
Summary of Public Hearing
Details of the S.R. 401 PD&E Study Public Hearing are provided in the Public Hearing Summary (see Project File). The following is a summary of this public Hearing:

FDOT held a hybrid Public Hearing on Tuesday January 31, 2023 (virtual) and Wednesday February 1, 2023 for the S.R. 401 Bridge Replacement Project Development and Environment (PD&E) Study. The Department offered multiple ways for the community to participate in the meeting. All participants, regardless of platform they chose, received the same information on the proposed project.

Virtual Option: Interested persons were invited to join from a computer, tablet, or mobile device on Tuesday, January 31, 2023, at 5:30 p.m. For this option, advance registration was required by visiting the following online link https://bit.ly/sr401hearing. Once registered, participants received a confirmation email containing information about joining the hearing online. The virtual hearing began at 5:30 p.m. as an open house to allow participants to view the hearing materials prior to the presentation. The formal hearing presentation began promptly at 6:00 p.m., followed by a formal public comment period.
Phone Option (Listen Only): Participants could also listen to the hearing on Tuesday, January 31, 2023, beginning at 5:30 p.m. by dialing 562-247-8422 and entering a passcode when prompted. Phone option participants were advised on how to submit their public comments after the hearing by contacting the FDOT project manager.
In-Person Option: Participants were also invited to attend in person by going to Canaveral Port Authority, 445 Challenger Road, Cape Canaveral, FL 32920 on Wednesday, February 1, 2023, at 5:30 p.m. The in-person hearing location opened the doors at 5:30 p.m. to allow participants to view the public hearing exhibits and speak one-on-one with project representatives. The formal hearing presentation began promptly at 6:00 p.m., followed by a formal public comment period.

ADVERTISEMENTS AND NOTIFICATION
This public hearing was advertised in the Florida Administrative Register (FAR), on FDOT's public notices website, the Florida Today Newspaper, on social media, and on the project web page. Adjacent property owners, interested individuals, elected and appointed officials, and government agencies were also notified about this public hearing by U.S. Mail. The notification letter included a copy of the public hearing newspaper advertisement. In addition, stakeholders who provided an email address during the course of the PD&E Study were notified by email of the public hearing. Notice of this public hearing was also shared through the FDOT, Space Coast Transportation Planning Organization (TPO) and Canaveral Port Authority event calendar and on social media outlets.

PRESENTATION AND EXHIBITS
A formal, narrated presentation was played at the virtual and in-person public hearings. A copy of the public hearing presentation slides was available for download on the project web page at www.cflroads.com/444787-1.
The following exhibits were on display at the in-person public hearing, were available for download from the Handouts section of the GoTo Webinar Control Panel during the virtual public hearing, and also available for download from the

project web page at www.cflroads.com/444787-1.

A comment form and a project information handout were available for download from the GoToWebinar Control Panel for virtual participants and as hard copies at the in-person public hearing. These materials were also available for download from the project website at www.cflroads.com/444787-1.

Copies of the PD&E study Project Documents were made available for public review online at www.cflroads.com/444787-1 and at the Port Canaveral Library, located at 201 Polk Avenue , Cape Canaveral, Florida 32920 from January 10, 2023 until February 11, 2023.

The public was notified of availability of the project documents through the hearing notifications (letters, advertisements, and FAR) and during the hearing virtual and in-person presentations.

ATTENDANCE

Forty-eight people registered for the GoTo Webinar, and 24 people attended online via computer or mobile device; however, individuals who attended by calling from a land line are not accounted for in this total. Not including FDOT and PD&E study team staff, 15 people attended the in-person public hearing.

There were no elected public officials noted in attendance at neither the virtual nor the in-person public hearing. Representatives from several agencies, including Canaveral Port Authority, U.S. Coast Guard, State of Florida Fish and Wildlife Conservation Commission (FWC) and Department of State (DOS), SpaceFlorida, and the Space Coast TPO registered for and/or attended the public hearing.

COMMENTS AND RESPONSES

Comments for both the virtual and in-person public hearings were received through the project website, by email to the FDOT Project Manager, David.Graeber@dot.state.fl.us, verbally during the virtual and in-person public hearings, and in written form. Following the virtual public hearing held on January 31, 2023, participants received an automated message thanking them for attending the hearing and proving the FDOT Project Manager's contact information.

In summary, there were five total comments from both public hearings originating from the Wild Ocean Market and members of the Port Canaveral Yacht Club expressing concern about the 65-foot vertical clearance for the proposed high-level fixed bridge; one commentor expressed written and verbal concern about the safety of drawbridges and support for the proposed high-level fixed bridge; there was one question about traffic control during construction and one question about when the final design would begin. Copies of the Public Hearing Transcripts are attached (see Public Involvement Appendix). Copies of the public hearing notices, exhibits, presentations, comments and Department responses are included in the PD&E Study Public Hearing Summary (see the Project File).

10. Commitments Summary

1. The USFWS and FWC Standard Manatee Construction Conditions for In-Water Work will be utilized during construction.
2. The NMFS Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office will be utilized during construction.
3. The NFMS Vessel Strike Avoidance Measures, NOAA Fisheries Southeast Regional Office will be utilized during construction.
4. NMFS Vibratory Pile Driving Report Calculator for noise impacts during construction will be completed during the design and permitting phase.
5. Coordination with NMFS will continue and consultation with NMFS will occur during the design/ permitting phase.

11. Technical Materials

The following technical materials have been prepared to support this Environmental Document and are included in the Project File.

Project Traffic Analysis Report Final
FDOT District 5 Urban Boundary Map
Economic Contribution of Port Canaveral to Florida in 2018
Marine Vessel Navigation Survey
Sociocultural Data Report
USCG Preliminary Navigational Determination
USCG EST Comments on Draft Type 2 CE
Section 4(f) Resources Form
Water Quality Impact Evaluation (WQIE)
Natural Resources Evaluation Final 22-12-14
Location Hydraulics Report Final
Pond Siting Report (PSR) Final
Bridge Hydraulics Report (BHR) Final
Utilities Assessment Package
Noise Study Report (NSR)
Contamination Screening Evaluation Report (CSER)
Geotechnical Report - PRELIMINARY
Typical Section Package
Preliminary Engineering Report
2023-03-30 444787-1-CE2-D5-PublicHearingSummary
2022-03-29 444787-1-CE2-D5-PublicMeetingSummary
Public Involvement Plan

Attachments

Planning Consistency

Planning_Consistency_LRTP
SCTPO_LRTP_2045_Amendment
FDOT State Transportation Improvement Program

Social and Economic

Land Use Map

Cultural Resources

SHPO Concurrence Letter
Section 4(f) Resources Form

Natural Resources

Floodplains Map
Aquatic Preserves and Outstanding Florida Waters (OFW) Map
Wetlands Surface Waters and Essential Fish Habitat Map
National Marine Fisheries Service Correspondence
Florida Fish and Wildlife Conservation Commission (FWC) Concurrence Letter
US Fish and Wildlife Service Species Concurrence Letter

Physical Resources

Noise Receptor Map
Potential Contamination Sites Map

Public Involvement

Public Hearing Certification - Virtual 1/31/2023
Public Hearing Certification - In-Person 2/1/2023
Public Hearing Transcript-Virtual 1/31/2023
Public Hearing Transcript-In-Person 2/1/2023

Planning Consistency Appendix

Contents:

Planning_Consistency_LRTP

SCTPO_LRTP_2045_Amendment

FDOT State Transportation Improvement Program

15.0 LRTP AMENDMENTS

Besides the 5-year update cycle, there are times when the SCTPO may find it necessary to amend the LRTP. An amendment is a major revision that may include adding or deleting a project from the plan. It also includes major changes to project costs, initiation dates, or design concepts and scopes for existing projects. A major amendment resulting in a change in the cost feasibility of the adopted LRTP cost feasible plan requires financial analysis reaffirming the cost feasibility of the amended plan. An amendment requires public review and comment in accordance with the Public Involvement Process for LRTP Amendments, and re-demonstrating fiscal constraint. Florida Statute requires the SCTPO Board adopt any amendments to the LRTP by a recorded roll call vote with a majority of the membership present.

Table 15.1 will be used throughout the timeframe of the 2045 LRTP to record the adoption and any future amendments or modifications that are processed.

Table 15.1: LRTP Amendments

Number	Amendment or Modification	Resolution Number	Approval Date	Reason for Amendment or Modification
1	Amendment	22-13	2/10/22	Project Advancement

From Chapter 4, page 4-29 of the FDOT Metropolitan Planning Organization Program Management Handbook:

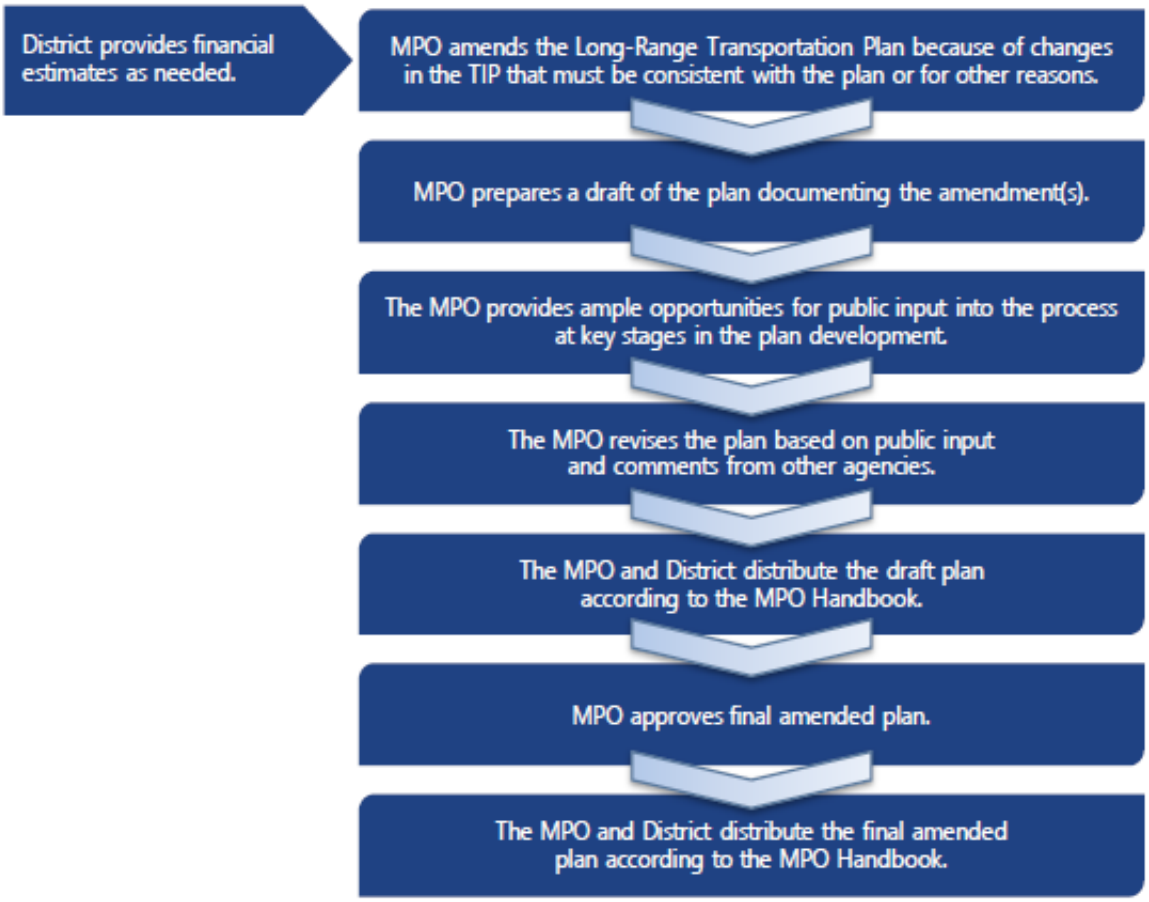
"Besides the five-year update cycle, there are times an MPO may find it necessary to revise the LRTP. FDOT Guidance provides minimum thresholds for project changes that trigger an LRTP Amendment. The Code of Federal Regulations defines two types of revisions:

- An **administrative modification** is a minor revision to the LRTP (or TIP) that includes minor changes to project/project phase costs, minor changes to funding sources of previously included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment, a redemonstration of fiscal constraint, or a conformity determination (in nonattainment and maintenance areas). [23 C.F.R. 450.104]
- An **amendment** means a revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP, that involves a major change to a project included in a LRTP, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment and a redemonstration of fiscal constraint. If an amendment involves "nonexempt" projects in nonattainment and maintenance areas, a conformity determination is required. [23 C.F.R. 450.104]

The LRTP can be revised at any time. It is important to note the MPO does not have to extend the LRTP planning horizon out another 20 years for administrative modifications and amendments. That is required only for the periodic (e.g., 5-year) update.

Florida Statute requires the MPO Board adopt any amendments to the LRTP by a recorded roll-call vote or hand-counted vote of the majority of the membership present. This guidance [s.339.175(13), F.S.] Figure 4.3 shows the LRTP amendment process."

Figure 4.3 LRTP Amendment Process



Amendment One

Due to developments in the FDOT Work Program the following projects have moved into the first 5 year time period of the LRTP. The limits of project T1.8b have been updated to be consistent with other planning documents. Cost Feasible Table 11.1 (PDF page 142) has been updated to reflect these changes. The changes below do not impact the cost feasibility of current or future projects.

Cost Feasible Project No.	Facility	From	To	Phase	Year	Amount
T1.8a	NASA Causeway Bridge Replacement			CST	2022	$134,205,657
T1.8b	Space Commerce Way Widening	NASA Parkway West	Kennedy Parkway	CST	2023	$24,810,000
T1.15	SR 401 Bridge Replacement			PE	2022	$2,038,318

TABLE 11.1: STRATEGIC INTERMODAL SYSTEM PROJECTS in millions YOE $s

						2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				2021-2045
Table ID	FACILITY	FROM	TO	PROJECT	SOURCE	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	TOTAL
T1.1	Ellis Rd.	John Rhodes Blvd.	W of Wickham Rd.	Widen to 4 Lanes	ACCM, ACSA, ACSU, CM, SA, SU			$ 21.51																		$ 21.51
					TMA (SU)			$ 1.60																		$ 1.60
					SIS								$ 37.92													$ 37.92
T1.2	I-95/SR 524 Interchange	N/A	N/A	Operational Improvements	Other Arterial						$ 1.75		$ 12.70													$ 14.45
T1.3	I-95 at SR 524 Interchange Ramps	N/A	N/A	Landscaping	DDR, DIH				$ 0.63																	$ 0.63
T1.4	I-95/Wickham Rd. Ramp Improvements and Mast Arms	N/A	N/A	Add Left Turn Lane(s)	ACFP, DDR				$ 3.23																	$ 3.23
T1.5	I-95	S. of SR 404 Interchange	N. of SR 404 Interchange	Landscaping	DDR, DIH				$ 0.58																	$ 0.58
T1.6	I-95/Ellis Rd. Interchange	N/A	N/A	Interchange (New)	ACNP				$ 0.05																	$ 0.05
T1.7	I-95 Southbound Rest Area			Rest Area	DDR, DIH, DRA		$ 1.00		$ 21.69																	$ 22.69
T1.8	*Cape Canaveral Spaceport Indian River Bridge Replacement & Space Commerce Way Connector*																									
	a. Nasa Causeway Bridge	N/A	N/A	Bridge Replacement	SIS, INFRA, NASA				$ 134.21																	$ 134.21
	b. Space Commerce Way	NASA Parkway West	Kennedy Parkway	Widen to 4 Lanes	SIS, INFRA, NASA, NFPD, LF				$ 24.80																	
	c. NASA Causeway			Resurfacing	SIS, INFRA								$ 32.03													
T1.9	SR 528	SR 520	SR 407	Widen to 6 Lanes	SIS							$ 4.02	$ 92.01													$ 96.03
T1.10	SR 528	E. of Industry Rd.	E. of SR 3	Widen to 6 Lanes	DI, DIH			$ 6.60																		$ 6.60
					SIS											$ 18.54	$ 424.05									$ 442.58
T1.11	SR 528	E. of SR 3	Port Canaveral Interchange (SR 401)	Widen to 6 Lanes	DI, DIH			$ 1.99																		$ 1.99
					SIS											$ 4.89	$ 491.81									$ 496.70
T1.12	SR 528	US 1	SR 401	Resurfacing	DDR, DIH, NHRE		$ 1.36		$ 12.07																	$ 13.43
T1.13	SR 528/US 1			Drainage Improvements	DDR, DIH			$ 0.16	$ 2.14																	$ 2.30
T1.14	SR 528	N/A	N/A	Upgrade Overhead Signing	PKYI				$ 4.14																	$ 4.14
T1.15	SR 401	N/A	N/A	Bridge Replacement	DDR, DIH	$ 1.51	$ 0.03																			$ 1.54
					SIS, ACNP		$ 2.00																			$ 2.00
SUBTOTAL - SIS						$ -	$ -	$ -	$ -	$ -	$ -	$ 4.02	$ 129.93	$ -	$ -	$ 23.43	$ 915.85	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,073.24
SUBTOTAL - Other Arterial						$ -	$ -	$ -	$ -	$ -	$ 1.75	$ -	$ 12.70	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 14.45
SUBTOTAL - Misc. State/Federal						$ 1.51	$ 4.39	$ 30.25	$ 203.52	$ -	$ -	$ -	$ 32.03	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 271.70
SUBTOTAL - TMA (SU)						$ -	$ -	$ 1.60	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1.60
TABLE 11.1 SUBTOTAL						$ 1.51	$ 4.39	$ 31.85	$ 203.52	$ -	$ 1.75	$ 4.02	$ 174.66	$ -	$ -	$ 23.43	$ 915.85	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,360.99
TABLE 11.1 TOTAL						$241.27				$180.44				$939.28				$0.00				$0.00				$ 1,360.99

RESOLUTION # 22-13

2045 Long Range Transportation Plan Amendment #1

A RESOLUTION, adopting the Space Coast Transportation Planning Organization's 2045 Long Range Transportation Plan (LRTP) for the Palm Bay-Melbourne and Titusville Urbanized Areas.

WHEREAS, the Space Coast Transportation Planning Organization is the designated and constituted body responsible for the urban transportation planning and programming process for the Palm Bay-Melbourne and Titusville Urbanized Areas; and

WHEREAS, Federal regulations 23 C.F.R. 450.322, 450.324, 450.306 and FL State Statute 339.175 outline the requirements for MPOs to develop LRTPs through a performance-driven, outcome-based approach to planning for metropolitan areas of the State. The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive; it should also provide for the consideration and implementation of projects, strategies, and services that will address all required factors; and

WHEREAS, the Long Range Transportation Plan (LRTP) was developed with local, regional, state, multi-modal and environmental agencies that depicts an accurate representation of the areas priorities as developed through the planning process carried on cooperatively in accordance with the provisions of 23 U.S.C. 134; and

WHEREAS amending the plan may be necessary from time to time due to major changes to project cost, scope and project limits; the addition of new projects to the Plan; and to ensure planning consistency with other planning studies, programs and production schedules.

WHEREAS, the BOARD'S registered Agent in Florida is Andrea Young, Space Coast TPO Chair. The registered Agent's address is: 2725 Judge Fran Jamieson Way, Building B, Room 105, Melbourne, FL 32940; and

NOW THEREFORE, BE IT RESOLVED The Space Coast Transportation Planning Organization amends the 2045 Long Range Transportation Plan, Amendment No. 1, as detailed in Attachment A.

Space Coast Transportation Planning Organization

Passed and duly adopted at a regular meeting of the Space Coast Transportation Planning Organization Governing Board on the 10th day of February, 2022.

Certificate

The undersigned duly qualified as Chair of the Space Coast Transportation Planning Organization Governing Board certifies that the foregoing is a true and correct copy of a Resolution adopted at a legally convened meeting of the Space Coast Transportation Planning Organization Governing Board.

By: _____
Andrea Young
Space Coast TPO Governing Board Chair

By: _____
Robert L. Jordan, Jr.
Space Coast TPO Governing Board Secretary

Space Coast Transportation Planning Organization
Transportation Improvement Program

Fiscal Year 2023 - 2027 Adopted July 14, 2022,
Amended September 8, 2022 (roll forward amendment)

Space Coast Transportation Planning Organization
2725 Judge Fran Jamieson Way
Building B, Room 105
Melbourne, Florida 32940
Phone: 321-690-6890
Fax: 321-690-6827

The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 595 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

5-Year Summary of Projects by Funding Category

Project #	Project Name	2023	2024	2025	2026	2027	Total
BNIR - INTRASTATE R/W & BRIDGE BONDS							
Total		**0**	**5,050,000**	**0**	**1,930,000**	**0**	**6,980,000**
BRRP - STATE BRIDGE REPAIR & REHAB							
4471351	US 1 ELBOW CREEK (#700007) & US 1 EAU GALLIE	750,030	0	0	0	0	**750,030**
4494251	I-95 BRIDGE REHAB; 700162 CARTER	1,152,181	0	0	0	0	**1,152,181**
4502641	SR 401 OVER CANAVERAL BARGE CANAL	40,000	4,000,771	0	0	0	**4,040,771**
Total		**1,942,211**	**4,000,771**	**0**	**0**	**0**	**5,942,982**
CIGP - COUNTY INCENTIVE GRANT PROGRAM							
4269052	ST JOHNS HERITAGE PKWY/ELLIS RD	0	0	0	4,100,000	0	**4,100,000**
Total		**0**	**0**	**0**	**4,100,000**	**0**	**4,100,000**
CM - CONGESTION MITIGATION - AQ							
4269054	ST JOHNS HERITAGE PKWY/ELLIS RD FROM JOHN	2,772,804	2,763,453	1,000,000	871,000	0	**7,407,257**
Total		**2,772,804**	**2,763,453**	**1,000,000**	**871,000**	**0**	**7,407,257**
D - UNRESTRICTED STATE PRIMARY							
2439681	MOA - MELBOURNE	80,328	80,328	80,328	80,328	80,328	**401,640**
2440031	COCOA BEACH MOA	0	14,874	14,874	14,874	14,874	**59,496**
2440041	CITY OF PALM BAY MOA	0	99,654	0	0	0	**99,654**
2440071	MOA CTY OF ROCKLEDGE	109,584	0	0	0	0	**109,584**
2441001	MOA TITUSVILLE	0	62,300	62,300	62,300	0	**186,900**
2443481	MOA - CITY OF COCOA	213,390	0	0	0	0	**213,390**
2447062	MOA - BREVARD COUNTY	0	32,340	32,340	32,340	32,340	**129,360**
2447291	MOA - INDIAN HARBOUR BEACH ON SR 513	48,975	0	0	0	0	**48,975**
4064911	MOA - INDIALANTIC	0	0	26,000	0	0	**26,000**
4136154	LIGHTING AGREEMENTS FUNDS	1,047,856	1,079,288	1,111,675	1,145,015	1,179,376	**5,563,210**
4157842	TOWN OF PALM SHORES MOA	12,572	12,572	12,572	0	0	**37,716**

PAGE 2417 FLORIDA DEPARTMENT OF TRANSPORTATION DATE RUN: 07/05/2023
AS-OF DATE: 07/01/2023 OFFICE OF WORK PROGRAM TIME RUN: 10.36.56
STIP REPORT MBRSTIP-1
HIGHWAYS

PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT

DDR	930,994	0	0	0	0	930,994
DIH	19,631	369	0	0	0	20,000
TOTAL <N/A>	994,603	75,955	0	0	0	1,070,558
TOTAL 444176 1	994,603	75,955	0	0	0	1,070,558
TOTAL Project:	994,603	75,955	0	0	0	1,070,558

ITEM NUMBER:444787 1 PROJECT DESCRIPTION:SR 401 BRIDGE REPLACEMENT *SIS*
DISTRICT:05 COUNTY:BREVARD PROJECT LENGTH: .686MI TYPE OF WORK:PD&E/EMO STUDY

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	GREATER THAN 2027	ALL YEARS

FEDERAL PROJECT NUMBER: <N/A>

PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT

DDR	1,915,449	0	0	0	0	1,915,449
DIH	166,597	407	0	0	0	167,004
DS	40,654	0	0	0	0	40,654
TOTAL <N/A>	2,122,700	407	0	0	0	2,123,107

FEDERAL PROJECT NUMBER: D522 049 B

PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT

ACNP	1,859,972	0	0	0	0	1,859,972
DIH	9,589	0	0	0	0	9,589
SA	7,227	22,773	0	0	0	30,000
TOTAL D522 049 B	1,876,788	22,773	0	0	0	1,899,561
TOTAL 444787 1	3,999,488	23,180	0	0	0	4,022,668
TOTAL Project:	3,999,488	23,180	0	0	0	4,022,668

ITEM NUMBER:444992 1 PROJECT DESCRIPTION:SR-5/US-1 FROM MILLER COVE ROAD TO THE PINEDA CAUSEWAY *NON-SIS*
DISTRICT:05 COUNTY:BREVARD PROJECT LENGTH: .605MI TYPE OF WORK:DRAINAGE IMPROVEMENTS

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	GREATER THAN 2027	ALL YEARS

FEDERAL PROJECT NUMBER: <N/A>

PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT

DIH	37,931	12,479	0	0	0	50,410
DS	765,759	0	0	0	0	765,759

PAGE 2418 FLORIDA DEPARTMENT OF TRANSPORTATION DATE RUN: 07/05/2023
AS-OF DATE: 07/01/2023 OFFICE OF WORK PROGRAM TIME RUN: 10.36.56
STIP REPORT MBRSTIP-1
HIGHWAYS

PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT

DDR	2,922,595	0	0	0	0	2,922,595
DIH	0	10,270	0	0	0	10,270
DS	2,741,944	0	0	0	0	2,741,944
TOTAL <N/A>	6,468,229	22,749	0	0	0	6,490,978
TOTAL 444992 1	6,468,229	22,749	0	0	0	6,490,978

ITEM NUMBER:445215 1 PROJECT DESCRIPTION:SR-5/US-1 FROM POST ROAD TO MILLER COVE ROAD *NON-SIS*
DISTRICT:05 COUNTY:BREVARD PROJECT LENGTH: 1.642MI TYPE OF WORK:RESURFACING

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	GREATER THAN 2027	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DIH	42,194	826	0	0	0	0	43,020
DS	14,633	0	0	0	0	0	14,633
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DDR	680,081	0	0	0	0	0	680,081
DIH	0	10,270	0	0	0	0	10,270
DS	5,828,919	0	0	0	0	0	5,828,919
TOTAL <N/A>	6,565,827	11,096	0	0	0	0	6,576,923
FEDERAL PROJECT NUMBER: D523 018 B							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
ACSU	29,358	0	0	0	0	0	29,358
DDR	634,166	0	0	0	0	0	634,166
SU	301,472	0	0	0	0	0	301,472
TOTAL D523 018 B	964,996	0	0	0	0	0	964,996
TOTAL 445215 1	7,530,823	11,096	0	0	0	0	7,541,919
TOTAL Project:	13,999,052	33,845	0	0	0	0	14,032,897

Social and Economic Appendix

Contents:

Land Use Map

1:9,028

0 0.075 0.15 0.3 mi

0 0.1 0.2 0.4 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Cultural Resources Appendix

Contents:

SHPO Concurrence Letter

Section 4(f) Resources Form

Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 South Woodland Boulevard
DeLand, Florida 32720-6834

KEVIN J. THIBAULT, P.E.
SECRETARY

February 16, 2022

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Mr. Clete Rooney, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
SR 401 Bridge Replacement Project Development and Environment (PD&E) Study
Brevard County, Florida
Financial Management No.: 444787-1

Dear Dr. Parsons,

Enclosed please find one copy of the report titled *Cultural Resource Assessment Survey in Support of the SR 401 Bridge Replacement PD&E Study Brevard County, Florida*. The FDOT District 5 is conducting a PD&E Study for proposed replacement of the three existing State Road (SR) 401 bascule bridges. The study alternatives consist of the No Build and three Build alternatives that would carry traffic northbound and southbound along the existing bridge alignment - Mid-Level Movable Bascule Bridge, Mid-Level Movable Lift Bridge, and High-Level Fixed Bridge. The Mid-Level Movable Bascule Bridge would replace the current three bascule bridges with two bascule bridges, the Mid-Level Movable Lift Bridge would replace the current three bascule bridges with two vertical-lift bridges, and the High-Level Fixed Bridge would replace the current three bascule bridges with two fixed span bridges. Additional improvements include roadway widening and/or realignment of existing ramps. The bridge and associated roadway improvements will take place within the existing right-of-way; no additional right-of-way is proposed.

To encompass all potential improvements, the Area of Potential Effects (APE) was defined to include the existing right-of-way where improvements are proposed, including the three bridges spanning the Canaveral Barge Canal, as well as the right-of-way along the SR 401/SR A1A interchange with SR 528 Causeway for a total length of approximately 0.7 miles of SR 401/SR A1A and 0.5 miles of SR 528 Causeway. The APE was extended from the right-of-way to include adjacent properties up to 100 meters (330 feet). Given the absence of natural soils within the entire

project right-of-way, no archaeological survey was conducted. The historic structure survey was conducted within the entire APE.

The purpose of the survey was to locate, identify, and bound any archaeological resources, historic structures, and potential districts within the project's APE and assess their potential for listing in the National Register of Historic Places (NRHP). This study was conducted to comply with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, and the Archeological and Historic Preservation Act of 1974, as amended. The study also meets the regulations for implementing NHPA Section 106 found in 36 CFR Part 800 (*Protection of Historic Properties*). This study also complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code. All work was performed in accordance with Part 2, Chapter 8 of the FDOT's PD&E Manual (revised July 2020) as well as the Florida Division of Historical Resources' (FDHR) recommendations for such projects as stipulated in the FDHR's *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-42).

The architectural survey resulted in the identification of five previously recorded historic resources within the SR 401 Bridge Replacement PD&E Study APE. The previously recorded historic resources include one resource group, one linear resource, and three bridges.

One previously recorded group, the Canaveral Lock (8BR02936), was determined eligible for listing in the National Register of Historic Places (NRHP) on June 5, 2012, under Criterion A for its association with the Florida space industry and the National Aeronautics and Space Administration (NASA), as well as its maritime transportation associations. Based on the results of the current study, 8BR02936 is recommended to remain NRHP-eligible. It is the opinion of the District that the improvements proposed at this location (replacement of bridges) are in keeping with the modernized SR 401 corridor and will not diminish Resource 8BR02936 such that its NRHP-eligible status would be compromised. It is the resource's associations with NASA and maritime transportation that has contributed to its NRHP-eligible status, and as the project poses no alterations to these associations nor the integrity of the resource itself, the proposed project has no potential to adversely affect the NRHP eligibility of the Canaveral Lock (8BR02936).

The remaining four resources within the APE (8BR03009, 8BR03010, 8BR03394, and 8BR03395) are recommended ineligible for listing in the NRHP due to factors such as a lack of engineering and/or architectural distinction and a lack of significant historical associations. The SHPO previously concurred that these four resources are ineligible for inclusion in the NRHP on February 17, 2017, and July 8, 2019. No further architectural history work is recommended.

Based on the results of this study, it is the opinion of the District that the proposed undertaking will have no adverse effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Catherine Owen, District Cultural Resource Coordinator, at (386) 943-5383 or me at (386) 943-5411.

Sincerely,

William G. Walsh
Environmental Manager
FDOT, District Five

cc. Deena Woodward, Cultural and Historic Resource Specialist, FDOT OEM

The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and ☑ concurs / ☐ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 2021-5217. Or, the SHPO finds the attached document contains _____ insufficient information.

In accordance with the Programmatic Agreement among the ACHP, SHPO and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FDOT may approve the project as de minimis use under Section 4(f) under 23 CFR 774.

SHPO Comments:

Kelly L Chase
For

Timothy A. Parsons, PhD, Director
Florida Division of Historical Resources

3/1/2022
Date

Section 4(f) Resources

Florida Department of Transportation

SR 401 BRIDGE REPLACEMENT

District: FDOT District 5

County: Brevard County

ETDM Number: 14397

Financial Management Number: 444787-1-22-01

Federal-Aid Project Number: N/A

Project Manager: David Graeber

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 May 26, 2022 and executed by the Federal Highway Administration and FDOT. Submitted pursuant 49 U.S.C. § 303.

Table of Contents

Summary and Approval 1
Rodney S. Ketcham Park 2
Resource Attachments 3

Summary and Approval

Resource Name	Facility Type	Property Classification	Owner/Official with Jurisdiction	Recommended Outcome	OEM SME Action
Rodney S. Ketcham Park	Public park and boat ramp	Park/Rec Area	Canaveral Port Authority	No Use	Determination 10-27-2022

Rodney S. Ketcham Park

Facility Type: Public park and boat ramp

Property Classification: Park/Rec Area

Address and Coordinates:
Address: 998 Mullet Rd, Cape Canaveral, FL, 32920, USA
Latitude: 28.40839 Longitude: -80.63109

Description of Property:
Rodney S. Ketcham Park, formerly known as Port's End Park, is located in Port Canaveral on the west side of the port near the Canaveral locks. This is a four-acre park offering boat access to the Intracoastal Waterway (Banana & Indian Rivers). Park amenities include a picnic pavilion, observation deck, river access, picnic tables, fishing, boat ramp, benches, fish cleaning stations, free parking, restrooms, non-motorized boat launch, and wildlife viewing. The park is open daily from sunrise to sunset.

Owner/Official with Jurisdiction: Canaveral Port Authority

Relationship Between the Property and the Project
Rodney Ketcham Park is located directly east of SR 401 and northeast of Mullet Road. While the park is located directly adjacent to proposed construction, no work is proposed within the park. Access is currently through Mullet Road, just off of SR 528/A1A. Access will continue to be maintained during construction as the access point is east of the project limits and through A1A, which has no proposed work. Staging or storing of materials is not proposed within park boundaries.

Yes	No	
☐	☒	Will the property be "used" within the meaning of Section 4(f)?

Recommended Outcome: No Use

OEM SME Determination Date: 10-27-2022

Resource Attachments

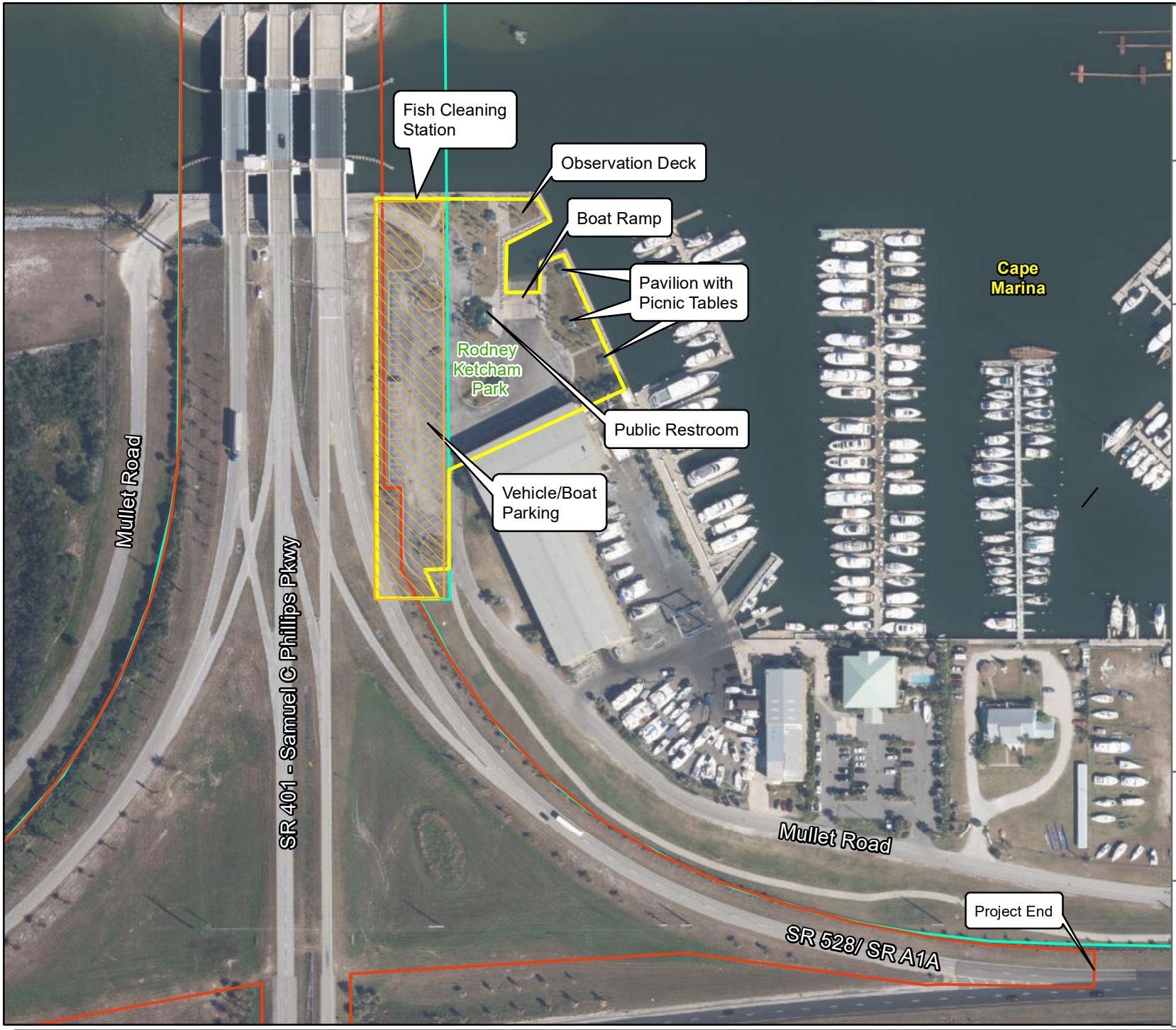
Rodney S. Ketcham Park

Map of Rodney S. Ketcham Park and Boat Ramp

Rodney S. Ketcham Park

Contents:

Map of Rodney S. Ketcham Park and Boat Ramp



SR 401 Bridge Replacement

Rodney Ketcham Park

Legend

- Parcel Boundary
- Impact Footprint Boundary
- Right of Way
- Permanent Road Right of Way Easement

Notes

Rodney Ketcham Park right of way easement granted to FDOT per Exhibit B, Part A of Memorandum Agreement, dated 2/2/70.

Brevard County Property Appraiser

Survey Conducted By CECOS Biologists: August 17/18, 2021

2017 BasemapSource: Esri, Maxar, GeoEye, Earthstar Geographics,

N

0 175'

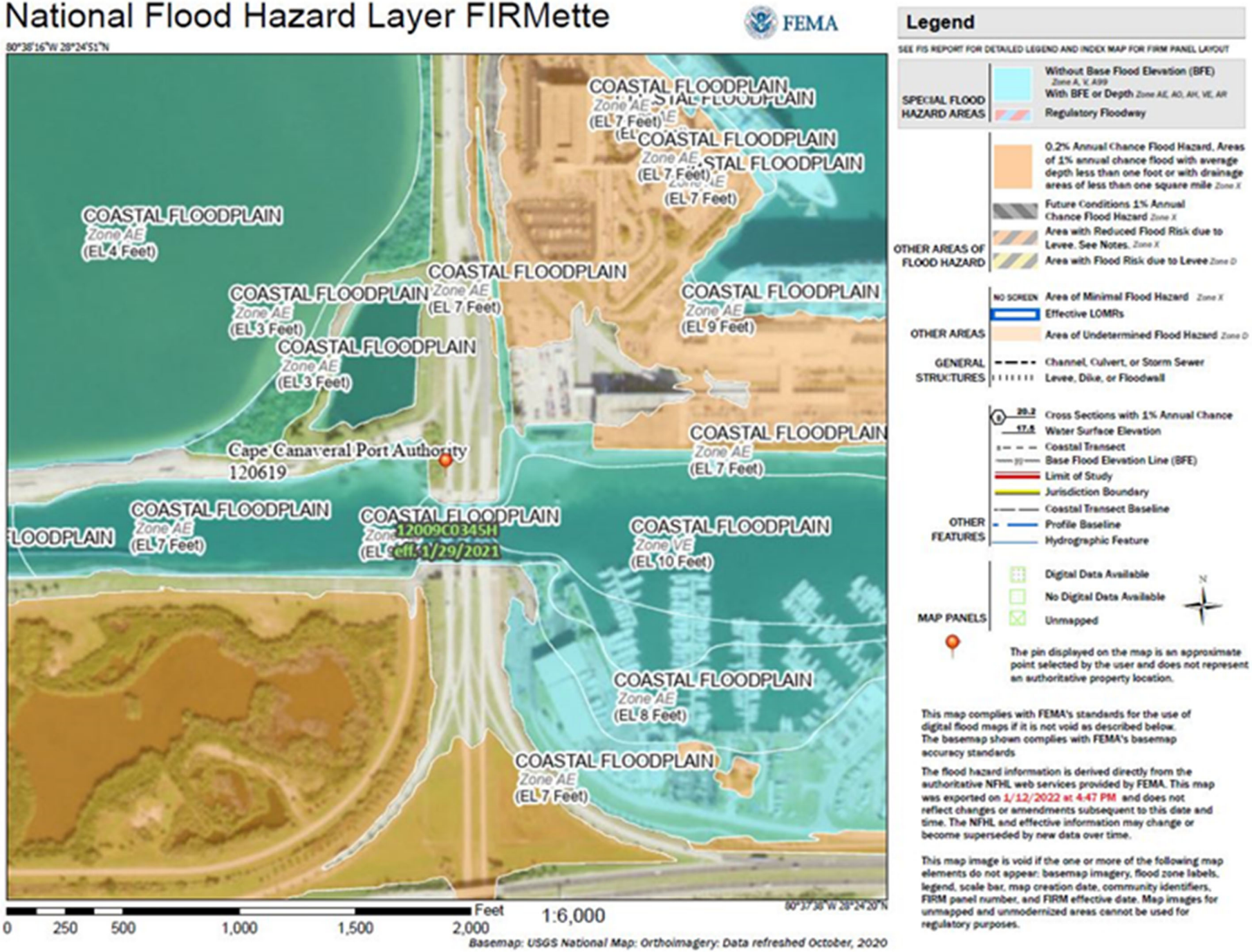
Date Revised: February 8, 2022

CECOS ENVIRONMENTAL CONSULTING SERVICES

Natural Resources Appendix

Contents:

Floodplains Map
Aquatic Preserves and Outstanding Florida Waters (OFW) Map
Wetlands Surface Waters and Essential Fish Habitat Map
National Marine Fisheries Service Correspondence
Florida Fish and Wildlife Conservation Commission (FWC) Concurrence Letter
US Fish and Wildlife Service Species Concurrence Letter


National Flood Hazard Layer FIRMette
FEMA
80°38'16"W 28°24'51"N
COASTAL FLOODPLAIN
Zone AE
(EL 7 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 4 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 3 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 9 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 3 Feet)
Cape Canaveral Port Authority
120619
COASTAL FLOODPLAIN
Zone AE
(EL 7 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 7 Feet)
12009C0345H
eff. 1/29/2021
COASTAL FLOODPLAIN
Zone VE
(EL 10 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 8 Feet)
COASTAL FLOODPLAIN
Zone AE
(EL 7 Feet)
0 250 500 1,000 1,500 2,000 Feet
1:6,000
80°37'38"W 28°24'20"N
Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020
Legend
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee. See Notes. Zone X
Area with Flood Risk due to Levee Zone D
OTHER AREAS
NO SCREEN Area of Minimal Flood Hazard Zone X
Effective LOMRs
Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES
Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall
OTHER FEATURES
20.2 Cross Sections with 1% Annual Chance
17.5 Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature
MAP PANELS
Digital Data Available
No Digital Data Available
Unmapped
N
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/12/2022 at 4:47 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

SR 401 Bridge Replacement PD&E Study

Project Location Map

Legend

- Impact Footprint Boundary
- Dredged Bays and Estuaries
- Bays and Estuaries
- Atlantic Ocean

2017 BasemapSource: Esri,

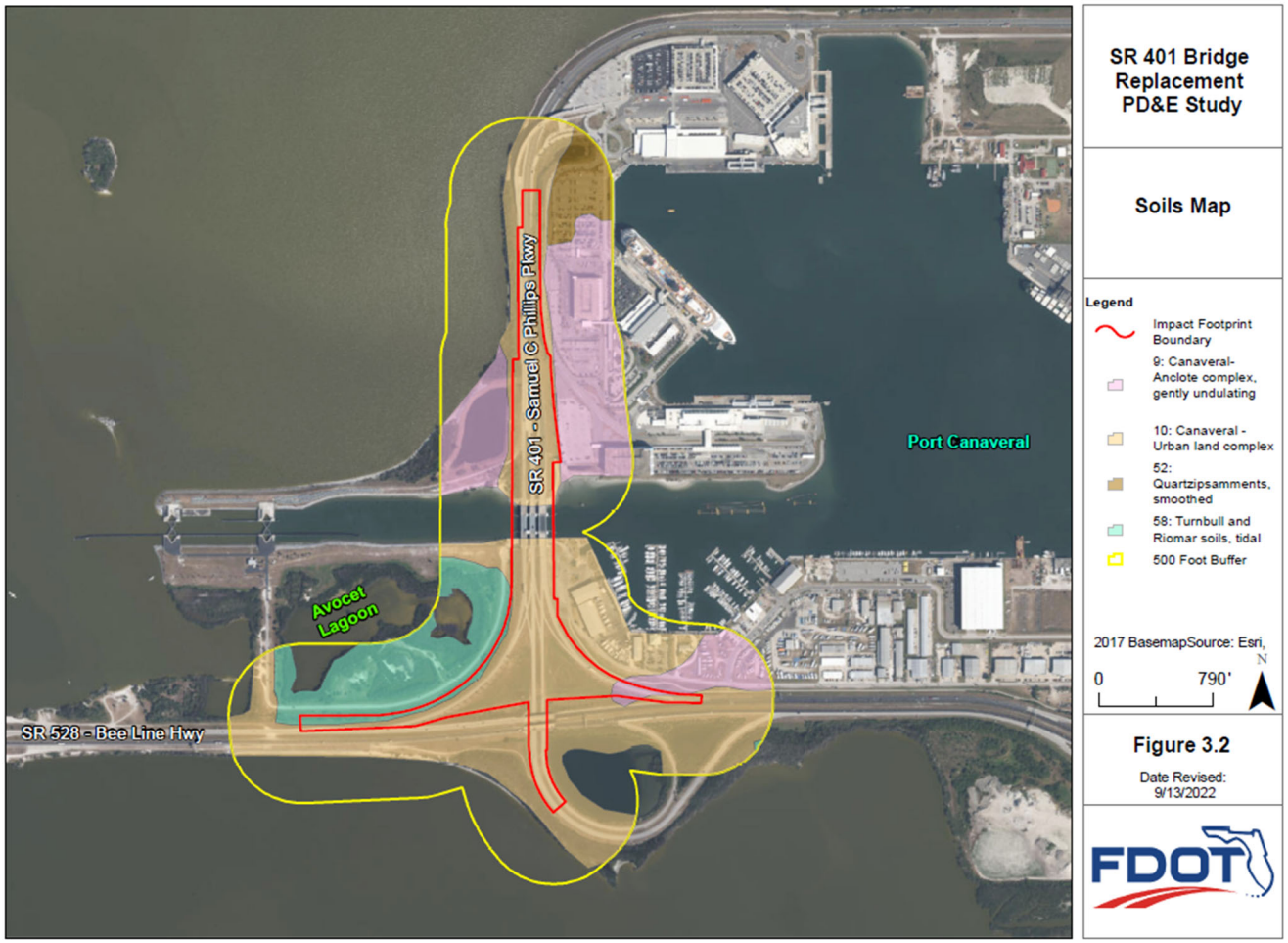
N

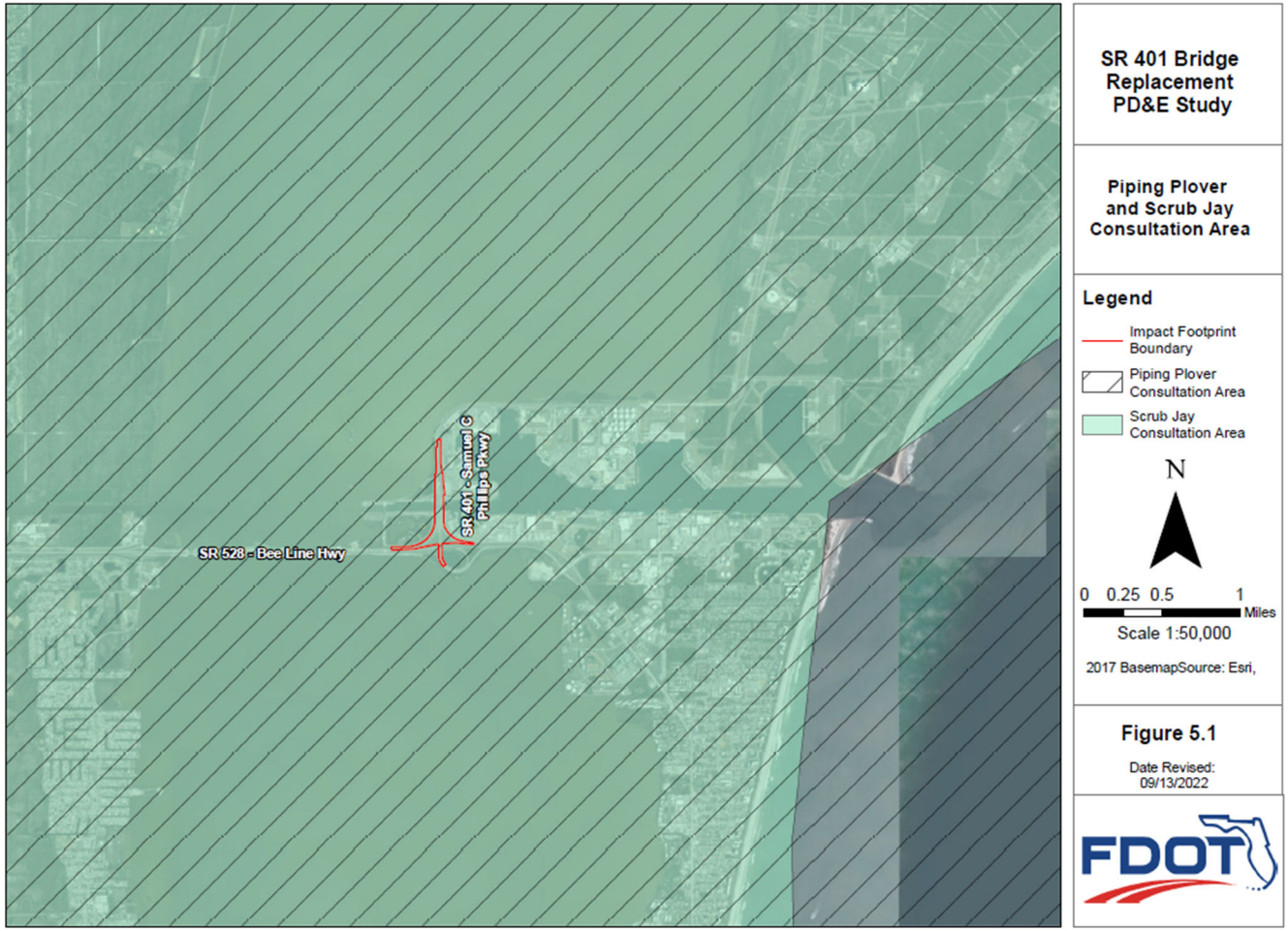
0 3,400'

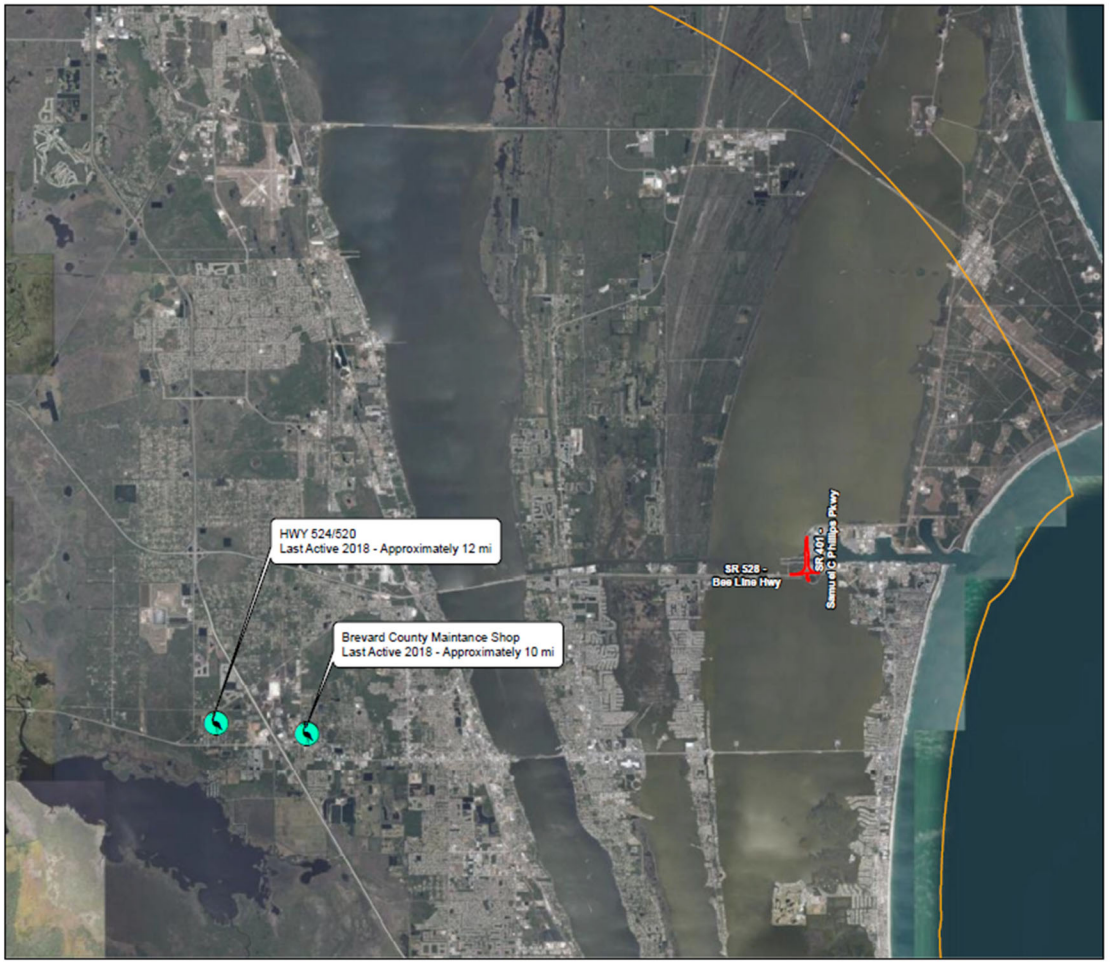
Figure 2.1

Date Revised: 9/13/2022

FDOT


SR 401 - Samuel C Phillips Pkwy
Port Canaveral
Avocet Lagoon
SR 528 - Bee Line Hwy
SR 401 Bridge Replacement PD&E Study
Soils Map
Legend
Impact Footprint Boundary
9: Canaveral-Anclote complex, gently undulating
10: Canaveral - Urban land complex
52: Quartzipsamments, smoothed
58: Turnbull and Riomar soils, tidal
500 Foot Buffer
2017 BasemapSource: Esri,
0
790'
N
Figure 3.2
Date Revised: 9/13/2022
FDOT


SR 401 Bridge Replacement PD&E Study
Piping Plover and Scrub Jay Consultation Area
Legend
Impact Footprint Boundary
Piping Plover Consultation Area
Scrub Jay Consultation Area
N
0 0.25 0.5 1
Miles
Scale 1:50,000
2017 BasemapSource: Esri,
Figure 5.1
Date Revised: 09/13/2022
SR 528 - Bee Line Hwy
SR 401 - Samuel C Phillips Pkwy
FDOT



SR 401 Bridge Replacement

Wood Stork Core Foraging Area

Legend

- Active Wood Stork Colonies
- Wood Stork Core Foraging Area
- Impact Footprint Boundary

2017 BasemapSource: Esri,

N

0 10,000'

Figure 5.2

Date Revised:
09/13/2022

FDOT

SR 401 Bridge Replacement PD&E Study

West Indian Manatee Critical Habitat

Legend

- Impact Footprint Boundary
- West Indian Manatee Critical Habitat

2017 BasemapSource: Esri,

Figure 5.3

Date Revised: 09/13/2022

FDOT

SR 401 Bridge Replacement PD&E Study

Wetlands, Other Surface Waters and Essential Fish Habitat Map

Legend
- Impact Footprint Boundary
- Impact
- Sporatic Discontinuous Seagrass
- Black Mangrove
- Red Mangrove
- White Mangrove
- 651: Tidal Flats
- 642: Saltwater Marsh
- 510: Streams and Waterways
- 534: Stormwater Ponds
- 542: Bays and Estuaries
- 612: Mangrove Swamps

Survey Conducted By CECOS Biologists: August 17/18, 2021 and February 24, 2022
2017 BasemapSource: Esri,

0 300'
N
Scale 1:4,000

Figure 6.1a

Date Revised: 11/14/2022

FDOT

SR 401 Bridge Replacement PD&E Study

Wetlands, Other Surface Waters, and Essential Fish Habitat Map

Legend

- Impact Footprint Boundary
- Impact
- 510: Streams and Waterways
- 524: Enclosed Saltwater Ponds
- 534: Stormwater Ponds
- 612: Mangrove Swamps
- 631: Wetland Scrub
- 641: Freshwater Marsh

Survey Conducted By CECOS Biologists: August 17/18, 2021 and February 24, 2022

2017 BasemapSource: Esri,

0 360'

Scale: 1:4,837

N

Figure 6.1b

Date Revised: 09/13/2022

FDOT

SR 401 Bridge Replacement PD&E Study

Wetlands, Other Surface Waters and Essential Fish Habitat Map

Legend
- Impact Footprint Boundary
- Impact
- Sporatic Discontinuous Seagrass
- Black Mangrove
- Red Mangrove
- White Mangrove
- 651: Tidal Flats
- 642: Saltwater Marsh
- 510: Streams and Waterways
- 534: Stormwater Ponds
- 542: Bays and Estuaries
- 612: Mangrove Swamps

Survey Conducted By CECOS Biologists: August 17/18, 2021 and February 24, 2022
2017 BasemapSource: Esri,

0 300'
N
Scale 1:4,000

Figure 6.1a

Date Revised: 11/14/2022

FDOT

SR 401 Bridge Replacement PD&E Study

Wetlands, Other Surface Waters, and Essential Fish Habitat Map

Legend

- Impact Footprint Boundary
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- 510: Streams and Waterways
- 524: Enclosed Saltwater Ponds
- 534: Stormwater Ponds
- 612: Mangrove Swamps
- 631: Wetland Scrub
- 641: Freshwater Marsh

Survey Conducted By CECOS Biologists: August 17/18, 2021 and February 24, 2022

2017 BasemapSource: Esri,

0 360'

N

Scale: 1:4,837

Figure 6.1b

Date Revised: 09/13/2022

FDOT

From: Delgado, Odalys [US-US]
To: Hogan, Lynn [US-US]; Ehrlich, Barry [US-US]
Subject: FW: Document Review Confirmation for NMFS EFH Transmittal Letter
Date: Thursday, January 12, 2023 12:08:55 PM

From: Chasez, Heather <Heather.Chasez@dot.state.fl.us>
Sent: Thursday, January 12, 2023 11:07 AM
To: Shannon Kelley <slk@cecosenvironmental.com>; wc <wc@cecosenvironmental.com>
Cc: Delgado, Odalys [US-US] <Odalys.Delgado@parsons.com>; Graeber, David <David.Graeber@dot.state.fl.us>; Rach, Denise <Denise.Rach@dot.state.fl.us>; Owen, Catherine <Catherine.Owen@dot.state.fl.us>
Subject: [EXTERNAL] FW: Document Review Confirmation for NMFS EFH Transmittal Letter

Hello,

Below is the response from NMFS for the NRE review.

Cheers,

Heather Chasez
Environmental Specialist IV
Project Compliance Coordinator
FDOT District Five
719 S. Woodland Blvd.
DeLand, FL 32720
Phone: (386) 943-5393

From: admin@fla-etat.org <admin@fla-etat.org>
Sent: Thursday, January 12, 2023 10:26 AM
To: kurtis.gregg@noaa.gov
Cc: Chasez, Heather <Heather.Chasez@dot.state.fl.us>
Subject: Document Review Confirmation for NMFS EFH Transmittal Letter

A review was received for the following:

Event:	SR 401 Bridge Replacement NRE
Document:	NMFS EFH Transmittal Letter
Submitted By:	Kurtis Gregg
Global:	Yes

Comments:

NOAA's National Marine Fisheries Service (NMFS) received letters requesting concurrence or technical assistance with essential fish habitat and Endangered Species Act (ESA) Section 7 consultations dated December 15, 2022 and a Natural Resource Evaluation (NRE) via the ETDM Portal by the Florida Department of Transportation, District 5 (FDOT). We are providing these comments as technical assistance. Concurrence will be determined in the final design phase, when project impacts will be calculated, as described in the NRE. FDOT is conducting a Project Development and Environmental Study regarding replacement of the State Road (SR) 401 bridge at the Port Canaveral interchange (FM# 444787-1) where it crosses the Port Canaveral canal east of the locks and roadway improvements adjacent to Banana River north and south of the bridge. The project is located within the City of Cape Canaveral, Brevard County. FDOT has estimated 51,401 square feet (1.18 acres) of impacts to wetlands including mangrove and seagrass habitats and 3,920 square feet (0.09 acres) of impacts to other surface waters. The FDOT's preliminary determination is the project will have no impact to estuarine bottom, seagrass and mangroves in the Banana River Aquatic Preserve and Merritt Island National Wildlife Refuge. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the NMFS provides the following comments pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

Essential Fish Habitat within the Project Area

The following comments are based on information in the NRE, aerial photographs in Google Earth , a joint site inspection conducted on January 4, 2023 and staff's experience with other projects in this vicinity. The project is located 2.6 miles west of the Port Canaveral Inlet south jetty in a developed tidal estuary associated with Port Canaveral Inlet and Banana River. The bridge location, roadway approaches, and adjacent areas include unconsolidated estuarine bottom, oysters, and mangroves, including red mangrove (*Rhizophora mangle*), white mangrove (*Laguncularia racemose*), and black mangrove (*Avicennia germinans*) above and below the mean high water line (MHW), and continuous seagrass habitat mapped by the Florida Fish and Wildlife Conservation Commission (FWC) adjacent to portions of the project area below MHW. Oysters were observed within the project footprint during the site inspection. The South Atlantic Fishery Management Council (SAFMC) identifies estuarine bottom, oyster reef/shell bar, seagrass and mangrove habitats as essential fish habitat (EFH) for several species, including adult white grunt (*Haemulon plumieri*), juvenile and adult gray snapper (*Lutjanus griseus*), juvenile mutton snapper (*Lutjanus analis*), and larval and juvenile pink shrimp (*Farfantepenaeus duorarum*). SAFMC also designates seagrass, oysters and mangroves as HAPC for several species within the snapper/grouper complex. HAPC's are subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially important ecologically, or located in an environmentally stressed area. Seagrass directly benefits fishery resources of the Banana River by providing water quality benefits, foraging opportunities, and nursery habitat. Further, seagrass and mangroves are part of a habitat complex that includes sand bottom, hardbottom, and coral. This complex supports a diverse community of fish and invertebrates within the Banana River and the Atlantic Ocean. SAFMC provides additional information on EFH and HAPCs and how they support federally managed fishery species in the Fishery Ecosystem Plan of the South Atlantic Region (available at www.safmc.net [safmc.net]).

Recommendations for Essential Fish Habitat

FDOT should avoid and minimize impacts to EFH within and adjacent to the project area by reducing the project area to the extent practicable, selecting construction methods and staging areas that cause the least disruption to benthic habitats and surrounding wetlands. Anchoring, spudding or grounding barges and work vessels in areas of mapped seagrass should be avoided. Unavoidable impacts to EFH should be fully offset with appropriate mitigation, preferably in the same waterbody. Proposed Uniform Mitigation Assessment Method functional assessment scores are provided in the NRE. NMFS recommends revised scoring be provided for our review once final project design and impact estimates have been calculated. FDOT proposes to employ best management practices, such as turbidity curtains around in-water work to control turbidity and silt fencing at staging areas to prevent sediments disturbed by the project from affecting areas outside of the project site.

Recommendations for the Endangered Species Act

The NRE includes preliminary determinations regarding effects to ESA listed species under the purview of the NMFS, including smalltooth sawfish, giant manta ray, loggerhead, green and Kemp's ridley, leatherback and hawksbill sea turtles. The information provided in the NRE appears consistent with FDOT's preliminary determinations of not likely to adversely affect smalltooth sawfish, giant manta ray and the five sea turtle species. The NMFS recommends FDOT reassess these determinations once final project designs are available. Ultimately, as the Federal Highway Administration's non-federal designee, it is incumbent upon FDOT to make effects determinations regarding ESA listed species. We recommend the federal action agency document in the project file the rationale for each species for which a no effect determination is made. If necessary, an Endangered Species Biological Assessment should be prepared and submitted to the NMFS for review.

Conclusion

Please consider these comments as the closeout for the requested EFH and ESA technical assistance. NMFS will continue to work with FDOT and other regulatory agencies as the project progresses into permitting and construction. We appreciate the opportunity to review this project and provide comments. Please direct related correspondence to the attention of Kurtis Gregg in the West Palm Beach Field Office, located at 400 North Congress Avenue, Suite 270, West Palm Beach, FL 33401. He can be reached by telephone at (561) 291-9843, or by email at Kurtis.Gregg@noaa.gov.

January 6, 2023

Heather Chasez
Environmental Project Manager
Florida Department of Transportation District Five
719 S Woodland Blvd.
Deland, Florida 32720
Heather.Chasez@dot.state.fl.us

Re: SR 401 Bridge Replacement Natural Resources Evaluation, Brevard County

Dear Ms. Chasez:

Florida Fish and Wildlife Conservation Commission (FWC) staff reviewed the above-referenced Natural Resources Evaluation (NRE) in accordance with FWC's authorities under Chapter 379, Florida Statutes, and Chapter 68A-27, Florida Administrative Code.

The Florida Department of Transportation District Five (FDOT D5) is conducting a Project Development and Environment (PD&E) Study to evaluate the replacement of the three existing low-level bascule bridges with a new high-level fixed span bridge over the Canaveral Barge Canal, a navigable channel, in Brevard County. The project limits begin approximately 100 feet south of the SR 528 overpass bridges over SR 401 and continue approximately 3,550 feet north to Charles M. Rowland Drive (Cruise Terminal Exit), which includes 315-foot-long barge canal bridges. In addition to SR 401, the project also includes eastbound and northbound ramps from SR 528 to SR 401.

The NRE was prepared as part of the PD&E Study (ETDM Number 14397) to document the natural resources analysis and to summarize potential impacts to wetlands, federal and state protected species, and protected habitats within existing and new proposed right-of-way for the proposed bridge replacement project. FWC staff agrees with the determinations of effect and supports the project implementation measures and commitments for protected species.

For specific technical questions regarding the content of this letter, please contact Kristee Booth at (850) 363-6298 or KristeeBooth@MyFWC.com. All other inquiries may be directed to ConservationPlanningServices@MyFWC.com.

Sincerely,

For Jason Hight, Director
Office of Conservation Planning Services

jh/kb
SR 401 Bridge Replacement _NRE_52774_01052023

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: 850-488-4676

Hearing/speech-impaired:
800-955-8771 (T)
800 955-8770 (V)

MyFWC.com

Florida Departm
RON DESANTIS
GOVERNOR
605
Tallaha

U.S. Fish and Wildlife Service
Florida Ecological Service Office

FWS Log No. 2023-0035143

The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the Florida Ecological Service Office.

This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

JOSE RIVERA Digitally signed by JOSE RIVERA
Date: 2023.01.19 08:23:27 -05'00'

José J. Rivera, Division Supervisor, Environmental Review Date

December 15, 2022

Annie DZiergowski, Deputy Field Supervisor
US Fish and Wildlife Service
North Florida Ecological Services Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

Attention: Mrs. Zakia Williams

RE: Request for Section 7 Informal Consul
SR 401 Bridge Replacement
Brevard County, Florida
Financial Management Number: 444787-1

The Florida Department of Transportation is proposing to replace the SR 401 Bridge over the Canaveral Barge Canal in Brevard County, Florida. As part of the project evaluation, a Natural Resources Evaluation (NRE) has been developed to assess the project for its impacts to wetlands and protected species.

The study area is either partially or wholly within several consultation areas, however, there is no suitable habitat for the following species: Eastern indigo snake (*Drymarchon corais couperi),* Atlantic salt marsh snake (*Nerodia clarkii taeniata)*, piping plover (*Charadrius melodus)*, Rufa red knot (*Calidris canutus rufa),* wood stork (*Mycteria americana)*, Eastern black rail (*Laterallus jamaicensis spp. Jamaicensis),* Florida scrub-jay (*Aphelocoma coerulescens),* Southeastern beach mouse (*Peromyscus polionotus niveiventris),* Carter's mustard (*Warea carteri*), and Lewton's polygala (*Polygala lewtonii*). As there is no suitable habitat and no documented occurrences, it has been determined that the project will have "no effect" on any of these species. Additionally, although impacts to sea turtle species were also evaluated, there is no nesting habitat with the project area. Coordination with National Marine Fisheries Service for the impacts to these species is being initiated.

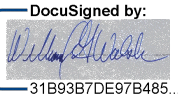
There is one (1) federally protected animal species that could occur within the project area, the West Indian Manatee along with its critical habitat. This species, its critical habitat, and the associated effect determinations, are discussed below:

The Florida manatee is listed as Threatened. Florida manatees utilize coastal waters, bays, estuaries, rivers and occasionally lakes. Manatees are known to utilize the Barge Canal to move to and from the IRL/ocean although none were observed during field reviews. Discussions with the USACE Canaveral Lock staff revealed that they observe manatees traversing the canal and sometimes open the lock to allow manatees through, even though no boats are present. The USFWS Manatee Key (USFWS, 2013) was also reviewed to determine effect. Standard manatee conditions for in-water work will be followed during construction. Based on the key, the likelihood of the presence of manatee, and due to in-water work, FDOT has determined the project "May Affect Not Likely to Adversely Affect" the Florida manatee.

The project is located within the USFWS critical habitat for the Florida manatee, and the west side of the project (IRL) is in an Important Manatee Area (IMA); designated by USFWS. Based on review of the USFWS Manatee Critical Habitat Mapper, the western S.R. 401 bridge appears to be partially located within designated manatee critical habitat. The manatee critical habitat extends westward through the Barge Canal and into the Indian River Lagoon/Banana River. Port Canaveral, to the east of the bridge, is outside the designated critical habitat. Although manatees are known to be present in the Barge Canal, as they move to/from the ocean and Indian River Lagoon, there are no seagrasses for foraging within the Barge Canal and limited other foraging resources (i.e., algae) may be available. No long-term impact to the designated critical manatee habitat will occur. Temporary, short-term impacts due to bridge construction (i.e., removal of existing bridges) are anticipated. The construction of the new bridge will result in 0.09 acres of impacts from the total area of new pilings in the water, however, the total number of pilings in the water is less. Additionally, manatee critical habitat does not appear to extend underneath the entire bridge. Due to nominal permanent impacts (0.09 acres) to critical habitat due to larger pilings and the area under the bridge providing negligible foraging habitat for the manatee, FDOT has determined the project "May Affect Not Likely to Adversely Affect" manatee critical habitat.

We appreciate the coordination effort and input already provided and look forward to continued consultation on this project. If you have any questions, feel free to contact either Heather Chasez at (386) 943-5393, heather.chasez@dot.state.fl.us or me at (386) 943-5411, william.walsh@dot.state.fl.us at your convenience. Thank you for your assistance with this project.

Sincerely,

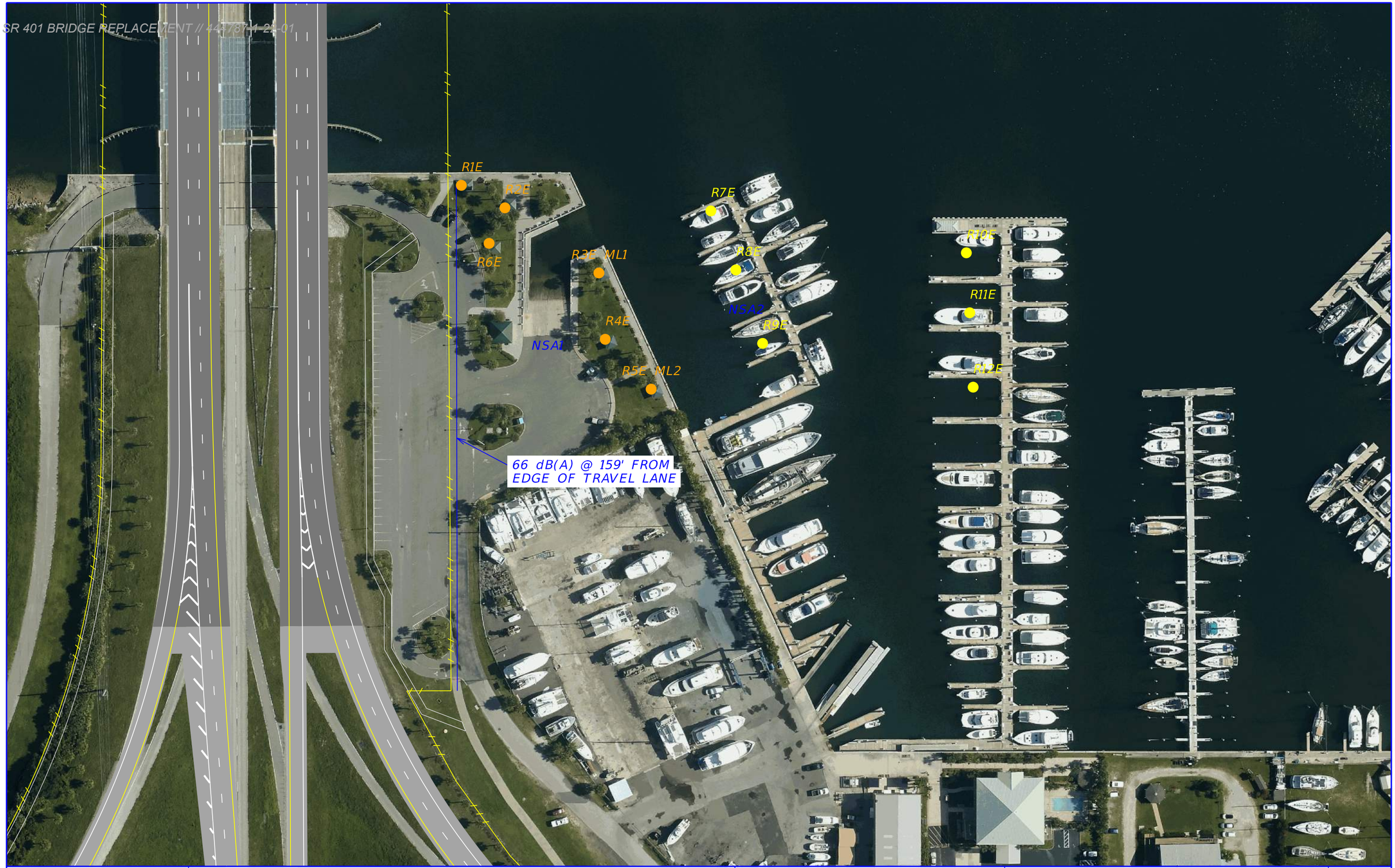
DocuSigned by:

31B93B7DE97B485...

William G. Walsh
Environmental Manager
FDOT, District Five

Physical Resources Appendix

Contents:

Noise Receptor Map
Potential Contamination Sites Map



FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT FIVE

LEGEND

- B - MARINA LIVE-A-BOARD 66.0 dB(A)
- C - OTHER SENTIVE LAND USES 66.0 dB(A)
- NOISE CONTOUR LINE 66.0 dB(A)
- ML# - MONITORING LOCATION
- NSA# - NOISE SENITIVE AREA

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 401	BREVARD	444787-1

NOISE ANALYSIS MAP
PREFERRED ALTERNATIVE

SHEET NO.

FIGURE 4

- SITE WITH HIGH RISK RATING
- SITE WITH MEDIUM RISK RATING
- SITE WITH LOW RISK RATING
- SITE WITH NO RISK RATING

N

0 250 500
Feet

RICHARD P. McCORMICK, P.G.
P.G. LICENSE NUMBER 2096
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.
919 LAKE BALDWIN LANE
ORLANDO, FL 32814

STATE OF FLORIDA
DEPARTMENT OF TRANSPORATATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 401	BREVARD	444787-1-22-01

POTENTIAL CONTAMINATION SITE MAP

SHEET NO.

W:\Projects\J4808GE SR 401 Bridge PD&E_Parsons\7 CADD Files\Environmental\4808E contam.mxd 12/21/2021

Public Involvement Appendix

Contents:

Public Hearing Certification - Virtual 1/31/2023
Public Hearing Certification - In-Person 2/1/2023
Public Hearing Transcript-Virtual 1/31/2023
Public Hearing Transcript-In-Person 2/1/2023

FLORIDA DEPARTMENT OF TRANSPORTATION

PUBLIC HEARING CERTIFICATION

SR 401 BRIDGE REPLACEMENT

Project Developmentand Environment (PD&E) Study

from

Brevard County, Florida

Financial Management No.: 444787-1-22-01

I certify that a public hearing was conducted on 01/31/2023, beginning at 05:30 PM for the above project. A transcript was made and the document attached is a full, true, and complete transcript of what was said at the hearing.

David Graeber
(Name)

May 16, 2024
Date

Project Manager
(Title of FDOT Representative)

Electronically signed within SWEPT
on May 16, 2024 2:16:03 PM EDT
(electronic signature on file)

Link to Public Hearing Transcript

1 - 44478712201-CE2-D5-Virtual_Public_Hearing_Transcript-2023-0131.pdf

FLORIDA DEPARTMENT OF TRANSPORTATION

PUBLIC HEARING CERTIFICATION

SR 401 BRIDGE REPLACEMENT

Project Developmentand Environment (PD&E) Study

from

Brevard County, Florida

Financial Management No.: 444787-1-22-01

I certify that a public hearing was conducted on 02/01/2023, beginning at 05:30 PM for the above project. A transcript was made and the document attached is a full, true, and complete transcript of what was said at the hearing.

David Graeber
(Name)

May 14, 2024
Date

Project Manager
(Title of FDOT Representative)

Electronically signed within SWEPT
on May 14, 2024 6:00:31 PM EDT
(electronic signature on file)

Link to Public Hearing Transcript

1 - 44478712201-CE2-D5-In-Person_Public_Hearing_Transcript_-2023-0201.pdf

****

VIRTUAL PUBLIC HEARING RE:

STATE ROAD 401 BRIDGE REPLACEMENT

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY

****

DATE: JANUARY 31, 2023

ORIGINAL

TIME: 6:00 PM - 6:35 PM

PLACE: ALL PARTIES VARIOUS LOCATIONS REMOTE

HELD BY: DAVID GRAEBER

Taken by: ANNMARIE TESTA
Stenographic Court Reporter
Notary Public, State of Florida at Large

RYAN REPORTING
REGISTERED PROFESSIONAL REPORTERS

1670 SOUTH FISKE BOULEVARD ROCKLEDGE, FLORIDA 32955
OFFICE: (321)636-4450 FAX: (321)633-0972

MR. GRAEBER: Good evening everyone and welcome to the virtual public hearing for the State Road 401 Bridge Replacement Project Department & Environment or PD&E study. Today's date is date is January 31st, 2023.

My name is David Graeber and I am the Project Manager with the Florida Department of Transportation.

During this hearing we will present information on the Department's evaluation of improvements to the State Road 401 bridges in Brevard County. We encourage your feedback and after the presentation you will have the opportunity to make a verbal public comment. There are also multiple other ways you can submit your questions and comments to us about this project. The Department will respond to all questions in writing after the hearing. All the questions and comments will become part of the public hearing record.

Before we begin the presentation we would like to take this time to recognize elected and public officials with us with tonight. In attendance tonight we have the following public officials.

MODERATOR: We have not identified any public officials in attendance.

MR. GRAEBER: Thank you. Are there any elected or appointed public officials present tonight who wish to recognized? If you wish to be recognized, please enter your name in the question box in the control panel. We'll now pause a few moments to allow you to enter your name.

MODERATOR: None noted.

MR. GRAEBER: Thank you. If no public officials wish to be recognized or not present, I am now turn it over to our project team to begin the presentation.

MODERATOR: Welcome to the State Road 401 Bridge Replacement Project Development & Environment or PD&E study public hearing. Financial Project ID or FP ID Number 444787-1. Efficient Transportation Decision-Making or ETDM Number 143977.

The environmental review, consultation, and other actions required by applicable Federal Environmental Laws for this project are being or have been carried out by FDOT pursuant to 23U.S.C. and 327 and

Memorandum of Understanding dated May 26th, 2022, and executed by FHWA and FDOT. The FDOT Office of Environmental Management in Tallahassee is the approving authority.

This hearing is being conducted in a hybrid format to provide multiple ways for the public to receive information about the project and provide input. This hearing is being conducted virtually through GoToWebinar and over the phone on Tuesday, January 31st, 2023, and in person on Wednesday, February 1st, 2023. A copy of the presentation is available on the project web page at www.cflroads.com/project/444787-1.

For online participates, the GoToWebinar control panel should be visible in the upper right corner of your computer screen. If you are joining the GoToWebinar on your mobile device, simply tap the screen to display the same options.

The blue errors in both images point to where you will find the question box. You can type a comment or question into the question box. Then click sent to submit your comment or question to staff.

The red arrows in both images point to where you will find handouts, documents, and comment forms for this public hearing. Click the handouts icon to see available handouts. Click on the file name to download.

If you are participating online or over the phone and happen to experience a technical experience during this hearing, please type the issue in the question box on the control panel on GoToWebinar or send an e-mail to inmelda.rangel@parsons.com, spelled i-n-m-e-l-d-a dot r-a-n-g-e-l at p-a-r-s-o-n-s dot com to report it. You may also call 407-702-6860, staff will do their best to assist you.

The purpose of tonight's public hearing is to share information with the public about the proposed improvement, its conceptional design, all alternative understudy, and the potential beneficial and adverse social, economic, and environmental impacts upon the community. The public hearing also serves as an official forum providing an opportunity for members of the public to express their opinions regarding the project.

The three primary components of tonight's hearing are: First, the open house, which occurred prior to this presentation where you were invited to view the project displays and for those attending in person to speak directly with the project team and provide your comments in writing or to the Court Reporter.

Second, this presentation, which will explain the project purpose and need, study alternatives, potential impacts, and proposed methods to mitigate the project impacts.

Third, a formal comment period following this presentation where you will have the opportunity to provide oral statements at the microphone or in writing or for those attending in person, you may provide your comments directly to the Court Reporter.

This public hearing was advertised and is being conducted in accordance with State and Federal requirements, including Title VI of the Civil Rights Act of 1964. Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons wishing to express their concerns about Title VI may do

so by contacting Melissa McKinney, FDOT District Five Title VI Coordinator by mail at 719 South Woodland Boulevard, Mail Station 501, DeLand, Florida, 32720-6834. By phone at 386-943-5077, or e-mail at Melissa.McKinney@dot.state.fl.us, spelled M-e-l-i-s-s-a dot M-c-K-i-n-n-e-y at d-o-t dot state dot f-l dot u-s.

You may also contact the State Title VI Coordinator Stefan Kulakowski by mail at 605 Suwanne Street, Mail Station 65, Tallahassee, Florida, 32399-0450. By phone at 850-414-4742, or e-mail at s-t-e-f-a-n dot k-u-l-a-k-o-w-s-k-i at d-o-t dot state dot f-l dot u-s.

All inquires or complaints will be handled according to FDOT procedures and in a prompt and courteous manner. This information is shown on a sign at the in person location, on the project website, and in the hearing notifications.

The public hearing was advertised consistent with the Federal and State requirements shown on this slide. This public hearing was advertised in the Florida

Administrative Register, on FDOT's public notices website and project web page, on the Florida Today Newspaper, and on social media. In addition, adjacent property owners and interested individuals, elected and appointed officials, and government agencies were also notified about this public hearing.

Project documents are available for viewing during business hours through February 11th, 2023, at the Cape Canaveral Public Library. The project documents are also available on the project website at www.cflroads.com/project/444787-1.

A PD&E study is a blending of engineering, environmental assessments, and public involvement activities. The process is used by engineers and planners to determine the location and conceptual design of the preferred roadway improvements. The study evaluation showed the associated social, economic, and environmental affects of the improvements, in addition to providing viable engineering and transportation solutions.

If the PD&E study results in a build alternative selection, the project may proceed

to the next phase, which is the design phase.

The right-of-way phase typically involves acquisition of any necessary right-of-way. Right-of-way acquisition is not anticipated for this project.

The project would be built during the construction phase. Currently the construction phase is unfunded.

Public input and information received at the public information meeting and this public hearing will be taken into consideration for this study.

This project is within the jurisdiction of the Space Coast Transportation Planning Organization, TPO. The State Road 401 drawbridges across at Canaveral Barge Canal at Port Canaveral in Brevard County. The limits of this study are State Road 401 from the State Road 528 interchange to approximately 1,000 feet north of the Canaveral Barge Canal.

The Port sits at the junction of Florida's main North South and East West corridors. As the second busiest cruise port in the World, it creates opportunities for trade, tourism, and development, which serves

Brevard County and the State of Florida with an economic impact to the State of $3.9 billion and 33,000 jobs. Port Canaveral supplies critical fuel to the Central Florida Region and beyond and in its strategic location is critical for support of Military missions and commercial space enterprises.

The purpose of this study is to evaluate improvements to or replacement of the existing State Road 401 bascule bridges or drawbridges over the Canaveral Barge Canal. The Department is developing and analyzing alternatives for improving the bridges to address access, future mobility, congestion, and safety needs. This project may also improve system linkage and modal interrelationships by providing access to strategic and national assets.

State Road 401 not only provides a vital connection to Port Canaveral's operations, including major cruise and Carnival terminals, the roadway is part of the Strategic Intermodal System Connecter and Strategic Highway Network, or STRAHNET. STRAHNET is the designation given to roads that provide defense

access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war.

Traffic conditions within the study limits are characterized by a high percentage of truck traffic due to nearby cargo, freight, and industrial tenants on the North side of the Port. Traffic conditions vary depending upon the season and when cruise ship passengers are arriving or departing. State Road 401 provides access for goods movement and computer traffic for the Canaveral Space Force Station, U.S. Coast Guard, and Commercial Space Industry.

The study being conducted a detailed marine navigation and vessel survey to determine the number of bridge openings that would be required in the future based on the size and type of marine vessels traveling through the Canaveral Barge Canal. This information also provides a basis for the height of the bridge over the Canal that would provide the optimum clearance for most common marine vessels.

This PD&E study has been conducted by FDOT in coordination with local agencies and

organizations that have a stake in this project, including the Canaveral Port Authority and Port tenants, local marinas, Space Coast Transportation Planning Organization, Space Florida, Brevard County, U.S. Army Corps of Engineers, U.S. Navy, U.S. Coast Guard, and U.S. Space Force.

During the PD&E study four alternatives were considered for the State Road 401 bridges. A no build alternative where the existing lower level drawbridges would remain and no roadway or structural improvements would be completed.

Three build alternatives that would replace the State Road 401 bridges were developed. The alternatives were a high-level fixed bridge, a mid-level movable lift bridge, and a mid-level bascule bridge or drawbridge alternative.

The no build alternative assumes that no improvements would be made to the three existing parallel bascule drawbridges on State Road 401. With the anticipated future traffic operations, congestion delays will continue to worsen on State Road 401, therefore, the no

build alternative does not meet the project purpose and need.

Of the three existing State Road 401 drawbridges one bridge is for northbound traffic and two bridges are for southbound traffic. The bridges provide three minimum 12-foot travel lanes in each direction and minimum 2-foot wide shoulders. The existing bridges provide 25-feet of vertical clearance, which is the distance between the lowest member of the bridge and the mean high water level of the Canaveral Barge Canal and 90-feet of horizontal clearance, which is the distance between the Canaveral Barge Canal bridge venders.

The concepts for the build alternatives were developed with a number of constraints and with design drivers in mind. In addition to traffic conditions and a 75-year design service life both on State Road 401 and through the Canaveral Barge Canal, the study concepts take into account existing infrastructure including the bridge house and foundations, utilities and signage, and how the proposed improvements would tie into or affect

nearby roadways such as State Road 528 ramps, Mullet Road, and the cruise terminal entrance to the North.

Characteristics of the Canaveral Barge Canal and Canaveral Lock, such as the 90-foot width of the Barge Canal at the bridge crossing, were determining factors of the height and length of the bridge crossing, as were predicted sea levels and marine vessel height that would require movable bridges to open and cause traffic delays.

The high-level fixed bridge alternative as illustrated on this slide will provide two high-level fixed bridges. This alternative will provide a 65-foot vertical clearance over the mean high water level of the Canaveral Barge Canal, which is typical of high-level fixed bridges over intercoastal waterways. The existing 90-foot horizontal clearance, which is the distance between the bridge venders, would remain uncharged for this alternative. The maximum road grade of 6 percent would require a design variation.

The lift bridge alternative would provide two mid-level lift bridges that have a

40-foot vertical clearance over the Canaveral Barge Canal when the bridge is closed as illustrated on this slide. Based on marine navigation and vessel survey of marine traffic traveling through the Canaveral lock, a 40-foot vertical clearance would, over the course of a year, reduce the need for the bridge to be opened and traffic stopped by 76 percent. When the bridge is opened or lifted 85 feet of clearance will be provided for taller marine vessels traveling through the canal. Existing overhead power lines next to the bridge currently limit the height of marine vessels to 85 feet. The existing 90-foot horizontal clearance will remain unchanged for this alternative. The maximum road grade for this alternative is 4 percent.

The draw bridge alternative would provide two mid-level drawbridges that have a 40-foot vertical clearance over the Canaveral Barge Canal when the bridge is closed as illustrated on this slide. As with the lift bridge, a 40-foot vertical clearance would, over the course of a year, reduce the need for the bridge to be opened and traffic stopped by

76 percent. When the drawbridge is opened, unlimited clearance would be provided for taller marine vessels traveling through the canal, except as limited by the existing power lines next to bridge. The existing 90-foot horizontal clearance will remain unchanged for this alternative. The maximum road grade for this alternative is 4 percent.

In February 2022 the Department conducted a public information meeting to present the alternatives. Attendees had the option of attending a virtual public meeting online or in person at the Canaveral Port Authority. 37 members of the public and agency representatives attended this meeting, which featured project exhibits and a presentation. Attendees also had the opportunity to provide comments. The Department has continued coordinating with project stakeholders as part of the alternatives analysis process.

As part of alternatives analysis a study team developed this matrix to compare the engineering and the environmental features and costs associated with each alternative. Although the no build alternative would not

meet the projects purpose and need, it will remain under consideration throughout the evaluation proces. This matrix provides a summary of the rankings for the traffic, physical, natural, social, and costs criteria. These rankings are from green, being the most desirable outcome, to red, being the least desirable.

For example, in terms of roadway traffic delays and safety, the high-level fixed bridge alternative has the best ranking because it provides free-flow traffic. From the marine navigational standpoint, the drawbridge alternative ranks highest since it offers no limitation on vessel height. The drawbridge alternative ranks lowest for utility impacts because the size of the abutments may result in impacts to nearby overhead power lines and buried utilities.

In terms of affects on the natural and social environment, all three build alternatives are expected to result in relatively equal impacts.

From a cost perspective, the no build alternative operations and maintenance over the

75-year design life is expected to exceed $80 million because the bridge is more than 40 years old and will require resurfacing and repairs. The high-level fixed bridge has the lowest operations and maintenance cost overall because it does not have the mechanical or electrical components like the lift bridge and drawbridge.

The approximate construction cost for each alternative, including cost to construct the bridge, earth work, roadway, signing, and storm water drainage components are $125 million for the high-level fixed bridge, $170 million for the lift bridge, and $180 million for the drawbridge. Overall, the high-level fixed bridge alternative ranks higher than the lift bridge and drawbridge alternatives when comparing traffic and safety benefits, the level of the environment affects, and costs.

Based on the results of the alternatives analysis process, ongoing coordination with stakeholders, the Department identified the high-level fixed bridge as the preferred alternative. Each of the high-level fixed bridges would provide three 12-foot wide

travel lines in each direction and 10-foot wide inside and outside shoulders. Since State Road 401 is a limited access facility and there are security concerns associated with pedestrian traffic at this location, neither sidewalks nor bike lanes are proposed. State Road 401 would have a 45-mile per hour design speed and 6 percent maximum road grade.

The high-level fixed bridge alternative meets the purpose and need and provides various benefits over the other alternatives. The high-level fixed bridge alternative will eliminate vehicular and vessel delays that would otherwise be caused by bridge openings and improve resiliency of the transportation network. This alternatively will not adversely affect the Port Canaveral Barge Canal and Lock and will maintain the existing Barge Canal width.

The high-level fixed bridge also resolves in the lowest construction costs of the three build alternatives and lowest operations and maintenance costs for all alternatives over a 75-year life span.

Environmental considerations and

possible impacts associated with the preferred alternative are important elements of the study. The PD&E study has evaluated the potential impacts and benefits to the natural, social and economic, cultural, and physical environments associated with each alternative. Avoidance or minimization of impacts to these features is a key consideration in the selection of the preferred alternative.

This table summarizes the key environmental considerations evaluated for the selection of the State Road 401 preferred alternative. The project is anticipated to result in 0.09 acres of direct impacts to essential fish habitat and 0.10 acres of direct impacts to mangroves.

The project is anticipated to result in a determination of, may affect but not likely to adversely affect, for eight Federally listed species. The project is anticipated to result in direct impact to 1.18 acres of wetland. Of these impacted wetland areas, 1.08 acres occur within existing roadway drainage systems. Avoidance and minimization will continue to be incorporated as practical

throughout the PD&E design basis.

The project will not use any land from the Rodney S. Ketcham Park.

The project will result in economic enhancements and mobility improvements by reducing vehicular and marine vessel delays. The project will not result in adverse affects to the Canaveral Lock, which is a historic resource and eligible for listing on the National Register of Historic Places.

Temporary driveway closures will occur during construction that affect the driveway access for the Canaveral Locks. While the noise levels for all alternatives are predicted to exceed the National Ambient Criteria for highway traffic noise, noise levels for the preferred alternative at Rodney S. Ketcham Park will be reduced when compared to other alternatives, including the no build alternative. There is no feasible or reasonable mitigation available to reduce the highway related noise to this Park.

No significant impacts to the natural, social and economic, cultural, or physical environments are anticipated to occur as a

result of the construction of the preferred alternative.

The State Road 401 Bridge Replacement Project is identified in Amendment One of the Space Coast Transportation Planning Organization's 2045 Long Range Transportation Plan as one of three projects advanced in February 2022 due to developments in the State Transportation Improvement Plan.

Public engagement activities and opportunities for the public throughout the PD&E study have included individual stakeholder coordination meetings, the public information meeting, and this public hearing. After this hearing we will incorporate public comments and finalize engineering and environmental analysis and documents for the preferred alternative. The final engineering and environmental analysis will be submitted to the FDOT Office of Environmental Management for approval of the location and design concept acceptance, LDCA. The approval of LDCA marks the completion of the PD&E Study. The design phase for this project is scheduled to follow the PD&E Study and start in 2023.

We encourage your input and feedback about this project and there are multiple ways for you to participate. All public comments and questions are part of the public hearing record and every method for providing public comments and questions carries equal weight. All questions will be responded to in writing after the hearing. While comments and questions will be accepted at any time, those submitted by February 11th, 10 days after an in-person public hearing, will become part of the project's public record. To submit a written comment or question online, please type the comment or question in the question box on the GoToWebinar control panel. Written comments amy also be submitted on the project website at www.cflroads.com/project/444787-1.

To learn more about the project, go to www.cflroads.com, type the Project Number 444787-1 in the search box at the top right and click go and click on the project name. Public hearing materials are posted on the website now.

This concludes our presentation. We will now enter the formal public comment period

for this hearing. All questions and comments will become part of the public hearing record. Please note that the Department will respond to all questions in writing after the hearing.

MR. GRAEBER: Anyone who wishes to make a verbal statement regarding the project will now have the opportunity to speak. Please know that tonights public hearing is being record digitally and also by a Court Reporter. You can request to speak using the GoToWebinar control panel by typing your name and I wish to speak in the questions box on the control panel. When it is your turn we'll call your name and your microphone will be unmuted. Please note that dial-in attendees are in listen only mode.

If you wish to leave a verbal comment or question over the phone, you may call me, David Graeber, the FDOT Project Manager at 386-943-5392. Again that is David Graeber, 386-943-5392 after this public meeting.

We'll now begin the hearing online participants who have requested to speak. When your name is called you will need to unmute your microphone by using the GoToWebinar

control panel shown on this slide. If the microphone button is orange, that means you need to unmute yourself. If the microphone button is green, it means that your microphone is unmuted and you may speak at any time. Please state your name and address before making your comment. If you represent an organization, municipality, or other public body, please provide that information as well. To ensure all who wish to speak today are able to, speakers will have a maximum of three minutes to make a statement and Department will respond to all questions in writing after the hearing. The timer on the screen will reflect each speakers remaining time.

We are now ready for our first speaker. The first person we will call, it is --

MODERATOR: At this time no one has requested to speak. If you would like to speak please type I wish to speak in the questions box.

We have Mr. Joshua Long who has requested to speak. One moment, Mr. Long, while I unmute your microphone. Okay, Mr.

Long, you are unmuted on our end, so you would just need to self unmute to make your comment.

MR. LONG: Copy. Can you hear me?

MODERATOR: Yes, we can.

MR. GRAEBER: Yes.

MR. LONG: Okay. Thank you very much. My name is Joshua Long. My address would be 910 Mullet Road. I am part of the Port Canaveral Club. I am speaking mostly on my behalf but also some concerns that were raised at the yacht club in regards to the change of the bridge itself.

One of the major issues that we see is that during hurricane season we, obviously, are required by the Port to evacuate the Port. With the current state of boats and private boats, how they keep getting larger, one of the only options we have is to escape into the Barge Canal and subsequent waters behind the lock, which would require us to go through the barge -- which would require us to go through the drawbridge. At the 65-foot set or 64-foot set bridge height, that would eliminate about 30 percent of the boats that are currently in the private basin of Cape Marine Port Canaveral

Yacht Club and Scorpion Marine Centers. So that is one major problem with that.

Another, I believe, would be eliminating some of the funds that come our way from the ICW into our waters for repair and subsequently spend their money for tourist reasons and such as that.

You know, again, I can't speak for exact numbers, I do own a small marine business and I know it is a concern to me in regard to my business in order to get boats in through that bridge and it not being a drawbridge does limit a lot of my clients' ability to get into that area. So I think is something that we should as a whole to consider or you folks as you move forward with the construction of that bridge, is looking at, you know, down the road how that might affect the economy, especially for small business guys like myself. Thank you.

MR. GRAEBER: Thank for your comment. Moderator, do we have another person wishing to make a statement?

MODERATOR: Not at this time.

MR. GRAEBER: Do you have anyone else

present tonight who wishes to make a statement? If so, please enter I wish to speak in the control panel. We will now pause 60 seconds to allow persons wishing to speak time to enter their name.

MODERATOR: Ms. Cynthia Kendall, we see that you would like to speak, just bear with me and I will unmute your microphone. Okay, Ms. Kendall, you are self muted, you can unmute yourself.

MS. KENDALL: I am unmuted.

MODERATOR: Yes, ma'am, we can hear you.

MS. KENDALL: Okay. My name is Cynthia Kendall and my husband David, we currently have a sailboat at Port Canaveral Yacht Club and it is required by the Port Authority that in case of a hurricane, and that happened several times this year, that we need to evacuate and to go offshore into the hurricane is not a wise thing to do. So our hurricane preparedness plan is to go through the bridge and into the ICW or someplace that we can shelter from a storm. So that is a big concern for us, as well as a lot of boats in

the Port Canaveral area with Cape Marina and Scorpion and Port Canaveral Yacht Club. You know, I was very surprised to hear that the fixed bridge is a good option, but we are used to on the ICW all the fixed bridges are, I guess they are 64, 65, but I know there is others vessels in the Port that can't get under the bridge at that height. So, you know, it is required by the Port Authority we evacuate but where do we evacuate. I am finished.

MR. GRAEBER: Thank you for your comment.

MS. KENDALL: You are welcome.

MR. GRAEBER: Moderator, do we have another person wishing to make a statement?

MODERATOR: At this time, no, we do not have anybody else who entered they wish to speak.

MR. GRAEBER: Thank you. On behalf of the Florida Department of Transportation, thank you for attending this public hearing and providing your input on this project. If you have comments or questions after the hearing, please submit them by February 11th, 2023. Project documents and other exhibits displayed

at the public hearing are posted on the project website at www.cflroads.com/project/444787-1.

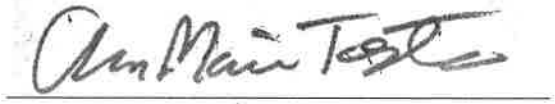
It is now 18:35 and I hereby officially close the public hearing for the State Road 401 Bridge Replacement PD&E. Have a great evening. Thank you.

(Whereupon, the virtual public hearing concluded at 6:35 p.m..)

CERTIFICATE OF REPORTER

I, ANN MARIE TESTA, a Stenographic Court Reporter, do hereby certify that I was authorized to and did report the foregoing proceedings, and that Pages 1 through 30 of the transcript are a true and correct record of my stenographic notes.

DATED this 15th day of February 2023.



Ann Marie Testa

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ORIGINAL

VIRTUAL PUBLIC HEARING RE:

STATE ROAD 401 BRIDGE REPLACEMENT

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY

****

DATE: FEBRUARY 1, 2023

TIME: 6:00 PM - 6:30 PM

PLACE: CANAVERAL PORT AUTHORITY
BOARD CHAMBERS
445 CHALLENGER ROAD #301
CAPE CANAVERAL, FL 32920

HELD BY: DAVID GRAEBER

Taken by: ANNMARIE TESTA
Stenographic Court Reporter
Notary Public, State of Florida at Large

RYAN REPORTING
REGISTERED PROFESSIONAL REPORTERS

1670 SOUTH FISKE BOULEVARD ROCKLEDGE, FLORIDA 32955
OFFICE: (321)636-4450 FAX: (321)633-0972

MR. GRAEBER: Good evening everyone and welcome to the in-person public hearing for the State Road 401 Bridge Replacement Project Department & Environment or PD&E study. Today's date is February 1st, 2023.

My name David Graeber, I am the Project Manager with the Florida Department of Transportation.

During this hearing we will present information on the Departments evaluation of improvements to the State Road 401 Bridges in Brevard County. We encourage your feedback and after the presentation you will have the opportunity to make a verbal public comment. There are also multiple other ways you can submit your questions and comments to us about this project. The Department will respond to all questions in writing after the hearing. All questions and comments will become part of the public hearing record.

Before we begin the presentation we would like to recognize elected and appointed public officials with us tonight. If you are a public official, elected and appointed public official, we would like to recognize you. We

don't have any that are signed in, but I do have two people that I would like to recognize.

The first is Captain John Murray, he is the Port Canaveral Director and CEO and we appreciate your partnership in the project and the use of your facilities tonight. Thank you.

MR. MURRAY: Thank you.

MR. GRAEBER: The second person is Georganna Gillette. She is the Executive Director of the Space Coast TPO and we also appreciate your partnership in the project.

If there is any other public, elected or appointed public officials that would like to be recognized, if you would raise your hand, you are welcome to introduce yourself. If no other public officials wish to be recognized, I will now turn it over to our project team to begin the presentation. Thank you.

MODERATOR: Welcome to the State Road 401 Bridge Replacement Project Development & Environment or PD&E study public hearing. Financial Project ID or FP ID Number 444787-1. Efficient Transportation Decision-Making or ETDM Number 143977.

The environmental review,

consultation, and other actions required by applicable Federal Environmental Laws for this project are being or have been carried out by FDOT pursuant to 23U.S.C. and 327 and Memorandum of Understanding dated May 26th, 2022, and executed by FHWA and FDOT. The FDOT Office of Environmental Management in Tallahassee is the approving authority.

This hearing is being conducted in a hybrid format to provide multiple ways for the public to receive information about the project and provide input. This hearing is being conducted virtually through GoToWebinar and over the phone on Tuesday, January 31st, 2023, and in person on Wednesday, February 1st, 2023. A copy of the presentation is available on the project web page at www.cflroads.com/project/444787-1.

The purpose of tonight's public hearing is to share information with the public about the proposed improvement, its conceptional design, all alternative understudy, and the potential beneficial and adverse social, economic, and environmental impacts upon the community. The public hearing

also serves as an official forum providing an opportunity for members of the public to express their opinions regarding the project.

The three primary components of tonight's hearing are: First, the open house, which occurred prior to this presentation where you were invited to view the project displays and for those attending in person to speak directly with the project team and provide your comments in writing or to the Court Reporter.

Second, this presentation, which will explain the project purpose and need, study alternatives, potential impacts, and proposed methods to mitigate the project impacts.

Third, a formal comment period following this presentation where you will have the opportunity to provide oral statements at the microphone or in writing or for those attending in person, you may provide your comments directly to the Court Reporter.

This public hearing was advertised and is being conducted in accordance with State and Federal requirements, including Title VI of the Civil Rights Act of 1964. Public participation is solicited without regard to race, color,

national origin, age, sex, religion, disability, or family status. Persons wishing to express their concerns about Title VI may do so by contacting Melissa McKinney, FDOT District Five Title VI Coordinator by mail at 719 South Woodland Boulevard, Mail Station 501, DeLand, Florida, 32720-6834. By phone at 386-943-5077, or e-mail at Melissa.McKinney@dot.state.fl.us, spelled M-e-l-i-s-s-a dot M-c-K-i-n-n-e-y at d-o-t dot state dot f-l dot u-s.

You may also contact the State Title VI Coordinator Stefan Kulakowski by mail at 605 Suwanne Street, Mail Station 65, Tallahassee, Florida, 32399-0450. By phone at 850-414-4742, or e-mail at s-t-e-f-a-n dot k-u-l-a-k-o-w-s-k-i at d-o-t dot state dot f-l dot u-s.

All inquires or complaints will be handled according to FDOT procedures and in a prompt and courteous manner. This information is shown on a sign at the in person location, on the project website, and in the hearing notifications.

The public hearing was advertised

consistent with the Federal and State requirements shown on this slide. This public hearing was advertised in the Florida Administrative Register, on FDOT's public notices website and project web page, on the Florida Today Newspaper, and on social media. In addition, adjacent property owners and interested individuals, elected and appointed officials, and government agencies were also notified about this public hearing.

Project documents are available for viewing during business hours through February 11th, 2023, at the Cape Canaveral Public Library. The project documents are also available on the project website at www.cflroads.com/project/444787-1.

A PD&E study is a blending of engineering, environmental assessments, and public involvement activities. The process is used by engineers and planners to determine the location and conceptual design of the preferred roadway improvements. The study evaluation showed the associated social, economic, and environmental affects of the improvements, in addition to providing viable engineering and

transportation solutions.

If the PD&E study results in a build alternative selection, the project may proceed to the next phase, which is the design phase.

The right-of-way phase typically involves acquisition of any necessary right-of-way. Right-of-way acquisition is not anticipated for this project.

The project would be built during the construction phase. Currently the construction phase is unfunded.

Public input and information received at the public information meeting and this public hearing will be taken into consideration for this study.

This project is within the jurisdiction of the Space Coast Transportation Planning Organization, TPO. The State Road 401 drawbridges across at Canaveral Barge Canal at Port Canaveral in Brevard County. The limits of this study are State Road 401 from the State Road 528 interchange to approximately 1,000 feet north of the Canaveral Barge Canal.

The Port sits at the junction of Florida's main North South and East West

corridors. As the second busiest cruise port in the World, it creates opportunities for trade, tourism, and development, which serves Brevard County and the State of Florida with an economic impact to the State of $3.9 billion and 33,000 jobs. Port Canaveral supplies critical fuel to the Central Florida Region and beyond and in its strategic location is critical for support of Military missions and commercial space enterprises.

The purpose of this study is to evaluate improvements to or replacement of the existing State Road 401 bascule bridges or drawbridges over the Canaveral Barge Canal. The Department is developing and analyzing alternatives for improving the bridges to address access, future mobility, congestion, and safety needs. This project may also improve system linkage and modal interrelationships by providing access to strategic and national assets.

State Road 401 not only provides a vital connection to Port Canaveral's operations, including major cruise and Carnival terminals, the roadway is part of the Strategic

Intermodal System Connecter and Strategic Highway Network, or STRAHNET. STRAHNET is the designation given to roads that provide defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war.

Traffic conditions within the study limits are characterized by a high percentage of truck traffic due to nearby cargo, freight, and industrial tenants on the North side of the Port. Traffic conditions vary depending upon the season and when cruise ship passengers are arriving or departing. State Road 401 provides access for goods movement and computer traffic for the Canaveral Space Force Station, U.S. Coast Guard, and Commercial Space Industry.

The study being conducted a detailed marine navigation and vessel survey to determine the number of bridge openings that would be required in the future based on the size and type of marine vessels traveling through the Canaveral Barge Canal. This information also provides a basis for the height of the bridge over the Canal that would provide the optimum clearance for most common

marine vessels.

This PD&E study has been conducted by FDOT in coordination with local agencies and organizations that have a stake in this project, including the Canaveral Port Authority and Port tenants, local marinas, the Space Coast Transportation Planning Organization, Space Florida, Brevard County, the U.S. Army Corps of Engineers, the U.S. Navy, U.S. Coast Guard, and U.S. Space Force.

During the PD&E study four alternatives were considered for the State Road 401 bridges. A no build alternative where the existing lower level drawbridges would remain and no roadway or structural improvements would be completed.

Three build alternatives that would replace the State Road 401 bridges were developed. The alternatives were a high-level fixed bridge, a mid-level movable lift bridge, and a mid-level bascule bridge or drawbridge alternative.

The no build alternative assumes that no improvements would be made to the three existing parallel bascule drawbridges on State

Road 401. With the anticipated future traffic operations, congestion delays will continue to worsen on State Road 401, therefore, the no build alternative does not meet the project purpose and need.

Of the three existing State Road 401 drawbridges one bridge is for northbound traffic and two bridges are for southbound traffic. The bridges provide three minimum 12-foot travel lanes in each direction and minimum 2-foot wide shoulders. The existing bridges provide 25-feet of vertical clearance, which is the distance between the lowest member of the bridge and the mean high water level of the Canaveral Barge Canal and 90-feet of horizontal clearance, which is the distance between the Canaveral Barge Canal bridge venders.

The concepts for the build alternatives were developed with a number of constraints and with design drivers in mind. In addition to traffic conditions and a 75-year design service life both on State Road 401 and through the Canaveral Barge Canal, the study concepts take into account existing

infrastructure including the bridge house and foundations, utilities and signage, and how the proposed improvements would tie into or affect nearby roadways such as State Road 528 ramps, Mullet Road, and the cruise terminal entrance to the North.

Characteristics of the Canaveral Barge Canal and Canaveral Lock, such as the 90-foot width of the Barge Canal at the bridge crossing, were determining factors of the height and length of the bridge crossing, as were predicted sea levels and marine vessel height that would require movable bridges to open and cause traffic delays.

The high-level fixed bridge alternative as illustrated on this slide will provide two high-level fixed bridges. This alternative will provide a 65-foot vertical clearance over the mean high water level of the Canaveral Barge Canal, which is typical of high-level fixed bridges over intercoastal waterways. The existing 90-foot horizontal clearance, which is the distance between the bridge venders, would remain uncharged for this alternative. The maximum road grade of 6

percent would require a design variation.

The lift bridge alternative would provide two mid-level lift bridges that have a 40-foot vertical clearance over the Canaveral Barge Canal when the bridge is closed as illustrated on this slide. Based on marine navigation and vessel survey of marine traffic traveling through the Canaveral lock, a 40-foot vertical clearance would, over the course of a year, reduce the need for the bridge to be opened and traffic stopped by 76 percent. When the bridge is opened or lifted 85 feet of clearance will be provided for taller marine vessels traveling through the canal. Existing overhead power lines next to the bridge currently limit the height of marine vessels to 85 feet. The existing 90-foot horizontal clearance will remain unchanged for this alternative. The maximum road grade for this alternative is 4 percent.

The draw bridge alternative would provide two mid-level drawbridges that have a 40-foot vertical clearance over the Canaveral Barge Canal when the bridge is closed as illustrated on this slide. As with the lift

bridge, a 40-foot vertical clearance would, over the course of a year, reduce the need for the bridge to be opened and traffic stopped by 76 percent. When the drawbridge is opened, unlimited clearance would be provided for taller marine vessels traveling through the canal, except as limited by the existing power lines next to bridge. The existing 90-foot horizontal clearance will remain unchanged for this alternative. The maximum road grade for this alternative is 4 percent.

In February 2022 the Department conducted a public information meeting to present the alternatives. Attendees had the option of attending a virtual public meeting online or in person at the Canaveral Port Authority. 37 members of the public and agency representatives attended this meeting, which featured project exhibits and a presentation. Attendees also had the opportunity to provide comments. The Department has continued coordinating with project stakeholders as part of the alternatives analysis process.

As part of alternatives analysis a study team developed this matrix to compare the

engineering and the environmental features and costs associated with each alternative. Although the no build alternative would not meet the projects purpose and need, it will remain under consideration throughout the evaluation proces. This matrix provides a summary of the rankings for the traffic, physical, natural, social, and costs criteria. These rankings are from green, being the most desirable outcome, to red, being the least desirable.

For example, in terms of roadway traffic delays and safety, the high-level fixed bridge alternative has the best ranking because it provides free-flow traffic. From the marine navigational standpoint, the drawbridge alternative ranks highest since it offers no limitation on vessel height. The drawbridge alternative ranks lowest for utility impacts because the size of the abutments may result in impacts to nearby overhead power lines and buried utilities.

In terms of affects on the natural and social environment, all three build alternatives are expected to result in

relatively equal impacts.

From a cost perspective, the no build alternative operations and maintenance over the 75-year design life is expected to exceed $80 million because the bridge is more than 40 years old and will require resurfacing and repairs. The high-level fixed bridge has the lowest operations and maintenance cost overall because it does not have the mechanical or electrical components like the lift bridge and drawbridge.

The approximate construction cost for each alternative, including cost to construct the bridge, earth work, roadway, signing, and storm water drainage components are $125 million for the high-level fixed bridge, $170 million for the lift bridge, and $180 million for the drawbridge. Overall, the high-level fixed bridge alternative ranks higher than the lift bridge and drawbridge alternatives when comparing traffic and safety benefits, the level of the environment affects, and costs.

Based on the results of the alternatives analysis process, ongoing coordination with stakeholders, the Department

identified the high-level fixed bridge as the preferred alternative. Each of the high-level fixed bridges would provide three 12-foot wide travel lines in each direction and 10-foot wide inside and outside shoulders. Since State Road 401 is a limited access facility and there are security concerns associated with pedestrian traffic at this location, neither sidewalks nor bike lanes are proposed. State Road 401 would have a 45-mile per hour design speed and 6 percent maximum road grade.

The high-level fixed bridge alternative meets the purpose and need and provides various benefits over the other alternatives. The high-level fixed bridge alternative will eliminate vehicular and vessel delays that would otherwise be caused by bridge openings and improve resiliency of the transportation network. This alternatively will not adversely affect the Port Canaveral Barge Canal and Lock and will maintain the existing Barge Canal width.

The high-level fixed bridge also resolves in the lowest construction costs of the three build alternatives and lowest

operations and maintenance costs for all alternatives over a 75-year life span.

Environmental considerations and possible impacts associated with the preferred alternative are important elements of the study. The PD&E study has evaluated the potential impacts and benefits to the natural, social and economic, cultural, and physical environments associated with each alternative. Avoidance or minimization of impacts to these features is a key consideration in the selection of the preferred alternative.

This table summarizes the key environmental considerations evaluated for the selection of the State Road 401 preferred alternative. The project is anticipated to result in 0.09 acres of direct impacts to essential fish habitat and 0.10 acres of direct impacts to mangroves.

The project is anticipated to result in a determination of, may affect but not likely to adversely affect, for eight Federally listed species. The project is anticipated to result in direct impact to 1.18 acres of wetland. Of these impacted wetland areas, 1.08

acres occur within existing roadway drainage systems. Avoidance and minimization will continue to be incorporated as practical throughout the PD&E design basis.

The project will not use any land from the Rodney S. Ketcham Park.

The project will result in economic enhancements and mobility improvements by reducing vehicular and marine vessel delays. The project will not result in adverse affects to the Canaveral Lock, which is a historic resource and eligible for listing on the National Register of Historic Places.

Temporary driveway closures will occur during construction that affect the driveway access for the Canaveral Locks. While the noise levels for all alternatives are predicted to exceed the National Ambient Criteria for highway traffic noise, noise levels for the preferred alternative at Rodney S. Ketcham Park will be reduced when compared to other alternatives, including the no build alternative. There is no feasible or reasonable mitigation available to reduce the highway related noise to this Park.

No significant impacts to the natural, social and economic, cultural, or physical environments are anticipated to occur as a result of the construction of the preferred alternative.

The State Road 401 Bridge Replacement Project is identified in Amendment One of the Space Coast Transportation Planning Organization's 2045 Long Range Transportation Plan as one of three projects advanced in February 2022 due to developments in the State Transportation Improvement Plan.

Public engagement activities and opportunities for the public throughout the PD&E study have included individual stakeholder coordination meetings, the public information meeting, and this public hearing. After this hearing we will incorporate public comments and finalize engineering and environmental analysis and documents for the preferred alternative. The final engineering and environmental analysis will be submitted to the FDOT Office of Environmental Management for approval of the location and design concept acceptance, LDCA. The approval of LDCA marks the completion of

the PD&E Study. The design phase for this project is scheduled to follow the PD&E Study and start in 2023.

We encourage your input and feedback about this project and there are multiple ways for you to participate. All public comments and questions are part of the public hearing record and every method for providing public comments and questions carries equal weight. All questions will be responded to in writing after the hearing. While comments and questions will be accepted at any time, those submitted by February 11th, 10 days after an in-person public hearing, will become part of the project's public record.

In-person attendees are encouraged to speak with project team members to ask questions and provide input. To submit a written comment for the public hearing record, please complete a printed comment form and return it to the project staff. You may also provide your comment directly to the Court Reporter.

To learn more about the project, go to www.cflroads.com, type the Project Number

444787-1 in the search box at the top right and click go and click on the project name. Public hearing materials are posted on the website now.

This concludes our presentation. We will now enter the formal public comment period for this hearing. All questions and comments will become part of the public hearing record. Please note that the Department will respond to all questions in writing after the hearing.

MR. GRAEBER: Anyone wishing to make a verbal statement regarding the project will now have the opportunity to speak. You will need to submit a speaker request card, if you have not already done so. We have some extras in the middle if anybody needs one.

We'll now call upon participants who have requested to speak. Please come to the microphone when your name is called, state your name and address. If you represent an organization, municipality, or other public body, please provide that information as well. Speakers will have a maximum of 3 minutes to make a statement. The timer on the screen reflects each speakers remaining time. Please

keep in mind that all questions will be responded to in writing after the hearing.

The first speaker tonight is Sarah Hodge.

MS. HODGE: Looks like I filled out a card for nothing because I am apposed to the drawbridges and looks like you are looking at the high-rise bridge, which my husband and I support. And we live on North Merritt Island and I can't tell you how many problems there are with the drawbridge, with they had a heart attack one time, bridge gets stuck sometimes, accidents. It is just a really bad option. I was told many years ago they were not allowing anymore drawbridges in Florida and I don't know what happened that it changed, but thank you, you know, for the alternative.

MR. GRAEBER: Thank you for your comment. Do you have we have anyone who wishes to make a statement?

On behalf of the Florida Department of Transportation, thank you for attending the public hearing and providing your input on this project. If you have comments or questions after the hearing, please submit them by

February 11th, 2023. Project documents and other exhibits displayed at this public hearing will be -- are posted at the project website at www.cflroads/project/444787-1.

It is now 18:30, I hereby officially close the public hearing for the State Road 401 Bridge Replacement PD&E. Have a great evening. Thank you.

(Whereupon, the public hearing concluded at 6:30 p.m..)

CERTIFICATE OF REPORTER

I, ANN MARIE TESTA, a Stenographic Court Reporter, do hereby certify that I was authorized to and did report the foregoing proceedings, and that Pages 1 through 25 of the transcript are a true and correct record of my stenographic notes.

DATED this 15th day of February 2023.

Ann Marie Testa

The foregoing certification of this transcript does not apply to reproduction of the same by any means, unless under the direct control and/or discretion of the certifying reporter.

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