

Part 1 of 3

DRAFT PRELIMINARY ENGINEERING REPORT

Florida Department of Transportation

District One

S.R.70 PD&E Study

Limits of Project: From Lonesome Island Road to the Southern Leg of C.R. 721

Highlands County, Florida

Financial Management Number: 449851-1

ETDM Number: 14490

Date: January 2026

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.

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ACRONYMS

AADT	Annual Average Daily Traffic
AN	Advance Notification
AO	Archaeological Occurrences
APE	Area of Potential Effect
CE	Categorical Exclusion
CMF	Crash Modification Factors
CRAS	Cultural Resources Assessment Survey
CSER	Contamination Screening Evaluation Report
dB(A)	Decibels A-weighted
DTTM	Design Traffic Technical Memorandum
DVB	Design Variation for Border width
ERP	Environmental Resource Permit
EST	Environmental Screening Tool
ETAT	Environmental Technical Advisory Team
ETDM	Efficient Transportation Decision Making
FAC	Florida Administrative Code
FDEM	Florida Division of Emergency Management
FDEP	Florida Department of Environmental Protection
FDM	FDOT Design Manual
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FGT	Florida Gas Transmission
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FLUCCS	Florida Land Use Cover and Forms Classification System
FPC	Floodplain Compensation
FPID	Financial Project Identification
FPL	Florida Power and Light
FWC	Florida Fish and Wildlife Conservation Commission
FY	Fiscal Year
GIS	Geographic Information System
HCS	Highway Capacity Software
HRTPO	Heartland Regional Transportation Planning Organization
ITS	Intelligent Transportation System
KV	Kilo Volt
LDCA	Location and Design Concept Approval
LOS	Level of Service
LRE	Long Range Estimate

L RTP	Long Range Transportation Plan
MOT	Maintenance of Traffic
MP	Mile Post
MPH	Miles Per Hour
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
NRE	Natural Resources Evaluation
NRHP	National Register of Historic Places
OA	Other Arterial
OEM	Office of Environmental Management
PBMP	Platt Branch Mitigation Bank
PD&E	Project Development and Environment
PHU	Panther Habitat Unit
PIP	Public Involvement Plan
PSR	Pond Siting Report
PTAR	Project Traffic Analysis Report
RACEC	Rural Area of Critical Economic Concern
RAO	Rural Areas of Opportunity
ROW	Right-of-Way
SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Officer
SIS	Strategic Intermodal System
SLD	Straight Line Diagram
SMF	Stormwater Management Facility
S.R.	State Road
STIP	State Transportation Improvement Program
TBD	To Be Determined
TIP	Transportation Improvement Program
TSM&O	Transportation System Management and Operations
UAO	Utility Agency Owners
UAP	Utility Assessment Package
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
VPD	Vehicles Per Day
WBID	Water Body Identification Number

Section 1 Project Summary

The Florida Department of Transportation (FDOT) District One is conducting a Project Development and Environment (PD&E) study along State Road (S.R.) 70 from Lonesome Island Road to the southern leg of C.R. 721 in Highlands County. The objective of the PD&E study is to assist the FDOT Office of Environmental Management (OEM) in reaching a decision on the type, location, and conceptual design of the necessary improvements for the widening of S.R. 70. This study documents the need for the improvements as well as the procedures utilized to develop and evaluate various improvements, including elements such as proposed typical sections, preliminary roadway alignments, and intersection enhancements.

The PD&E study satisfies all applicable requirements, including the National Environmental Policy Act (NEPA), to qualify for federal-aid funding of subsequent development phases (design, right-of-way (ROW) acquisition, and construction). This project was screened through the FDOT's Efficient Transportation Decision Making (ETDM) process as ETDM Project No. 14490. The *ETDM Programming Screen Summary Report* was published on February 2, 2023, containing comments from the Environmental Technical Advisory Team (ETAT) on the project's effects on various natural, physical, and social resources. A *Type 2 Categorical Exclusion (CE)* is the class of action for this PD&E study.

1.1 Project Description

This roadway project proposes the widening of a two-lane facility to a four-lane, divided facility and/or the inclusion of operational improvements along 7.6 miles of S.R. 70 from Lonesome Island Road to the southern leg of County Road (C.R.) 721 in Highlands County. Travel lane widths may be widened from 10 feet to 12 feet as part of the project. Multimodal facilities will also be considered along the project segment, where appropriate. A project location map is provided in **Figure 1-1**.

Existing Conditions

S.R. 70 is part of Florida's Strategic Intermodal System (SIS) highway network and designated state hurricane evacuation route network. As part of the National Highway System, S.R. 70 is critical in the transportation network as it facilitates local and regional traffic and the movement of goods/freight. S.R. 70 is functionally classified as "Rural Principal Arterial – Other" within the project area, and the project segment of the roadway has an existing context classification of C2-Rural.

The existing typical section consists of a two-lane undivided facility with 10-foot travel lanes. There are 8-foot shoulders, four (4) feet of which are paved; however, there are no designated bicycle lanes or sidewalks present on either side of the existing roadway. The posted speed limit along the project corridor is 60 miles per hour (mph). The existing (ROW) width along S.R. 70 project segment varies from 50 feet to 70 feet. A deep canal runs intermittently along the southern border of the project limits. The existing roadway typical sections are shown as **Figure 1-2** and **Figure 1-3**.

Figure 1-1 | Project Location Map

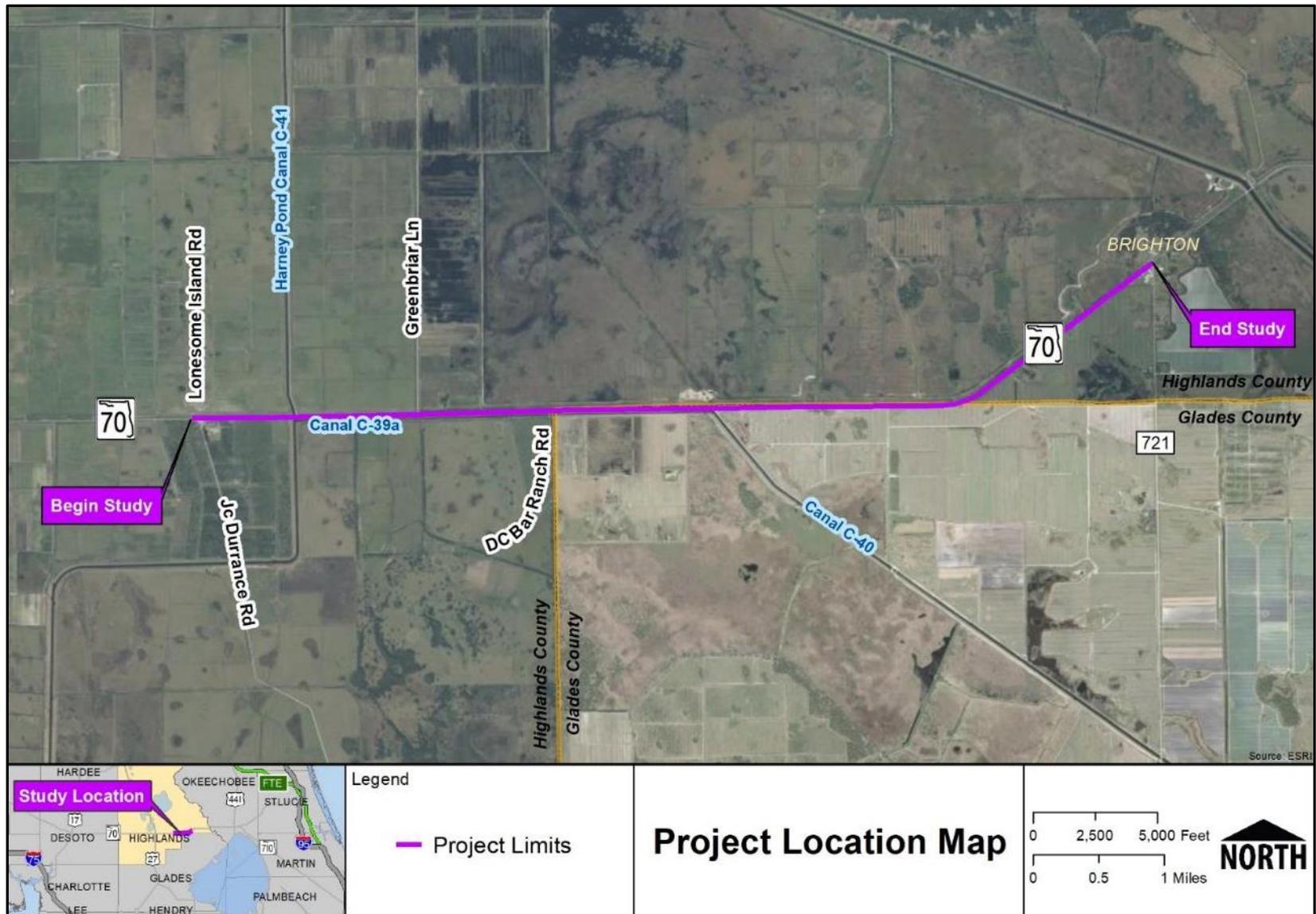


Figure 1-2 | S.R. 70 – Existing Roadway Typical Section from Lonesome Island Road (Begin Project) to Harney Pond Canal C-41 and From Indian Prairie Canal C-40 to C.R. 721 (End Project)

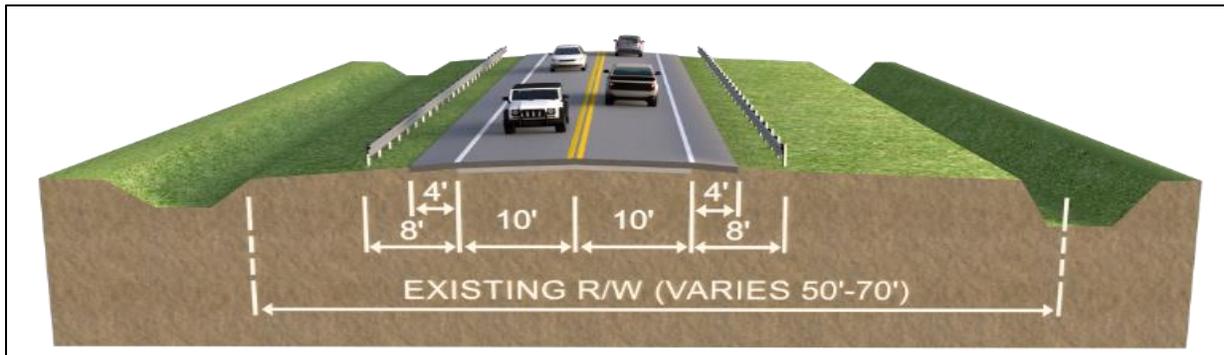
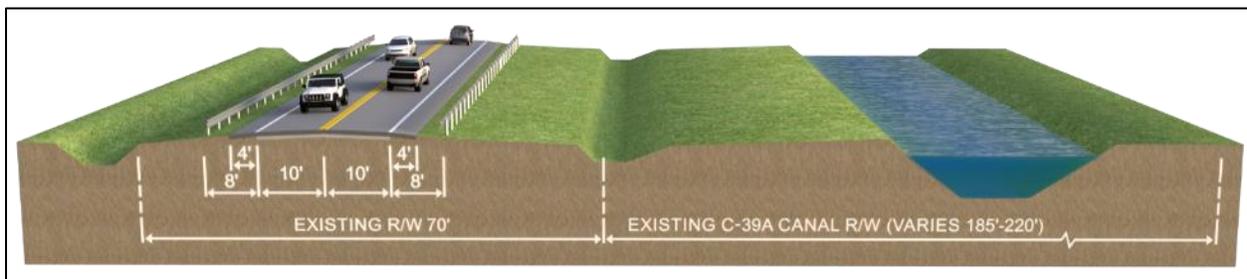


Figure 1-3 | Existing Roadway Typical Section from Harney Pond Canal C-41 to Indian Prairie Canal C-40



Preferred Alternative

The Preferred Alternative includes widening the existing two-lane undivided rural arterial to a four-lane divided arterial with a 40-foot grass median throughout the project limits. Full paved shoulders and drainage ditches are proposed on the outside and a 12-foot-wide shared use path is proposed along the south side of the road for bicycles and pedestrians. The Preferred Alternative is described further in **Section 1.5**.

1.2 Purpose and Need

1.2.1 Purpose

The *S.R. 70 from I-75 to St. Lucie County Line Corridor Vision Report* (September 2020) was prepared by the FDOT District One Planning Studio. The Planning Studio ensures that transportation projects and strategies align with community visions. This document identified two main themes, roadway safety and capacity, and branding and placemaking, as vision elements in the development of potential concepts. The Corridor Vision Report detailed a potential typical section for the roadway which included widening from two to four lanes, adding a median and paved shoulders, and including a shared-use path to accommodate multi-modal users.

The purpose of this project is to address traffic safety conditions on State Road (S.R.) 70 from Lonesome Island Road to the southern leg of C.R. 721 within Highlands County. Other goals of the project are to

maintain important east-west connectivity within the regional transportation network and accommodate freight activity within the area.

1.2.2 Need

This project is needed to improve traffic safety conditions including emergency evacuation, and incident response times, maintain important east-west connectivity within the regional transportation network and accommodate freight activity within the area.

PRIMARY NEED:

Safety: Improve Traffic Safety Conditions, Emergency Evacuation, and Incident Response Times

Crash data was collected for the years 2018 to 2022 from the Signal Four Analytics database. A total of 84 crashes were reported along the S.R. 70 project corridor during the five-year period. Of the 84 crashes along the project corridor, 13 (15%) were guardrail crashes and 13 (15%) were sideswipe, opposite direction crashes. The average crash rate for this section of S.R. 70 is 1.073, 36% more than the statewide average of 0.789 and 19.4% higher than the Highlands County crash rate of 0.898 for similar facilities. Eight fatal crashes occurred in this segment of S.R. 70 during the five-year period. One of the fatal crashes was reported as a front-to-front crash that was caused by improper passing.

The project section of S.R. 70 presently features 10-foot travel lanes and 8-foot shoulders, with four feet paved. Guardrails along the roadway are also minimally set back from the travel lanes (less than seven feet). With a context classification of C2-Rural, the existing typical section does not meet 2022 FDOT Design Manual (FDM) standards. The substandard lane and shoulder widths and proximity of the guardrails to the travel lanes restrict the ability of drivers to avoid hazards within each directional travel lane without veering off the roadway causing direct impacts. According to “Evaluation of the Safety Effectiveness of the Conversion of Two-Lane Roadways to Four-Lane Divided Roadways: Bayesian vs. Empirical Bayes” referenced on the Federal Highway Administration (FHWA) Crash Modification Factors (CMF) Clearinghouse, widening a rural two-lane roadway to a four-lane divided roadway can help decrease fatal and injury crashes by 45 percent. In addition, due to the roadway’s current configuration, there is limited space for an emergency service vehicle to pass to respond to a situation during periods of congestion or to accommodate a disabled vehicle to prevent it from obstructing traffic flow. According to the Highlands County Sheriff’s Office, one of the two travel lanes (if not both) is often blocked during traffic incidents.

S.R. 70 is part of the emergency evacuation route network designated by the Florida Division of Emergency Management (FDEM) as well as the network established by Highlands County. This roadway is critical in facilitating traffic during emergency evacuation periods as it connects to other arterials and highways of the state evacuation route network such as U.S. 27 (on the west) and C.R. 721 (one the east) and serves as only one of two east-west facilities with S.R. 66/U.S. 98 being the other that traverses Highlands County. Under various FDEM evacuation scenarios for different storm events, FDEM noted that S.R. 70 has some of the longest lasting vehicle queues in the Central Florida region, contributing to prolonged clearance times. Clearance time, comprised of time required for mobilization of the evacuating population, travel time, and the delay time caused by traffic congestion, is one input used by County emergency managers to determine when to recommend an evacuation order and is a key factor pertaining to public safety during an evacuation event.

The project is anticipated to address deficiencies of the roadway which may reduce crashes (including fatalities) and lead to enhanced emergency evacuation capabilities and incident response times.

SECONDARY NEEDS:

Area Wide Network/System Linkage: Maintain Important East-West Connectivity within the Regional Transportation Network

S.R. 70 is one of four corridors connecting Central and South Florida's west and east coasts as it spans from U.S. 41 in Manatee County (west coast) to U.S. 1 in St. Lucie County (east coast). It also connects to several major north-south transportation facilities of the state, including U.S. 41, I-75, U.S. 17, U.S. 27, U.S. 441, Florida's Turnpike, I-95, and U.S. 1. With the nearest available parallel east-west facilities being located over 10 miles to the north and south, S.R. 70 is integral to facilitating east-west travel within the regional transportation network of Florida's heartland.

The project is intended to complement other S.R. 70 corridor safety and traffic operational improvements identified in the 2029 - 2045 SIS Long Range Cost Feasible Plan from C.R. 675 in Manatee County to U.S. 98 in Okeechobee County. In turn, the improvements are anticipated to maintain the corridor's function as a designated SIS highway corridor and important east-west connection for freight and commuters across the Central Florida region and state.

Transportation Demand: Accommodate Freight Activity

As part of Florida's SIS highway network, S.R. 70 connects regionally important routes (such as I-75, U.S. 27, Florida's Turnpike, and I-95) as well as serves as a regional through route for long-haul truck volumes and provides access to agricultural/ranching operations, industrial/commercial areas, and other intensive freight activity centers within Central Florida. The 2022 Annual Average Daily Traffic (AADT) volume for the project corridor is 5,600 vehicles per day, of which 32% is truck traffic. Truck volumes along S.R. 70 are expected to increase in the future as freight distribution and logistics activities continue to gain economic significance in Central Florida counties through the rapid growth occurring along the I-4 and I-75 corridors within the broader region. According to the Heartland Regional Transportation Planning Organization's (TPO) 2045 Long Range Transportation Plan (LRTP), Highlands County is in the process of diversifying their economy, expanding the potential for freight distribution and logistics activity development. With the major metro markets of Orlando, Tampa, and Fort Myers being located nearly equidistant to Highlands County and more than 86 percent of Florida's population being located within a 150-mile (or two-hour) radius of Highlands County, the S.R. 70 improvements are intended to accommodate increased population and employment growth as well as support the vision of the county and larger region to grow as a trade hub.

According to the FDOT District 1, Freight Mobility and Trade Study: Technical Memorandum 5 - Freight Improvements Prioritization, improvements to S.R. 70 are the #1 long-term priority in Highlands County to facilitate the future growth of freight traffic in the region. Additionally, the Heartland Regional TPO, its committees, and community stakeholders have identified S.R. 70 as the highest priority transportation facility in the region in need of improvements due to concerns pertaining to safety, freight mobility, and economic growth. The project improvements are aligned with the goals of these plans and SIS objectives of promoting interregional transportation linked to economic development.

Project Status

The proposed improvements along S.R. 70 from East of Lonesome Island Road to NW 38th Terrace (near downtown Okeechobee) are identified in the Heartland Regional Transportation Planning Organization (HRTPO) 2045 LRTP Cost Feasible Plan with Other Arterial (OA) Future Funding fiscal year (FY) 2031-2035 for safety improvements and/or a PD&E Study. The HRTPO *Transportation Improvement Program* (TIP) for Fiscal Years (FY) 2025/2026 - 2029/2030 was adopted on June 18, 2025, and has identified the project in the FY 2029/2030 Transportation Project Priorities list. Funding for the subsequent project phases, consisting of final design, ROW acquisition, and construction, are not yet programmed within the FDOT *State Transportation Improvement Program* (STIP) Five-Year Work Program. However, the next project phase, final design, is listed in the work program as "candidate" status funding. As noted, funding for the project as well as the project limits differ across plans; the identified plans will need to be modified to reflect consistency

1.3 Commitments

- The most recent version of the United States Fish and Wildlife Service (USFWS) *Standard Protection Measures for the Eastern Indigo Snake* will be implemented during construction.
- A standard reconnaissance survey for Audubon's crested caracara nests will be completed prior to construction to identify any active nest location(s) to ensure accurate impact analysis.
- FDOT will provide a financial contribution of \$89,476.20 to the Crested Caracara Conservation Fund for the project's impacts to Audubon's crested caracara primary zones of three nests.
- FDOT will provide 152.80 eastern indigo snake acre credits from Platt Branch Mitigation Bank (PBMB), which include land cover types that provide habitat for the eastern indigo snake. The FDOT will provide USFWS with a letter or email from the PBMB stating that the credit ledger for the bank has been revised to reflect the deduction of credits. The FDOT will not commence construction of the proposed project until a response email or letter from USFWS has been received stating that they have received the document. Due to the project not currently being funded for construction, if eastern indigo snake credits are not available from PBMB, FDOT will contribute \$78,000 to the Eastern Indigo Snake Conservation Fund or an agreed amount by USFWS if a portion of the credits are provided by PBMB.
- FDOT will provide mitigation for impacts to wood stork Suitable Foraging Habitat within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank.
- FDOT will mitigate habitat impacts to the Florida panther by providing 951 Panther Habitat Units (PHUs) from the Platt Branch Conservation Mitigation Bank.
- FDOT commits to design and constructing wildlife shelves at the bridge crossings over the South Florida Water Management District (SFWMD) canals (Canal C-40 and C-41), per current wildlife crossing guidelines.
- FDOT will coordinate with SFWMD to evaluate each canal crossing to determine locations and lengths of herpetofauna funnel fencing to be installed without precluding SFWMD canal access and maintenance of canals.

- FDOT will install landscaping utilizing native vegetation within the FDOT right-of-way and limits of funnel fencing.
- In accordance with the Florida Bonneted Bat Consultation Key, FDOT will implement Best Management Practice #1: If potential roost trees or structures need to be removed, check cavities for bats within 30 days prior to removal of trees, snags, or structures. When possible, remove structure outside of breeding season (e.g., January 1 - April 15). If evidence of use by any bat species is observed, discontinue removal efforts in that area and coordinate with the USFWS on how to proceed.
- In accordance with the Florida Bonneted Bat Consultation Key, FDOT will implement Best Management Practice #5: Conserve open freshwater and wetland habitats to promote foraging opportunities and avoid impacting water quality. Created/restored habitat should be designed to replace the function of native habitat.
- In accordance with the Florida Bonneted Bat Consultation Key, FDOT will implement Best Management Practice #7: Avoid or limit widespread application of insecticides (e.g., mosquito control, agricultural pest control) in areas where Florida bonneted bats are known or expected to forage and roost.
- In accordance with the Florida Bonneted Bat Consultation Key, FDOT will implement Best Management Practice #11: Avoid and minimize the use of artificial lighting, retain natural light conditions, and install wildlife friendly lighting (i.e., downward facing, and lowest lumens possible). Avoid permanent night-time lighting to the greatest extent practicable.
- If eastern black rails are observed in the project's action area prior to or during construction, consultation with USFWS will be reinitiated.
- If the tricolored bat is listed by the USFWS as threatened or endangered prior to the completion of construction, FDOT commits to reinitiating consultation with USFWS to determine appropriate avoidance and minimization measures.
- If the monarch butterfly is listed by USFWS as Threatened or Endangered prior to the completion of construction, FDOT commits to reinitiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.
- FDOT will require contractors to remove garbage daily from the construction site or use bear proof containers for securing of food and other debris from the project work area to prevent these items from becoming an attractant for the Florida black bear (*Ursus americanus floridanus*). Any interaction with nuisance bears will be reported to the Florida Fish and Wildlife Conservation Commission (FWC) Wildlife Alert hotline 888-404-FWCC (3922).

1.4 Alternatives Analysis Summary

Within the limits of this study, the FDOT is evaluating two Build Alternatives and a No-Build Alternative. The No-Build Alternative does not address the purpose and need of the project. The Build Alternatives will utilize a design speed of 65 mph for S.R. 70. The two Build Alternatives are being evaluated to widen the roadway from a two-lane undivided section to a four-lane divided section. The proposed improvements will be accomplished within 175 to 200 feet of (ROW) within the study limits, and ROW will need to be acquired for the proposed Build Alternatives. The proposed typical section is 4-lanes with two 12-foot travel

lanes in each direction separated by a 40-foot grassed median. Full paved shoulders and drainage ditches are proposed on the outside and a 12-foot-wide shared use path is proposed along the south side of the road for bicycles and pedestrians. There are two bridges identified over Harney Pond canal and Indian Prairie Canal.

East of the Indian Prairie Canal towards C.R. 721, approximately 500 feet west of mile marker 96, is where the alternatives begin to differ. Intersection Alternative 1 continues the south shifted alignment; however, it impacts an existing church and several existing business buildings, even with narrowing the median to 28-feet wide. Intersection Alternative 2 shifts both proposed eastbound and westbound lanes to the south of the existing location, avoiding the business impacts. Access to the businesses will remain and be connected to S.R. 70 through the access from C.R. 721.

Horizontal alignments for widening the existing roadway were optimized to utilize the existing ROW and minimize additional ROW as well as other impacts. The Build Alternatives were analyzed based on forecast traffic volumes and the enhancements it provides to mobility and safety within the corridor.

An Alternatives Workshop was held on June 13, 2024, at the Town of Lake Placid Government Center. Following the Alternatives Workshop, Alternative 1 impacted the existing church and business buildings, even with a narrower typical section, and the existing skew angle at the C.R. 721 would remain sharp, Alternative 2 with the realignment of the C.R. 721 intersection was selected as the Preferred Alternative.

Coordination with Florida Power and Light (FPL) following the Alternatives Workshop to minimize impacts to proposed transmission poles on the north side of S.R. 70 took place and resulted in aligning S.R. 70 slightly south of the location shown in the Alternatives Workshop to avoid impacting up to 25 transmission poles. The Concept Plans in **Appendix A** reflect the resulting alignment and ROW requirements.

1.5 Description of Preferred Alternative

The Preferred Alternative includes widening the existing two-lane undivided rural arterial to a four-lane divided arterial with a 40-foot grass median throughout the project limits. Full paved shoulders and drainage ditches are proposed on the outside and a 12-foot-wide shared use path is proposed along the south side of the road for bicycles and pedestrians. The proposed typical sections are shown on **Figure 1-4** and **Figure 1-5** from the western limits of the project where the widening is to the south of the existing roadway to the SFWMD Harney Pond Canal (C-41) where the widening shifts to north of the existing roadway.

Figure 1-4 | Preferred Alternative Roadway Typical Section: Lonesome Island Road (Begin Project) to West of Harney Pond Canal C-41

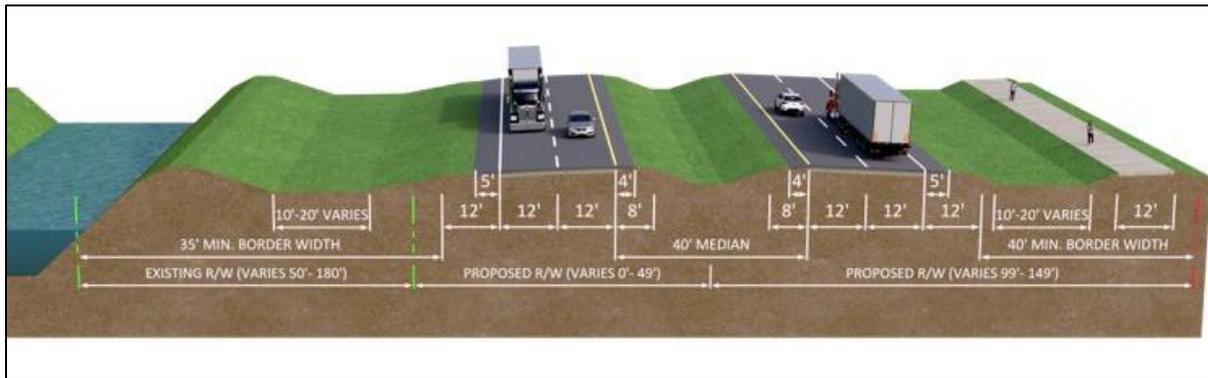
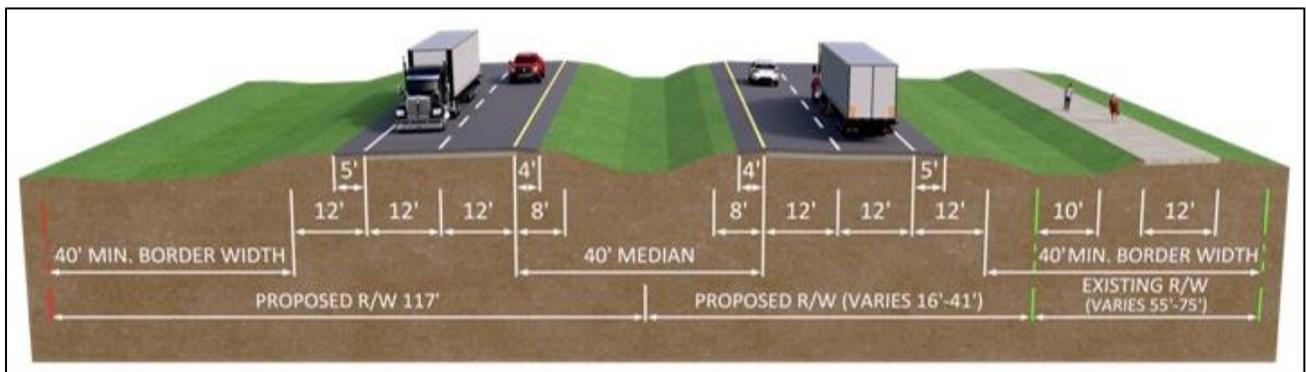
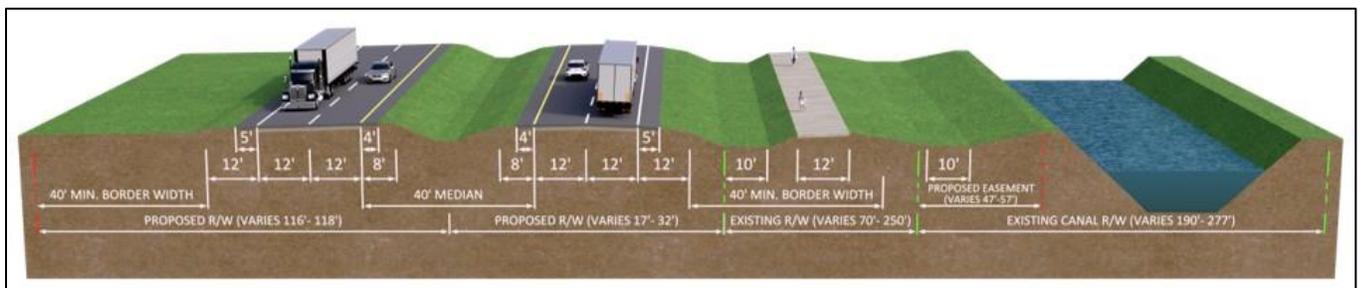


Figure 1-5 | Preferred Alternative Roadway Typical Section: West of Harney Pond Canal C-41 and East of Indian Prairie Canal C-40



Moving east, the proposed alignment continues east with widening to the north side of existing S.R. 70 pavement as it traverses the Harney Pond Canal (C-41) and follows immediately north of and parallel to the C-39A canal as shown on **Figure 1-6**. The alignment remains to the north across the Indian Prairie Canal (C-40).

Figure 1-6 | Preferred Alternative Roadway Typical Section: Harney Pond Canal C-41 to Indian Prairie Canal C-40



East of the Indian Prairie Canal continuing east towards C.R. 721, the alignment shifts back to the south side of existing S.R. 70 as shown previously in **Figure 1-5** to avoid impacts to an existing gas pipeline and overhead transmission line which are situated north of S.R. 70.

Approaching the Southern leg of C.R. 721, the Preferred Alternative shifts both proposed eastbound and westbound lanes starting approximately 1,000 feet west of the existing S.R. 70 and C.R. 721 intersection avoiding the business impacts along existing S.R. 70. Access to the businesses will remain and be connected to S.R. 70 through access from C.R. 721. The proposed typical section is shown in **Figure 1-7** and the realignment is shown in **Figure 1-8**.

Figure 1-7 | Preferred Alternative Roadway Typical Section: East of Indian Prairie Canal C-40 to C.R. 721 (End Project)

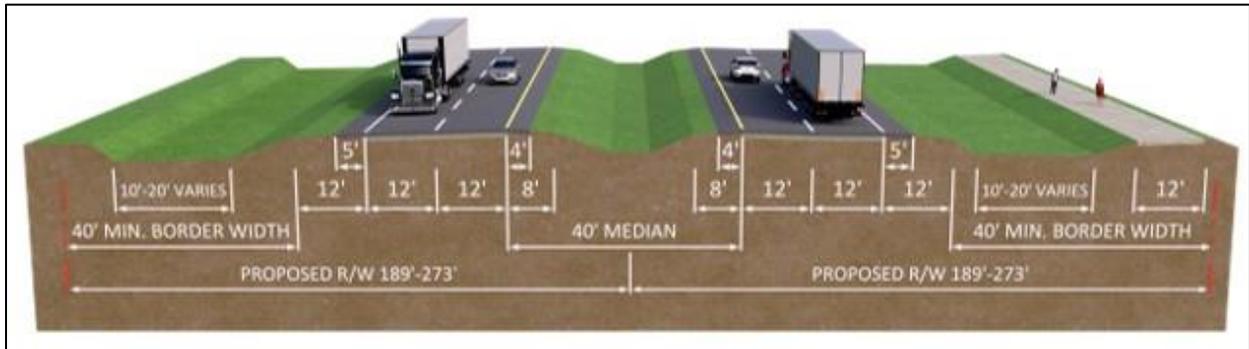
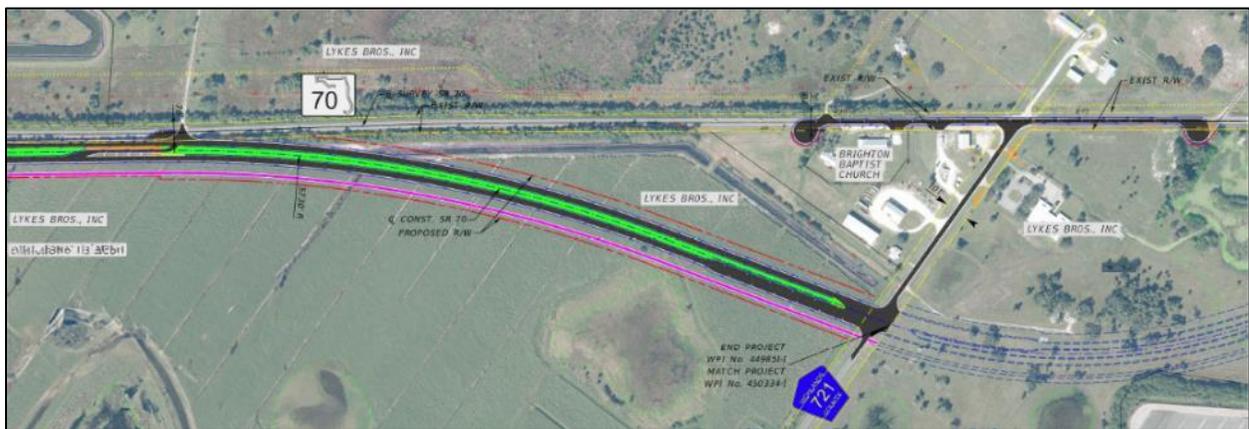


Figure 1-8 | C. R. 721 Intersection Realignment



The S. R. 70 bridges over Harney Pond Canal (C-41) shown on **Figure 1-9** and over Indian Prairie Canal (C-40) shown on **Figure 1-10**, will be replaced. The bridges include a 12-foot wide shared use path on the south side. Horizontal widening alignments were adjusted to minimize ROW requirements, impacts and costs.

Figure 1-9 | Preferred Alternative Bridge Typical Section – S.R. 70 over Harney Pond Canal C-41

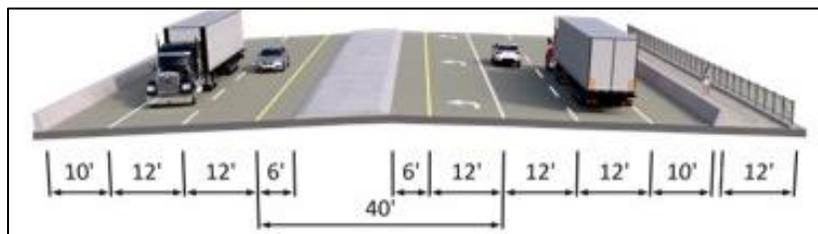
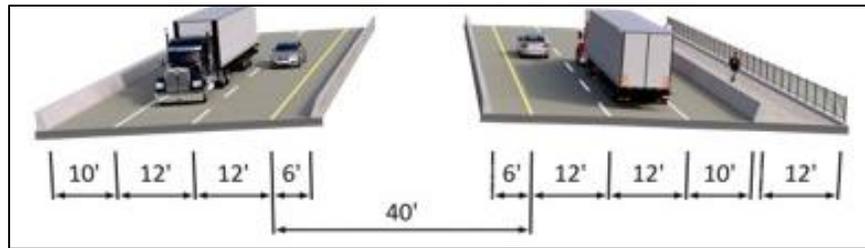


Figure 1-10 | Preferred Alternative Bridge Typical Section – S. R. 70 over Indian Prairie Canal C-40



The Preferred Alternative includes construction of six new off-site stormwater management facilities (SMF) designated as SMF 1, 2A, 3A, 4, 5, 6 and linear sites LIN7L and LIN7R within the roadway ROW limits. Six new off-site floodplain compensation (FPC) sites, designated as FPC 1B, 2-3B, 4A, 5A, 6B and 7B are also proposed as part of the Preferred Alternative.

Additional ROW will be required for the Preferred Alternative for roadway widening (183.2 acres) and for off-site SMF and FPC sites (148.5 acres). The total additional ROW is approximately 331.7 acres and involves 7 parcels. The SMF and FPC sites are situated on parcels that are also included in the parcel count for roadway widening. In addition, approximately 20.7 acres of easements are needed from SFWMD for roadway widening along canals C-41, C-40 and C-39A.

The proposed improvements for the S.R. 70 project address the purpose and need by enhancing traffic safety and maintaining crucial connectivity. The widening will also provide a median to improve traffic safety by separating traffic and allowing room for vehicle movement to reduce vehicle conflicts and the likelihood of accidents. Additionally, median openings at critical intersections will alleviate congestion and minimize delays from large vehicles traversing the corridor, offering a much better alternative to the no-build scenario. The widened roadway will further streamline traffic flow, reducing the potential for vehicle maneuvering conflicts and enhancing overall road safety and efficiency.

The overall cost of the Preferred Build Alternative with Design, ROW acquisition, Construction Engineering & Inspection (CEI), Construction, Species Mitigation and Wetlands Mitigation costs is approximately \$142.2 million (refer to **Table 1-1**). The conceptual plans for the preferred alternative are shown in **Appendix A**. Construction is not funded for the current 5-year fiscal period.

Table 1-1: Evaluation Matrix

Evaluation Criteria	Preferred Alternative	No-Build Alternative
Benefits		
Improves Traffic Safety Conditions	✓	✗
Improves Emergency Evacuation and Incident Response Times	✓	✗
Maintains Important East-West Connection	✓	✗
Accommodates Increasing Freight Activity	✓	✗
Potential Right-of-Way Impacts		
Right-of-Way to be Acquired for Roadway (acres)	183.2	0
Right-of-Way to be Acquired for Off-Site Stormwater Management (acres)	148.5	0
Number of Parcels Impacted	7	0
Number of Utilities Impacted	6	0
Number of Potential Business Relocations	0	0
Number of Potential Residential Relocations	0	0
Potential Environmental Effects		
Potential Impacts to Threatened and Endangered Species	Medium	No Change
Direct Impacts to Wetlands and Other Surface Waters (acres)	85.7	No Change
Section 4(f) / Public Recreation and Conservation Lands Potentially Impacted (acres)	0	No Change
Number of Historic Sites Impacted	0	No Change
Number of Archaeological Sites Impacted	0	No Change
Number of Noise-sensitive Sites Impacted	0	No Change
Potential Contamination Sites (high/medium risk)	0 High; 32 Medium	No Change
Impacts to Farmland (acres)	225.7	No Change
Impacts to Floodplain (acre-feet)	164.0	No Change
Estimated Costs		
Design	\$10,300,000	\$0
Right-of-Way Acquisition	\$6,000,000	\$0
Roadway Construction	\$102,500,000	\$0
Construction Engineering and Inspection (CEI)	\$10,300,000	\$0
Utility Relocation	\$11,926,000	\$0
Wetland Mitigation	\$1,000,000	\$0
Species Mitigation	\$168,000	\$0
Preliminary Estimate of Total Project Costs	\$142,194,000	\$0
<i>* SUBJECT TO CHANGE</i>		

1.6 List of Technical Documents

Table 1-2 lists the technical documents. Documents that are in draft status are noted with “Draft” and a date of the draft submittal in parentheses.

Table 1-2 | List of Technical Documents

Report	Date Completed
Public Involvement Items	
Public Involvement Plan	October 2023
Alternatives Workshop Scrapbook	July 2024
Public Hearing Transcript	To be completed after Public Hearing
Public Hearing Scrapbook	To be completed after Public Hearing
Comments and Coordination Report	To be completed after Public Hearing
Engineering Items	
Preliminary Engineering Report	(Draft) January 2026
Project Traffic Analysis Report	January 2025
Pond Siting Report	December 2025
Utility Assessment Package	December 2025
Environmental Items	
ETDM Programming Screen Summary Report	February 2023
Farmland Memo	March 2025
Water Quality Impact Evaluation	June 2025
Cultural Resource Assessment Survey	August 2025
Location Hydraulics Report	August 2025
Natural Resource Evaluation	August 2025
Natural Resource Evaluation Addendum	October 2025
Contamination Screening Evaluation Report	August 2025
Noise Contour Technical Memorandum	June 2025
Type 2 Categorical Exclusion	(Draft) January 2026

Section 2 Existing Conditions

2.1 Previous Planning Studies

The *S.R. 70 from I-75 to St. Lucie County Line Corridor Vision Report* (September 2020) was prepared by the FDOT District One Planning Studio. The Planning Studio ensures that transportation projects and strategies align with community visions. This document identified two main themes, roadway safety and capacity, and branding and placemaking, as vision elements in the development of potential concepts. The Corridor Vision Report detailed a potential typical section for the roadway which included widening from two to four lanes, adding a median and paved shoulders, and including a shared-use path to accommodate multi-modal users.

The widening of S.R. 70 was identified in the Capital Improvement Element of the Highlands County 2030 Comprehensive Plan and adopted in the HRTPO 2045 LRTP adopted on March 10, 2021. The HRTPO TIP for Fiscal Years 2023/2024 – 2027/2028 was adopted on June 21, 2023, has identified the project in the SIS Projects list on page 20 of the TIP. Additionally, S.R. 70 was classified as a high priority investment in the Florida Freight Mobility and Trade Plan: Investment Element – Project list (April 2020). Further, S.R. 70 is included as a four-lane facility throughout all of Highlands County in the FDOT’s 2035 SIS Cost Feasible Plan.

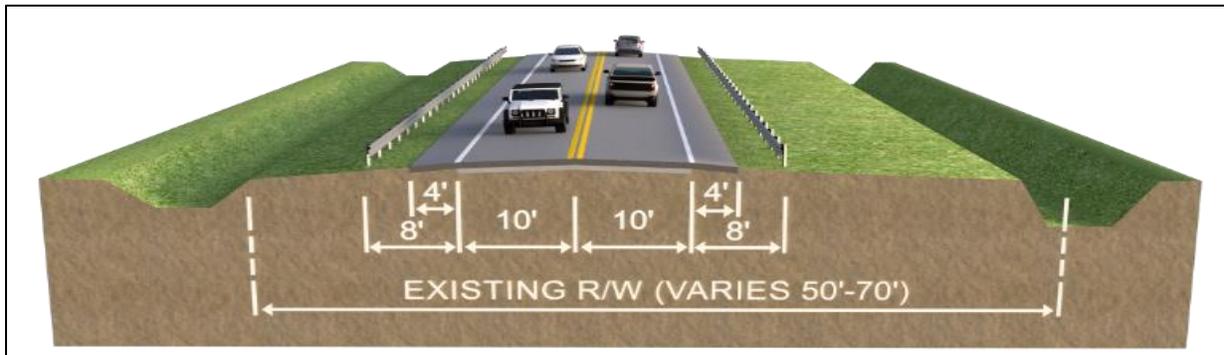
2.2 Existing Roadway Conditions

S.R. 70 is an east-west two-lane undivided facility in Highlands County and on the SIS, Florida’s high priority network of transportation facilities that is important to the state’s economy and mobility. S.R. 70 also serves as part of the emergency evacuation route network.

2.2.1 Roadway Typical Sections

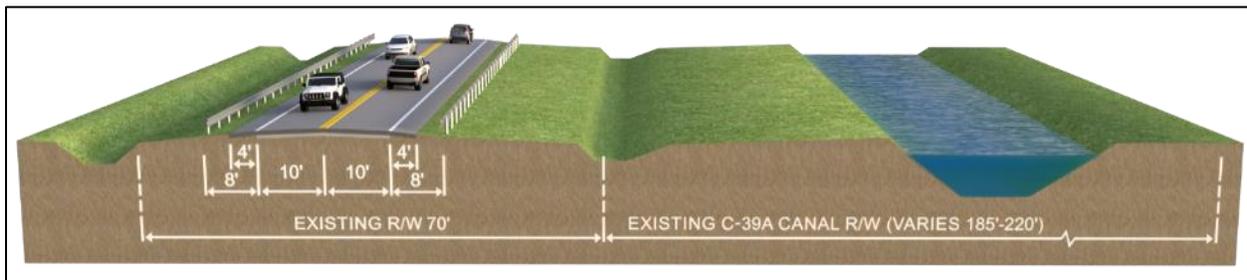
Within the project area, S.R. 70 is currently a two-lane undivided roadway. The roadway has one 10-foot lane in each direction, with shoulders that are approximately 8-foot wide (4-foot paved) on both the south and north side throughout the corridor with no dedicated bicycle lanes or sidewalk. The existing ROW width varies along the corridor from a minimum of 50 feet to a maximum of 70 feet. There are two existing typical sections within the study limits. The limits of existing roadway *Typical Section 1* is from Lonesome Island Road to Harney Pond Canal C-41 and from Indian Prairie Canal C-40 to C.R. 721 (Southern Leg) (**refer to Figure 2-1**). The limits of existing roadway *Typical Section 2* are from Harney Pond Canal C-41 to Indian Prairie Canal C-40 (**refer to Figure 2-2**).

Figure 2-1 | S.R. 70 – Existing Roadway Typical Section 1



From Lonesome Island Road to Harney Pond Canal C-41 and From Indian Prairie Canal C-40 to C.R. 721 (Southern Leg)

Figure 2-2 | Existing Roadway Typical Section 2



From Harney Pond Canal C-41 to Indian Prairie Canal C-40

2.2.2 Roadway Functional & Context Classifications

Within the project area, S.R. 70 Roadway Segment ID# 09060000 from mile post 21.573 to mile post 29.187, is currently a two-lane undivided roadway that is functionally classified as a rural principal arterial other roadway. The context classification is C-2 Rural. S.R. 70 is on the FDOT's SIS and designated as a hurricane evacuation route.

2.2.3 Access Management Classification

S.R. 70 is classified as Access Classification 3 for the limits of this study. Class 3 standards call for the following minimum spacing standards, per Florida Administrative Code (FAC) Rule 14-97 as shown in **Table 2-1**.

Table 2-1 | Access Management Classification Spacing Standards

Roadway Access Class	FDOT Context Classification	Median Type	Median Opening Spacing (feet)		Minimum Signal Spacing (feet)***
			Directional	Full	
2	C1 Natural, C2 Rural	Restrictive w/Service Roads	1,320	2,640	2,640
3	C1 Natural, C2 Rural, C2T Rural Town, C3R Suburban Residential, C3C Suburban Commercial	Restrictive	1,320	2,640	2,640
4	C2T Rural Town, C4 Urban General, C5 Urban Center, C6 Urban Core	Non-Restrictive**			2,640
5		Restrictive	660	2,640/1,320*	2,640/1,320*
6		Non-Restrictive**			1,320
7		Both Median Types**	330	660	1,320
*Spacing 1,320 feet when roadway speed limit is 45 mph or below					
**It is recommended that additional safety/operational analysis is completed for non-restrictive medians					
***Traffic signals, which are proposed at intervals closer than the access management standard for the designated access class, will only be approved where the need for such signal(s) is clearly demonstrated for the safety and operation of the roadway and approved through the signal warrant process. (F.A.C. Rule Chapter: 14-97.003) Applicants requesting or requiring the addition, removal, or modification of a traffic signal for Category E, F, and G connections, must submit an Intersection Control Evaluation Form, Form 750-010-30 (F.A.C. Rule Chapter: 14-96.003). This language is in the draft version of rule 14-96.					

Source: Adapted from [FDM 201 - Design Controls](#) and [FDOT Context Classification](#)

2.2.4 Right-of-Way

The existing ROW information was obtained from ROW maps, as-built plans for S.R.70, and property appraiser maps from Highlands County. Generally, the ROW varies in width throughout the study area from 50 feet to 70 feet wide. Within the existing ROW, the current S.R. 70 horizontal alignment is centered between the south and north boundary. The *Preferred Alternative Concept Plans* (refer to **Appendix A**) show the existing ROW throughout the project limits with a yellow line and label the total existing ROW width.

There are utility easements for the FPL high voltage overhead transmission line and FGT buried gas transmission within the project limits. The FPL easement runs along the north side of S.R. 70. The FGT easement also runs along the north side of S.R. 70, generally north of the FPL transmission line.

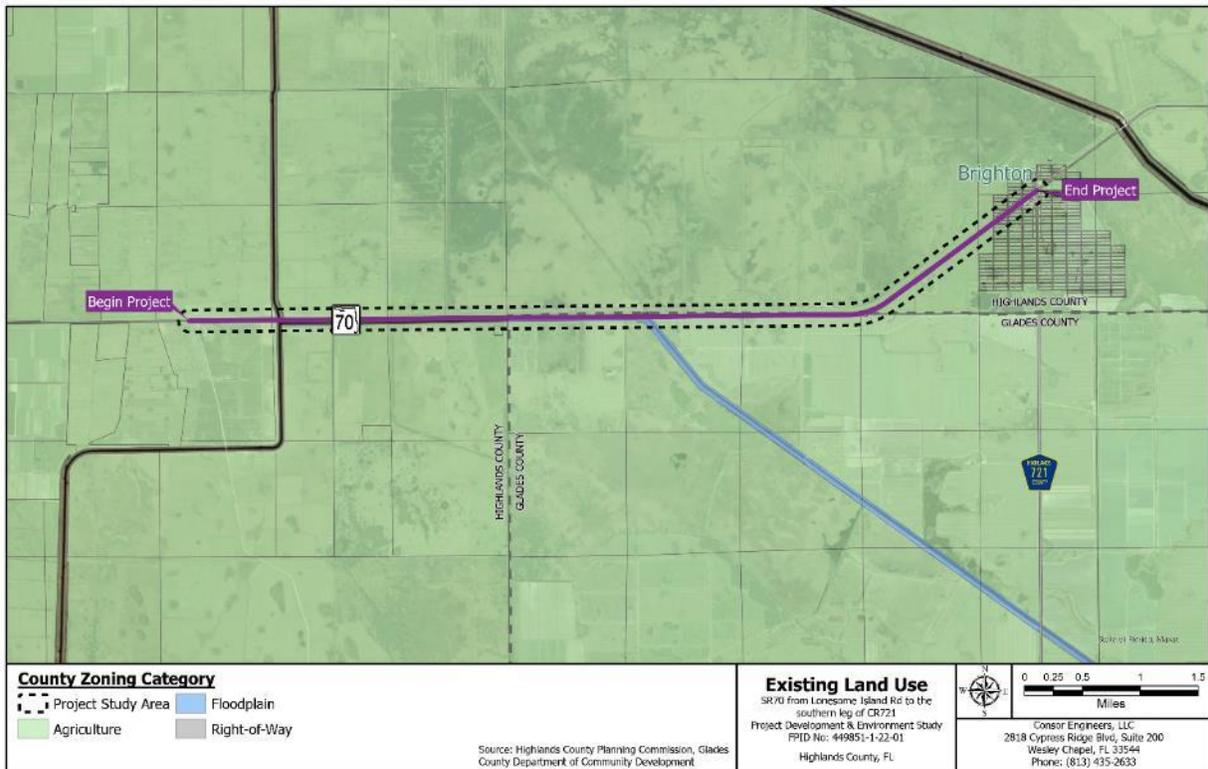
2.2.5 Adjacent Land Use

Land use along the S.R. 70 corridor is mainly agricultural. The existing land use maps for Highlands and Glades Counties within the project area is shown on **Figure 2-3**.

2.2.6 Pavement Type and Condition

S.R. 70 is an asphalt paved roadway throughout the study area. According to the Pavement Condition Survey for Highlands County dated February 6, 2024, pavement along the corridor has an average cracking rating of 8.5 and an average ride rating of 7.9. Ratings less than 6.0 indicate that the pavement is deficient. The roadway was resurfaced within the project limits most recently in 2004.

Figure 2-3 | Highlands & Glades County Existing Land Use



2.2.7 Existing Design and Posted Speed

The existing design speed for S.R. 70 is 65 mph, and the posted speed is 60 mph.

2.2.8 Horizontal Alignment

The data for the horizontal alignment was sourced from existing FDOT design plans along the project segment, consisting of S.R. 70 from West of Harney Pond Canal to Slough Ditch (FPID 425226-1-52-01).

Table 2-2 summarizes the horizontal curves along the corridor.

Table 2-2: Existing Horizontal Alignment

Baseline PI Station	Bearing		Degree of Curvature	Radius	Length
	Back	Ahead			
114+26.62	N89°03'40"E	N53°10'10"E	02°00'00"	2864.79 ft	1796.25 ft
171+83.29	N53°10'10"E	N51°29'40"E	00°30'00"	11459.16 ft	335.00 ft

2.2.9 Vertical Alignment

The existing plans do not provide information on vertical alignment throughout the project limits. During the future design phase, when funded, survey data will be collected where the vertical alignment may be determined and evaluated.

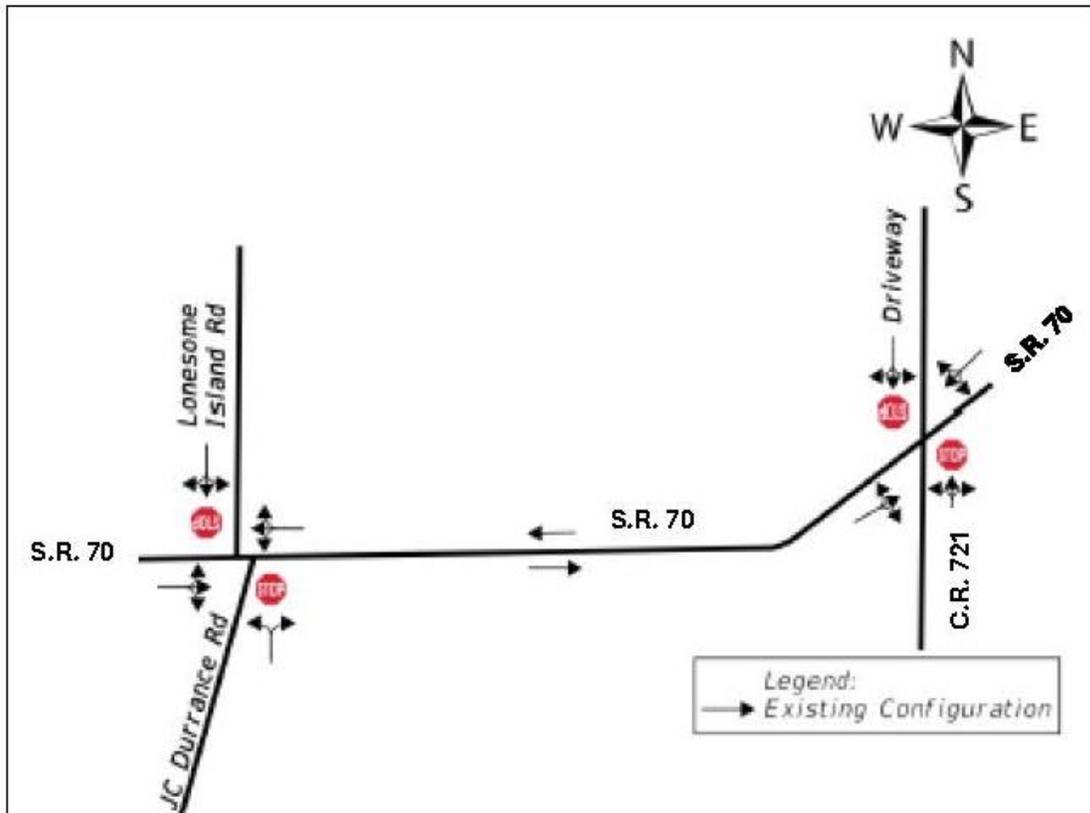
2.2.10 Multimodal Facilities

There are no existing sidewalks, crosswalks, or multi-use paths along the limits of this study. Also, there are no designated bicycle facilities within the limits of this corridor.

2.2.11 Intersections

There are no signalized intersections within the project limits. C.R. 721 is a stop-controlled T-intersection with S.R. 70. **Figure 2-4** illustrates the existing lane configuration at this intersection.

Figure 2-4 | Intersections



2.2.12 Physical or Operational Restrictions

There are no multimodal use lanes, parking or passing restrictions within the limits of this study. The existing lateral offset for the guardrail is approximately 8 to 9 feet from the edge of travel which is less than the required minimum of 12 feet.

2.2.13 Traffic Data

This section provides a summary of the existing traffic conditions information that can be found in the *Design Traffic Technical Memorandum (DTTM) (July 2023)*. As stated in the DTTM, the FDEM's Statewide Regional Evacuation Study Program determined that S.R. 70, within the study area, is a critical segment with significant queues experienced during emergency evacuations. The existing 2022 AADT ranged from 5,600 to 5,800 vehicles per day (vpd) along S.R. 70 within the study limits. Refer to **Figure 2-5** & **Figure 2-6**. The truck percentage factor (T-Factor) is the percentage of trucks passing through a segment of road daily. FDOT 2022 historical traffic reports from the Florida Traffic Online along S.R. 70 and C.R. 721 provided the T-Factors that were used for this project. S.R. 70, West of C.R. 721 had a T-Factor of 29.4%, while S.R. 70, East of C.R. 721 had a T-Factor of 28.1%. C.R. 721, and South of S.R. 70 had a T-Factor of 16.9%.

Figure 2-5 | Existing Year (2022) Traffic Data

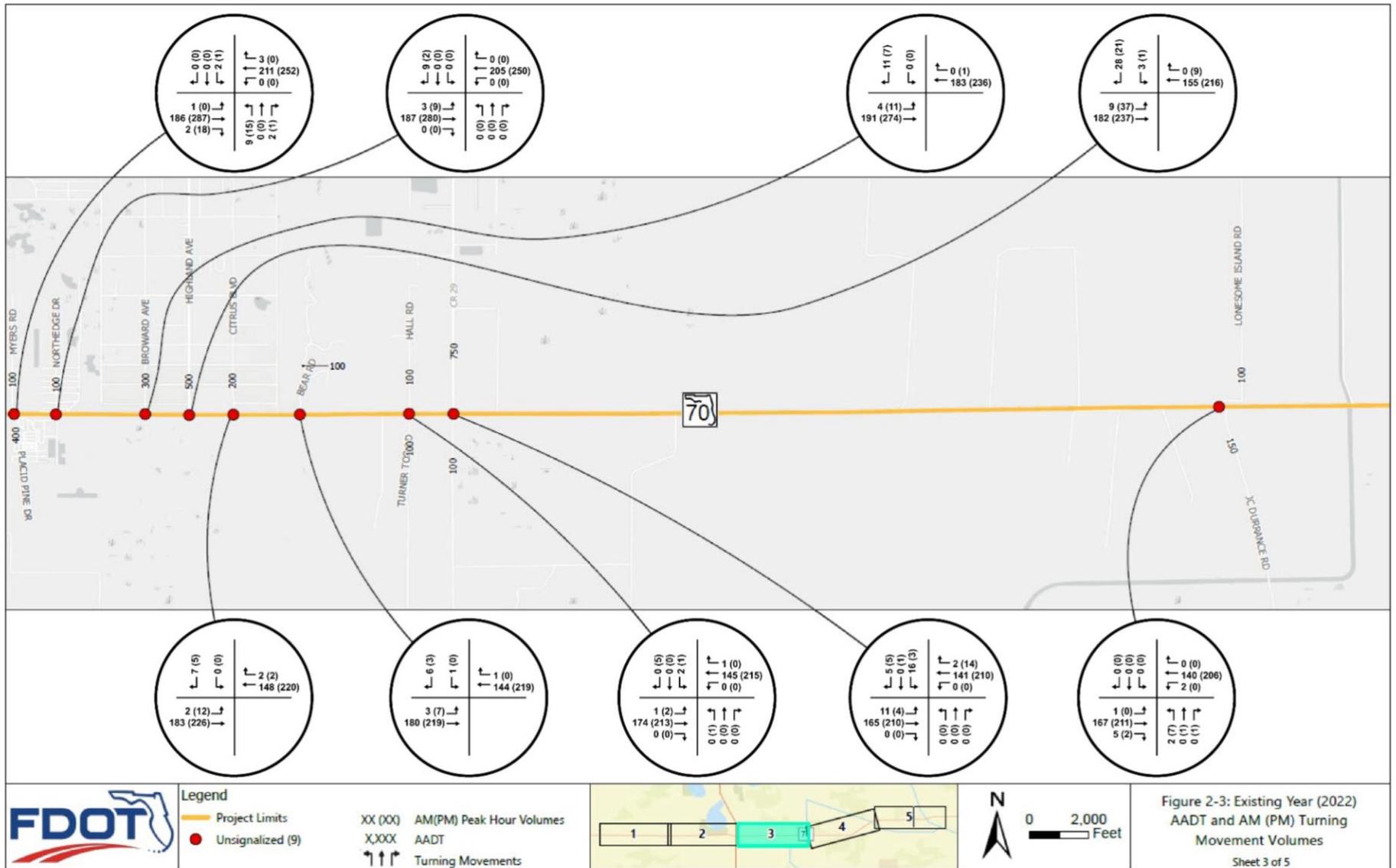


Figure 2-6 | Existing Year (2022) Traffic Data

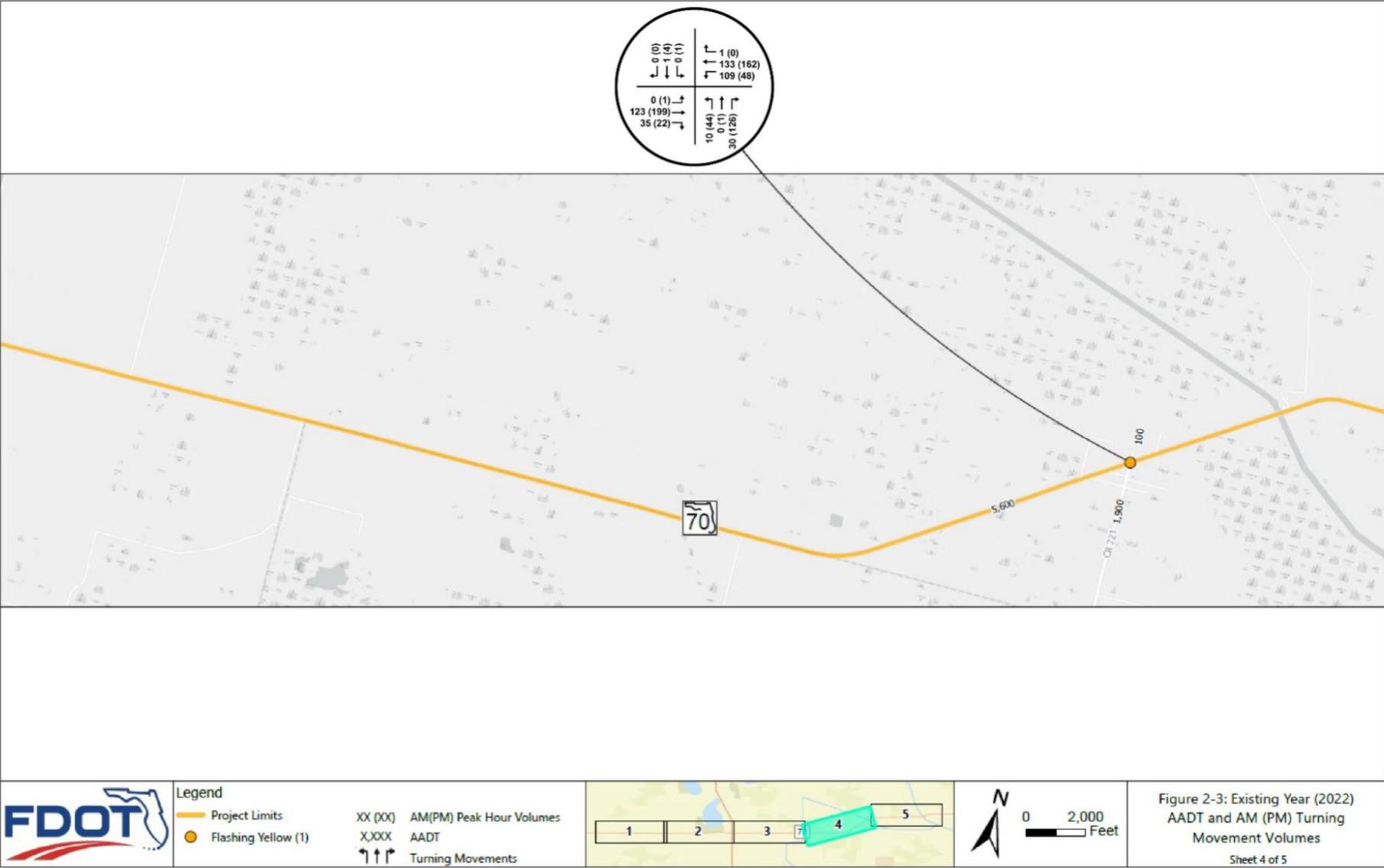


Figure 2-3: Existing Year (2022) AADT and AM (PM) Turning Movement Volumes
Sheet 4 of 5

2.2.14 Roadway Operational Conditions

Peak hour-to-daily volume ratios (k factors) were evaluated based on the existing traffic volumes. The rural arterial Standard K factor of 9.5% was recommended for all study roadway segments. The truck percentage factor (T-Factor) is the percentage of trucks passing through a segment of road daily. FDOT 2022 historical traffic reports from the Florida Traffic Online along S.R. 70 and C.R. 721 provided the T-Factors that were used for this project. S.R. 70, West of C.R. 721 had a T-Factor of 29.4%, while S.R. 70, East of C.R. 721 had a T-Factor of 28.1%. C.R. 721, and South of S.R. 70 had a T-Factor of 16.9%. The design hour truck (DHT) of 16.0% were recommended for the mainline. The DHT is the percentage of truck traffic during the design peak hour and is recommended as one-half of the T factor based on the FDOT Project Traffic Forecasting (PTF) Handbook. Classification counts were conducted on C.R. 721 South and C.R. 721 North, immediately south and north of S.R. 70, respectively. No other classification counts were conducted for the side streets within the study area. An average D factor of 55.0% for the mainline calculated from the classification counts and historical traffic information was recommended for the mainline.

Existing 2022 Level of Service (LOS) analysis was conducted based on the methodology outlined in the Highway Capacity Manual, 6th Edition using Synchro 11 and documented in the *Project Traffic Analysis Report* (PTAR). The existing year intersection Synchro analysis shows that both intersections in this project are currently operating at an overall LOS of A. The existing year arterial (Highway Capacity Software (HCS) analysis shows that the corridor of S.R. 70 from Lonesome Island Road to C.R. 721 is also currently operating at a LOS of A. **Table 2-2** shows the overall LOS and delay experienced by both intersections, as well as the individual delay and LOS of each approach of each intersection. **Table 2-3** shows the overall arterial LOS, as well as the vehicle miles-traveled, vehicle-hours delay, and follower density, currently being experienced on S.R. 70.

Table 2-2 | Existing Year 2022 Intersection LOS

Intersection	Peak Hour	LOS	Overall Delay (sec/veh)	NB Delay (s) / LOS	SB Delay (s) / LOS	EB Delay(s)/ LOS	WB Delay(s)/ LOS
Lonesome Island Rd/JC Durrance Rd	AM	A	0.2	10.9 / B	0.0 / A	0.0 / A	8.1 / A
	PM	A	0.2	11.8 / B	0.0 / A	0.0 / A	0.0 / A
C.R. 721	AM	A	2.8	10.5 / B	13.7 / B	0.0 / A	7.8 / A
	PM	A	4.2	12.4 / B	13.7 / B	7.6 / A	7.8 / A

Table 2-3 | Existing Year 2022 Aerial LOS

Segment	Peak Hour	LOS	Average Speed (mph)	Segment Travel Time (minutes)	Follower Density (followers/mi/ln)	Percent Followers (%)
S.R. 70 from Lonesome Island Rd to C.R. 721	AM	A	58.3	7.92	1.7	35.8
	PM	A	58.4	7.91	1.5	34.3

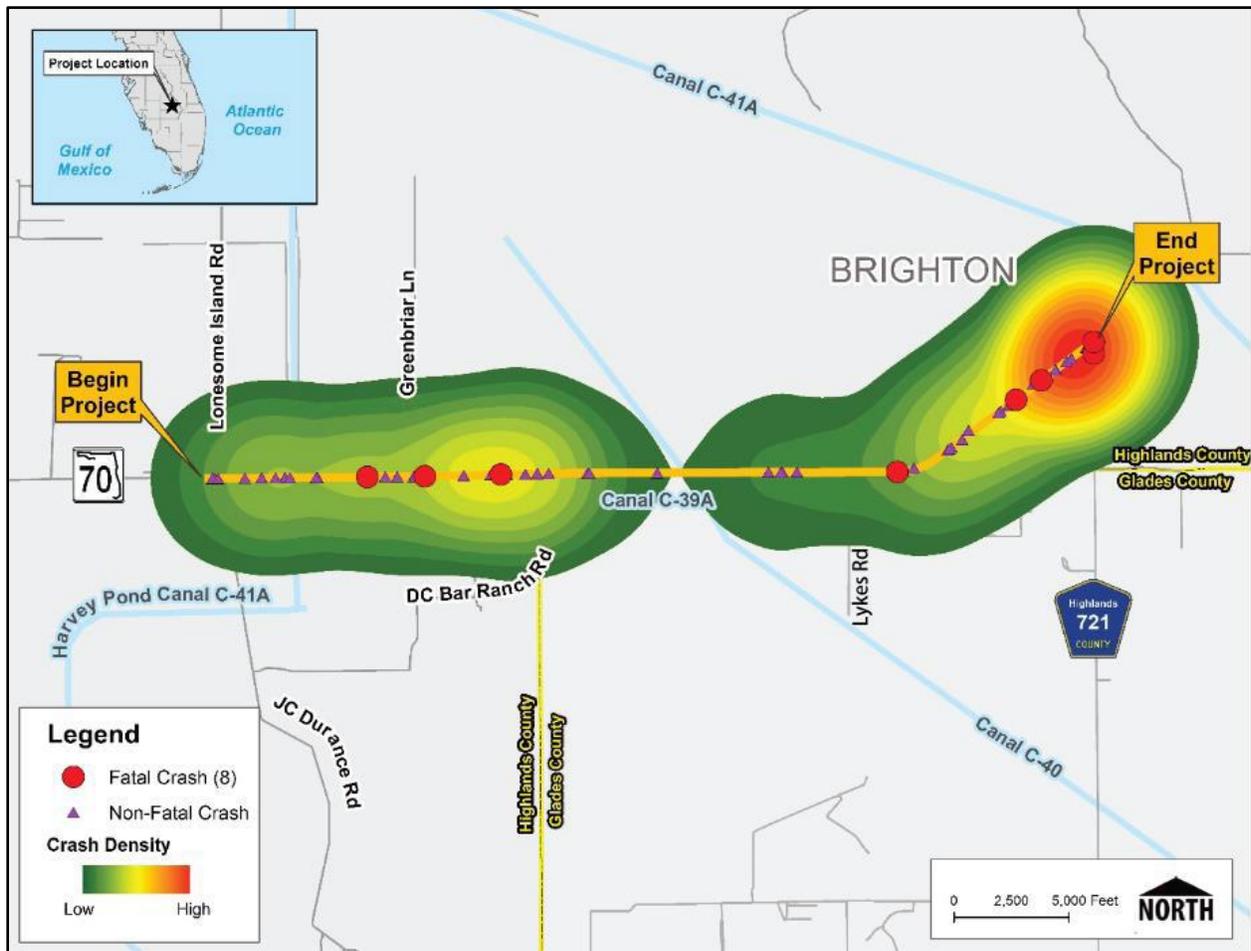
2.2.15 Managed Lanes

There are no managed lanes within the study limits.

2.2.16 Crash Data

Five (5) years of crash data (from January 2018 to December 2022) were obtained from the University of Florida’s Signal Four Analytics. The five-year crash analysis (2018-2022) showed 84 total crashes (average of 17 crashes per year) for the overall study corridor along S.R. 70. Most of the reported crashes (68%) occur on the segment from Lykes Road to the Southern Leg of C.R. 721 which had the highest number of crashes (26 crashes). A heat map showing where crashes are concentrated along the study corridor is shown in **Figure 2-7**.

Figure 2-7 | 2018-2022 Crash Data



Eight (8) fatal crashes were reported for this roadway during the five-year analysis period. The locations are shown by a red “dot” on **Figure 2-7**. A fatal crash reported in 2018 was a guardrail face crash type at the intersection of S.R. 70 and Greenbriar Lane under dark, not lighted, and dry conditions. Vehicle one was reported as heading east and Vehicle two was reported as heading west. Vehicle one goes out of the lane, hits the guardrail face, and drives into the opposite direction lane, which causes vehicle one to hit vehicle two head-on. The initial cause of this fatal crash was reported as driver failed to keep in proper lane. Guardrail face crashes are one of the most common types of crash that have occurred on S.R. 70 in the past five years. This type of crash can be avoided if S.R. 70 was widened to four lanes and had a median separating the directions of traffic.

Another fatal crash reported in 2018 was a fell/jumped from motor vehicle crash type on C.R. 721 near the intersection under daylight and dry conditions. The initial cause of this fatal crash was reported as running off roadway.

A fatal crash reported in 2019 was a head on crash type on S.R. 70 near C.R. 721 under daylight and dry conditions. Vehicle one was traveling eastbound and vehicle two was traveling westbound. Vehicle one changed lanes to pass low speed traffic, does not notice vehicle two is approaching and hits vehicle two's front left. The initial cause of this fatal crash was reported as improper passing. This head on crash could have been avoided by widening S.R. 70 to four lanes and dividing the lanes of oncoming traffic with a median.

Another fatal crash reported in 2019 was an angle crash type on S.R. 70 near Partnership Road under dark, not lighted, and dry conditions. There were three (3) vehicles reported to be involved in the crash. Vehicle one stopped in the westbound lane facing south. Vehicle two was reported to be traveling westbound. Vehicle three came to a stop in the eastbound lane just west of vehicle one. Vehicle two did not see vehicle one stopped in the middle of the road and hit the left side of vehicle one. Vehicle one spins and hits vehicle three. The initial cause of this fatal crash was reported as other contribution action.

A fatal crash reported in 2020 was an opposing sideswipe crash about 1600 ft away from Greenbrier Lane under daylight and dry conditions. There were three (3) vehicles reported to be involved in the crash. Vehicle one that was a semi-trailer was reported as heading east, vehicle two was reported heading west going straight ahead and vehicle three was reported heading east going straight ahead. Vehicle one crosses the center lane causing vehicle two to collide with the front of vehicle one. Vehicle two was spinning out of control which hit vehicle three that was driving behind vehicle one. The initial cause of this fatal crash was reported as driver failed to keep in proper lane. Opposing sideswipe crashes are also one of the most common types of cars that have occurred on S.R. 70 in the past 5 years. These kinds of crashes can be avoided by widening S.R. 70 to four lanes and installing a median to separate the opposite directions of traffic.

Another fatal crash reported in 2020 was an "other" crash type on S.R. 70 near C.R. 721 under dusk and dry conditions. Vehicle one was reported traveling eastbound and went off road hitting the southside guardrail. Vehicle one was redirected and traveled across both travel lanes and hit the guardrail on the north side of the roadway. The initial cause of this fatal crash was reported as operated motorized vehicle in careless or negligent manner.

A fatal crash reported in 2022 was a minor street left turn crash at the intersection of S.R. 70 and C.R. 721 under daylight and dry conditions. Vehicle one was reported as stopped at the south leg of the intersection and vehicle two was reported as heading east going straight ahead. Vehicle one was a motorcycle that was stopped at the intersection but drove out in front of Vehicle two to make a left onto S.R. 70. This caused vehicle two to steer left onto the north grass shoulder. The initial cause of this fatal crash was reported as driver failed to yield right of way. Minor street left turn crashes made up 2 % of all crashes along S.R. 70 in the past 5 years. By restricting side streets to right turn only movements onto S.R. 70, these types of crashes can be reduced.

Another fatal crash reported in 2022 was an angle crash near the S.R. 70 and C.R. 721 intersection under dark, not lighted, and dry conditions. Vehicle one was reported traveling westbound and vehicle two was also traveling westbound approaching vehicle one. Vehicle one attempted to make a U-turn causing vehicle two to hit the left rear side of vehicle one. This causes vehicle one to spin and hit the left side of vehicle two. The initial cause of this fatal crash was reported as an improper turn.

The crash data is also summarized by crash type on **Table 2-4**. The highest-ranking crash types for the study area were reported as opposing sideswipe and guardrail face crashes (both 15%), animal and rear end crashes (both 13%) as the second most prominent crash types, and angle crashes (8%) as the third most prominent crash type. The high percentage of opposing sideswipe collisions could be attributed to the vehicles wishing to pass a low-speed traffic and not seeing oncoming traffic. Guardrail face crashes could be attributed to distracted drivers, loss of control, and many other driver related causes. The animal crashes could be attributed to the surrounding area being rural and the ditches/canals located parallel to the roadway could potentially be attracting animal crossings. The rear end crashes are mainly due to vehicle operating in a careless or negligent behavior. The most common types of crashes that can be attributed to the current layout of the roadway are animal, guardrail face, head on, left leaving, and opposing sideswipe. These 5 types of crashes made up 49% of the crashes that occurred along S.R. 70 in the past 5 years. The likelihood and occurrence of these types of accidents can be greatly reduced by widening the road from two lanes to four lanes, separating opposing directions of travel with a median, and restricting side streets to right turn only movements onto S.R. 70.

Table 2-4 | Crash Data Summary

Crash Type	Year					Total Percentage	
	2018	2019	2020	2021	2022		
Animal	2	3	1	4	1	11	13%
Cargo/Equipment Loss or Shift	0	0	0	0	1	1	1%
Ditch	2	0	1	0	0	3	4%
Fell/Jumped from Motor Vehicle	1	0	0	0	0	1	1%
Guardrail Face	4	2	3	2	2	13	15%
Angle	2	3	1	0	1	7	8%
Head On	0	1	0	1	1	3	4%
Left Leaving	0	0	0	1	1	2	2%
Opposing Sideswipe	1	4	4	3	1	13	15%
Other	0	0	2	1	0	3	4%
Rear End	4	2	2	2	1	11	13%
Same Direction Sideswipe	0	0	0	2	0	2	2%
Single Vehicle	0	0	0	1	0	1	1%
Unknown	0	0	0	1	0	1	1%
Other Non-Collision	0	1	1	0	1	3	4%
Other Non-Fixed Object	1	1	0	1	2	5	6%
Overturn/Rollover	2	0	0	0	0	2	2%
Struck by Falling, Shifting Cargo	0	1	0	0	0	1	1%
Thrown or Falling Object	0	0	0	0	1	1	1%
Total	19	18	15	19	13	84	100%

There were no known or documented pedestrian or bike crashes during the crash analysis years (2018-2022). The average percentage of wet and dark crashes for the five-year period in the study area is 9.5%

and 38.1%, respectively. The number of wet pavement crashes is below the statewide average of 15% from data published on page 33 in the Florida Highway Safety and Motor Vehicles *Traffic Crash Facts Annual Report 2020*. The percentage of dark lighting condition crashes is above the statewide average of 26% from data published on page 34 in the Florida Highway Safety and Motor Vehicles *Traffic Crash Facts Annual Report 2020*. A crash summary for S.R. 70 for the five-year analysis period is shown in **Table 2-5**.

Table 2-5 | Five-Year Crash Summary (2018-2022)

	Year					Total
	2018	2019	2020	2021	2022	
No. of Fatal Crashes	2	2	2	0	2	8
No. of Serious Injury Crashes	1	2	0	1	2	6
No. of Injury Crashes	4	3	3	3	3	16
No. of Property Damage Only Crashes	12	11	10	15	6	54
Total Crashes	19	18	15	19	13	84
Pedestrian Crashes	0	0	0	0	0	0
Bike Crashes	0	0	0	0	0	0
Wet Surfaces Crashes	2	2	4	0	0	8
Dark Crashes	6	10	2	9	5	32

2.2.17 Railroad Crossings

There are no Railroad Crossings within the study limits.

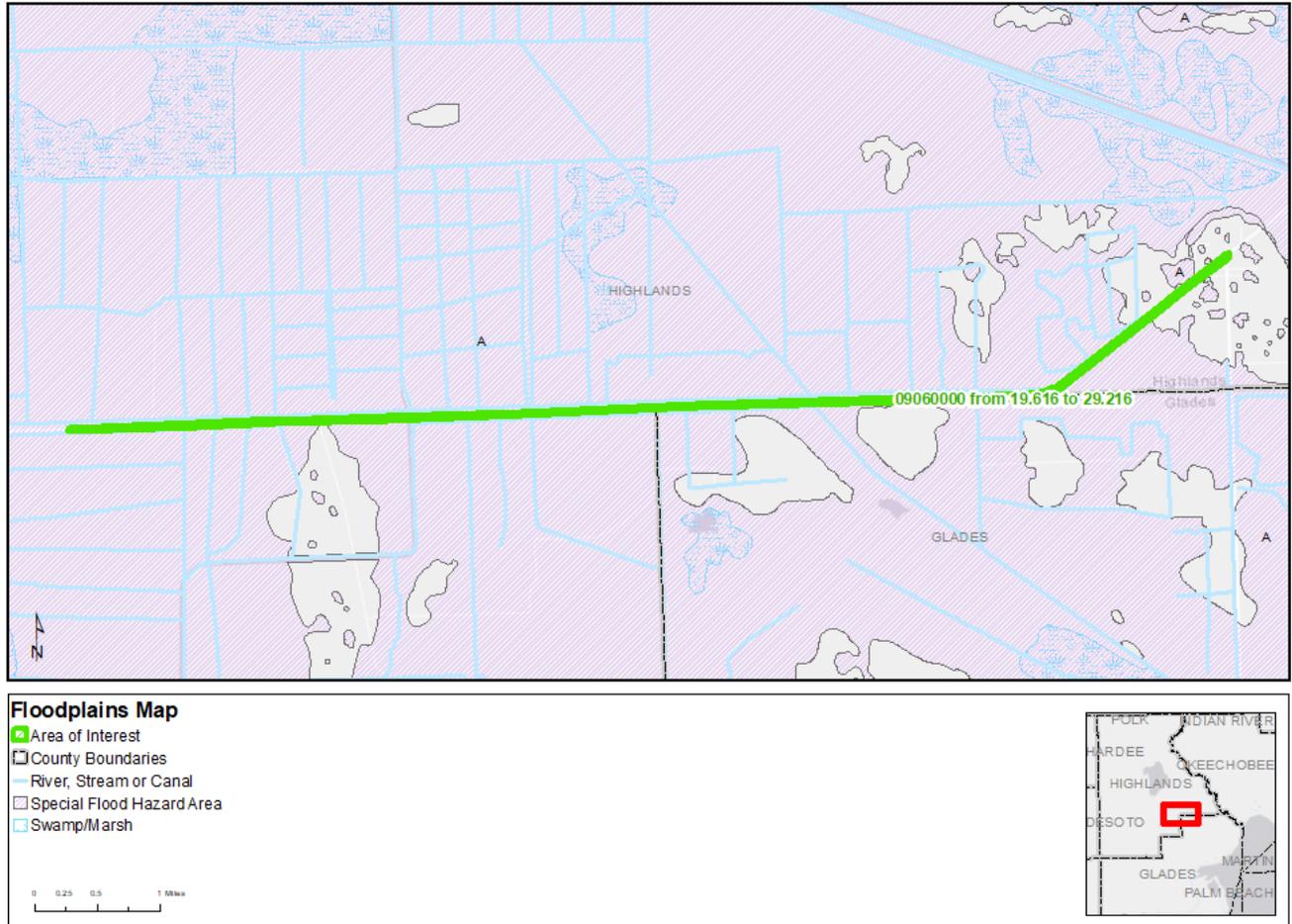
2.2.18 Drainage

As documented in the *Pond Siting Report* (December 2025), the Soil Survey of Highlands and Glades County classifies the majority of soils within the project area as poorly draining fine sands and mucks with very shallow seasonal high water tables (0"-18" below ground). The existing land use within the project corridor is characterized by unimproved pastures, wet prairies, and channelized waterways. The project falls within the Upper Bay Swamp and North Indian Prairie Canal watersheds of the SFWMD with ultimate outfalls to the Harney Pond Canal (Water Body Identification [WBID] 3204) and the Indian Prairie Canal (WBID 3206) both of which are impaired for nutrients. The existing drainage patterns were determined using United States Geological Survey (USGS) quadrangle maps and LiDAR contours. A map showing the drainage basins and WBIDs are in **Appendix F**.

Floodplains/Floodways

The project site is located on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community-Panel Numbers 12055C0555C, 12055C0560C, and 12055C0580C (effective date November 18, 2015) in Highlands County and Community-Panel Numbers 12043C0025C and 12043C0050C (effective date September 26, 2014) in Glades County. As documented in the *Location Hydraulics Report* (August 2025), the project does not include any FEMA floodways. A majority of the project limits (>90%) are designated as Zone A, which are areas of the 100-year floodplain where the base flood elevation has not been determined.

Figure 2-8: FEMA Floodplain Map



There are seven existing cross drains along the existing S.R. 70 alignment. (refer to **Table 2-6**).

Table 2-6 | Existing Cross Drains

No.	MP	Station	Existing Description
CD-1	22.645	2 - 295+69.58	84" PIPE
CD-2	23.941	2 - 364+04.00	84" PIPE
CD-3	25.785	2 - 461+03.69	60" PIPE
CD-4	27.391	2 - 546+89.24	2-9'x7' CBC
CD-5	27.950	2 - 576+39.76	18" PIPE
CD-6	27.977	2 - 577+81.93	2-7'x5' CBC
CD-7	29.253	2 - 651+23.51	24" PIPE

2.2.19 Lighting

There is no lighting within the study limits.

2.2.20 Utilities

A *Utility Assessment Package* (UAP) (December 2025) was prepared for this project. Each utility owner on the list was contacted and asked to verify ownership or operation of any facilities, existing or proposed, within the study area. These owners were provided the conceptual design plans which they could mark up and return with their facilities, or optionally, provide a CADD or KMZ file.

The existing S.R. 70 corridor has four utilities identified within the project limits. These utilities run along the north and south side of the travel lanes and are either within proximity of the existing S.R. 70 roadway or far away with enough separation to avoid any possible impacts in a future widening phase of the corridor. The Utility Agency Owners (UAOs) provided the requested information concerning their facilities using either the utility plans or reference documentation (i.e., “As Built” or geographic information system (GIS) maps). “Marked” Plans or reference documentation was received from all UAOs.

1. Florida Gas Transmission Company (FGT)

A 30-inch FGT line is one of the utilities located along the north side with sufficient distance from the existing travel lanes to avoid any impacts if future widening was to occur. The FGT line is located approximately 220 feet north of the existing roadway centerline. At approximately 0.45 miles west of the end project limit, the FGT gas line turns to the south and runs parallel approximately 110 feet measured from the existing roadway centerline for about 1300 feet then turns northeast away from the existing roadway. After this northeast turn to avoid an existing radio tower the FGT line turns back towards S.R. 70 where it continues outside this studies limits.

2. Glades Electric Cooperation

Glades Electric has a three-phase overhead electric feeder supplying 7.2 kilovolt (kV) that is located on the south side of the project corridor. All of their structures are located outside of the existing FDOT ROW.

3. Florida Power & Light (FPL) Transmission and Distribution

FPL has a 69kV transmission line that is located north of the project corridor. All of the structures are located outside of the existing FDOT ROW. New 230kV transmission lines and towers are proposed beginning 2600 feet west of the end project limits and will run parallel along the north side of the existing S.R. 70 corridor. FP&L is also proposing a solar farm to be located on property at the beginning of the project corridor west of the Harney Pond canal.

4. Lumen / Century Link – Local and National

Century Link has buried fiberoptic and underground copper line that runs along the south side through the S.R. 70 Corridor.

The UAOs known to operate utilities within the project corridor are summarized in **Table 2-7**. A *UAP* (December 2025) was prepared for this project under separate cover.

Table 2-7 | Utility Agency Owners

Company	Contact	Address	Phone Number/ Email	Utilities in Corridor
Glades Electric CO-OP	Colin Evans	214 Hwy 70 Lake Placid, FL 33852	(863) 531-5304 CEvans@gladeselectric.com	Electric
Florida Gas Transmission	Joseph E. Sanchez	2405 Lucien Way Suite 200 Maitland, FL 32751	(407) 808-4607 Joseph.e.sanchez@energytransfer.com	Gas
Florida Power & Light Distribution	Chris McJunkin	15430 Endeavor Drive Jupiter, FL 33478	(941) 267-7474 Chris.mcjunkin@fpl.com	Electric
Florida Power & Light Transmission	Craig B. Ledbetter	15430 Endeavor Drive Jupiter, FL 33478	(561) 532-7082 Craig.ledbetter@fpl.com	Electric
Lumen/ Centurylink (local)	Kenneth R. Lutz	924 Memorial Drive Avon Park, FL 33825	(863) 214-1490 Ken.lutz@lumen.com	Telephone/ Fiber
Lumen/ Centurylink (national)	Francisco Azuri	2121 W. Prospect Rd. Ft. Lauderdale, FL 33309	(786) 266-1713 Francisco.azuri@lumen.com	Fiber

2.2.21 Soils and Geotechnical Data

The Natural Resources Conservation Service (NRCS) Soil Survey of Highlands County (1989) and GIS data indicate that there are multiple soil types that exist within and adjacent to the study area. The dominant soil types and their soil map unit identification numbers are as follows: Felda Fine Sand (13, 10) 0-2% Slopes, Valkaria Fine Sand (4, 16) 0-2% Slopes, and Basinger Fine Sand (3, 14) 0-2% slopes. Soils within a 500-ft buffer from the centerline of S.R. 70 were evaluated. Acreages and percentages of soils types within the study buffer can be found in **Table 2-8**. A detailed soils map is included in **Appendix E**. A brief description of dominant soil types, quoted from NRCS Official Soil Series Descriptions, is provided below:

Felda Fine Sand, 0-2% Slopes – This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded or ponded. The seasonal zone of water saturation is at 6 inches during July, August, September, and October. Organic matter content in the surface horizon is about 3 percent. This component is in the F155XY130FL Sandy over Loamy Flatwoods and Hammocks ecological site. Non-irrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Valkaria Fine Sand, 0-2% Slopes - This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available

water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded or ponded. The seasonal zone of water saturation is at 6 inches during July, August, September, and October. Organic matter content in the surface horizon is about 3 percent. This component is in the F155XY120FL Sandy Flatwoods and Hammocks ecological site. Non-irrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Basinger Fine Sand, 0-2% Slopes - This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. The seasonal zone of water saturation is at 6 inches during July, August, September, and October. Organic matter content in the surface horizon is about 2 percent. This component is in the F155XY120FL Sandy Flatwoods and Hammocks ecological site. Non-irrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Table 2-8 | Existing Soils (NRCS)

Map Unit Symbol	Description	Acreage	Percent Cover
<i>Highlands County</i>			
3	Basinger Fine Sand, Frequently Ponded (0-1% Slopes) - hydric	9.91	0.86%
7	Placid Fine Sand, Frequently Ponded (0-1% Slopes) - hydric	4.05	0.35%
8	Immokalee Sand (0-2% Slopes)	101.09	8.79%
12	Basinger Fine Sand (0-2% Slopes) - hydric	137.35	11.94%
13	Felda Fine Sand (0-2% Slopes) - hydric	379.39	32.98%
15	Bradenton Fine Sand (0-2% Slopes) - hydric	6.18	0.54%
16	Valkaria Fine Sand (0-2% Slopes) - hydric	152.45	13.25%
17	Malabar Fine Sand (0-2% Slopes) - hydric	14.65	1.27%
18	Kaliga Muck, Frequently Ponded (0-1% Slopes) - hydric	40.55	3.52%
19	Hicoria Mucky Sand, Depressional - hydric	32.62	2.83%
26	Tequesta Muck, Frequently Ponded (0-1% Slopes)	51.86	4.51%
<i>Glades County</i>			
4	Valkaria Fine Sand (0-2% Slopes) - hydric	58.55	5.09%
10	Felda Fine Sand (0-2% Slopes) - hydric	62.16	5.40%
14	Basinger Fine Sand (0-2% Slopes) - hydric	38.53	3.35%
15	Pineda-Pineda, Wet, Fine Sand (0-2% Slopes)	37.55	3.26%
16	Floridana Fine Sand, Frequently Ponded (0-1% Slopes) - hydric	10.21	0.89%
99	Water	13.42	1.17%
TOTAL		1150.53	100%

2.2.22 Aesthetics Features

There are no Aesthetics Features within the study limits.

2.2.23 Traffic Signs

There are no overhead Traffic Signs within the study limits.

2.2.24 Noise Barriers and Perimeter Walls

There are no Noise Barriers nor Perimeter Walls within the study limits.

2.2.25 Intelligent Transportation Systems (ITS)/Transportation System Management and Operations (TSM&O) Features

There are no Intelligent Transportation Systems (ITS) or Transportation System Management and Operations (TSM&O) features within the project limits.

2.3 Existing Bridges and Structures

2.3.1 Bridge Number and Key Data

There are two (2) bridges along S.R. 70 within the study limits. **Table 2-9** provides a summary of the existing bridge structures.

Table 2-9 | Existing Bridges

090009	S.R. 70 over Indian Prairie Canal (C-40)	2 spans x 52' 0" = 104' 0"	1970	91.5	72.88
090920	S.R. 70 over Harney Pond Canal (C-41)	2 spans x 35' 9.6"+ 3 spans x 35' 1.2" = 176' 9.6"	1960	84.3	94.15

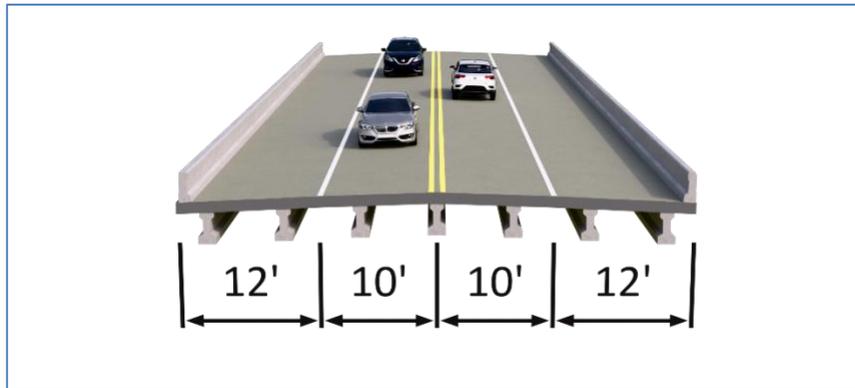
2.3.2 Bridge Type

Bridge No. 0900920 is prestressed concrete stringer/girder design spans with a cast in place deck. Bridge No. 0900009 is prestressed concrete stringer/girder design spans with a precast panel deck.

2.3.3 Typical Section

Bridge No. 0900920 has two 10-foot lanes with 12-foot shoulders on each side. The width of the bridge is 46.1 feet. The structure lengths for both bridges are shown in **Table 2-9**. Bridge No. 0900009 has two 10-foot lanes with 12-foot shoulders on each side. The width of the bridge is 46.3 feet (refer to **Figure 2-9**).

Figure 2-9 | Existing Bridge Typical Section



2.3.4 Facility crossed (waterway, roadway, or railroad)

Bridge No. 0900920 crosses the Harney Pond Canal C-40 and Bridge No. 0900009 crosses the Indian Prairie Canal C-41.

2.3.5 Year structure was built and/or modified

Bridge No. 0900920 was built in 1960 and was reconstructed in 2000. Bridge No. 0900009 was built in 1970.

2.3.6 Type of structure - Timber, concrete, or steel

Both bridges are concrete structures.

2.3.7 Condition

Both bridges were inspected on 4/26/2023. Bridge No. 0900920 had a Sufficiency Rating of 81.8 and a Health Index rating of 92.70. Bridge No. 0900009 had a Sufficiency Rating of 88 and a Health Index rating of 64.46.

2.3.8 Load posting information

Neither bridge has posted traffic restrictions.

2.3.9 Horizontal and vertical clearances

Both bridges report 0 feet navigational clearance for horizontal and vertical clearance.

2.3.10 Ship impact data

Not applicable to the canal system.

2.3.11 Span arrangement - Number and length of spans

Bridge No. 0900920 has three spans with six beams for each span. Span #1 is 39.9 feet, span #2 is 40 feet, span #3 is 39.8 feet long.

Bridge No. 0900009 has two spans with seven beams for each span. Both spans are 52 feet long.

2.3.12 Historical significance

Neither bridge is eligible for National Register of Historic Places (NRHP).

2.3.13 Channel data - Alignment, width, depth, and clearance requirements

According to the Bridge Inspection Report dated 04/19/2021 Bridge 0900920 over the Harney Pond Canal has a channel depth of 14.3 feet and a horizontal clearance of 0 feet.

According to the Bridge Inspection Report dated 04/19/2021 Bridge 0900009 over the Indian Prairie Canal has a channel depth of 3.6 feet and a horizontal clearance of 0 feet.

2.3.14 On bridges with moveable spans

Both of the bridges are fixed bridges.

2.3.15 Normal High Water and Mean High Water (for coastal bridges)

Both of the bridges are canal system and water elevation is controlled by the SFWMD.

2.3.16 Bridge security issues

There are no bridge security issues to report.

2.4 Existing Environmental Features

Existing environmental features are documented in the following reports for this PD&E study:

2.4.1 ETDM Programming Screen Summary Report

The purpose of the *Programming Screen Summary Report* (February 2023) is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Most effects were either enhanced, minimal, or moderate except for Wetlands and Surface waters which were categorized as substantial by US Environmental Protection Agency.

2.4.2 Natural Resource Evaluation (NRE)

As documented in the *NRE* (August 2025) and *NRE Addendum* (October 2025), literature reviews, agency database searches and field reviews were conducted to assess federal and state-protected species presence, their habitat, and designated critical habitat occurring or potentially occurring within the project study area. Based on the nature of the project, and no anticipated critical habitat impacts, it was

determined that construction of the project “**will not result in destruction or adverse modification of critical habitat**”.

2.4.3 Contamination Screening Evaluation Report (CSER)

As documented in the *CSER* (August 2025), all corridor properties within a half mile of the proposed ROW were evaluated to the extent necessary for potential contamination sources within or near the project study area. Based on review of available data, historical aerials, and a field review, no sites were rated as high risk, 32 sites were rated as Medium risk, 7 sites were rated as Low risk; and all proposed pond sites are ranked as medium risk.

2.4.4 Cultural Resource Assessment Survey (CRAS)

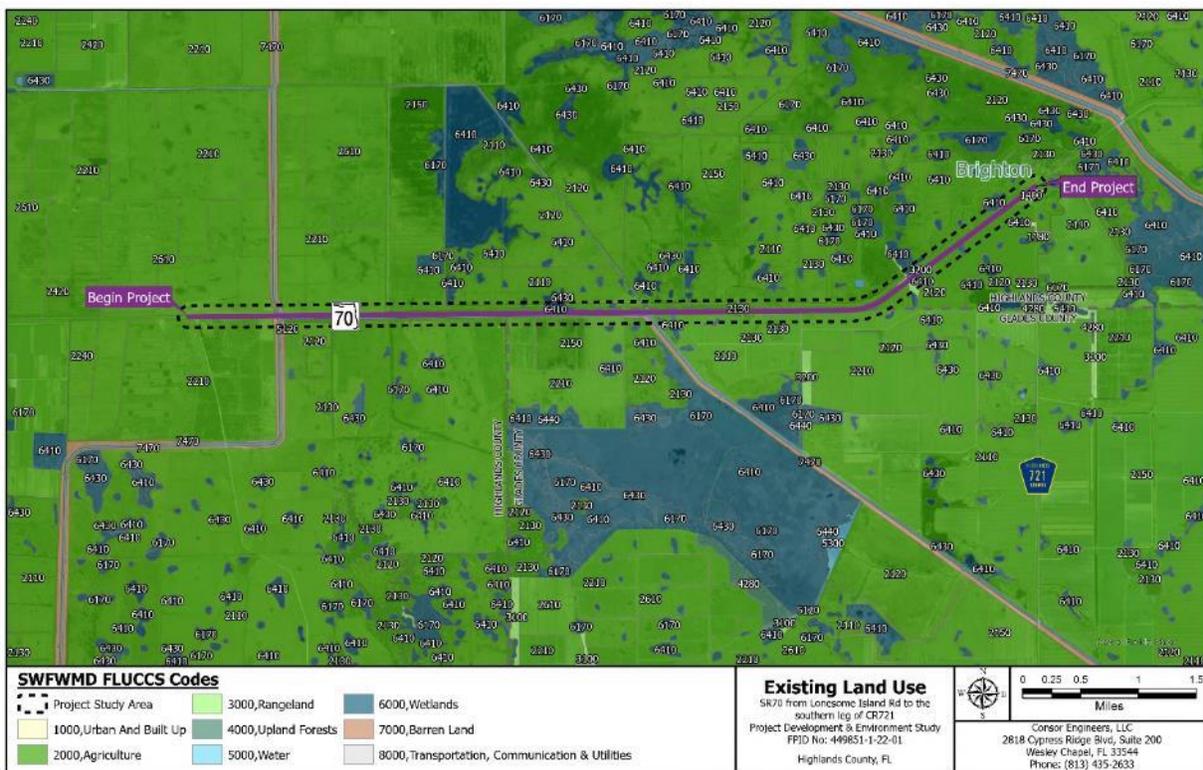
As documented in the *CRAS* (August 2025), based on the background research and the results of field investigations, which included the excavation of 250 shovel tests, one new archaeological site (8HG01682) was identified within the area of potential effect (APE) as well as one Archaeological Occurrence (AO). The archaeological site does not appear eligible for listing in the National Register of Historic Places (NRHP) as found within the archaeological APE and AOs are not considered sites. As a result of the historical/architectural field survey, 17 historic resources were identified within the APE, including four buildings and 13 linear resources. Of the 17 historic resources identified within the APE, 15 appear ineligible for listing in the NRHP (four buildings and 11 linear resources). Two historic resources within the APE appear eligible for listing in the NRHP. These include segments of the Harney Pond Canal (C-41) and the Indian Prairie Canal (C-40).

Section 3 Future Conditions

3.1 Future Conditions Considerations

The study area is predominantly comprised of agriculture (Florida Land Use Cover and Forms Classification System [FLUCCS] 2000), Water (FLUCCS 5000), Wetlands (FLUCCS 6000) and Upland Forest (FLUCCS 4000). Additional upland land use types with minimal coverage of the project area or located in the surrounding area include Urban and build-up (FLUCCS 1000), Rangeland (FLUCCS 3000), Barren Land (FLUCCS 7000), and Transportation, Communication, and Utilities (FLUCCS 8000). Comparing future and existing land use, future land use remains compatible with the existing land use. The project will maintain and improve access to surrounding agricultural land uses to maintain future agricultural zoning and practices. **Figure 3-1** shows the Future Land Use Map along the project limits.

Figure 3-1 | Future Land Use Map



This section depicts the future years traffic volumes from the S.R. 70 DTTM. The traffic AADT volumes have been rounded according to the 2019 FDOT Project Traffic Forecasting Handbook. **Table 3-1** shows the calculations for Design Year 2052 No-Build AADT based on the recommended annual growth rate for each roadway segment. **Table 3-2** provides the AADT values of the Existing Year 2022, Opening Year 2032, and Design Year 2052 No-Build scenarios. **Figure 3-2** shows Design Year 2052 No-Build AADT values on the project map.

Table 3-1 | Design Year 2052 No-Build AADT Calculation

Roadway	Segment	2022 AADT	Annual Growth Rate % Used	2052 AADT	2052 AADT (rounded)
S.R. 70	West of C.R. 721	5,600	4.0%	12,320	12,500
	East of C.R. 721	5,400	4.5%	12,690	12,500
C.R. 721	South of S.R. 70	1,900	4.0%	4,180	4,200

Table 3-2 | No-Build AADT Summary

Roadway	Segment	2022 AADT	2032 AADT	2052 AADT
S.R. 70	West of C.R. 721	5,600	7,800	12,500
	East of C.R. 721	5,400	7,800	12,500
C.R. 721	South of S.R. 70	1,900	2,700	4,200

Figure 3-2 | S.R. 70 Design Year 2052 No-Build AADT

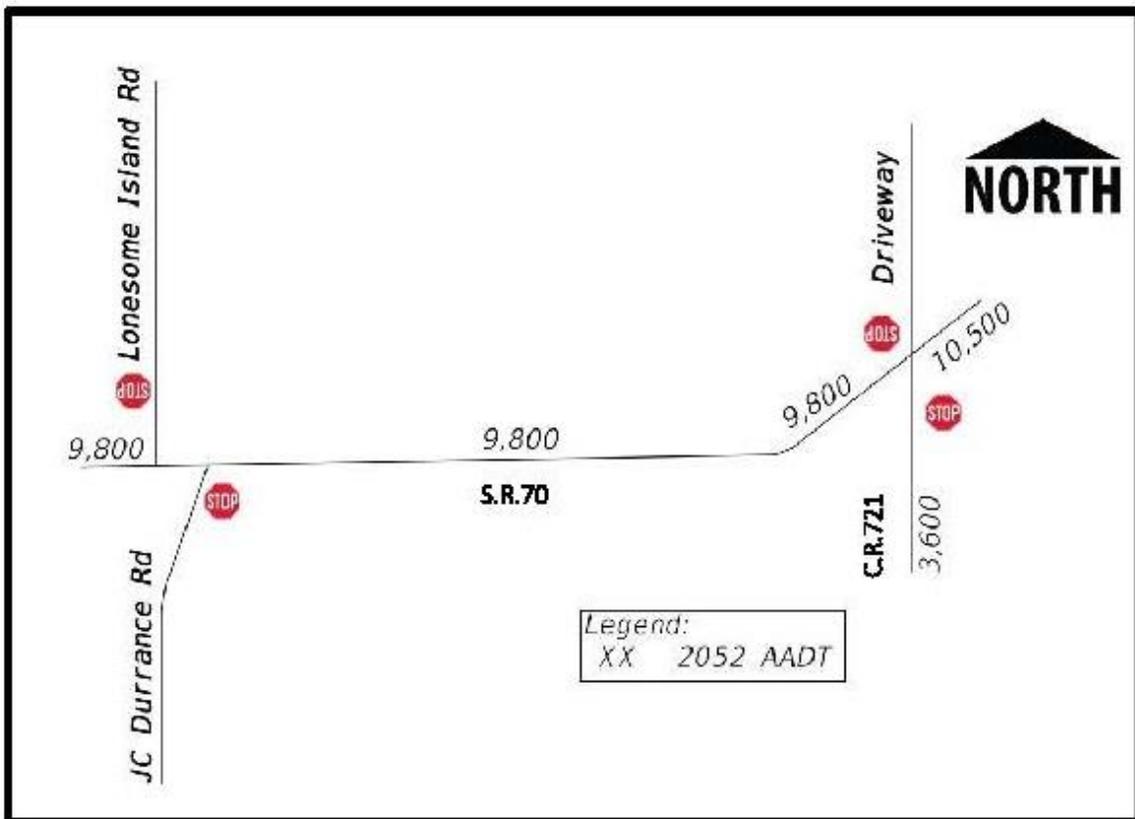


Table 3-3 shows the calculations for Design Year 2052 Build AADT values based on the recommended annual growth rate for each roadway segment. Table 3-4 provides the AADT values of the Existing Year 2022, Opening Year 2032, and Design Year 2052 Build scenarios. Figure 3-3 shows Opening Year 2032 Build AADT values on the project map. Figure 3-4 shows Design Year 2052 Build AADT values on the project map.

Table 3-3 | Design Year 2052 Build AADT Calculation

Roadway	Segment	2022 AADT	Annual Growth Rate % Used	2052 AADT	2052 AADT (rounded)
S.R. 70	West of C.R. 721	5,600	4.0%	12,320	12,500
	East of C.R. 721	5,400	4.5%	12,690	12,500
C.R. 721	South of S.R. 70	1,900	4.0%	4,180	4,200

Table 3-4 | Build AADT Summary

Roadway	Segment	2022 AADT	2032 AADT	2052 AADT
S.R. 70	West of C.R. 721	5,600	7,800	12,500
	East of C.R. 721	5,400	7,800	12,500
C.R. 721	South of S.R. 70	1,900	2,700	4,200

Figure 3-3 | S.R. 70 Opening Year 2032 Build AADT

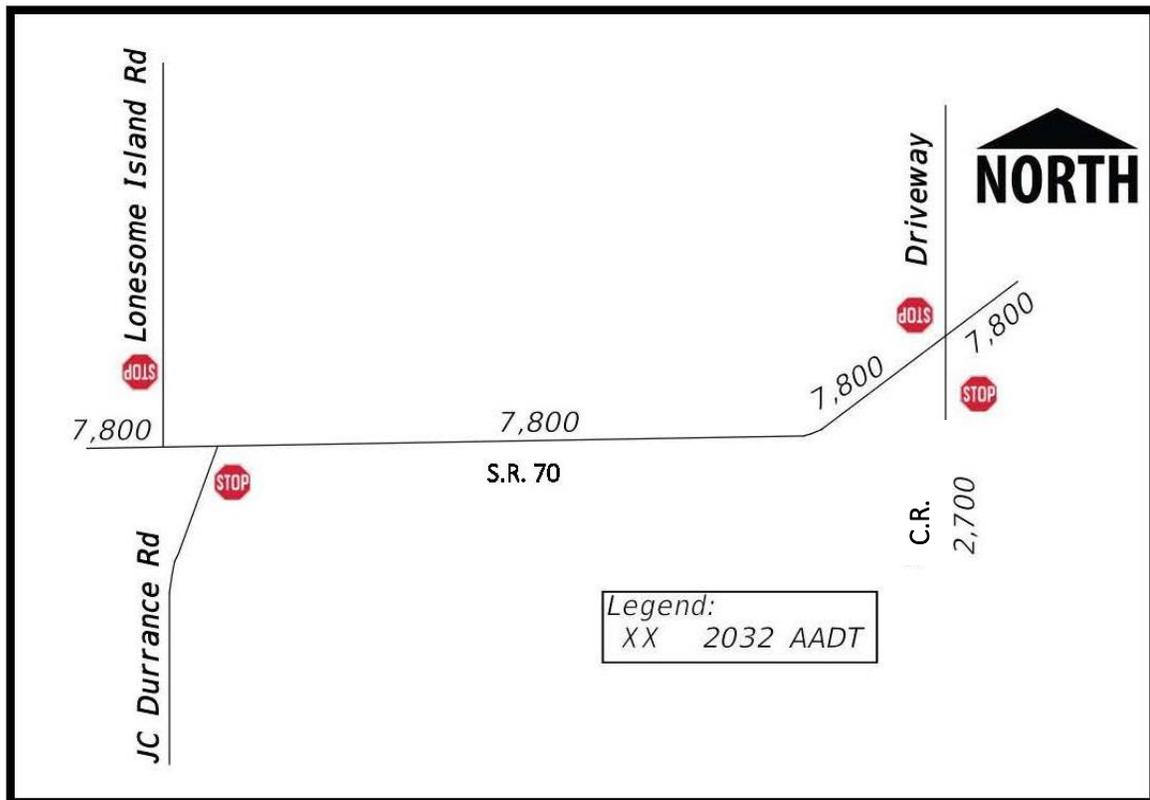
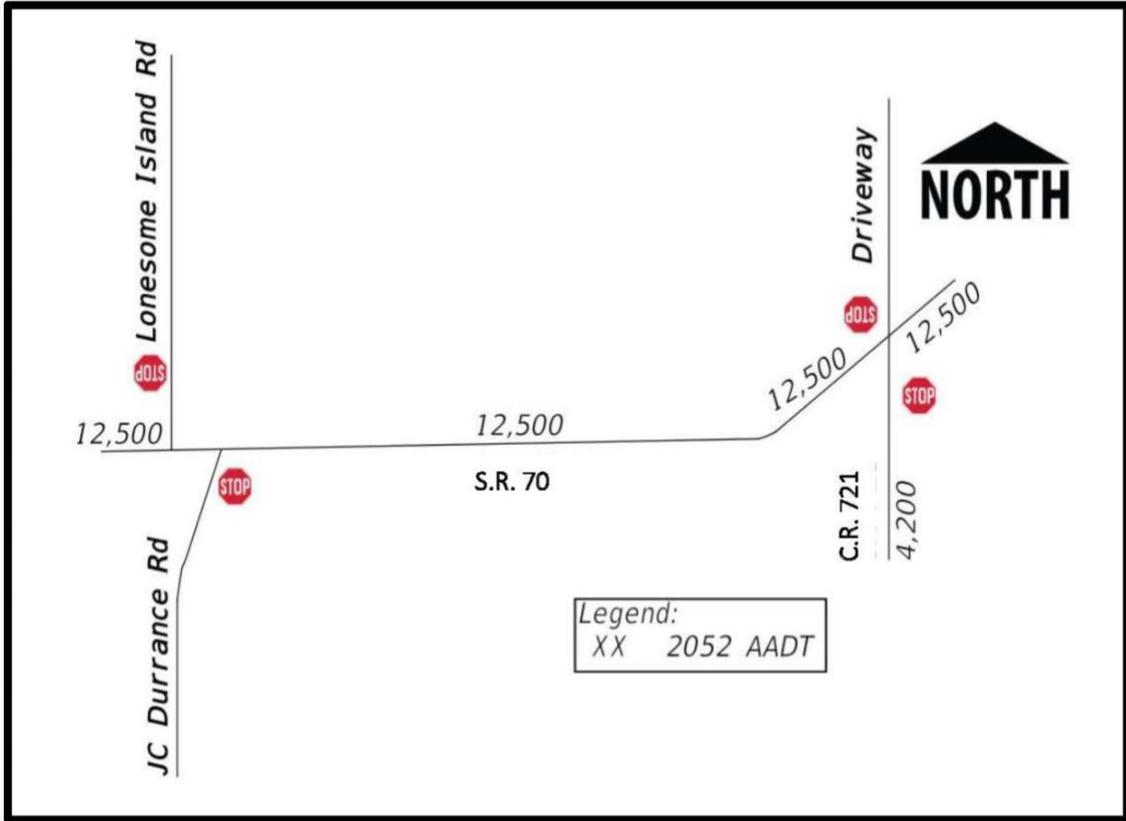


Figure 3-4 | S.R. 70 Design Year 2052 Build AADT



Design Year 2052 LOS analysis was conducted based on the methodology outlined in the Highway Capacity Manual, 6th Edition using Synchro 11. **Table 3-5** shows the overall LOS and Delay experienced by both intersections, as well as the individual delay and LOS of each approach of each intersection for the AM and PM peak hours for the Design Year 2052 No-Build scenario. **Table 3-6** shows the AM and PM Arterial LOS expected in the Design Year 2052 No-Build scenario. **Figure 3-5** depicts the No-Build Design Year 2052 LOS on the map.

Table 3-5 | Design Year 2052 No-Build Intersection LOS

Intersection	Peak Hour	LOS	Overall Delay (sec/veh)	NB Delay (s) / LOS	SB Delay (s) / LOS	EB Delay (s) / LOS	WB Delay (s) / LOS
Lonesome Island Rd/JC Durrance Rd	AM	A	0.3	25.4 / D	0.0 / A	8.3 / A	9.7 / A
	PM	A	0.5	21.5 / C	0.0 / A	0.0 / A	0.0 / A
C.R. 721	AM	A	6.6	45.9 / E	63.3 / F	0.0 / A	10.5 / B
	PM	A	9.6	42.9 / E	30.0 / D	8.0 / A	9.0 / A

Figure 3-5 | S.R. 70 Design Year No-Build LOS

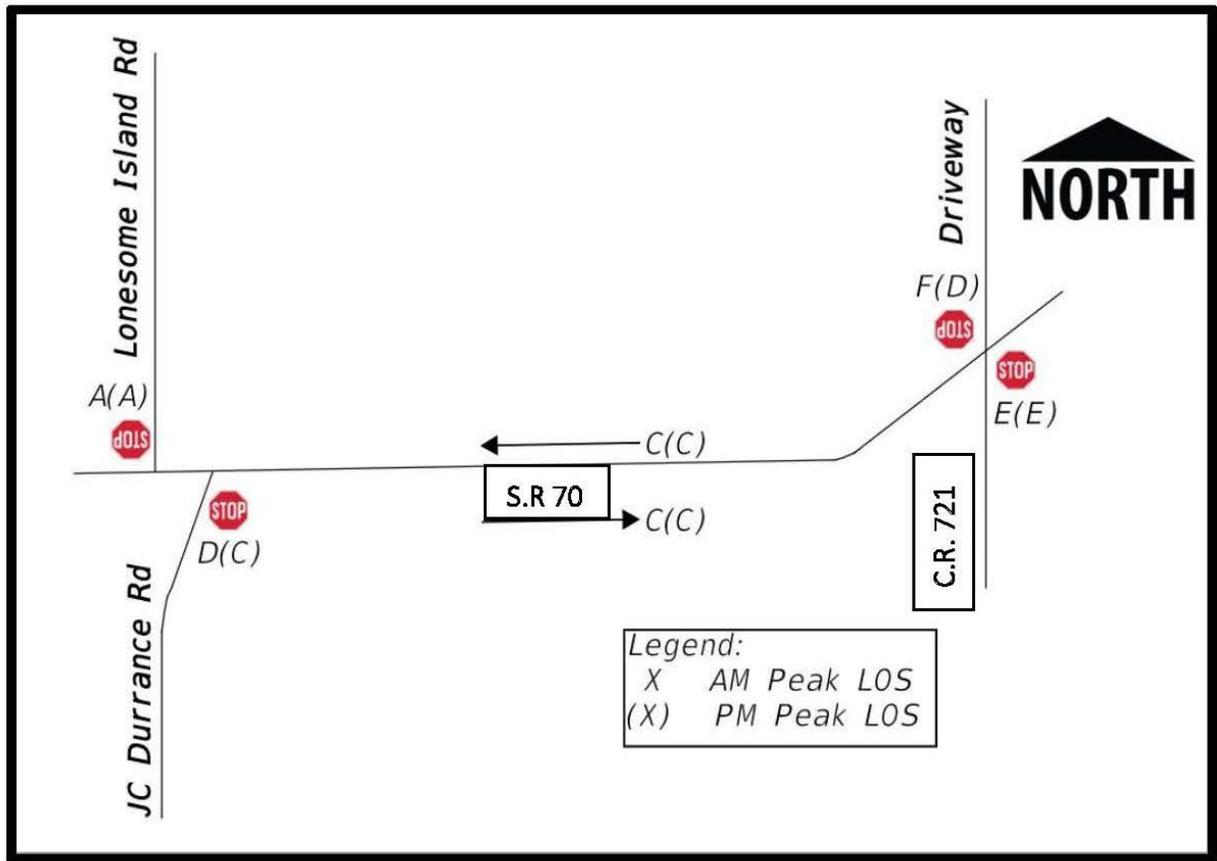


Table 3-6 | Design Year 2052 No-Build Arterial LOS

Segment	Peak Hour	LOS	Average Speed (mph)	Segment Travel Time (minutes)	Follower Density (followers/mi/ln)	Percent Followers (%)
S.R. 70 from Lonesome Island Rd to C.R. 721	AM	C	57.3	8.05	6.8	60.0
	PM	C	57.0	8.09	5.1	54.3

Figure 3-6 | S.R. 70 Design Year 2052 Build LOS

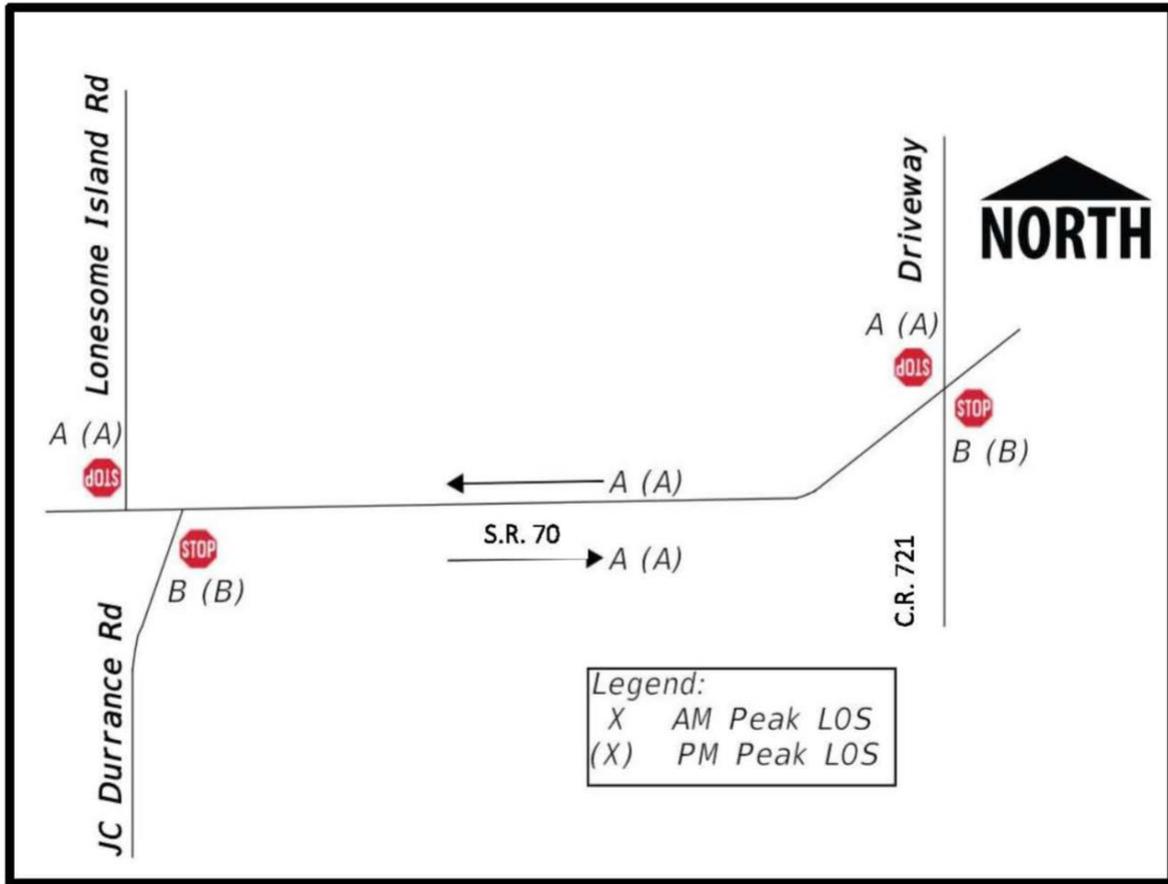


Table 3-7 shows the overall LOS and Delay expected at both intersections, as well as the individual delay and LOS of each approach of each intersection for the AM and PM peak hours for the Design Year 2052 Build scenario. Table 3-8 shows the Arterial LOS, average speed, and density expected along S.R. 70 for the Design Year 2052 Build scenario. Figure 3-6 depicts the Design Year 2052 Build LOS on the map.

Table 3-7 | Design Year 2052 Build LOS

Intersection	Peak Hour	LOS	Overall Delay (sec/veh)	NB Delay (s) / LOS	SB Delay (s) / LOS	EB Delay (s) / LOS	WB Delay (s) / LOS
Lonesome Island Rd/JC Durrance Rd	AM	A	0.3	13.2 / B	0.0 / A	8.6 / A	10.6 / B
	PM	A	0.3	10.5 / B	0.0 / A	0.0 / A	8.9 / A
C.R. 721	AM	A	3.8	11.6 / B	9.7 / A	8.3 / A	13.1 / B
	PM	A	2.9	13.3 / B	9.8 / A	8.4 / A	10.1 / B

Table 3-8 | Design Year 2052 Build Arterial LOS

Segment	Peak Hour	LOS	Average Speed (mph)	Density (pc/mi/ln)
S.R. 70 from Lonesome Island Rd to C.R. 721	AM	A	65.0	7.5
	PM	A	65.0	6.8

As defined in the FDM Section 200.4 and in the Context Classification Memo prepared by FDOT, the existing and future context classification along this corridor is C2 - Rural for S.R. 70 from Lonesome Island Road to the southern leg of C.R. 721 in Highlands County.

Section 4 Design Controls & Criteria

4.1 Design Controls

The design controls for the proposed S.R. 70 study will adhere to the FDM, effective January 2026, and Section 3.2.3.5 of Part 2 Chapter 3 of the PD&E Manual.

4.2 Design Criteria

The design criteria used for this PD&E Study are listed in **Table 4-1** and **Table 4-2**

Table 4-1 | Design Criteria

DESIGN ELEMENT	4- Lane Flushed Shoulder Roadway	Source
DESIGN CONTROLS		
Functional Classification	Rural Principal Arterial Other (SIS Facility)	FDOT SLD dated 2019 & 2022
Context Classification	Rural (C2)	Scope of Services
Access Management Class	Class 3	
Design Year	2050	PTAR
Design Speed	Existing: 65 mph Proposed: 65 mph (SIS Minimum)	FDM Table 201.5.1
Target Speed	65 mph	D1 Target Speed Committee Presentation
Capacity and LOS Target		
Design Vehicle	WB-62FL	FDM Section 201.6.2
Pedestrian and Bicycle Requirements	Shared Use Path	Highlands County Master Plan
Physical constraints	Refer to Section 2.2.12 for a description of physical constraints	
Environmental Constraints	Minimum criteria (refer to Section 2.4)	
Type of SMF	Includes an open drainage system with ditches and stormwater ponds	
Navigational Requirements	The design control is not applicable to the project	
Design High Water	Refer to Pond Siting Report / Minimum	
Design Wave Heights	The design control is not applicable to the project	
TYPICAL SECTION ELEMENTS		
Lane Widths	12 ft.	FDM Table 210.2.1
Median Widths	40 ft.	FDM Table 210.3.1
Shoulder Widths (Outside)	5 ft. Paved/ 10 ft. Total	FDM Table 210.4.1
Shoulder Widths (Median)	4 ft. Paved/ 8 ft. Total	FDM Table 210.4.1

DESIGN ELEMENT	4- Lane Flushed Shoulder Roadway	Source
Bridge Shoulder Widths (Outside)	10 ft.	FDM Figure 260.1.1 & Figure 260.1.4
Bridge Shoulder Widths (Inside)	6 ft	FDM Figure 260.1.1 & Figure 260.1.4
Lane Cross Slopes	0.02	FDM Figure 210.2.1
Shoulder Cross Slopes (Outside)	0.06	FDM Section 210.4.1
Shoulder Cross Slopes (Inside)	0.05	FDM Section 210.4.1
Bridge Shoulder Cross Slopes (Inside & Outside)	0.02	FDM Section 260.4
Border Width	min. 40 ft.	FDM Table 210.7.1
Clear Zone Width	24 ft (New Construction) 18 ft (RRR)	FDM Table 215.2.1
Lateral Offset	Varies (See Table 215.2.2)	FDM Table 215.2.2
Front Slope	0-5' Fill = 1:6	FDM Table 215.2.3
	5'-10' Fill = 1:6 to CZ, then 1:4	
	10'-20' Fill = 1:6 to CZ, then 1:3	
	>20' Fill = 1:2 with guardrail	
Back Slope	1:4 or 1:3 with Standard Width Trapezoidal Ditch with 1:6 Front Slope	FDM Table 215.2.3
Canal Lateral Offset	60 ft. min.	FDM Figure 215.3.1
HORIZONTAL ALIGNMENT		
Maximum Deflection (Without Horizontal Curve)	0° 45' 00"	FDM Section 210.8.1
Desired Length of Horizontal Curve (Based on Design Speed)	975 ft.	FDM Table 210.8.1
Desired Length of Horizontal Curve (Based on Deflection)	1° = 900 ft.	FDM Table 210.8.1
	2° = 800 ft.	
	3° = 700 ft.	
	4° = 600 ft.	
	5° = 500 ft.	
Superelevation	$e_{max} = 0.10$	FDM Section 210.9 & Table 210.9.1
Superelevation Transition Rate	1:250	FDM Table 210.9.3
Maximum Degree of Curve (D)	4° 15' 00"	FDM Table 210.9.1
Roadway Transitions • Merging Taper = L • Shifting Taper = L/2 • Shoulder Taper = L/3	L = WS	FDM Section 210.2.5

DESIGN ELEMENT	4- Lane Flushed Shoulder Roadway	Source
VERTICAL ALIGNMENT		
Maximum Grade	3.00%	FDM Table 210.10.1
Maximum Change in Grade Without Vertical Curve	0.30%	FDM Table 210.10.2
Minimum VPI Spacing	N/A	FDM Section 210.10.1.1
Stopping Sight Distance (min) (Grade ≤ 2%) (Upgrade & Downgrade)	645 ft.	FDM Table 210.11.1
Vertical Curves	$L = KA$	FDM Table 210.10.3 & 210.10.4
	$A = g_1 - g_2 $	
	$L_{min} = 450 \text{ ft. Crest}$	
	$K_{min} = 313 \text{ Crest}$	
	$L_{min} = 350 \text{ ft. Sag}$	
	$K_{min} = 157 \text{ Sag}$	
Base Clearance above Base Clearance Water Elevation	3 ft	FDM Section 210.10.3
Vertical Clearance (Sign Structure)	17.5 ft.	FDM Section 210.10.3
SHARED USE PATH		
Width of Pavement	14 ft. Max. 12 ft. Standard 10 ft. Min.	FDM Section 224.4
Design Speed ≤4% Downgrade >4% Downgrade	18 mph 30 mph	FDM Section 224.9
Maximum Cross Slope	2%	FDM Section 224.5
Minimum Cross Slope Transition Length	75 ft.	FDM Section 224.5
Horizontal Clearance	4 ft.	FDM Section 224.7
Vertical Clearance	8 ft.	FDM Section 224.8
Minimum Radii 18 mph, 2% 18 mph, -2% 30 mph, +2% 30 mph, -2%	74 ft. 86 ft. 261 ft. 316 ft.	FDM Table 224.10.1
Minimum Stopping Sight Distance	Varies (See Table 224.10.2)	FDM Table 224.10.2
Maximum Grade	5%	FDM Section 224.6
Minimum Length of Vertical Curve $s > L$ $s < L$	$L = 2s - (900/A)$ $L = As^2/900$	FDM Section 224.11

4.3 Drainage Design Criteria

The design of the drainage and stormwater facilities will comply with the standards set forth by the *FDOT Drainage Manual*, *FDOT Drainage Design Guide*, and the *SFWMD Environmental Resource Permit (ERP) Applicant's Handbook II*. Per *FGT's Engineering and Construction Specifications*, all proposed pipe crossings shall provide a minimum of 24" separation below the FGT gas line and must cross at a ninety-degree angle. Depending on the elevation of the FGT gas line, this may require crossing under the gas line to provide the required clearance.

Water quality and quantity requirements will comply with the guidelines as defined in Chapter 62-330 *Florida Administrative Code (FAC)* and the *SFWMD ERP Applicant's Handbook II*. It is noted that the proposed shared use path described in earlier sections will be exempt from water quality treatment. The new statewide stormwater rule, ratified on June 28, 2024 would not impact the water quality requirements for this project since the LDCA is anticipated to be obtained prior to June 28, 2026.

Water quality treatment for linear pond alternatives shall provide treatment for 50% of 1" over the contributing basin or 50% of 2.5" over the impervious area, whichever is greater. Water quality treatment for offsite and regional pond alternatives shall provide the greater of 1" over the contributing basin or 2.5" over the impervious area. It's noted that an additional 50% of water quality treatment has been added since all basins discharge to impaired waterbodies (WBID 3204/3206). Therefore, dry retention is treating 0.8" over the basin or 1.88" over the impervious area and the wet detention is treating 1.5" over the basin or 3.75" over the impervious area.

Water quantity shall be mandated as follows: The proposed discharge rate for the 25yr/72hr storm shall be limited to the existing rate and the proposed discharge rate for the 10yr/72hr storm shall be limited to 35.4 CSM (cubic feet per second per square mile) according to the C-41 Basin Requirement. Since the CSM discharge rate controls, the CSM volume was subtracted from the Post 10 Yr/72 Hr volume to obtain the required attenuation. To determine the allowable CMS volume, the post-developed basin area was converted to square miles and multiplied by 35.4 to determine the allowable discharge rate. Hydrology was then run with ICPR analysis using the basin CN while varying the acreage to determine at what acreage the allowable discharge rate was obtained, the runoff volume generated from that acreage was then used as the allowable runoff volume in the post-developed condition.

Section 5 Alternatives Analysis

5.1 No-Build (No-Action) Alternative

Throughout this study, the No-Build Alternative (no-action) is also considered. It assumes that both normal and evacuation traffic volumes will continue to increase in the future without capacity or operational improvements except for routine maintenance on the existing road. The No-Build Alternative remains a viable alternative throughout the study process although it does not accomplish the purpose and need for this project. The following are advantages and disadvantages associated with the No-Build Alternative:

Advantages of the No-Build Alternative:

- No additional right-of-way to be acquired
- No design or construction costs
- No delays to motorists or inconveniences to property owners due to construction
- No impacts to the adjacent natural, physical, and social environment

Disadvantages of the No-Build Alternative:

- No pedestrian or bicycle facilities added
- Increased potential for crashes due to higher traffic volumes and a lack of physical separation between directional traffic volumes
- Increased traffic congestion and user costs associated with increased delays
- Increased vehicle emission pollutants due to higher levels of traffic congestion
- Increased emergency vehicle response times
- Increased maintenance costs to repair roadway and side slopes
- Traffic delays associated with routine maintenance due to lane closure requirements

5.1.1 No-Build Analysis

Design Year 2052 LOS analysis was conducted based on the methodology outlined in the *Highway Capacity Manual, 6th Edition* using Synchro 11. **Appendix D** from the *PTAR* includes the copies of the Synchro, SIDRA, and HCS LOS computer outputs. **Table 5-1** shows the overall LOS and Delay experienced by both intersections, as well as the individual delay and LOS of each approach of each intersection for the AM and PM peak hours for the Design Year 2052 No-Build scenario. **Table 5-2** shows the AM and PM Arterial LOS expected in the Design Year 2052 No-Build scenario. **Figure 5-1** depicts the No-Build Design Year 2052 LOS on the map.

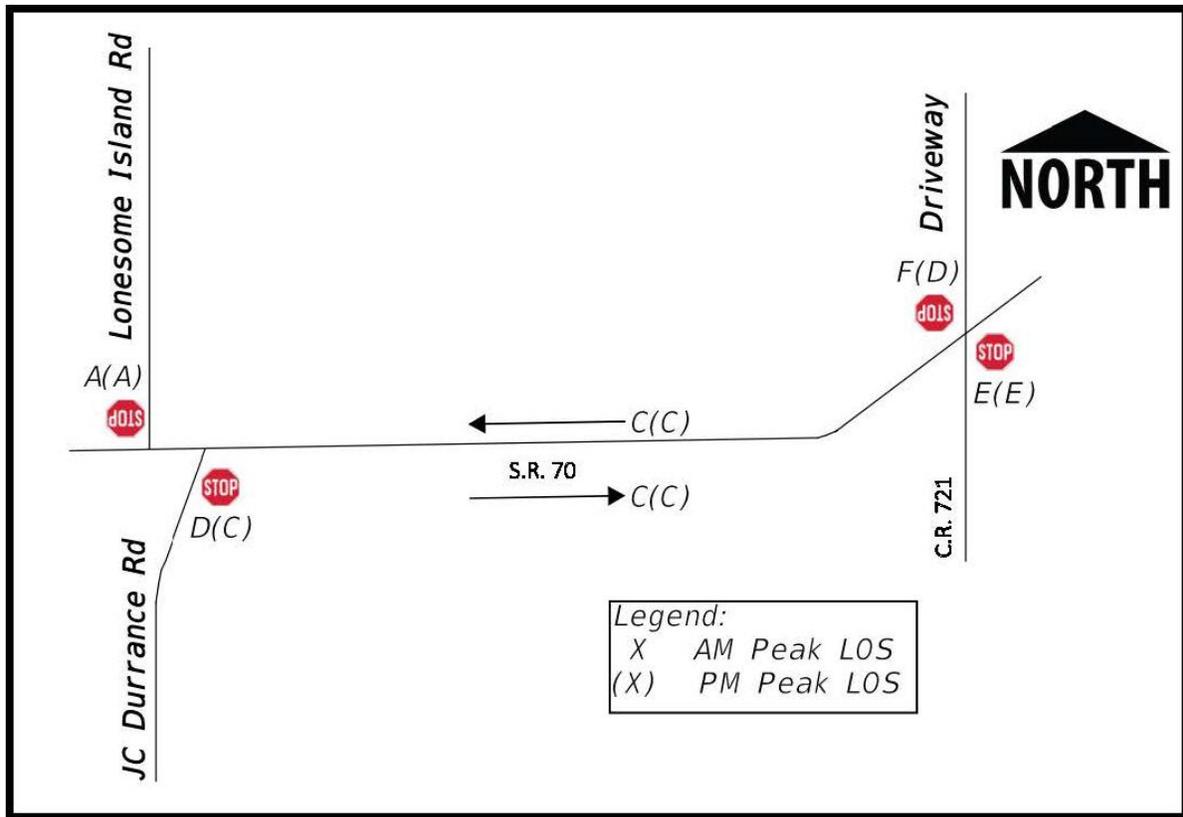
Table 5-1 | Design Year 2052 No-Build Intersection LOS

Intersection	Peak Hour	LOS	Overall Delay (sec/veh)	NB Delay (sec/veh) / LOS	SB Delay (sec/veh) / LOS	EB Delay (sec/veh) / LOS	WB Delay (sec/veh) / LOS
Lonesome Island Rd/JC Durrance Rd	AM	A	0.3	25.4 / D	0.0 / A	8.3 / A	9.7 / A
	PM	A	0.5	21.5 / C	0.0 / A	0.0 / A	0.0 / A
C.R. 721	AM	A	6.6	45.9 / E	63.3 / F	0.0 / A	10.5 / B
	PM	A	9.6	42.9 / E	30.0 / D	8.0 / A	9.0 / A

Table 5-2 | Design Year 2052 No-Build Arterial LOS

Segment	Peak Hour	LOS	Average Speed (mph)	Segment Travel Time (minutes)	Follower Density (followers/mi/ln)	Percent Followers (%)
S.R. 70 from Lonesome Island Rd to C.R. 721	AM	C	57.3	8.05	6.8	60.0
	PM	C	57.0	8.09	5.1	54.3

Figure 5-1 | S.R. 70 Design Year 2052 No-Build LOS



5.2 Transportation Systems Management and Operations (TSM&O) Alternative

The objective of TSM&O is to identify strategies that reduce traffic congestion and prevent its occurrence in areas that are currently congested. These strategies are designed to modify travel behavior and increase system efficiency without costly infrastructure improvements. This widening is proposed as an initiative to improve operations along S.R. 70 during emergency evacuations. TSM&O improvements are not expected to provide sufficient additional capacity to significantly reduce evacuation times during evacuation events. Highlands County is part of the Rural Area of Critical Economic Concern (RACEC), or Rural Areas of Opportunity (RAO) program defined by the state of Florida legislature to encourage and facilitate the location and expansion of major economic development projects of significant scale in such rural communities.

5.3 Multimodal Alternatives

Multimodal alternatives will not alleviate the existing geometric deficiencies or reduce emergency evacuation times; however, bicycle/pedestrian facilities are included in the Build Alternative.

5.4 Build Alternatives

This study evaluated two Build Alternatives along with the No-Build Alternative. In order to avoid impacts to NRCS conservation lands to the north and impacts to FGT, the Build Alternative will shift the roadway to the south and will widen it from the existing two-lane undivided section to a four-lane divided typical section. Additional right-of-way will be needed to provide the width required to accomplish the proposed improvements. The Build Alternative will maintain the existing design speed of 65 mph.

5.4.1 Typical Sections

The Build Alternative includes widening the existing two-lane undivided rural arterial to a four-lane divided arterial with a 40-foot grass median throughout the project limits. Full paved shoulders and drainage ditches are proposed on the outside and a 12-foot-wide shared use path is proposed along the south side of the road for bicycles and pedestrians. **Figure 5-2** from the west limits of the project where the widening is to the south of the existing roadway to the SFWMD Harney Pond Canal (C-41) where the widening shifts to north of the existing roadway.

Figure 5-2 | Build Alternative Roadway Typical Section: Begin Project to West of Harney Pond Canal

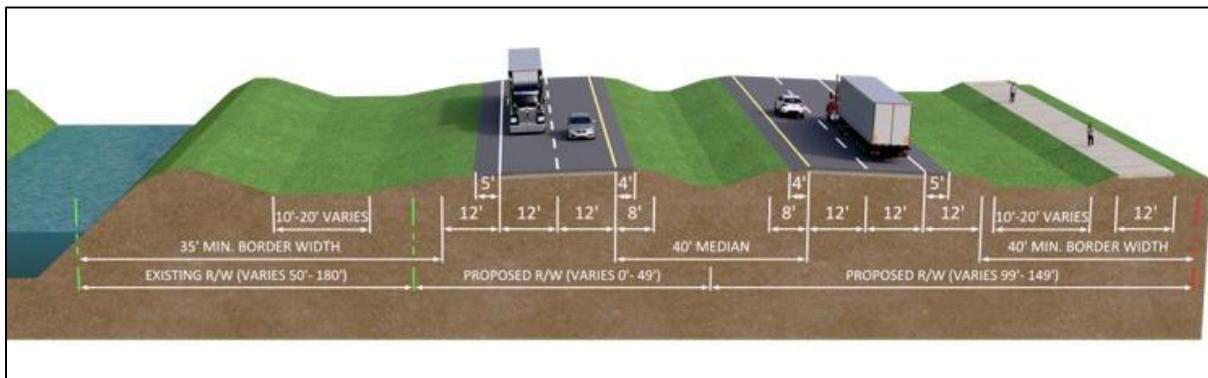
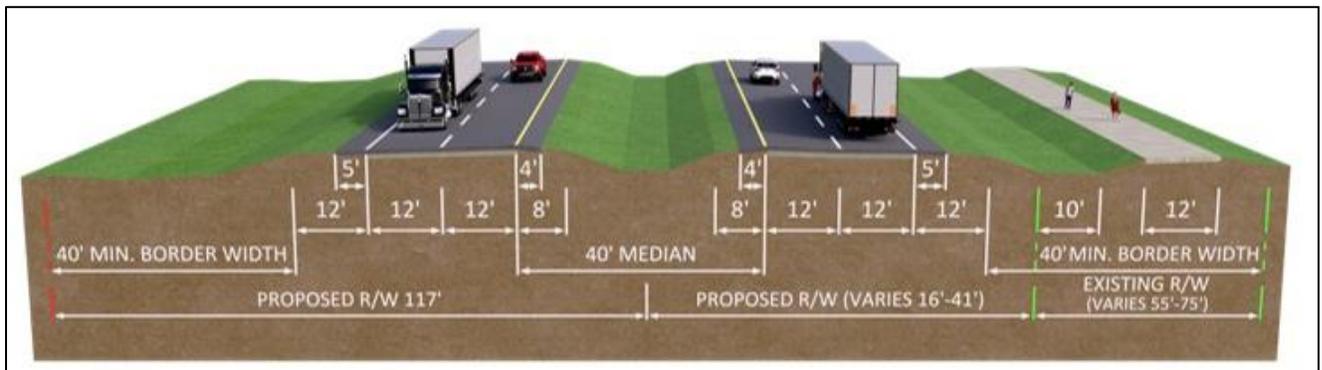


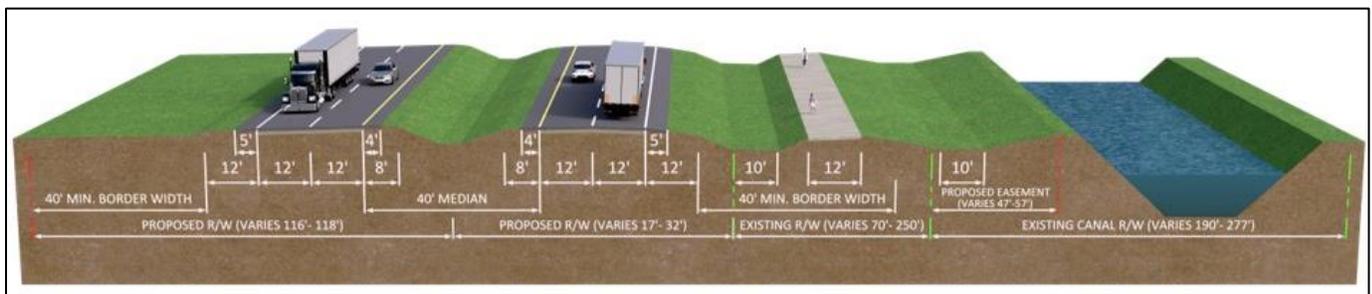
Figure 5-3 | Build Alternative Roadway Typical Section: West of Harney Pond Canal C-41 and East of Indian Prairie Canal C-40



The placement of the proposed roadway centerline was evaluated in coordination with FPL as they were in the process of replacing and re-running their existing electric transmission line along the north side of S.R. 70. Through a series of meetings with FPL and iterations of offset clearances that were acceptable to FPL for future maintenance access of their poles and to minimize right of way and keep the proposed poles outside the S. R. 70 clear zone, the proposed centerline alignment and typical section for northern widening was finalized.

Moving east, the proposed alignment continues east with widening to the north side of existing S.R. 70 pavement as it traverses the Harney Pond Canal (C-41) and follows immediately north of and parallel to the C-39A canal as shown on **Figure 5-3**. In order to avoid the constraint of FPL poles on the north side, and the constraint of the C-39A canal on the south side, the S.R. 70 alignment was set to keep all roadway elements, including the proposed shared use path north of the existing southern S.R. 70 ROW line, however slope grading and retaining and existing ditch between existing S.R. 70 and C-39A Canal will necessitate acquiring a grading easement within SFWMD's canal ROW. The C-39A Canal and the top of its northern bank (minimum 10' width) will remain. The alignment remains to the north of existing S.R. 70 across the Indian Prairie Canal (C-40).

Figure 5-4 | Build Alternative Roadway Typical Section: Harney Pond Canal C-41 to Indian Prairie Canal C-40



East of the Indian Prairie Canal continuing east towards C.R. 721, the alignment shifts back to the south side of existing S.R. 70 as shown previously in **Figure 5-4** to avoid impacts to an existing gas pipeline and overhead transmission line which are situated north of S.R. 70.

Approaching the Southern leg of C.R. 721, two alternatives were initially evaluated. One alternative involved retaining the existing intersection location with C.R. 721. Constraints include the existing FGT easement and FPL transmission poles north of S.R. 70 and the presence of the several existing Lykes Bros. buildings and Brighton Baptist Church on the south side of S.R. 70. To avoid the utilities on the north side, ROW acquisition and business relocations are required on the south side. The proposed median was narrowed from 40 to 28 feet as shown in **Figure 5-5** and the alignment is shown in **Figure 5-6**. The existing intersection angle is highly skewed which is not adjusted with Build Alternative 1.

Figure 5-5 | Build Alternative 1 - Roadway Typical Section: West of C.R. 721

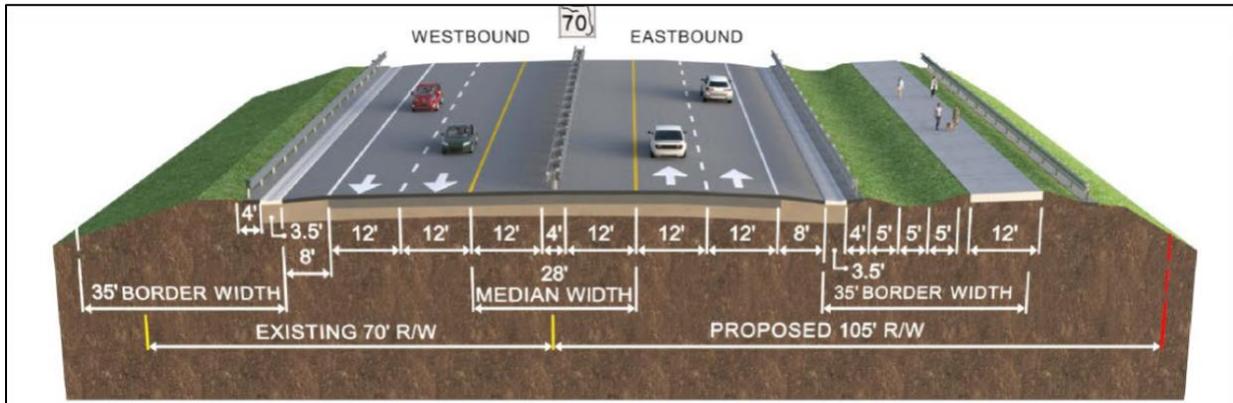
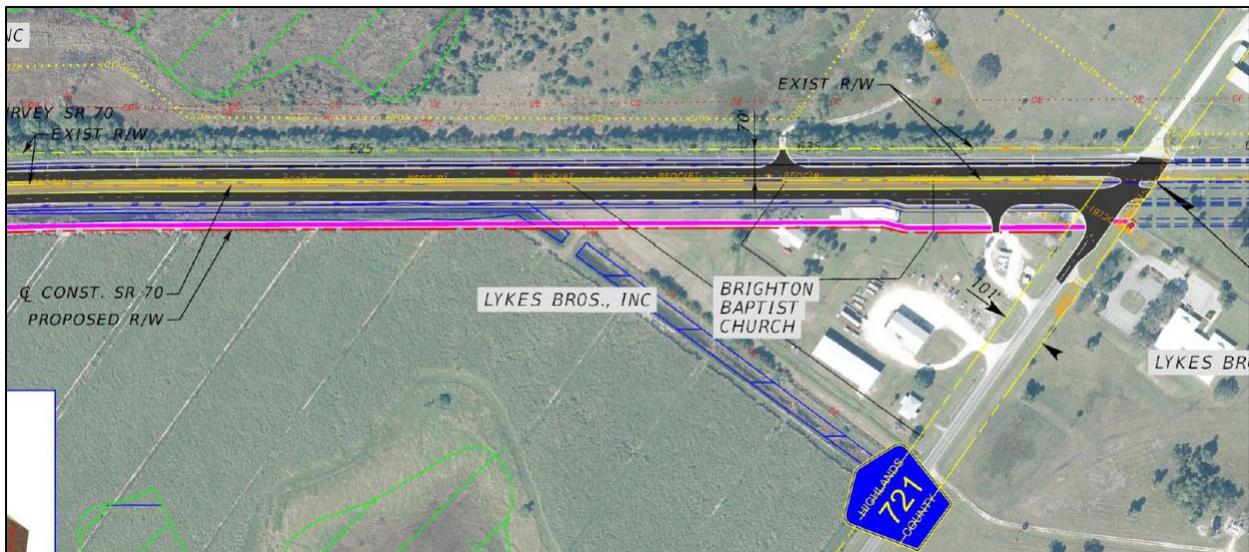


Figure 5-6 | Build Alternative 1 – C.R. 721 Intersection Layout



A second intersection alternative involved both proposed S.R. 70 eastbound and westbound lanes starting approximately 1,000 feet west of the existing S.R. 70 and C.R. 721 intersection avoiding the business impacts along existing S.R. 70. Access to the church and business properties will remain and be connected to S.R. 70 through access from C.R. 721. The proposed typical section for Intersection Alternative 2 for the realignment is shown in **Figure 5-7**, and the realignment is shown in **Figure 5-8**.

Figure 5-7 | Preferred Alternative Roadway Typical Section: East of Indian Prairie Canal C-40 to C.R. 721

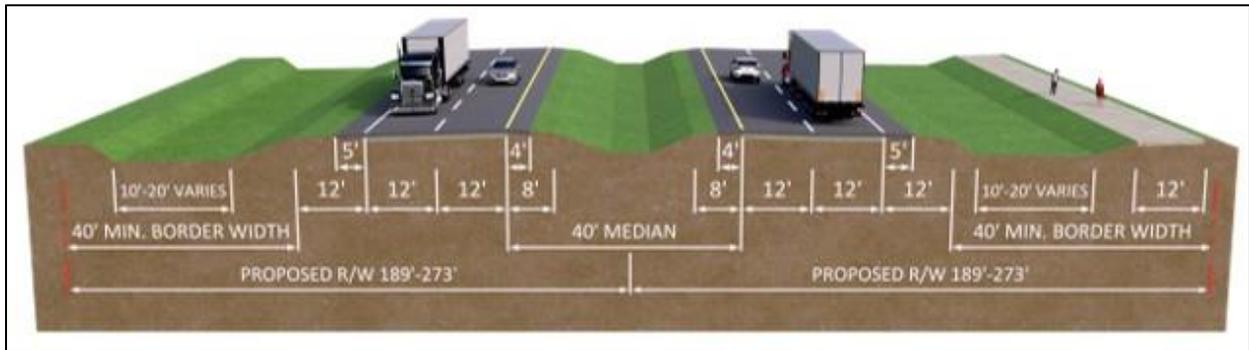
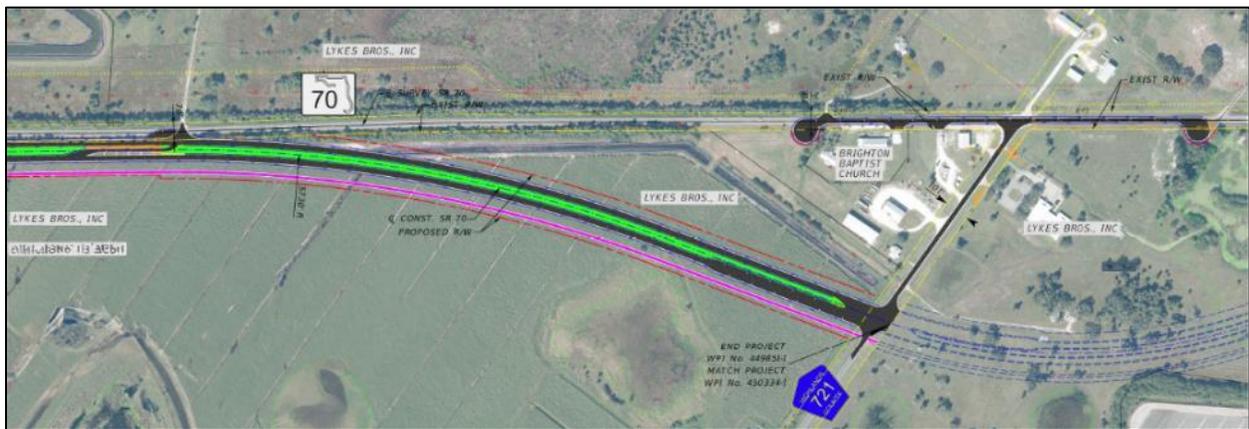


Figure 5-8 | C. R. 721 Intersection Realignment



Both intersection alternatives were presented to the public at the Alternatives Workshop in June 2024.

5.4.2 Pedestrian and Bicycle Accommodation

The proposed 12-foot wide shared use path will parallel the south side of the proposed roadway improvements and will enhance safety by separating pedestrians and bicyclists from vehicular traffic.

5.4.3 Traffic Operations and Safety

The proposed improvements for the S.R. 70 project address the purpose and need by enhancing traffic safety and maintaining crucial connectivity. The project will widen the existing roadway, improving capacity from Lonesome Island Road to the southern leg of C.R. 721. The proposed median will improve traffic safety by separating traffic and allowing room for vehicle movement to reduce vehicle conflicts and the likelihood of accidents. Additionally, median openings at critical intersections will alleviate congestion and minimize delays from large vehicles traversing the corridor, offering a superior alternative to the no-build scenario. The widened roadway will further streamline traffic flow, reducing the potential for vehicle maneuvering conflicts and enhancing overall road safety and efficiency.

5.4.4 Managed Lanes

There are no managed lanes within the study limits.

5.4.5 Access Management

An access management classification of Class 3, Restrictive, was considered for the build alternative (refer to **Table 2-1** in **Section 2**). The proposed improvements include a 40-foot grassed median. The proposed median improves safety and addresses the purpose and need of the project by reducing the number of conflict points and severity of crashes.

5.4.6 Interchanges and Interstate Highways

There are no Interchanges and/or Interstate Highways within the study limits.

5.4.7 Intelligent Transportation Systems

Intelligent Transportation Systems will be evaluated in the design phase.

5.4.8 Lane Repurposing

Lane repurposing was not a consideration for this study.

5.4.9 Landscape

Landscaping will be evaluated in the design phase.

5.4.10 Lighting

Lighting improvements will be evaluated in the design phase.

5.4.11 Wildlife Crossings

A wildlife crossing is a road-related structure that provides wildlife an option to cross under roadways. These crossings have the potential to reduce motor vehicle collisions with wildlife, consequently reducing the likelihood of injuries and mortalities to humans and wildlife as well as reducing the potential for damage to motor vehicles. In following the FDOT *Wildlife Crossing Guidelines*, a wildlife crossing is not warranted for the project because there does not appear to be a documented or science-based need for a crossing, and a crossing was not suggested by USFWS or FWC. There is insufficient documentation of large animals (i.e. panther and bear) that would benefit from the crossing, and the project is located outside of major habitat zones (i.e. Florida panther Focus Area) of these species. Additionally, conservation lands are not present on both sides of the corridor to make a crossing effective. However, the data does suggest that a benefit could be realized from the consideration of a wildlife feature. A wildlife feature may include, but is not limited to new or modified structures, such as bridges, bridges with shelves, specially designed culverts, enlarged culverts or drainage culverts and/or exclusionary devices such as fencing, walls or other barriers, or some combination of these features. Wildlife features were evaluated for the build alternative. Since the build alternatives include two bridge crossings over water features, these were considered for enhancing the bridge embankments to support wildlife movement under the roadway. See **Section 7.1.12** for details on wildlife features associated with the Preferred Alternative. Wildlife crossings are proposed under the bridges for the Harney Pond Canal and the Indian Prairie Canal.

5.4.12 Permits

Permits are anticipated for the Build Alternatives and will be applied for during the design or construction phase as appropriate (refer to **Section 7.1.13**).

5.4.13 Stormwater Management

The *PSR* (December 2025) identified SMF and FPC site alternatives. Proposed drainage improvements will include construction of SMF and FPC sites. Stormwater runoff will be collected and conveyed to proposed SMF sites via a series of roadside swales for water quality treatment and water quantity attenuation. The report has determined the preferred stormwater pond sites are SMF 1, SMF 2A, SMF 3A, SMF 4, SMF 5, SMF 6, and LIN 7L & LIN 7R and the preferred floodplain pond sites are FPC 1B, FPC 2-3B, FPC 4A, FPC 5A, FPC 6B, and FPC 7B. These alternatives were then compared based on relocations and community impacts; environmental impacts including wetlands, upland habitat, and protected species involvement; petroleum and hazardous materials contamination; and economic factors including right of way costs. Maps showing the alternative SMF and FPC sites are provided in the *PSR*.

5.4.14 Sea Level Impact Protection (SLIP) Studies

Sea level impact studies assess how rising oceans affect human populations and natural environments, detailing increased coastal flooding, land loss, erosion, and threats to infrastructure and ecosystems. Studies predict that by 2050, areas will experience significantly more frequent and intense flooding, while long-term impacts could lead to permanent inundation of land and displacement of communities. Highlands County is not considered a high risk county.

5.4.15 Water Quality

Section 7.1.14 discusses water quality as it pertains to impacts in the development of the Build Alternatives.

5.4.16 Hydrology and Floodplains

Section 7.1.15 discusses hydrology and floodplains as it pertains to impacts in the development of the Build Alternatives.

5.4.17 Utilities and Railroad

The Build Alternatives avoid impacts to FGT by shifting the existing horizontal alignment to the south. Two major utility providers, FGT and FP&L, represent significant cost factors in the evaluation of alternatives due to high relocation expenses since the UAOs are in private easements. Relocating the FGT 30-inch natural gas line is estimated at approximately \$15,000,000 per mile, while FPL overhead electric line relocations range from \$500,000 per mile for distribution lines to \$5,280,000 per mile for transmission lines. FP&L also owns property on the south side of S.R. 70 west of the Harney Pond Canal C-41 that is being developed as a Solar Farm. Efforts have been made in the development of the proposed typical section and alignment shifts to avoid linear impacts to the FGT line, and avoid/minimize potential impacts to the FP&L transmission poles and Solar Farm. The UAP (December 2025) details the utilities, potential impacts and estimated relocation costs. There are no railroads within the study limits.

5.4.18 Survey and Mapping

The Build Alternatives will require the acquisition of additional ROW including a combination of partial and full property acquisition. However, no business relocation and/or residential relocations are anticipated. Survey and ROW maps will be completed in the design phase.

5.4.19 Geotechnical Investigation

Section 2.2.21 discusses soils and geotechnical data.

5.4.20 Structures and Bridges

The S. R. 70 bridges over Harney Pond Canal (C-41) and Indian Prairie Canal (C-40) will be replaced. The bridges include a 12-foot wide shared use path on the south side. The build typical sections for both bridges are shown on Figure 5-9 and Figure 5-10.

Additional bridge analysis including the span arrangement analysis will be evaluated further in the design phase. It is anticipated that both bridges will be extended in length to provide a wildlife shelf between the existing canals and the bridge ends to facilitate wildlife crossings at these locations. Additional coordination will continue in the design phase.

5.4.21 Perimeter Walls

There are no existing or planned perimeter walls for the build alternatives.

5.4.22 Transportation Management Plan

A Transportation Management Plan is discussed in Section 7.17.

Figure 5-9 | Build Alternative Bridge Typical Section – S.R. 70 over Harney Pond Canal C-41

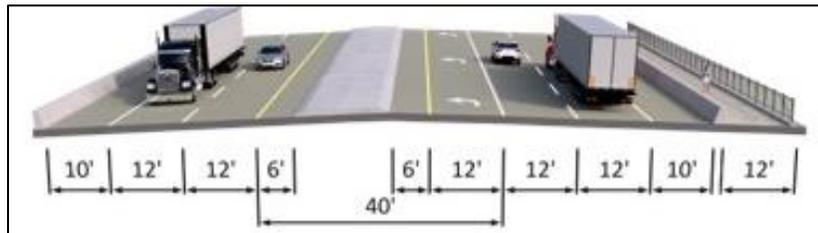
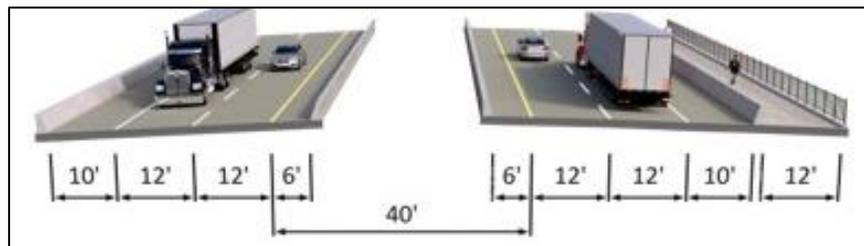


Figure 5-10 | Build Alternative Bridge Typical Section – S. R. 70 over Indian Prairie Canal C-40



5.4.23 Constructability

Constructability is discussed in **Section 7.18**.

5.4.24 Construction Impacts

S.R. 70 provides access to businesses, residential properties, and local side streets. Construction of the build alternatives is not expected to have any significant impact to property access or safety considerations. Construction is not anticipated to adversely impact listed species with adherence to project commitments, construction precautions, and conservation measures. Also, construction is not expected to have any significant impact to water quality, noise, or air quality. The project will adhere to the FDOT Standard Specifications for Road and Bridge Construction along with implementation of a Stormwater Runoff Control Concept and Best Management Practices to minimize or eliminate potential construction impacts.

5.5 Comparative Alternatives Evaluation

The no-build alternative and the two build alternatives involving the two intersection alignment alternatives for the C.R. 721 intersection were presented to the public at the June 2024 Alternatives Workshop. The evaluation matrix was determined based on environmental effects, ROW needs, project costs, and engineering factors. The evaluation matrix is provided in **Table 5-3**. The matrix quantifies considerations such as potential business and residential relocations, impacts to environmental resources, and the amount of right-of-way needed for roadway improvements and stormwater management facilities. The matrix also quantifies potential impacts to archaeological/historical sites, noise sensitive sites, and threatened and endangered species.

The top portion of the evaluation matrix identifies estimates of project costs for wetland mitigation, right-of-way acquisition, construction, design, and construction engineering and inspection. These estimates were based on the year 2024-unit costs. Construction costs were estimated using the FDOT's Long Range Estimate (LRE) provided in **Appendix B**.

A Value Engineering was not performed for this project and if necessary, will be undertaken in the design phase.

Table 5-3 | Alternative Evaluation Matrix from Alternatives Workshop

Criteria	No-Build Alternative	Alternative 1	Alternative 2
Project Cost			
Design Phase (0.1 million)	\$0.0	\$9.5	\$9.4
ROW Acquisition (0.1 million)	\$0.0	\$5.5	\$2.4
Construction (Roadway and Bridge) (0.1 million)	\$0.0	\$105.5	\$104.2
Construction Engineering & Inspection (0.1 million)	\$0.0	\$15.2	\$14.8
Wetland, Habitat and Species Costs	\$0.0	TBD	TBD
Cultural Resources Costs	\$0.0	TBD	TBD
Utility Relocation Cost	\$0.0	TBD	TBD
Operations and Maintenance Cost	\$0.0	N/A	N/A
Purpose and Need			
Ability to Meet Purpose and Need	Does not meet purpose and need	Both alternatives meet the purpose and need	Both alternatives meet the purpose and need
Social and Economic Environment			
Number of Parcels (Business/Residential)	0	12 parcels	15 parcels
Number of Relocations	0	2 businesses	None
Churches, Synagogues, Mosques, Worship Centers	0	1 site	None
Cemeteries	0	None	None
Schools	0	None	None
Hospitals, Medical Centers	0	None	None
Farmland	0	None	None
Cultural Environment			
Section 4(f) Resources	None	None	None
Historic Sites and Districts	None	None	None
Archaeological Sites	None	2 sites	2 sites
Parks, Recreational Areas, Wildlife/Waterfowl Refuges, and Protected Lands	None	None	None
Natural Environment			
Wetlands and Other Surface Waters	No impact	Impacts approximately 7.8 acres of wetlands, 63.2 acres of surface waters	Impacts approximately 7.9 acres of wetlands, 61.7 acres of surface waters
Protected Species and Habitat	No impact	High impact	High impact
Floodplains	No impact	Impacts approximately 276 acres	Impacts approximately 276 acres
Water Resources	No impact	Impacts approximately 64 acres	Impacts approximately 64 acres
Physical Environment			
Contamination/Hazardous Waste Sites	No impact	None	None
Noise Receptors	No impact	None	None
Navigation	No impact	None	None
Air Quality	No impact	Similar impacts	Similar impacts
Utilities	No impact	Similar impacts	Similar impacts
Bicycles and Pedestrians	No impact	Similar improvements	Similar improvements
Traffic Operations and Safety			
Level of Service (LOS)	No improvement	Improved	Improved
Throughput	No improvement	Increased	Increased
Delay	No improvement	Reduced	Reduced
Travel Time	No improvement	Reduced	Reduced
Safety	No improvement	Enhanced	Enhanced
Vehicle Hours Traveled (VHT)/Vehicle Miles Traveled (VMT)	No improvement	Reduced	Reduced
Travel Time Reliability	No improvement	Improved	Improved

Following the Alternatives Workshop, Build Alternative 2 was selected to be further evaluated as it results in avoiding impacts to the Brighton Baptist Church by realigning the S.R. 70 intersection with C.R. 721. Further refinements were made to the typical section and alignment as noted in **Section 5.4** as well as an assessment of environmental impacts as documented in the various technical reports listed in **Section 1.7**. **Table 5-4** provides an evaluation matrix comparing the no-build alternative with the refinements of Alternative 2 that was considered to the preferred build alternative at the public hearing.

Table 5-4 | Evaluation Matrix from Public Hearing

Evaluation Criteria		Preferred (Build) Alternative	No-Build Alternative
Benefits	Improves Traffic Safety Conditions		
	Improves Emergency Evacuation and Incident Response Times		
	Maintains Important East-West Connection		
	Accommodates Increasing Freight Activity		
Right of Way Impacts	Right of Way to be Acquired for Roadway (acres)	183.2	0
	Right of Way to be Acquired for Off-Site Stormwater Management (acres)	148.5	0
	Number of Property Owner Parcels Impacted	7	0
	Number of Utilities Impacted	6	0
	Number of Potential Business Relocations	0	0
	Number of Potential Residential Relocations	0	0
Environmental Effects	Potential Impacts to Threatened and Endangered Species	Medium	No Change
	Direct Impacts to Wetlands and Other Surface Waters (acres)	85.7	No Change
	Section 4(f) / Public Recreation and Conservation Lands Potentially Impacted (acres)	0	No Change
	Number of Historic Sites Impacted	0	No Change
	Number of Archaeological Sites Impacted	0	No Change
	Number of Noise-sensitive Sites Impacted	0	No Change
	Potential Contamination Sites (high/medium risk)	0 High; 32 Medium	No Change
	Impacts to Farmland (acres)	225.7	No Change
	Impacts to Floodplain (acres)	164.0	No Change
Estimated Costs	Design	\$10,300,000	\$0
	Right of Way Acquisition	\$6,000,000	\$0
	Roadway, Bridge and Off-Site Stormwater Management Construction	\$102,500,000	\$0
	Construction Engineering and Inspection	\$10,300,000	\$0
	Utility Relocation	\$11,926,000	\$0
	Wetlands Mitigation	\$1,000,000	\$0
	Species Mitigation	\$168,000	\$0
	Total Project Costs	\$142,194,000	\$0

5.6 Selection of the Preferred Alternative

The Build Alternatives address existing roadway deficiencies and improves safety for vehicles, bicyclists and pedestrians. It provides two additional travel lanes and accommodates the design year traffic volumes at an acceptable LOS. The proposed typical section consists of a four-lane divided roadway with a shared use path paralleling the eastbound lanes which will improve safety and mobility by accommodating pedestrian and bicycle traffic.

The Build Alternative, and at the east end of the project, specifically Alternative 2 which realigns the C.R. 721 intersection to the south, avoids impacts to conservation lands, FGT and FPL transmission lines by shifting the existing horizontal alignment to the south. Thus, the Build Alternative (Intersection Alternative 2 as presented at the Alternatives Workshop) was selected as the Preferred Alternative to meet the purpose and need of this study.

Section 6 Agency Coordination & Public Involvement

A *Public Involvement Plan* (PIP) (October 2023) was developed for the project in accordance with FDOT's PD&E Manual, and Florida Statutes Sections 120.525 and 399.155 and is included in the project file. The program identified federal, state, regional and local agencies with project involvement due to jurisdictional review or expressed interest.

6.1 Agency Coordination

Agency coordination for this project has occurred through the ETDM process (ETDM No.: 14490) and Environmental Screening Tool (EST). Numerous local, regional, state, and federal agencies identified as having an interest in this project through jurisdictional review or expressed interest. These agencies were identified and contacted through the Advance Notification (AN) process at the outset of the project in accordance with PD&E Manual. The AN Package was distributed by the Florida State Clearinghouse on January 10, 2023, for the project. Coordination with agencies is summarized below:

6.2 Public Involvement

Various public involvement activities were conducted during the study:

A **Project Website** <https://www.swflroads.com/project/449851-1> was developed and maintained throughout the study period. This website contained information about the study and served as a clearinghouse of information for the public pertaining to the project details. The website also included an opportunity section where the public may submit a comment or request a meeting.

A **Project Kickoff Newsletter** - This newsletter described the PD&E study process, discussed the project purpose, and provided a project schedule with the next steps in the study. The newsletter also included contact information and instructions for those needing special assistance or language support.

An **Alternatives Workshop Newsletter** - This newsletter was sent to inform the public and stakeholders of the Alternatives Workshop and to encourage participation and receive public comments. Contact information and instructions for those needing special assistance or language support were also provided within the newsletter.

6.3 Alternatives Workshop

An Alternatives Workshop was held on June 13, 2024, at the Town of Lake Placid Government Center. There were 13 attendees at this workshop. There were 4 public officials in attendance, from the Town of Lake Placid, the Highland County Board of County Commissioners, and a representative for Senator Grall. Vice Mayor Debra Worley, from the Town of Lake Placid attended the workshop. There was one representative from the Lykes Brothers, one from Archibold, and one from Lost Lake Groves Inc. There were two written comments received during the workshop period. The overall response to this project was positive; people expressed their desire for construction to begin as soon as possible to alleviate safety issues along the corridor.

6.4 Public Hearing

An In Person public hearing is scheduled for Tuesday, February 17, 2026 and a Virtual Hearing is scheduled for Thursday, February 19, 2026. This section will be updated following the public hearing.

Section 7 Preferred Alternative

This section describes additional engineering details of the operational improvements proposed for the preferred alternative.

7.1 Engineering Details of the Preferred Alternative

7.1.1 Typical Sections

The Preferred Build typical sections were previously discussed in **Section 5.2**. Along S.R. 70 the Build typical section is a 4-lane rural section with 12-ft wide travel lanes, 10-foot (5-foot paved) outside shoulders, an 8-foot (4-foot paved) inside shoulder, a 40-foot grassed median and a 12-ft wide shared use path. The proposed design speed for the typical section is 65 mph with a target speed of 65 mph. A *Typical Section Package*, which is under review by FDOT is included as **Appendix C**.

7.1.2 Access Management

Table 7-1 | Access Management Changes

Segment	Access point	Named Rd/Priv Ent	Side	MP	~BL Station	ft from last	Access Recommendation
West Segment	D and B Rd	Named Rd	North	20.80126	43400		Full
	Southwind Rd	Named Rd	South	21.038	44650	1250	WB Dir
	Dosia Smith Rd	Named Rd	South	21.269	45900	1250	EB Dir
	Lonesome Island	Named Rd	North	21.551	47400	1500	FULL/w/JCD
	JC Durrance Rd	Named Rd	South	21.65	47900	500	FULL/w/LIR
At C-41 Bridge	Private/SFWMD CM?	Priv Ent	North	22.31	51400	3500	RI/RO
	Private/SFWMD CM?	Priv Ent	South	22.31	51400	3500	RI/RO
	Canal C-41 bridge			22.33	51500		
	Greenbrier Ln West	Named Rd	North	22.37	51600	200	RI/RO
Center Segment	Private	Priv Ent	North	22.39	51700	100	RI/RO
	Station Equation Back				51825		
	Station Equation Ahead				28300		
	Private SFWMD CM	Priv Ent	South	22.61	29500	1200	RI/RO
	Private SFWMD CM	Priv Ent	South	22.64	29650	150	RI/RO
	Greenbrier Ln East	Named Rd	North	23.25	32850	3200	FULL
	Private SFWMD CM	Priv Ent	South	23.91	36350	3500	RI/RO
	Private SFWMD CM	Priv Ent	South	23.93	36450	100	RI/RO
At C-40 Bridge	DC Bar Ranch Rd	Named Rd	South	24.279	38150	1700	FULL
	Private	Priv Ent	North	25.29	43500	5350	RI/RO
	Private SFWMD CM	Priv Ent	South	25.49	44525	1025	RI/RO
	Canal C-40 bridge			25.515	44700		
	Private SFWMD CM	Priv Ent	North	25.58	44850	325	RI/RO
East Segment	Private SFWMD CM	Priv Ent	South	25.58	44850	325	RI/RO
	Private	Priv Ent Lykes Ranch	North	26.37	49050	4200	FULL
	Private	Priv Ent	South	26.37	49050	4200	FULL
	DC Bar Ranch Rd?	Priv Ent Lykes?	South	26.852	51750	250	FULL
	WB DIR U			27.11	53100	1350	WB DIR
	Private	Priv Ent	North	27.35	54400	2650	RI/RO
	Private	Priv Ent	South	27.37	54500	100	RI/RO
	EB DIR U			27.85	57000	2500	EB DIR
	WB DIR U			28.09	58300	1300	WB DIR
	Private	Priv Ent	North	28.32	59500	5000	RI/RO
	Private - EB DIR	Priv Ent	North	28.57	60800	1300	EB DIR
CR 7215 Intersection	WB DIR U			28.60	61000	200	WB DIR
	Private	Priv Ent	North	29.07	63450	2650	Depends on Int Alt
	Private Church	Priv Ent	South	29.12	63700	250	Depends on Int Alt
	Private	Priv Ent	South	29.15	63900	200	Depends on Int Alt
	CR 7215/Private	Named Rd	South/North	29.216	64250	350	Intersection Alt
Private	Priv Ent	North	29.37	65050	800	Depends on Int Alt	

Access class 3
 2640 Full Openings
 1320 Directional Openings
 660 Connection Driveway

Changes in access management are proposed to reduce conflict points and the number and severity of crashes, refer to **Table 7-1**. The access management for the Preferred Alternative is also shown on the Concept Plans in **Appendix A**.

7.1.3 Right-of-Way

Additional right of way will be required for the Preferred Alternative for roadway widening (183.2 acres) and for off-site SMF and FPC sites (148.5 acres). The total additional ROW is approximately 331.7 acres and involves 7 parcels. The SMF and FPC sites are situated on parcels that are also included in the parcel count for roadway widening. In addition, approximately 20.7 acres of easements are needed from SFWMD for roadway widening along canals C-41, C-40 and C- 39A. The ROW acquisition for roadway widening and preferred SMF/FPC sites is anticipated to require zero (0) business relocation and residential relocations. All locations of proposed ROW are shown in a red line on the Concept Plans in **Appendix A**.

7.1.4 Horizontal and Vertical Geometry

A proposed profile grade for the vertical alignment will be determined during the future design phase when full survey data is available. Existing vertical curves design standards for a 65-mph design speed will be determined during the design phase when survey data is available. Should the existing vertical alignment not meet design standards, options to remedy would be considered during the future design phase including:

1. Adjust the vertical alignment and reconstruct the pavement in the deficient areas.
2. Request design exceptions or variations.

7.1.5 Design Variations and Design Exceptions

One design variation is required for border width (DVB) from Sta. 2071+96.73 (MP – 21.269) to Sta. 2120+15.06 (MP – 22.182). The DVB avoids impacts to the FPL Solar Farm and solar panels (**Refer to Appendix D**).

7.1.6 Multimodal Accommodations

The proposed typical section includes a 12-ft wide shared use path along the south side of the roadway, throughout the project limits to accommodate bicycles and pedestrians. These are described in detail in **Section 5.4** and shown on the conceptual design plans in **Appendix A**.

7.1.7 Intersection/Interchange Concepts and Signal Analysis

The proposed intersection lanes at the S.R. 70 intersection with C.R. 721 is shown on the Concept Plans in **Appendix A**.

7.1.8 Tolled Projects

There are no tolled projects within the study limits.

7.1.9 Intelligent Transportation System and TSM&O Strategies

ITS and TSM&O Strategies will be evaluated in the design phase.

7.1.10 Landscape

Landscaping will be evaluated in the design phase.

7.1.11 Lighting

Lighting will be evaluated in the design phase.

7.1.12 Wildlife Crossings

During the September 2025 coordination with USFWS, a request was made for additional details associated with the project's proposed wildlife crossings. The August 2025 NRE included a commitment to design and construct wildlife shelves at the bridge crossings over the SFWMD canals (Canal C-40 and C-41). These canal locations also include access points for SFWMD to enter their property along canal banks to conduct maintenance activities for each SFWMD canal. FDOT will coordinate with SFWMD during the Design Phase to evaluate each canal crossing to determine locations and lengths of funnel fencing, with herpetofauna fencing, to be installed without precluding SFWMD canal access and the ability of SFWMD to conduct maintenance activities for their canals. Additionally, to promote usage of wildlife crossings, a commitment has been added. FDOT will install landscaping utilizing native vegetation within the FDOT ROW and the limits of funnel fencing. Therefore, FDOT has added the following two commitments to promote wildlife utilization of the project's proposed wildlife crossings and to reduce vehicle strikes and road mortality of listed and protected species crossing this area of S.R. 70.

- FDOT will coordinate with SFWMD during the Design Phase to evaluate each canal crossing to determine locations and lengths of herpetofauna funnel fencing to be installed without precluding SFWMD canal access and maintenance of canals.
- FDOT will install landscaping utilizing native vegetation within the FDOT right-of-way and limits of funnel fencing. Wildlife crossings are proposed under the bridges for the Harney Pond Canal and the Indian Prairie Canal by constructing a shelf for wildlife to traverse under S.R. 70.

7.1.13 Permits

The permits listed in Table 7-2 are anticipated for this project and will be applied for during the design or construction phase as appropriate:

Table 7-2 | Anticipated Permits

Coordinating Agency	Permit
Florida Department of Environmental Protection (FDEP)	NPDES Permit
US Army Corps of Engineers (USACE)	404 Permit
USACE	408 Authorization
FWC	Gopher Tortoise Permit (as necessary)
SFWMD	Individual ERP Permit
SFWMD	ROW Occupancy Permit

7.1.14 Drainage and Stormwater Management Facilities

Stormwater runoff from S.R. 70 will be collected and conveyed to stormwater management facilities through roadside swales. These stormwater management facilities will provide water quality (treatment)

and water quantity (attenuation). The design of the drainage and stormwater facilities will comply with the standards set forth by the FDOT Drainage Manual, FDOT Drainage Design Guide, and the SFWMD ERP Applicant's Handbook II. For more information regarding the proposed drainage design, refer to the PSR (December 2025).

7.1.15 Floodplain Analysis

The widening of the S.R. 70 roadway will result in an insignificant change in the capacity to carry floodwater. This change will cause no increases in flood heights and flood limits through the proposed cross drains and floodplain compensation areas. These minimal increases will not result in any significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There will be no significant change in potential interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

7.1.16 Bridge and Structure Analysis

Bridge typical sections included in section 5.4.20 including proposed typical sections for the bridges over the Harney Pond Canal (C-41) and Indian Prairie Cana (C-40). These structures will be evaluated further in the design phase.

7.1.17 Transportation Management Plan

Along this corridor, S.R. 70 provides access to businesses, residential properties, and local side streets. Due to its importance, the existing travel lanes should be maintained to the maximum extent possible during construction. Lane closures, if necessary, would occur during night or other off-peak hours.

7.1.18 Constructability

Phase 1

- Relocate existing utilities within the existing or proposed ROW.
- Construct SMF and FPC sites.
- Construct temporary pavement as necessary to maintain existing traffic.

Phase 2

- Construct the westbound or eastbound lanes (travel lanes, shoulder, drainage, and shared use paths) that are on new alignment while maintaining existing two-way traffic on a combination of the existing pavement and newly constructed or temporary pavement.
- Maintain the current signals or install temporary ones while transitioning traffic. Where the existing signals include pedestrian crossings, retain them with either the existing or temporary signal heads. Construct new traffic signal equipment as the work areas allow.
- In alignment transition areas, widen the existing roadway while maintaining existing traffic on a combination of existing pavement and newly constructed or temporary pavement.

Phase 3

- Shift traffic to the newly completed sections of pavement.
- Construct the remainder of pavement in transition areas, and at intersections including final friction course.
- Remove temporary pavement, and construct medians and turn lanes where applicable.

Phase 4

- Complete the final roadway signing and pavement markings and shift traffic to the final permanent lane configurations. Open all new pedestrian features throughout the project limits.

During all phases of the project:

- Maintain pedestrian and bicycle access during all phases of construction.
- Maintain access to adjacent properties throughout the phasing of construction.

Constructability will be evaluated in greater detail in the design phase.

7.1.19 Construction Impacts

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*. An NPDES permit will be acquired along with development of the required Stormwater Runoff Control Concept during the design phase.

Entrances to all businesses and residential properties will be maintained to the extent practicable during project construction. A Maintenance of Traffic (MOT) plan will be developed for the implementation of the Preferred Alternative.

Construction activities for the proposed project will have temporary noise, water quality, traffic flow, and visual effects for the travelers within the immediate vicinity of the project. These effects will be minimized through application of the FDOT *Standard Specifications for Road and Bridge Construction*.

The Preferred Alternative for this project is anticipated to have no substantial impact to residents, business owners and road users during construction.

7.1.20 Special Features

No other provisions or commitments have been made yet regarding special aesthetic features.

7.1.21 Utilities

Existing utilities are described in **Section 2.2.20**. A UAP was prepared documenting utility coordination to date and is in the project files. Depending on the horizontal and vertical location and depth of the utilities, construction of the proposed project will likely require adjustments or relocation of some facilities. The cost for utility adjustments as noted in the UAP is estimated at \$11,926,000, however includes some contingencies and is not included in the total estimated project costs presented in **Section 7.1.22**, since some may be incurred by the utility owners. Determination of any utility relocation reimbursement costs will be made during the future design phase. Coordination with utility owners will be ongoing throughout the study process.

7.1.22 Project Costs

Preliminary cost estimates for the Preferred Alternative are included in **Table 7-3**. Estimated construction costs are based on FDOT’s Long Range Estimates (LRE) cost estimating system, and include temporary traffic control, mobilization, project unknowns and an initial contingency. The LRE estimate is included in **Appendix B**. All costs are preliminary and will be refined as the design phase progresses.

Table 7-3 | Estimated Costs for the Preferred Alternative

Component	Estimated Cost (rounded to \$0.1 millions) ³
Design (10% of construction)	\$10.3
Right of Way for Roadway Widening	\$3.0
Right of Way for Stormwater Ponds & Floodplain Compensation Sites	\$3.0
Wetlands Mitigation	\$1.0
Species Mitigation	\$0.2 ²
Construction Engineering & Inspection (10% of construction)	\$10.3
Construction of Roadway and Drainage ¹	\$102.5
Total Project Estimated Costs	\$130.30

¹Construction cost based on LRE system prepared April 15, 2025 and excludes utility relocation costs.

² rounded up to \$0.2, actual figure is \$168,000

³ Does not include utility relocation costs

7.2 Summary of Environmental Impacts

Environmental impacts for the Preferred Alternative are discussed below and detailed further in the Type 2 Categorical Exclusion and various environmental documents listed in **Section 1.7**.

7.2.1 Future Land Use

The preferred Alternative is consistent with the land use vision for the project area, which appears to be becoming more agriculturally intense while the corridor supporting more regional travel and freight. As such, some changes to proximate land uses are anticipated as a result of the project. There are no business or residential relocations required with the Preferred Alternative.

7.2.2 Section 4(f) and Section 6(f)

The ETDM Programming Screen identified potentially protected Section 4(f) resources within the 500-foot project buffer to include the Indian Prairie Canal Public Boat Ramp at State Road 70 [also identified as a park], one Florida Forever Board of Trustees Project [Fisheating Creek Ecosystem], one Florida National Wildlife Refuge [Everglades Headwaters National Wildlife Refuge and Conservation Area], three Florida Managed Areas, two Office of Greenways and Trails multi-use trail opportunities [Indian Prairie Canal Corridor and Manatee to Highlands Corridor], and several possible NRHP-eligible resources [both recorded and unrecorded] to be re-evaluated/evaluated by the State Historic Preservation Officer (SHPO). None of these potential resources are involved with the project, so there are no properties in the project area that are protected pursuant to Section 4(f) of the US Department of Transportation Act of 1966.

There are no properties within the project areas that are protected pursuant to Section 6(f) of the Land and Water Conservation Fund of 1965, nor other recreational or protected lands.

7.2.3 Cultural Resources

As noted in **Section 2.4.4** and documented in the *CRAS* (August 2025) potential resources were identified within the project area of potential effect. No further archaeological work is recommended.

The architectural history background research indicated three historic resources (8HG01125, 8HG01126, and 8GL00476) were previously recorded. These include segments of three linear resources - the Harney Pond Canal (C-41) (8HG01125), the Indian Prairie Canal (C-40) (8HG01126), and the C-39A Canal (8GL00476) - all of which have been found to have insufficient information to make a determination of NRHP eligibility by the SHPO. In addition, unrecorded segments of S.R. 70 (8HG01306), S.R. 70 Canal (North) (8HG01722), and S.R. 70 Canal (South) (8HG01723) were identified within the APE.

Historical/architectural field survey resulted in the identification of 17 historic resources within the APE. Of the 17 historic resources identified within the APE, FDOT determined that 15 are ineligible for listing in the NRHP. FDOT determined that two historic resources within the APE are eligible or appear eligible for listing in the NRHP under Criterion A in the areas of Community Planning and Development and Agriculture. These include segments of the Harney Pond Canal (C-41) (8HG01125) and the Indian Prairie Canal (C-40) (8HG01126/8GL00560). Based on the scope of work at each location, the Preferred Alternative will include the construction of a new bridge carrying a divided four-lane highway to the north of the existing bridges (Bridge No's. 090920 and 090009). Although this will result in a new bridge footprint and alteration to the earthen bank along the linear resources, these alterations are in keeping with the existing conditions within the APE. Therefore, FDOT recommended that the proposed undertaking will have no adverse effect on the Harney Pond Canal (C-41) (8HG01125) or the Indian Prairie Canal (C-40) (8HG01126/8GL00560). No further architectural history work is recommended for the proposed corridor work. The SHPO concurrence letter, dated October 6, 2025, is in the project file.

7.2.4 Wetlands

The *NRE* (August 2025) documented all potential involvement of species and wetlands within the project area. A total of 13.51 acres of herbaceous wetland impacts (10.21 acres direct impact and 3.30 acres secondary impact) and 72.20 acres of other surface water impacts are anticipated as a result of the project, with an anticipated loss of 7.06 functional units (6.73 functional units for direct impacts, 0.33 functional units for secondary impacts) to wetlands.

Wetland impacts which 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 of Chapter 373, F.S., and 33 U.S.C 1344. Compensatory mitigation for impacts to wetlands will be completed during the design and permitting phase. There is one wetland mitigation bank with a service area covering the project: Lake Istokpoga Mitigation Bank. The project will require 7.06 freshwater herbaceous credits for mitigation. According to the Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS), there are currently no available wetland mitigation credits at Lake Istokpoga Mitigation Bank.

Although Lake Istokpoga Mitigation Bank does not currently have sufficient freshwater herbaceous credits available for sale, the Lake Istokpoga Mitigation Bank has been permitted by the SFWMD (SFWMD Permit #28-107464-P) and USACE (USACE Permit #SAJ-2019-04543) to provide state and federal wetland forested and herbaceous UMAM credits. The mitigation bank is permitted for a total of 14.90 state and 16.55 federal potential herbaceous credits. Therefore, the Lake Istokpoga Mitigation Bank is anticipated to have sufficient

state and federal credits to provide compensatory mitigation for the 7.06 freshwater herbaceous UMAM credits required for the project during the permitting phase.

7.2.5 Protected Species and Habitat

The *NRE* (August 2025) and *NRE Addendum* (October 2025) documented the project corridor is located within the Core Foraging Area of wood stork colonies, Eastern black rail, tricolored bat, everglade snail kite, Audubon's crested caracara, Eastern indigo snake, Florida bonneted bat and Florida panther. The effect determination for the Audubon's crested caracara, Eastern indigo snake, and Florida panther is "may affect, likely to adversely affect". There are several listed species that may be present, or their habitat may be present, but the effect determination of "may affect, not likely to affect" was made for these species including the following Florida bonneted bat, Eastern black rail, wood stork and Everglade snail kite. Federal Listed faunal and floral species: A "no adverse effect anticipated", "no effect anticipated" determination was made for certain Federal and/or State Listed faunal and floral species as listed in Table 4-1 of the *NRE Addendum* for federal-listed species and Table ES-2 in the *NRE* for state-listed species.

7.2.6 Essential Fish Habitat

There is no Essential Fish Habitat in the project area.

7.2.7 Highway Traffic Noise

An evaluation of highway traffic noise was documented in the *Noise Contour Technical Memorandum* (June 2025). There is one noise sensitive site that is not within 500 ft of the proposed roadway but is within the limits of the existing roadway. The Brighton First Baptist Church is located near the existing S.R. 70 and C.R. 721 intersection about 60 feet south of the edge of pavement of S.R. 70. The results of the analysis indicate that the existing (year 2022) exterior traffic noise level is at 64.6 decibels A-weighted [dB(A)] for the single noise receptor. In the future (year 2045) for the No-Build Alternative, the exterior traffic noise level is predicted to be 66.2 dB(A). In the future with the Build Alternative, exterior traffic noise level is predicted to be 53.3 dB(A). For the Build Alternative, the original S.R. 70 will be converted into a cul-de-sac which will not have the same traffic volumes as the main line. Due to the unavailability of projected traffic volumes for this segment of the project, it is assumed that traffic volumes will be low, resulting in reduced noise levels. Considering that the No-build Alternative is only slightly above the 66 dB(A) NAC threshold, it is reasonable to conclude that the receptor will not be impacted. Accordingly, the construction of a noise barrier or other abatement measure is not warranted.

7.2.8 Contamination

The *CSEER* (August 2025) documented the presence of potential contamination sources along the study corridor. As part of the evaluation, sites of potential environmental concern were reviewed and awarded a risk ranking based on the potential for contaminant impacts to be present on each site.

Thirty nine (39) potentially contaminated sites were identified. None of the sites were assigned a 'No' risk, seven (7) were rated as 'Low' risk, thirty two (32) sites were rated as 'Medium' risk, and no site was rated as 'High' risk. Nine (9) of the preferred pond sites were rated as 'Medium' risk (**refer to Table 7-4**).

Table 7-4 | Potential Contamination Site Rankings

Risk Ranking	Number of Sites	Number of Preferred Proposed Pond Sites
No	0	0
Low	7	0
Medium	32	9
High	0	0

For sites rated "No" and "Low" for potential contamination, no further action is required at this time. These sites/facilities have potential to impact the study area but based on variables such as current site operations and distance to the project area, have been determined to have low risk to the corridor at this time. Variables that may change the risk rating include a facility's non-compliance with environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change an additional assessment of the facilities will be conducted.

For the site with a risk rating of "Medium", which consists of an underground petroleum storage tank that is undergoing cleanup activities for historic groundwater contamination due to a gasoline leak, the Project Manager (PM) and District Contamination Impact Coordinator (DCIC) will coordinate to determine if Level-II testing and/or Level-III support will be warranted. This may include determining if the FDEP/FDOT Memorandum of Understanding (MOU) applies to any sites, conducting Level II activities or recommending Level III or remedial activities, notes on the plans, design modifications and/or special provisions prior to or during construction.

Existing bridge structures were not physically evaluated or tested for hazardous materials as part of this contamination screening evaluation. However, as shown in Table 6-2, hazardous materials including asbestos-containing materials and metal-based coatings could exist at Bridge 090920, the S.R. 70 bridge over the Harney Pond Canal and Bridge 090009, the S.R. 70 bridge over the Indian Prairie Canal, given the age of the original infrastructure. The current scope of work proposes the removal of Bridges 090920 and 090009. A pre-construction hazardous material survey will be performed at these locations during final design.

