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SEA ISLAND ROAD CORRIDOR STUDY

Glynn County, GA

REPORT

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1.0 INTRODUCTION

1.1 Project Background

The intent of this corridor study was to develop a detailed, and accurate analysis of Sea Island Road from Demere Road to Frederica Road on St. Simon's Island, Georgia.

The objective of this study was to present a preferred construction alternative that can be used as a basis for future planning activities by Glynn County. This preferred alternative may impact the currently-under-design Georgia Department of Transportation (GDOT) project replacing the Sea Island Road bridge at Dunbar Creek.

The preferred alternative of this work will also help inform other planning and design activities occurring at either end of the study area.

1.2 Relationship to other Studies and Projects

The Sea Island Road corridor was considered in relation to other projects and plans produced by Glynn County and the Georgia Department of Transportation. The type of plan or project, and the effect on this corridor study are described here.

1.2.1 GDOT Project PI 0014914 - CR 583/Sea Island Road over Dunbar Creek

This Georgia Department of Transportation project will replace the existing two-lane bridge over Dunbar Creek located between Hawkins Island Road and Salt Marsh Drive. The current concept for this project is to replace the current structure with a similar two-lane structure with provisions for a multi-use path. As of the publication date of this document the project is in preliminary design.

1.2.2 St. Simons Island Gateway Traffic Study, May 2022

The Gateway Study consists of examining the “triangle” on entry/exit to the island defined by the of FJ Torras Causeway, Kings Way, Sea Island Road, and Demere Road. The County is working through alternatives for the Gateway Study and has not concluded the process as of the publication date of this document.

For purposes of the Sea Island Road Corridor Study, the analysis assumed that some improvement at Sea Island Road at Demere Road will be accomplished by the Gateway project, with operational improvements to the intersection. The study did not examine alternatives at Demere Road.

1.2.3 Sea Island Road at Frederica Road Roundabout

Glynn County is pursuing an intersection improvement at Sea Island Road and Frederica Road under a separate contract. The current configuration of this improvement is a multi-lane roundabout. As of the publication date of this document, the intersection improvement is under design.

For purposes of the Sea Island Road Corridor study, the analysis assumed that a four-lane roadway at approximately Market Street will be joined to the proposed Sea Island Road Corridor Study alternatives.

1.2.4 Brunswick Area Transportation Study St. Simons Island Sector Area Study

To quote from the Brunswick Area Transportation Study (BATS) St. Simons Island Sector Area Study (November 2020), “The St. Simons Island (SSI) Sector Study is included in the 2045 Brunswick Area Transportation Study Metropolitan Transportation Plan (2045 BATS MTP) planning effort to focus on the specific needs and potential solutions for the mobility challenges

facing the SSI area within the larger BATS study area. Transportation infrastructure improvements on St. Simons Island have not kept up with the growing pace of development, requiring that the 2045 BATS MTP provide a more in-depth look at the transportation needs of this area. The SSI Sector Area Study provides a more detailed examination of this subarea, factoring in future growth projections for SSI and identifying context sensitive recommendations that preserve the unique character of SSI, while supporting local decision making that address current and anticipated mobility needs."

The BATS study was referenced during the traffic review of this analysis, and the conclusions from its report that Sea Island Road is one of the roadways needing improvements to increase mobility is one of the founding reasons for the Sea Island Corridor Study.

1.3 Study Methodology

The methodology of this study was to examine the existing area context of Sea Island Road with respect to safety, operations, environmental resources, and multi-modal operations. Combining this information with projected future needs, a series of alternatives for a future Sea Island Road construction project were compared using a set of Measures of Effectiveness (MOEs). These MOEs specified how each alternative ranked with respect to each other.

Public information was be sought during the study process at an initial Public Workshop Meeting on March 8, 2023. The draft report was presented during several BATS meetings at which public comments were accepted for committee review but not recorded. A thirty-day public comment period was held between June 12, 2023 and July 12, 2023.

1.4 Study Area

The study area for this study consists of Sea Island Road between Demere Road and Frederica Road. See Figure 1 for the study area map.

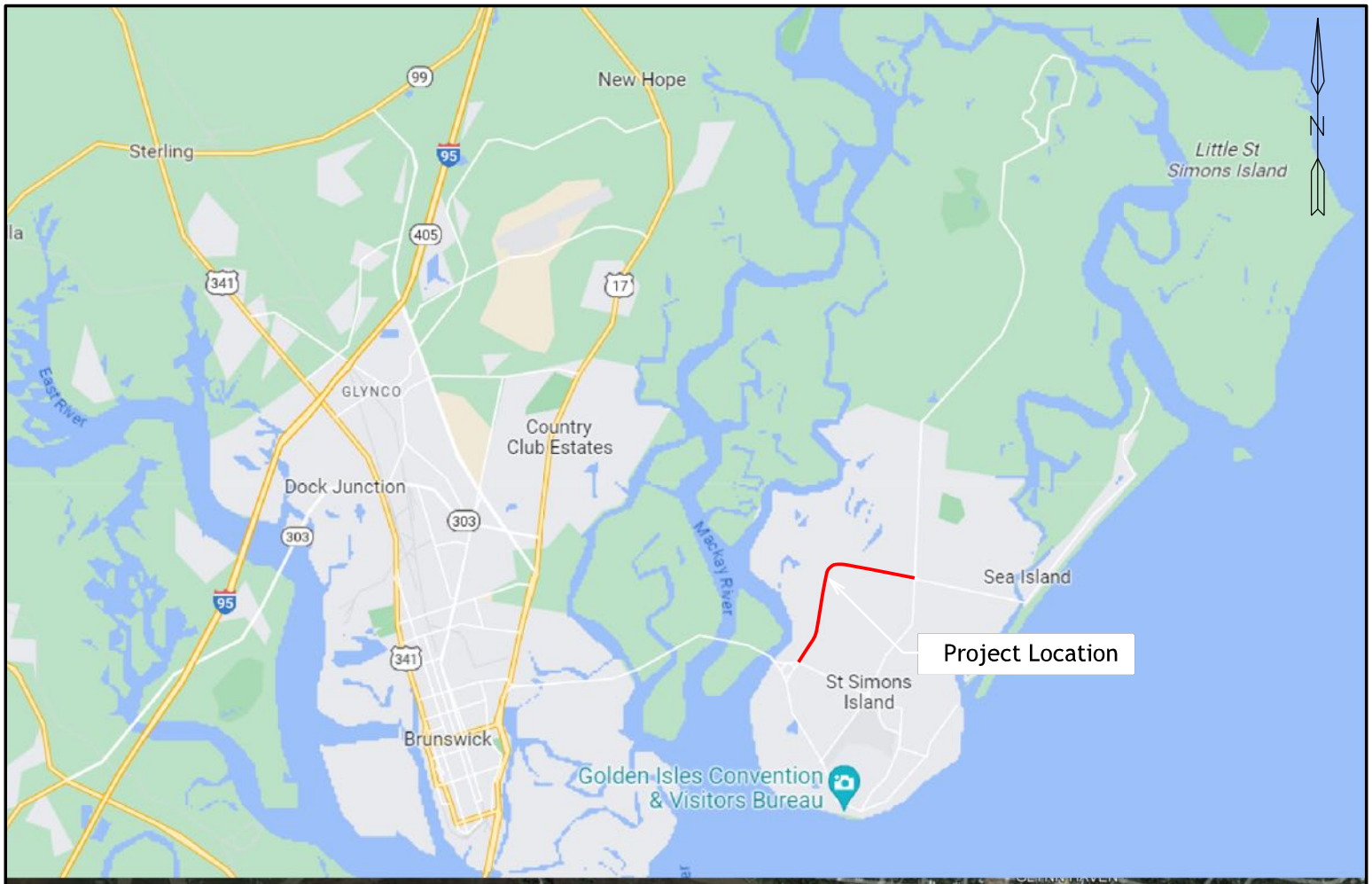


Figure 1	Study Area Map	Sea Island Road Corridor Study	Michael Baker INTERNATIONAL

2.0 DATA COLLECTION

As a part of the study work, a number of different data resources were collected and evaluated. The categories of data and the sources of information are summarized below.

2.1 Traffic Data

Traffic operations analysis is important to the alternatives analysis and plays an important part in the MOE evaluation. Traffic volume and turning movement data was collected from previous work done by Glynn County including the Sea Island/Frederica Road intersection improvement and the GDOT bridge replacement project over Dunbar Creek.

New traffic counts were collected throughout the study area at critical intersections during peak times, and over a 24-hour period at three locations through the corridor.

Data was also drawn from the BATS travel demand model, US Census data, and from the GDOT "TADA" database which records historic daily traffic volumes for use in projecting future traffic growth in the area.

Glynn County provided signal timing and phasing for the three signal-controlled intersections in the study corridor at Demere Road, Market Drive, and Frederica Road.

2.1.1 Roadway Characteristics and Traffic Control

A site visit to collect existing conditions data and observe traffic was conducted on November 15, 2022. The field data sheets showing collected information are contained in the Appendix.

2.1.2 Traffic Volumes

The existing (2022) and future (2025 and 2045) peak hour traffic volumes for the area are shown in the Appendix. These volumes were developed using the existing turning movement counts collected during the AM and PM peak periods of the roadway, grown by a 1.66% growth rate annually to the future year.

The 1.66% growth rate is based on a comparison on the GDOT historical count stations, the BATS travel demand model, and census information provided by the US Census. Details of this analysis are shown in the Appendix.

2.2 Safety Data

Crash data was taken from the Georgia Department of Transportation GEARS website for the most recent five years available at the time of data collection. The dates used were 1/1/2018 through 12/31/2022.

2.3 Demographics and Land Use Data

No new demographic or land use information was gathered as a part of this work. All information was based on existing information contained in the Glynn County Comprehensive Plan.

2.4 Environmental Data

Data was gathered from available public resources as detailed in the Environmental section. A site visit to collect Global Positioning System (GPS) points on wetlands and other aquatic resources, as well as to evaluate other environmentally sensitive areas was conducted on February 7, 2023.

3.0 EXISTING CONDITIONS

This section establishes the existing conditions of the study area for purposes of evaluating the impacts each proposed alternative may have. An existing conditions needs assessment is contained at the end of the section.

3.1 Environmental

An environmental review was conducted to establish the locations of wetlands, streams, marshlands, potentially historic structures, archeological sites, the likely presence of protected species, and other types of environmental resources.

3.1.1 Cultural Resources

The cultural resources evaluated as part of this work include Archaeological and potentially Historic resources, as described in the next sections.

3.1.1.1 Archaeology

Seven (7) previously recorded archaeological sites, one (1) cemetery, the Gullah Geechee Cultural Heritage Corridor, and one (1) Georgia Department of Natural Resources (GDNR) tract are located within 1 kilometer (km) of the survey area.

3.1.1.1.1 ARCHAEOLOGICAL SITES

Site 9GN4 is located approximately 441 meter (m) west of the survey area. 9GN4 was recorded as an Indian village by Preston Holder in 1938 during Works Progress Administration (WPA) era investigations. Holder's investigation was intended to collect ceramics to develop a cultural chronology (HPD 2005). Holder did not indicate the temporal components or extent of the site. He considered the site to extend for a considerable distance along the bluff. The site form does not indicate a National Register of Historic Places (NRHP) eligibility recommendation. Site 9GN204 is located on Hawkins Island approximately 530 m northwest of the survey area. Site 9GN204 was identified in 1980 by the University of Florida as a shell midden site. The site contained few artifacts that included two plain ceramic sherds. The 1980 report recommended further testing at the site.

Site 9GN205 is located approximately 430 m east of the project area and was identified in 1980 as a historic scatter. The scatter was located around the Sea Island Yacht Club and appeared very disturbed from construction activities. Site 9GN205 was recommended ineligible for the NRHP. Site 9GN210 is located approximately 250 m east of the survey area. The site was identified in 1980 as a shell scatter around the Sea Island Stables. The report indicates that it was not apparent if the shell scatters were the remnant of an occupation or had been brought in. No artifacts were present on the surface. Testing indicated that the shell was on present on or near the surface and no artifacts were recovered. Site 9GN210 was recommended ineligible for the NRHP.

Site 9GN247 is located approximately 243 m west of the survey area. Site 9GN247 is a multi-component prehistoric shell midden with possible Spanish and Colonial intrusions. The site was investigated by GDOT in 1980. GDOT placed 2x2 m test units on either side of the highway within the right-of-way (ROW). The site was initially interpreted to be part of Holders 9GN4 but was later assigned a separate site number, 9GN247. Site 9GN247 was recommended eligible for the NRHP.

Site 9GN455 is located approximately 618 m west of the survey area. The site data form indicates this site as an 18th century shipwreck. Additional information for the site says it is included in the database of Chris McCabe (former GDNR – Historic Preservation Division (HPD) underwater

archaeologist), and there are no known associated reports. The database was indicated to be on file at Georgia Archaeological Site File (GASF). No eligibility recommendation was indicated on the site data form.

Site 9GN465 was identified in 2021 by Jayson Zoino as part of the Dunbar Bridge Replacement Project and is within the survey area. Site 9GN465 consists of seven wooden bridge pile remnants located underneath the existing bridge. The pilings are believed to represent the previous bridge that was removed in 1960. No other artifacts or features were encountered. Site 9GN465 was recommended ineligible for inclusion in the NRHP.

3.1.1.1.2 CEMETERY

The Stranger Cemetery is located approximately 228 m east of the survey area. The cemetery is unlikely to be within the viewshed of the project due to it being obscured by vegetation and structures east of the survey area.

3.1.1.1.3 GDNR – SEA ISLAND HAMMOCKS TRACT

This GDNR property is located within the 200 m buffer of the survey area. It is a 1.873-acre plot known as the Sea Island Hammock Tract - Parcel ID 04-12297 in Glynn County.

3.1.1.1.4 GULLAH GEECHEE CULTURAL HERITAGE CORRIDOR

The survey area is within the Gullah Geechee Cultural Heritage Corridor which spans the coastlines of Georgia, South Carolina, North Carolina, and a portion of Florida.

3.1.1.1.5 EPEI POSSIBLE PREVIOUS COVERAGE (2021)

Edward-Pitman Environmental's (EPEI) report of the Phase I Archaeological Survey of CR 583/Sea Island Road at Dunbar Creek Bridge Replacement Project on St. Simons Island, Glynn County Georgia, PI No. 0014914 could possibly be used for previous survey coverage for a portion of a future programmed project.

3.1.1.2 History

There are approximately four (4) resources 50 years or age or older in the estimated Area of Potential Effect (APE). There is a historic residential neighborhood, conference center, school campus, and water treatment plant. Both the conference center and the residential neighborhood were surveyed in 2021 as part of a post-Hurricane Irma survey. There are two (2) historic cemeteries in the surrounding area, but they do not appear to be within the project area. There is a historic bridge, but it was determined not eligible for the NRHP in the Georgia Historic Bridge Survey (GHBS). There are no historic railroads or other linear resources, and there are no NRHP-listed resources within the APE. The project would require a field survey and preparation of a Historic Resource Survey Report to determine eligibility of these resources.

3.1.2 Ecological Resources

Ecological resources in this study include Aquatic, Migratory Birds and Bats, Floodplains, and Federal and State Protected Species, as described below.

3.1.2.1 AQUATIC RESOURCES)

3.1.2.1.1 IDENTIFIED WATERS, DITCHES AND WETLANDS

Open Water 1 – This aquatic resource is a jurisdictional open water located in the southeast quadrant of the Sea Island Road at Demere Road intersection. This resource provides suitable foraging habitat for the federally protected wood stork (Mycteria americana) and is also considered a buffered water of the state.

Wetland 2 – This aquatic resource is a tidally influenced forested wetland located in the southwest quadrant of the Sea Island Road at Demere Road intersection. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 3 – This aquatic resource is a tidally influenced emergent wetland located in the northwest and northeast quadrants of the Sea Island Road at Demere Road intersection. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail (Laterallus jamaicensis jamaicensis). It also provides suitable habitat for the state-protected diamondback terrapin (Malaclemys terrapin) and suitable foraging habitat for the state-protected least tern (Sternula antillarum). This resource is also considered a buffered water of the state.

Non-Jurisdictional Ditch A – This aquatic resource is a non-jurisdictional drainage ditch located along the west side of Sea Island Road, north of Wetland 3 and south of Margaret A Pitts Drive. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 4 – This aquatic resource is a tidally influenced emergent wetland located east and west of Sea Island Road. The majority of the wetland is located north of the Arthur J. Moore Drive intersection, extending north/northeast to the Hawkins Island Drive intersection. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail. It also provides suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the state-protected least tern. This resource is also considered a buffered water of the state.

Wetland 5 – This aquatic resource is a tidally influenced forested wetland located within the eastern portion of Wetland 4. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 6 (Wetland 1 in the Ecology Resource Survey Report (ERSR) for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located along the south side of Sea Island Road and east of the Hawkins Island Drive intersection. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 7 (Wetland 2 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced emergent wetland located north and south of Sea Island Road, east of the Hawkins Island Drive intersection and west of the Dunbar Creek crossing. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail. It also provides suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the state-protected least tern. This resource is also considered a buffered water of the state.

Wetland 8 (Wetland 3 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located north of Sea Island Road and east of the Hawkins Island Drive intersection. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Open Water 9 / Dunbar Creek (Open Water 4 / Dunbar Creek in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced creek / open water located underneath the Dunbar Creek bridge, east of Wetland 8 and west of Wetland 10. This resource provides suitable habitat for the federally protected shortnose sturgeon (Acipenser brevirostrum), Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus), and West Indian manatee (Trichechus manatus). It also services as suitable habitat for the state-protected diamondback terrapin and suitable foraging

habitat for the bald eagle (Haliaeetus leucocephalus). This resource is considered a buffered water of the state.

Wetland 10 (Wetland 5 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced emergent wetland located north and south of Sea Island Road, east of Open Water 9 / Dunbar Creek. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail. It also provides suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the state-protected least tern. This resource is also considered a buffered water of the state.

Wetland 11 (Wetland 6 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located north of Sea Island Road, east of Open Water 9 / Dunbar Creek, and within Wetland 10. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 12 (Wetland 7 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located south of Sea Island Road, east of Open Water 9 / Dunbar Creek and within Wetland 10. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 13 (Wetland 8 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located north of Sea Island Road and east of Wetland 10. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

3.1.2.1.2 STATE-MANDATED BUFFERS

The following aquatic resources are considered buffered waters of the state; therefore, they require a 25-foot vegetated buffer measured from the point of wrested vegetation: Wetland 3, Wetland 4, Wetland 7, Open Water 9 / Dunbar Creek, and Wetland 10.

3.1.2.1.3 ESSENTIAL FISH HABITAT

The following aquatic resources are considered Essential Fish Habitat (EFH) for snapper (Lutjanus spp.) and grouper (Epinephelus spp.): Wetland 3, Wetland 4, and Wetland 7. Open Water 9 / Dunbar Creek is considered EFH for snapper, grouper, and spiny lobster (Palinuridae spp.).

3.1.2.2 Migratory Birds and Bats

The existing Sea Island Road bridge over Dunbar Creek (Structure ID 127-0066-0) provide suitable habitat for migratory birds and bats. During a 4/21/21 ecological resources field survey for GDOT PI No. 0014914, 25 (25) barn swallow (Hirundo rustica) nests and one (1) Carolina wren (Thryothorus ludovicianus) were observed on the bridge structure.

3.1.2.3 Floodplains

There are floodplains located adjacent to Sea Island Road throughout the project study area. The majority of the floodplains are classified as Zone AE with a base flood elevation of 10 feet above Mean Sea Level.

3.1.2.4 Federal and State Protected Species

Table 1 below lists the federal and state protected species that may be present in the area, the current determination of presence or effect.

Table 1: Federal and State Protected Species

Federal and State Protected Species							
Common Name	Scientific Name	Federal Rank	State Rank	Habitat Present	Species Present	Special Provision	Effect Determination
shortnose sturgeon	*Acipenser brevirostrum*	E	E	Yes	Yes[1]	Yes	MANLAA
Atlantic sturgeon	*Acipenser oxyrinchus oxyrinchus*	E	E	Yes	Yes[1]	Yes	MANLAA
red knot	*Calidris canutus rufa*	T	T	No	No	No	NE
loggerhead sea turtle	*Caretta caretta*	E	E	No	No	No	NE
piping plover	*Charadrius melodus*	T	T	No	No	No	NE
Wilson's plover	*Charadrius wilsonia*	-	T	No	No	No	NE
green sea turtle	*Chelonia mydas*	T	T	No	No	No	NE
monarch butterfly	*Danaus plexippus*	C	-	Yes	Not Assessed	No	NE
leatherback sea turtle	*Dermochelys coriacea*	E	E	No	No	No	NE
eastern indigo snake	*Drymarchon couperi*	T	T	No	No	No	NE
hawksbill sea turtle	*Eretmochelys imbricata*	E	E	No	No	No	NE
gopher tortoise	*Gopherus polyphemus*	-	T	No	No	No	NE
American oystercatcher	*Haematopus palliatus*	-	R	No	No	No	NE
bald eagle	*Haliaeetus leucocephalus*	-	T	Yes	Yes[2]	No	NSAE
eastern black rail	*Laterallus jamaicensis jamaicensis*	T	-	Yes	Yes[2]	Yes	MANLAA
Kemp's Ridley sea turtle	*Lepidochelys kempii*	E	E	No	No	No	NE
diamondback terrapin	*Malaclemys terrapin*	-	U	Yes	Yes[3]	Yes	NSAE
wood stork	*Mycteria americana*	T	T	Yes	Yes[2]	Yes	MANLAA
climbing buckthorn	*Sageretia minutiflora*	-	T	Yes	No	No	NSAE
hooded pitcherplant	*Sarracenia minor var. minor*	-	U	No	No	No	NE
least tern	*Sternula antillarum*	-	R	Yes	Yes[4]	Yes	NSAE
West Indian manatee	*Trichechus manatus*	E		Yes	Yes[1]	Yes	MANLAA

Key: Endangered (E); Threatened (T); Candidate (C); Rare (Rare); Unusual (U); May Affect, Not Likely to Adversely Affect (MANLAA); No Effect (NE), & No Significant Adverse Effect (NSAE)
[1] Surveys will not be conducted due to having known occurrences within the project area and the mobility and low detectability of the species.
[2] Species will be assumed on-site due to suitable foraging habitat within the project study area and the mobility of the species.
[3] Surveys will not be conducted due to having known occurrences in the vicinity of the project study area and the low detectability of this species.
[4] Survey will not be conducted due to the absence of nesting habitat and the mobility and low detectability of this species; species presence is assumed based on the presence of suitable foraging habitat.

3.1.3 CHURCHES & INSTITUTIONAL PROPERTIES

3.1.3.1 Frederica Academy

This institution is an independent, coeducational, college preparatory school located on St. Simons Island. It serves students from grades pre-K to 12. The school property is located in the northeast quadrant of the Sea Island Road at Demere Road intersection.

3.1.3.2 Epworth by the Sea – Methodist Center

This property is an institutional property owned by the South Georgia Conference of the United Methodist Church. The facility provides a conference and retreat center for worship, study, and fellowship

3.1.3.3 Saint Simons Christian School

This institution is an independent, non-denominational, private Christian school located on St. Simons Island. The school serves students from grades K-4 through 8th grade. The property is located north of Sea Island Road and adjacent to Coquina Circle, near the eastern terminus of the study corridor.

3.1.4 SECTION 4(f) PROPERTIES

3.1.4.1 Epworth Park

This property is a county owned and operated recreational park that contains a bocce ball court, restroom facilities, picnic tables, tennis courts, pickleball courts, and a fenced dog run. The park is located west of Sea Island Road, south of Lady Huntingdon Street, and adjacent to the Epworth by the Sea property.

3.1.5 HAZARDOUS MATERIALS SITES

A database review was conducted utilizing the Environmental Database Reports (EDR) online tool to determine the presence / absence of hazardous materials sites within the project study area. The review included a 1/8–mile buffer measured from the edge of the project study area. The results of the database review included 27 incidents and / or sites located at 11 sites throughout the project corridor. Impacts to potential hazardous materials sites will be determined once the suite of alternatives is developed and required right-of-way estimates are available.

3.2 Safety

Historic crash data was collected from 1/1/2018 through 12/31/2022 in the study area (5 years of data). The crash query area along Sea Island Road extended 500 feet south of Demere Road to 500 feet east of Frederica Road. Crashes along Frederica Road and Demere Road were included within 150 feet of their respective intersections with Sea Island Road.

Below are summaries of all crashes within the queried area.

Table 2: Manner of Collision by Year

Year	Manner of Collision						Total
	Angle	Head On	Rear End	Sideswipe-Opposite Direction	Sideswipe-Same Direction	Not A Collision with Motor Vehicle	
2018	18	1	45	0	4	11	79
2019	7	0	34	0	3	6	50
2020	7	0	32	1	5	4	49
2021	9	2	26	2	3	4	46
2022	5	0	31	2	4	3	45
Total	**46**	**3**	**167**	**5**	**19**	**28**	**269**

Table 3: Manner of Collision by Month

Month	Manner of Collision						Total
	Angle	Head On	Rear End	Sideswipe-Opposite Direction	Sideswipe-Same Direction	Not A Collision with Motor Vehicle	
Jan	3	0	14	0	3	5	25
Feb	2	1	16	1	3	1	24
Mar	4	1	17	0	2	2	26
Apr	1	0	12	0	2	1	16
May	6	0	16	0	1	0	23
Jun	4	1	17	0	0	0	22
Jul	6	1	19	1	1	6	34
Aug	3	0	11	3	2	3	22
Sep	5	0	14	0	1	1	21
Oct	6	0	10	0	1	3	20
Nov	2	0	7	0	3	5	17
Dec	4	0	14	0	0	1	19
Total	**46**	**4**	**167**	**5**	**19**	**28**	**269**

Table 4: Driver Fault by Road Surface and Lighting Condition

At-Fault Driver Factor	Light and Road Surface Condition								Total
	Daylight		Dark -		Dark - Not		Twilight		
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	
Following too Close	84	10	5	0	2	0	2	1	104
Inattention	37	2	2	0	1	0	0	0	42
Failure to Yield	28	1	2	0	5	0	2	1	39
Improper Turn or Movement	14	1	1	0	1	0	0	0	17
Speeding, Too Fast for Conditions	3	7	0	0	1	1	0	0	12
Driver Lost Control	6	0	2	0	1	1	1	1	12
Under the Influence	2	1	3	1	2	1	1	0	11
Other	6	0	1	0	1	0	1	0	9
Changed Lanes Improperly	7	1	0	0	0	0	0	0	8
No Contributing Factors	3	1	0	0	2	0	0	0	6
Disregard Stop Sign/Signal	4	1	0	0	0	0	0	0	5
Animal	0	0	1	0	2	1	0	0	4
Total	194	25	17	1	18	4	3	1	**269**
Lighting Totals	**219**		**18**		**22**		**10**		

Table 5: Inbound Rear End Crashes

Crash Route and At-Fault Vehicle Direction	Rear End Crashes
DEMERE RD	
East	3
West	8
FREDERICA RD	
North	22
South	10
SEA ISLAND RD	
Inbound (North & East)	87
Outbound (South & West)	29
OTHER CROSS STREET	8
TOTAL	**167**

The majority of crashes along the corridor are caused by an “inbound” vehicle, travelling toward Frederica Road from Demere Road. There does not appear to be a heavy correlation with weather or lighting conditions along the roadway.

The primary cause of vehicle crashes is vehicles following too closely, followed by inattention and a failure to yield. Following too closely can often be related to congestion, or urgent/aggressive driving.

3.2.1 Intersection

Below is a summary of all crashes along the study corridor, broken into categories by intersection location along the corridor. Individual breakdowns of crashes at Demere Road and Frederica Road are also given.

Table 6: Manner of Collision by Intersection

Location	Manner of Collision						Total
	Angle	Head On	Rear End	Sideswipe-Opposite Direction	Sideswipe-Same Direction	Not A Collision with Motor Vehicle	
Demere Rd	12	1	42	0	7	7	69
Epworth Road	1	0	2	0	0	0	3
Hamilton Landing Dr	0	0	2	1	0	1	4
Hamilton Rd	3	0	5	0	1	3	12
Lady Huntingdon Dr	1	0	2	1	0	1	5
Arthur J Moore Dr	0	0	8	0	0	2	10
Hawkins Island Dr	3	0	0	1	2	2	8
Sea Island Bridge	1	0	6	1	0	3	11
Salt Marsh Dr	0	0	3	0	0	0	3
Cinema Ln	3	0	6	0	1	0	10
Harris Teeter West Dwy	0	0	1	0	0	0	1
Market St	5	0	7	0	3	0	15
Stable Street	0	0	2	0	0	0	2
Frederica Rd	9	3	66	0	4	1	83
Non Intersection	8	0	15	1	1	8	33
Total	**46**	**4**	**167**	**5**	**19**	**28**	**269**

Table 7: Crashes at Demere Road

Crash Type	Direction of Travel, At-Fault Vehicle				Grand Total
	North	South	East	West	
Angle	1	0	2	9	12
Head On	0	1	0	0	1
Rear End	21	1	6	14	42
Sideswipe-Same Direction	3	0	1	3	7
Not A Collision with Motor Vehicle	3	1	2	1	7
Total	**28**	**3**	**11**	**27**	**69**

Table 8: Crashes at Frederica Road

Crash Type	Direction of Travel, At-Fault Vehicle				Grand Total
	North	South	East	West	
Angle	6	2	1	0	9
Head On	0	0	1	2	3
Rear End	25	12	21	8	66
Sideswipe-Same Direction	1	0	0	3	4
Not A Collision with Motor Vehicle	0	0	1	0	1
Total	**32**	**14**	**24**	**13**	**83**

Demere Road and Frederica Road experience the most crashes on the corridor, in part due to higher volumes at these intersections. Rear end crashes are the primary crash type at each intersection, which is in kind with crashes long the remainder of the corridor.

3.2.2 KABCO Collision Statistics

KABCO is a rating system for evaluating the injury severity of a recorded crash. The term is an acronym defined by the level of severities as indicated by K (fatal injury), A (severe injury), B (minor apparent injury), C (complaint injury) and O (property damage only).

As shown by the absence of the K rating in the tables below, there have been no recorded fatal crashes since 2018.

Table 9: KABCO Ratings of all Crashes by Manner of Collision

Manner of Collision	Severity				Grand Total
	A	B	C	O	
Angle	3	9	5	29	46
Head On	0	0	0	4	4
Rear End	0	7	22	138	167
Sideswipe-Opposite Direction	0	1	1	3	5
Sideswipe-Same Direction	0	0	1	18	19
Not A Collision with Motor Vehicle	1	4	2	21	28
Grand Total	**4**	**21**	**31**	**213**	**269**

Table 10: KABCO Ratings of all Crashes by Year

Year	Severity				Grand Total
	A	B	C	O	
2018	3	6	7	63	79
2019	0	6	7	37	50
2020	0	2	6	41	49
2021	1	1	10	34	46
2022	0	6	1	38	45
Total	**4**	**21**	**31**	**213**	**269**

There have been 4 severe (A) crashes in the last 5 years, one of which involved a vehicle running off the road and three of which are angle collisions. Two of the severe angle collisions occurred at the intersection of Frederica Road and Sea Island Road.

3.3 Traffic Operations

Traffic operations analysis was conducted using existing traffic volumes (2023) and forecast traffic volumes for 2025 and 2045 for the no build conditions. The details of the traffic forecasting activities are contained in the Appendix.

Using the forecast traffic and the no build (existing) geometry and traffic control, the projected traffic operations were evaluated.

The current and no-build intersection lane configurations and traffic control for the study area are shown in Figure 2.

3.3.1 Operational Analysis

Using the methods described in the Highway Capacity Manual (HCM), Synchro was used to evaluate the performance of the intersections. Synchro determines the average delay experienced by each vehicle as a result of traffic control devices, which then provides a Level of Service (LOS). Definitions of LOS for Signalized and Stop-Controlled intersections are shown in Table 11. Each signalized intersection was observed and recorded in the existing peak hours to determine cycle length, and then the timing was optimized for the corridor in Synchro. Signal timing was also provided by Glynn County to ensure the analysis was accurate. Further analysis was conducted using SimTraffic, a microsimulation package associated with Synchro, to determine the system-wide results of alternative changes.

Table 11: Level of Service Definitions

Level of Service	Control Delay Per Vehicle (sec)	
	Stop Controlled Intersection	Signalized Intersection
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤50	> 55 and ≤ 80
F	>50	> 80

3.3.2 Level of Service Results

The 2025 No Build and 2045 No Build levels of service results were evaluated using the forecast traffic. This represents the traffic operations of the study area if no project is constructed by the forecast year.

As shown in Table 12, the intersections most subject to low levels of service and severe traffic congestion are Sea Island Road at Demere Road and Sea Island Road at Frederica Road. The existing LOS for Demere Road is already E and F for the AM and PM peak hours respectively. The LOS for Frederica Road is showing as existing LOS C and D for AM and PM peak hours, and will be E and F by 2045. [1]

The only intersection between Demere Road and Frederica Road that operates at a poor LOS is Hamilton Landing Drive. It will be LOS F by 2045. All other intersections are at D or better by 2045 and many remain at D or better for overall traffic.

It should be noted that all intersections between Demere Road and Frederica Road are two-way stop-controlled. Two-way stop-controlled intersections can be evaluated using the side-street Level of Service in which case all side streets are experiencing poor LOS by 2045 (E or F).

[1] Note: It was observed by our field reviewers and noted by other traffic studies and Glynn County representatives that Frederica Road at Sea Island Road is operating at a much reduced LOS than is show by this analysis. Possible reasons for that include limited ability to count demand traffic during our study period. This issue is noted but is moot for purposes of this study as Frederica Road modifications are specifically excluded from this work as they are being addressed by a separate project.

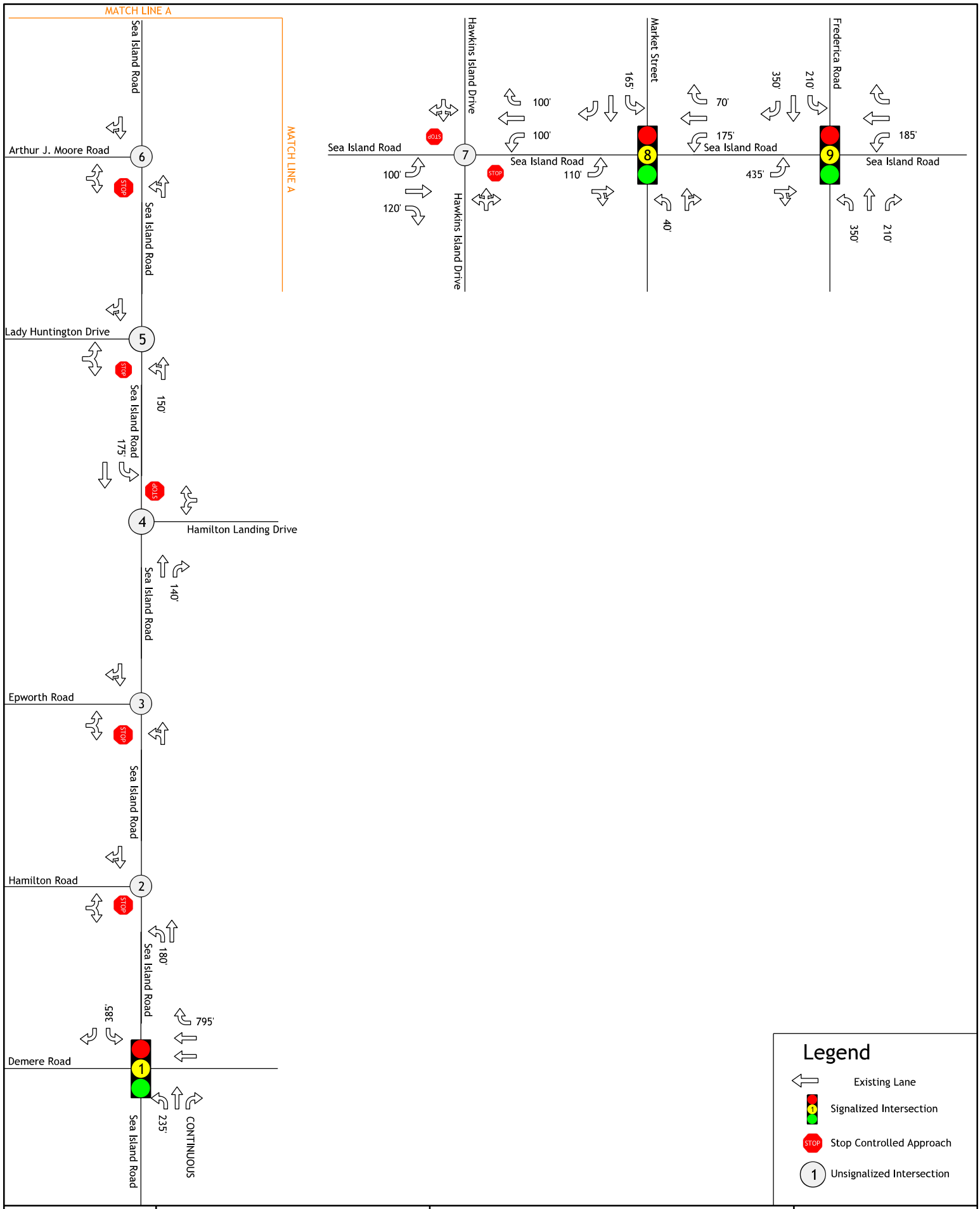


Figure 2

Existing Geometry and Traffic Control

Sea Island Road Corridor Study

Michael Baker INTERNATIONAL

Table 12: Existing and Future No Build LOS

Intersection				2023 Existing LOS (Delay† in sec/veh)		2025 No-Build LOS (Delay† in sec/veh)		2045 No-Build LOS (Delay† in sec/veh)	
Number	Name	Control	Approach	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	Sea Island Rd & Demere Rd	Signal	WB	F (99.3)	F (168.1)	F (148.0)	F (182.9)	F (318.0)	F (374.6)
		Signal	NB	C (29.9)	B (17.0)	F (87.2)	B (17.8)	F (244.0)	D (40.4)
		Signal	SB	F (131.4)	F (110.9)	D (46.5)	F (129.6)	F (223.9)	F (369.8)
		Signal	Total	E (75.3)	F (91.4)	F (89.0)	F (102.2)	F (255.0)	F (246.4)
2	Sea Island Rd & Hamilton Rd	Stop	EB	C (22.2)	D (32.1)	C (23.4)	D (34.7)	F (54.4)	F (163.9)
		Free	NB	A (0.7)	A (0.9)	A (0.7)	A (0.8)	A (0.9)	A (1.2)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (1.1)**	**A (1.8)**	**A (1.1)**	**A (1.8)**	**A (2.2)**	**A (7.9)**
3	Sea Island Rd & Epworth Rd	Stop	EB	A (0.0)	C (18.6)	A (0.0)	C (19.3)	A (0.0)	D (31.2)
		Free	NB	A (0.1)	A (0.0)	A (0.1)	A (0.0)	A (0.0)	A (0.0)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (0.1)**	**A (0.1)**	**A (0.1)**	**A (0.1)**	**A (0.0)**	**A (0.1)**
4	Sea Island Rd & Hamilton Landing Dr	Stop	WB	F (102.1)	F (63.3)	F (120.1)	F (72.2)	F (1251.7)	F (872.9)
		Free	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Free	SB	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)
		Stop	**Total**	**A (4.8)**	**A (2.3)**	**A (5.4)**	**A (2.6)**	**F (57.6)**	**D (31.8)**
5	Sea Island Rd & Lady Huntington St	Stop	EB	C (22.9)	C (19.0)	C (24.2)	C (19.6)	F (59.2)	E (35.6)
		Free	NB	A (0.2)	A (0.7)	A (0.2)	A (0.7)	A (0.2)	A (1.0)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (0.5)**	**A (0.6)**	**A (0.5)**	**A (6.0)**	**A (1.1)**	**A (0.9)**
6	Sea Island Rd & Arthur J Moore Dr	Stop	EB	D (26.8)	D (27.3)	D (28.4)	D (29.0)	F (63.1)	F (64.0)
		Free	NB	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.0)	A (0.1)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.5)**	**A (0.6)**
7	Hawkins Island Dr & Sea Island Rd	Free	EB	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.1)
		Free	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	SB	E (37.2)	E (38.9)	E (40.6)	E (42.0)	F (280.4)	F (129.7)
		Stop	**Total**	**A (0.7)**	**A (0.3)**	**A (0.8)**	**A (0.3)**	**A (5.4)**	**A (0.6)**
8	Market St & Sea Island Rd	Signal	EB	A (8.2)	A (9.0)	A (8.4)	A (9.3)	B (17.2)	B (13.2)
		Signal	WB	A (9.5)	B (13.5)	A (9.9)	B (14.3)	C (32.7)	D (45.2)
		Signal	NB	D (52.5)	D (46.9)	D (52.5)	D (45.7)	D (52.8)	F (82.2)
		Signal	SB	E (76.7)	E (73.3)	E (76.8)	E (77.6)	F (86.0)	F (220.3)
		Signal	**Total**	**B (12.3)**	**C (20.1)**	**B (12.5)**	**C (20.9)**	**C (28.0)**	**D (52.8)**
9	Frederica Rd & Sea Island Rd	Signal	EB	C (33.0)	D (38.8)	D (35.5)	D (43.0)	F (87.0)	F (221.4)
		Signal	WB	E (55.2)	E (68.2)	E (57.9)	E (70.9)	F (86.6)	F (91.5)
		Signal	NB	C (29.0)	E (55.1)	C (30.7)	E (57.2)	D (37.3)	F (81.2)
		Signal	SB	C (28.4)	D (42.1)	C (30.1)	D (43.9)	E (60.5)	E (76.0)
		Signal	**Total**	**C (31.5)**	**D (47.8)**	**C (33.5)**	**D (50.4)**	**E (65.3)**	**F (117.9)**

3.4 Field Observations

During our field visits, a number of observations were made:

- There is a path connection between the existing Sea Island Road sidewalk across from Hamilton Road to Frederica Academy. This connection was observed to be used by both pedestrians and a golf cart during the site visit. Maintaining or improving this connection should be included in any construction alternative.

- Hamilton Landing Drive is the sole entrance and exit to the large number of single-family residences on the east side of Sea Island Road. Provisions for a secondary entrance and exit might be a part of a Sea Island Road improvement project.
- Pickle ball is a popular past time for locals who don't work during the day. Expanding access for local movements may generate more traffic to the local courts.
- A dog park is located along the route and dog walking is a popular activity along this corridor. Provisions for safe roadway crossings should be incorporated.
- Bike lanes are heavily used by tourists and locals.
- Residential areas along the southern portion of Sea Island Road are visually separated from the roadway by a thick row of trees. Maintenance of this visual buffer should be considered.

3.5 Planned and Programmed Projects Incorporated into Future Conditions

There are three planned or programmed projects that are incorporated into the future conditions of the Sea Island Road corridor study.

A Programmed project is one that has received funding and is placed into the Transportation Improvement Program (TIP). A Planned project is one for which planning activities have commenced but no identified construction funding has been Programmed.

3.5.1 GDOT Project PI 0014914 - CR 583/Sea Island Road over Dunbar Creek - Programmed

This Georgia Department of Transportation project will replace the existing two-lane bridge over Dunbar Creek located between Hawkins Island Road and Salt Marsh Drive. This project is incorporated into future conditions, however as a simple bridge replacement has no impact on the future conditions of the corridor study. Conversely, this corridor study may impact the design of the GDOT bridge replacement project.

3.5.2 St. Simons Island Gateway Traffic Study, May 2022 - Planned

The Gateway Study consists of examining the "triangle" on entry/exit to the island defined by the of FJ Torras Causeway, Kings Way, Sea Island Road, and Demere Road. The County is working through alternatives for the Gateway Study and has not concluded the process as of the publication date of this document. For purposes of the Sea Island Road Corridor Study, the analysis assumes that some improvement at Sea Island Road at Demere Road will be accomplished separately, with operational improvements to the intersection. The future conditions of the corridor study assume that a four-lane connection will be made between the Gateway intersection with Demere Road/Sea Island Road and the rest of Sea Island Road to the north.

This Planned project is incorporated as it appears to have strong support from local constituents, as well as County leadership.

3.5.3 Sea Island Road at Frederica Road Roundabout – Programmed

Glynn County is pursuing an intersection improvement at Sea Island Road and Frederica Road under a separate contract. The current configuration of this improvement is a multi-lane roundabout. As of the publication date of this document, the intersection improvement is under design. For purposes of the Sea Island Road Corridor study, this analysis assumes that a four-lane roadway at approximately Market Street will be tied to with the proposed Sea Island Road alternatives.

3.6 Existing & Future Conditions Assessment

The Sea Island Road Corridor has many important environmental resources, residential and recreational land uses, and provides a critical link for St. Simons travelers to access the mainland via the causeway.

The roadway has a high rate of rear end crashes which are generally attributable to congestion. Furthermore, there is a discrepancy in the frequency of “inbound” and “outbound” rear-end crashes with “inbound” being more prevalent.

The side-streets along Sea Island Road between Demere Road and Frederica Road experience long delays in order to access Sea Island Road.

The current traffic volumes along Sea Island Road appear to be reaching what can be considered a normal maximum provided by a two-lane roadway. This is evidenced by the flat growth in average daily traffic (ADT) volumes counted by the GDOT traffic count station.

The roadway acts like an arterial, providing much more service for traffic that does not stop within the study area.

St. Simons Island has an interest in providing additional pedestrian and bicycling infrastructure.

4.0 ALTERNATIVES

The Sea Island Road corridor between Demere Road and Frederica Road was examined in the future conditions under a set of build alternatives described in this section. The alternatives were compared with each other using a set of Measures of Effectiveness (MOE) described under the Alternative Evaluation section.

As mentioned elsewhere in the document, no specific designs are included for the intersections of Sea Island Road at Demere Road and Sea Island Road at Frederica Road. These intersections are being examined in detail as a part of other County work.

4.1 Alternative Descriptions

Note that each of the alternatives includes a multi-use path and operational improvements at targeted intersections.

4.1.1 Alternative 1 – "North Side Widening"

Alternative 1 is a widening of Sea Island Road to four lanes (two each inbound and outbound). The roadway would be widened mostly to the west/north side of Sea Island Road to accommodate the need for additional pavement and right of way.

Along with the addition of vehicular travel lanes, the alternative includes:

- A raised median throughout the length of the corridor
- Left-turn bays at named roadways
- Right turn bays at Hamilton Landing Drive, Hawkins Island Drive, Sea Island Circle, and Market Street.
- A multi-use path along the west/north side of Sea Island Road through the length of the corridor

4.1.2 Alternative 2 – "South Side Widening"

Alternative 2 is a widening of Sea Island Road to four lanes (two each inbound and outbound). The roadway would be widened mostly to the west/south side of Sea Island Road to accommodate the need for additional pavement and right of way.

Along with the addition of vehicular travel lanes, the alternative includes:

- A raised median throughout the length of the corridor
- Left-turn bays at named roadways
- Right turn bays at Hamilton Landing Drive, Hawkins Island Drive, Sea Island Circle, and Market Street
- A multi-use path along the east/north side of Sea Island Road through the length of the corridor

4.1.3 Alternative 3 – "Symmetrical Widening"

Alternative 3 is a "symmetrical" widening of Sea Island Road to four lanes (two each inbound and outbound). The roadway would be evenly widened to each side of the current location of the Sea Island Road centerline to accommodate the need for additional pavement and right of way.

Along with the addition of vehicular travel lanes, the alternative includes:

- A raised median throughout the length of the corridor
- Left-turn bays at named roadways

- Right turn bays at Hamilton Landing Drive, Hawkins Island Drive, Sea Island Circle, and Market Street.
- A multi-use path along the west/north side of Sea Island Road through the length of the corridor

4.1.4 Alternative 4 (Preferred) – "Weaving Option"

Alternative 4 is a widening of Sea Island Road to four lanes (two each inbound and outbound). The roadway widening and the position of the centerline of Sea Island Road would be shifted back and forth along the corridor to accommodate the need for additional pavement and right of way. The shifts ("Weaves") would be to avoid environmental impacts, private property, or other constraints.

Along with the addition of vehicular travel lanes, the alternative includes:

- A raised median throughout the length of the corridor
- Left-turn bays at named roadways
- Right turn bays at Hamilton Landing Drive, Hawkins Island Drive, Sea Island Circle, and Market Street.
- A multi-use path along the west/north side of Sea Island Road through the length of the corridor

4.1.5 Alternative 5 – "Three-Lane"

Alternative 5 is a widening of Sea Island Road to three lanes (one each inbound and outbound) with a third lane used as a center turn lane and potential evacuation route. The roadway would be widened from the current location of Sea Island Road to accommodate the need for additional pavement and right of way.

Along with the addition of the center turn lane, the alternative includes:

- Left-turn bays at named roadways (as part of the center turn lane)
- Right turn bays at Hamilton Landing Drive, Hawkins Island Drive, Sea Island Circle, and Market Street.
- A multi-use path along the west/north side of Sea Island Road through the length of the corridor

4.1.6 Alternative 6 – "Operational Improvements"

Alternative 6 widens portions of Sea Island road to accommodate turn lanes at targeted intersections.

The alternative includes:

- Left-turn bays at named roadways
- Right turn bays at Hamilton Landing Drive, Hawkins Island Drive, Sea Island Circle, and Market Street.
- A multi-use path along the west/north side of Sea Island Road through the length of the corridor

4.2 Alternative Evaluation

In order to evaluate the various alternatives under review for Sea Island Road, it was necessary to compile a set of criteria that can be compared to determine which alternative best meets the needs of the corridor. During the initial corridor study development phase, a set of evaluation

criteria and weightings were proposed to Glynn County. This set was reviewed and revised cooperatively with the County and was informed by interactions with the Brunswick Area Transportation Study (BATS) staff and volunteers, as well as input from the public. The final weightings of each category were presented to the Glynn County and representatives of the BATS Technical Coordinating Committee and Policy Committee on July 20, 2023 and form the basis of the Alternatives Evaluation.

The evaluation criteria are presented below. They are collectively referred to as the Measures of Effectiveness (MOE). These MOEs are summarized below, with notes and their weightings.

Table 13: Measures of Effectiveness

Environmental		
Impacts to Open Waters	Acres	
Linear Impacts to Marsh Drainages	Feet	Recreational Drainages
Impacts to Marsh Drainages	Acres	Recreational Drainages
Impacts to Wetlands	Acres	
Impacts to Trees	High/Med/Low	3 is high; 2 is medium; 1 is low
Potentially Historic Parcels Impacted	Each	
Archaeological Sites Impacted	Each	
4f Parcels Impacted	Each	
Number of Resources Impacted	Each	**Weighting of Category**
Alternative Ranking (1-5)…5 is best & 1 is worst		**5**
ENVIRONMENTAL RANKING		
Operations		
System Travel Time	Hours	**Weighting of Category**
Alternative Ranking (1-5)…5 is best & 1 is worst		**5**
OPERATIONS RANKING		
Safety		
Total Vehicle Stops	Each	This is an indirect measure of exposure to rear-end collisions
Alternative Ranking (1-5)…5 is best & 1 is worst		**Weighting of Category**
SAFETY RANKING		**5**
Public Support		
Public Support of Alternatives		% of people against each by Public Comment
Alternative Ranking (1-5)…5 is best & 1 is worst		**Weighting of Category**
PUBLIC SUPPORT RANKING		**4**
Evacuation		
Total Number of Lanes	Each	**Weighting of Category**
Alternative Ranking (1-5)…5 is best & 1 is worst		**3**
EVACUATION RANKING		
Multimodal Access		
Bicycle Access	Yes/On Road	
Pedestrian Access	Yes/No	**Weighting of Category**
Alternative Ranking (1-5)…5 is best & 1 is worst		**5**
MULTIMODAL ACCESS RANKING		
Right of Way		
Number of Parcels Impacted	Each	
Total Acreage	Acres	ROW for 4 lane = 200' & ROW for 3 lane = 150'
Alternative Ranking (1-5)…5 is best & 1 is worst		**Weighting of Category**
RIGHT OF WAY RANKING		**3**

4.2.1 Environmental

The environmental measures used to evaluate the alternatives include a number of items that can be quantified by the proposed alternatives:

- Impacts to Open Waters – Acres of impacts to a defined open water, defined by the right of way to right of way width of the alternative.
- Linear Impacts to Marsh Drainages – Linear feet of impacts to marsh drainages, defined by the right of way to right of way width of the alternative.
- Impacts to Marsh Drainages – Acres of impacts to a marsh drainages, defined by the right of way to right of way width of the alternative.
- Impacts to Wetlands - – Acres of impacts to a defined wetland, defined by the right of way to right of way width of the alternative.
- Impacts to Trees – Individually counted impacts to live oak trees along the corridor.
- Potentially Historic Parcels Impacted – Number of individual parcels that have been identified as potentially historic that may be impacted by an alternative.
- Archaeological Sites Impacted - Number of individual archaeological sites that may be impacted by an alternative.
- 4f Parcels Impacted - Number of individual parcels that have been identified as a 4f resource that may be impacted by an alternative.
- Number of Resources Impacted - Total number of environmental resources that may be potentially impacted by the alternative.

Note: The linear feet of potential noise walls was considered as a MOE, however at this time insufficient information was available to project the required noise reduction, if any. Any noise reduction as required by a federal aid project will be considered during the design phase.

The environmental MOEs are evaluated as a whole, and the environmental impacts to the corridor have been determined to have a weighting of 5 out of 5 with respect to other MOEs. This means that Environmental MOE is a critical and high-value item on this corridor study.

4.2.1.1 Environmental Evaluation

Each alternative was measured with respect to the environmental impacts and the results were recorded in the MOE results table shown in Table 15.

4.2.2 Operations

The operational measures used to evaluate the alternatives includes one item:

- System Travel Time – An average of peak time hours of total vehicular time traveled by the modeled vehicles within the alternative analysis.

The operational MOE has been determined to have a weighting of 5 out of 5 with respect to other MOEs. This means that the Operations MOE is a critical and high-value item on this corridor study.

From a traffic operations standpoint, Alternatives 1, 2, 3, and 4 function the same way, as a 4-lane facility. The shifting of the 4-lane facility to the north, south, or either direction does not affect the delay at individual intersections. Due to this, they are grouped together in the traffic operations reporting process as "**Alternatives 1-4: 4-Lane Widenings**."

Similarly, Alternatives 5 and 6 operate at individual intersections the same way, with the addition of turn lanes. The turn lane configuration at individual intersections between Alternatives 5 and 6 are the same at each intersection, the difference being Alternative 5 having a continuous turn

lane *between* intersections. For the intersection operations analysis, these two alternatives are grouped together as "**Alternatives 5-6: Additional Turn Lanes**."

Note: Intersection delay was not chosen as an effective comparator between each corridor alternative for purposes of selecting a preferred alternative as the removal of Frederica Road and Demere Road from the analysis makes the side street delays the determining factor. Two-way stop-controlled intersections are volatile with respect to improvements made to turning traffic. The results of including turn bays at various intersections is shown in the operational analysis results in Table 14. This table shows all delay measures for existing, no build, and build conditions for 2023, 2025, and 2045 traffic.

4.2.2.1 Operational Evaluation

Each alternative was measured with respect to the operational impacts and the results were recorded in the MOE results table shown in Table 15.

Table 14: Sea Island Road Existing and Future Operational Levels of Service

Intersection				2023 Existing LOS (Delay† in sec/veh)		2025 No-Build LOS (Delay† in sec/veh)		2025 Build Alts 1-4: 4-Lane Widenings LOS (Delay† in sec/veh)		2025 Build Alts 5-6: Additional Turn Lanes LOS (Delay† in sec/veh)		2045 No-Build LOS (Delay† in sec/veh)		2045 Build Alts 1-4: 4-Lane Widenings LOS (Delay† in sec/veh)		2045 Build Alts 5-6: Additional Turn Lanes LOS (Delay† in sec/veh)	
Number	Name	Control	Approach	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	Sea Island Rd & Demere Rd	Signal	WB	F (99.3)	F (168.1)	F (148.0)	F (182.9)	F (107.8)	F (182.9)	F (90.0)	E (68.2)	F (318.0)	F (374.6)	F (253.3)	F (374.6)	F (220.8)	F (166.6)
		Signal	NB	C (29.9)	B (17.0)	F (87.2)	B (17.8)	C (33.0)	B (17.8)	B (16.8)	B (11.6)	F (244.0)	D (40.4)	F (125.5)	D (40.4)	C (27.4)	B (15.1)
		Signal	SB	F (131.4)	F (110.9)	D (46.5)	F (129.6)	E (58.4)	F (109.7)	D (37.6)	F (110.0)	F (223.9)	F (369.8)	F (266.6)	F (319.2)	F (153.4)	F (321.4)
		Signal	Total	E (75.3)	F (91.4)	F (89.0)	F (102.2)	E (57.4)	F (95.4)	D (39.5)	E (61.0)	F (255.0)	F (246.4)	F (195.7)	F (229.2)	F (108.0)	F (162.0)
2	Sea Island Rd & Hamilton Rd	Stop	EB	C (22.2)	D (32.1)	C (23.4)	D (34.7)	C (15.3)	C (21.3)	C (15.3)	C (21.3)	F (54.4)	F (163.9)	C (23.3)	F (63.4)	C (23.3)	F (63.4)
		Free	NB	A (0.7)	A (0.9)	A (0.7)	A (0.8)	A (0.7)	A (0.8)	A (0.7)	A (0.8)	A (0.9)	A (1.2)	A (0.9)	A (1.2)	A (0.9)	A (1.2)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (1.1)**	**A (1.8)**	**A (1.1)**	**A (1.8)**	**A (0.8)**	**A (1.3)**	**A (0.8)**	**A (1.3)**	**A (2.2)**	**A (7.9)**	**A (1.2)**	**A (3.3)**	**A (1.2)**	**A (3.3)**
3	Sea Island Rd & Epworth Rd	Stop	EB	A (0.0)	C (18.6)	A (0.0)	C (19.3)	A (0.0)	B (12.6)	A (0.0)	B (12.6)	A (0.0)	D (31.2)	A (0.0)	C (15.6)	A (0.0)	C (15.6)
		Free	NB	A (0.1)	A (0.0)	A (0.1)	A (0.0)	A (0.2)	A (0.0)	A (0.2)	A (0.0)	A (0.0)	A (0.0)	A (0.2)	A (0.0)	A (0.2)	A (0.0)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (0.1)**	**A (0.1)**	**A (0.1)**	**A (0.1)**	**A (0.1)**	**A (0.0)**	**A (0.1)**	**A (0.0)**	**A (0.0)**	**A (0.1)**	**A (0.1)**	**A (0.0)**	**A (0.1)**	**A (0.0)**
4	Sea Island Rd & Hamilton Landing Dr	Stop	WB	F (102.1)	F (63.3)	F (120.1)	F (72.2)	E (47.4)	D (30.9)	E (47.4)	D (30.9)	F (1251.7)	F (872.9)	F (330.1)	F (141.7)	F (330.1)	F (141.7)
		Free	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Free	SB	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.2)
		Stop	**Total**	**A (4.8)**	**A (2.3)**	**A (5.4)**	**A (2.6)**	**A (2.0)**	**A (1.1)**	**A (2.0)**	**A (1.1)**	**F (57.6)**	**D (31.8)**	**C (15.2)**	**A (5.3)**	**C (15.2)**	**A (5.3)**
5	Sea Island Rd & Lady Huntington St	Stop	EB	C (22.9)	C (19.0)	C (24.2)	C (19.6)	C (16.0)	B (12.7)	C (16.0)	B (12.7)	F (59.2)	E (35.6)	C (24.9)	C (16.2)	C (24.9)	C (16.2)
		Free	NB	A (0.2)	A (0.7)	A (0.2)	A (0.7)	A (0.4)	A (1.3)	A (0.4)	A (1.3)	A (0.2)	A (1.0)	A (1.0)	A (2.9)	A (1.0)	A (2.9)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (0.5)**	**A (0.6)**	**A (0.5)**	**A (6.0)**	**A (0.5)**	**A (0.7)**	**A (0.5)**	**A (0.7)**	**A (1.1)**	**A (0.9)**	**A (0.9)**	**A (1.4)**	**A (0.9)**	**A (1.4)**
6	Sea Island Rd & Arthur J Moore Dr	Stop	EB	D (26.8)	D (27.3)	D (28.4)	D (29.0)	C (18.8)	C (20.2)	C (18.8)	C (20.2)	F (63.1)	F (64.0)	D (29.4)	D (32.8)	D (29.4)	D (32.8)
		Free	NB	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.0)	A (0.1)	A (0.2)	A (0.3)	A (0.2)	A (0.3)
		Free	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	**Total**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.3)**	**A (0.5)**	**A (0.6)**	**A (0.4)**	**A (0.4)**	**A (0.4)**	**A (0.4)**
7	Hawkins Island Dr & Sea Island Rd	Free	EB	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.2)	A (0.2)	A (0.2)	A (0.2)	A (0.1)	A (0.1)	A (0.7)	A (0.3)	A (0.7)	A (0.3)
		Free	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
		Stop	SB	E (37.2)	E (38.9)	E (40.6)	E (42.0)	C (23.0)	D (28.5)	C (23.0)	D (28.5)	F (280.4)	F (129.7)	F (67.2)	F (68.9)	F (67.2)	F (68.9)
		Stop	**Total**	**A (0.7)**	**A (0.3)**	**A (0.8)**	**A (0.3)**	**C (23.0)**	**A (0.3)**	**C (23.0)**	**A (0.3)**	**A (5.4)**	**A (0.6)**	**A (1.6)**	**A (0.4)**	**A (1.6)**	**A (0.4)**
8	Market St & Sea Island Rd	Signal	EB	A (8.2)	A (9.0)	A (8.4)	A (9.3)	A (5.0)	A (6.5)	A (5.0)	A (6.5)	B (17.2)	B (13.2)	A (7.3)	A (7.7)	A (7.3)	A (7.7)
		Signal	WB	A (9.5)	B (13.5)	A (9.9)	B (14.3)	A (5.5)	A (7.8)	A (5.5)	A (7.8)	C (32.7)	D (45.2)	A (8.5)	A (9.5)	A (8.5)	A (9.5)
		Signal	NB	D (52.5)	D (46.9)	D (52.5)	D (45.7)	D (52.5)	D (45.7)	D (52.5)	D (45.7)	D (52.8)	F (82.2)	D (52.8)	F (81.6)	D (52.8)	F (81.6)
		Signal	SB	E (76.7)	E (73.3)	E (76.8)	E (77.6)	E (76.7)	E (77.6)	E (76.7)	E (77.6)	F (86.0)	F (220.3)	F (85.8)	F (217.5)	F (85.8)	F (217.5)
		Signal	**Total**	**B (12.3)**	**C (20.1)**	**B (12.5)**	**C (20.9)**	**A (8.8)**	**B (16.7)**	**A (8.8)**	**B (16.7)**	**C (28.0)**	**D (52.8)**	**B (11.5)**	**C (32.9)**	**B (11.5)**	**C (32.9)**
9	Frederica Rd & Sea Island Rd	Signal	EB	C (33.0)	D (38.8)	D (35.5)	D (43.0)	C (28.3)	C (30.6)	C (28.3)	C (30.6)	F (87.0)	F (221.4)	E (70.8)	F (152.6)	E (70.8)	F (152.6)
		Signal	WB	E (55.2)	E (68.2)	E (57.9)	E (70.9)	D (46.8)	E (56.9)	D (46.8)	E (56.9)	F (86.6)	F (91.5)	E (72.2)	E (76.9)	E (72.2)	E (76.9)
		Signal	NB	C (29.0)	E (55.1)	C (30.7)	E (57.2)	C (28.5)	D (47.4)	C (28.5)	D (47.4)	D (37.3)	F (81.2)	C (32.8)	E (56.2)	C (32.8)	E (56.2)
		Signal	SB	C (28.4)	D (42.1)	C (30.1)	D (43.9)	C (29.8)	D (38.1)	C (29.8)	D (38.1)	E (60.5)	E (76.0)	D (54.5)	E (55.4)	D (54.5)	E (55.4)
		Signal	**Total**	**C (31.5)**	**D (47.8)**	**C (33.5)**	**D (50.4)**	**C (30.0)**	**D (40.9)**	**C (30.0)**	**D (40.9)**	**E (65.3)**	**F (117.9)**	**E (56.0)**	**F (84.4)**	**E (56.0)**	**F (84.4)**

4.2.3 Safety

The safety measures used to evaluate the alternatives includes one item:

- Total Vehicle Stops – An average of peak time total vehicle stops as defined by the modeled vehicles within the alternative analysis. This is an indirect measure of safety exposure, especially with respect to rear-end collisions.

The safety MOE has been determined to have a weighting of 5 out of 5 with respect to other MOEs. This means that the Safety MOE is a critical and high-value item on this corridor study.

4.2.3.1 Safety Evaluation

Each alternative was measured with respect to the safety impacts and the results were recorded in the MOE results table shown in Table 15.

4.2.4 Public Support

The public support measures used to evaluate the alternatives includes one item:

- Public Support – Measured as percent of people against each alternative as a multiplier of the Public Comments received at the Public Workshop.

The Public Support MOE has been determined to have a weighting of 4 out of 5 with respect to other MOEs. This means that the Public Support MOE is one step down from the most important MOEs.

4.2.4.1 Public Support Evaluation

Each alternative was measured with respect to the comments received at the public workshop and the results were recorded in the MOE results table shown in Table 15.

4.2.5 Evacuation

The Evacuation measures used to evaluate the alternatives includes one item:

- Evacuation – Measured as number of available lanes on Sea Island Road.

The Evacuation MOE has been determined to have a weighting of 3 out of 5 with respect to other MOEs. This means that Evacuation MOE is of medium concern on this corridor study, ranked below MOEs with weighting of 4 or 5.

4.2.5.1 Evacuation Evaluation

Each alternative was measured with respect to the ability of the proposed project to carry evacuation and the results were recorded in the MOE results table shown in Table 15.

4.2.6 Multimodal Access

The multimodal access measures used to evaluate the alternatives includes two items:

- Bicycle Access – Measured as whether the bicycle access through the corridor is separated from the road, or on road.
- Pedestrian Access – Measured as whether there is a dedicated pedestrian facility through the corridor.

The Multimodal Access MOE has been determined to have a weighting of 5 out of 5 with respect to other MOEs. This means that the Multimodal Access MOE is a critical and high-value item on this corridor study.

4.2.6.1 Multimodal Access Evaluation

Each alternative was measured with respect to the inclusion of pedestrian or bicycle infrastructure and the results were recorded in the MOE results table shown in Table 15.

4.2.7 Right of Way

The Right of Way measures used to evaluate the alternatives includes one item:

- Number of Parcels – Measured in number of parcels impacted by each alternative.
- Total Acreage – Measured in acres of needed property by each alternative.

The right of way MOE has been determined to have a weighting of 3 out of 5 with respect to other MOEs. This means that Right of Way MOE is of medium concern to this corridor study, ranked below MOEs with weighting of 4 or 5.

Table 15: Measures of Effectiveness Results Table

			No Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Criteria	Unit	Notes		North	South	Symetrical	Weaving	3-lane Section (Weaving)	2-Lane Operational Improvement
Environmental				Same Intersections	Same Intersections	Same Intersections	Same Intersections	Same Intersections	Same Intersections
Impacts to Open Waters	Acres			**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**
Linear Impacts to Marsh Drainages	Feet	Recreational Drainages		**1413.58**	**1155.06**	**1262.77**	**983.16**	**182.11**	**30.00**
Impacts to Marsh Drainages	Acres	Recreational Drainages		**0.27**	**0.18**	**0.27**	**0.18**	**0.00**	**0.00**
Impacts to Wetlands	Acres			**17.03**	**16.80**	**16.94**	**16.88**	**10.12**	**4.30**
Impacts to Trees	High/Med/Low	3 is high; 2 is medium; 1 is low		**2**	**3**	**2**	**2**	**2**	**1**
Potentially Historic Parcels Impacted	Each			**0**	**0**	**0**	**0**	**0**	**0**
Archaeological Sites Impacted	Each			**0**	**0**	**0**	**0**	**0**	**0**
4f Parcels Impacted	Each			**0**	**0**	**0**	**0**	**0**	**0**
Number of Resources Impacted	Each	**Weighting of Category**		**14**	**14**	**14**	**14**	**12**	**6**
Alternative Ranking (1-5)…5 is best & 1 is worst		**5**		**1**	**3**	**2**	**4**	**5**	**6**
ENVIRONMENTAL RANKING				**5**	**15**	**10**	**20**	**25**	**30**
Operations									
System Travel Time	Hours	**Weighting of Category**		-548	-548	-548	-548	-635.5	-635.5
Alternative Ranking (1-5)…5 is best & 1 is worst		**5**		**5**	**5**	**5**	**5**	**2**	**1**
OPERATIONS RANKING				**25**	**25**	**25**	**25**	**10**	**5**
Safety									
Total Vehicle Stops	Each	This is an indirect measure of exposure to rear-end collisions		6375	6375	6375	6375	7478	7478
Alternative Ranking (1-5)…5 is best & 1 is worst		**Weighting of Category**		**5**	**5**	**5**	**5**	**2**	**1**
SAFETY RANKING		**5**		**25**	**25**	**25**	**25**	**10**	**5**
Public Support									
Public Support of Alternatives		% of people against each by Public Comment							
Alternative Ranking (1-5)…5 is best & 1 is worst		**Weighting of Category**		**1**	**1**	**1**	**1**	**4**	**5**
PUBLIC SUPPORT RANKING		**4**		**4**	**4**	**4**	**4**	**16**	**20**
Evacuation									
Total Number of Lanes	Each	**Weighting of Category**		1	1	1	1	**2**	**3**
Alternative Ranking (1-5)…5 is best & 1 is worst		**3**		**5**	**5**	**5**	**5**	**2**	**1**
EVACUATION RANKING				**15**	**15**	**15**	**15**	**6**	**3**
Multimodal Access									
Bicycle Access	Yes/On Road			**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Pedestrian Access	Yes/No	**Weighting of Category**		**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Alternative Ranking (1-5)…5 is best & 1 is worst		**5**		**5**	**5**	**5**	**5**	**5**	**5**
MULTIMODAL ACCESS RANKING				**25**	**25**	**25**	**25**	**25**	**25**
Right of Way									
Number of Parcels Impacted	Each			**63**	**63**	**63**	**63**	**62**	**43**
Total Acreage	Acres	ROW for 4 lane = 200' & ROW for 3 lane = 150'		**29.92**	**28.58**	**29.91**	**29.78**	**17.48**	**6.74**
Alternative Ranking (1-5)…5 is best & 1 is worst		**Weighting of Category**		**1**	**4**	**2**	**3**	**5**	**6**
RIGHT OF WAY RANKING		**3**		**3**	**12**	**6**	**9**	**15**	**18**
OVERALL RANKING				**102**	**121**	**110**	**123**	**107**	**106**

5.0 PUBLIC INPUT

As summarize in the Alternatives Evaluation section, the input of the public was sought for this corridor study. The public had two formal opportunities to present comments on the corridor study and several informal ones. These opportunities were:

- Public Workshop – On March 8, 2023, a public workshop was held in the Pioneer Room at the Epworth by the Sea Conference Center located at 100 Arthur J. Moore Drive, S. Simons Island, GA 31522. At the time of the workshop, no proposed alternatives or alignments of future projects were displayed and the Draft Sea Island Corridor Study had not yet been completed. Forty-two (42) people attended and fifty-five (55) comments were received either at the workshop or via electronic means immediately following.
- Brunswick Area Transportation Study (BATS) Policy Committee meeting – On April 10, 2023, the Policy Committee met for their regularly scheduled meeting. The progress of the Sea Island Corridor study was presented to them but no formal documents were available at that time. No public comments or statements were received at that meeting. The meeting was held as a hybrid event, with in-person attendance at the Harold Pate Building, 1725 Reynolds Street, Second Floor Brunswick, GA 31520. During the meeting public statements concerning the corridor study were heard by the Policy Committee.
- Brunswick Area Transportation Study (BATS) Technical Coordinating Committee – On May 8, 2023, the Technical Coordinating Committee met and was presented the initial results of the Sea Island Corridor Study. The meeting was held as a hybrid event, with in-person attendance at the Harold Pate Building, 1725 Reynolds Street, Second Floor Brunswick, GA 31520. During the meeting public statements concerning the corridor study were heard by the Committee.
- Brunswick Area Transportation Study (BATS) Citizens Advisory Committee – On May 8, 2023, the Citizens Advisory Committee met and was presented the initial results of the Sea Island Corridor Study. The meeting was held as a hybrid event, with in-person attendance at the Harold Pate Building, 1725 Reynolds Street, Second Floor Brunswick, GA 31520. During the meeting public statements concerning the corridor study were heard by the Committee.
- Brunswick Area Transportation Study (BATS) Policy Committee meeting – On June 12, 2023, the Policy Committee met for their regularly scheduled meeting. They discussed and approved the release of the Draft Sea Island Corridor Study to a 30-Day public comment period. The meeting was held as a hybrid event, with in-person attendance at the Harold Pate Building, 1725 Reynolds Street, Second Floor Brunswick, GA 31520. During the meeting public statements concerning the corridor study were heard by the Policy Committee.
- Public Comment Period – From June 12, 2023 to July 12, 2023, the Draft Sea Island Corridor Study was available to the public for review and comment. During that time, three hundred sixty-two (362) comments were received.

The public comments received are summarized in Table 16. The comments are summarized in two categories: those received during or immediately after the March 8, 2023 public workshop, and those received during the June 12, 2023 to July 12, 2023 public comment period.

The compiled public comment documentation is contained in the Appendix.

Table 16: Public Comment Summary

Sea Island Corridor Study Public Workshop 3/8/23									
Attendees	Comments	For	Against	Conditional	Uncommitted	Multi-use path	Twitty Park	No alternatives	Live Oak Trees
42 w/o staff	55	14	25	7	5	24	4	7	9

Sea Island Corridor Study - 30-Day Public Comment Period Comments 6/12/23 - 7/12/23									
# People Commented	Comments submitted	Explicit support for option 6 , multi-use path, or bike lanes	Oppose road widening because it would not resolve traffic issues	Opose road widening because of ecological resources impacts (live oaks, tree canopy, salt marsh, wildlife habitat)	Oppose road widening because of safety concerns for speeding, increased colisions, entrances, children, cyclists, pets, families	Oppose road widening because of increased noise and/or loss of buffers	Oppose road widening because of loss of asthetics, natural beauty, charm, scenery, character, ambience	Oppose road widening due to concerns about eminent domain	Oppose road widening due to concerned about loss of property value
147	362	26	94	91	50	24	42	16	8

6.0 RECOMMENDED ALTERNATIVE

Based on the evaluation criteria, Alternative 4, the “weaving” four-lane option is recommended as the preferred alternative.

Alternative 4 was nearly identical in score as Alternative 2 “South Widening” however Alternative 4 by definition will be better able to avoid impacts to resources.

Alternative 4 has the following benefits and impacts:

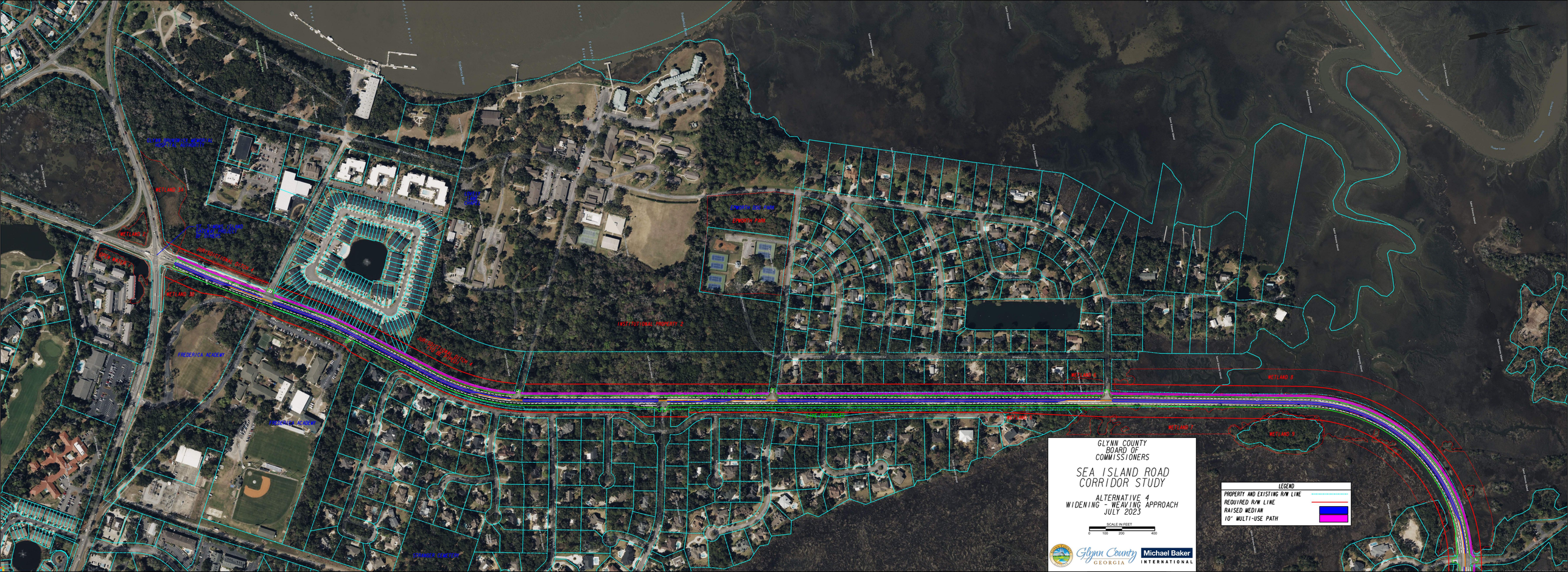
- Environmental – Alternative 4 has the least impacts of the four-lane options, but greater impacts than either the three-lane or two-lane option.
- Operations – Alternative 4 is functionally equivalent to the other four lane alternatives in terms of system travel time. The roadway will serve more vehicles by virtue of added lane capacity. The intersection delays are equivalent across all alternatives as the same intersection improvements were incorporated into each.
- Safety – Alternative 4 was evaluated with respect to total simulated vehicle stops during the analysis period. All four-lane options reduce the total predicted vehicle stops by 15%.
- Public Support – Alternative 4 was not strongly supported by public input.
- Evacuation – Alternative 4 and all other four-lane options have the best evacuation capabilities. Alternative 5, the three lane option, would have a similar capability but would require additional work from a controlling agency to enable evacuation on the center lane in a safe manner.
- Multimodal Access – All alternatives were functionally equivalent as all incorporated a multi-use path in the project proposal.
- Right of Way – Alternative 4 was ranked second from last due to the number of parcels impacted and a slight increase of acreage over the other four lane options.

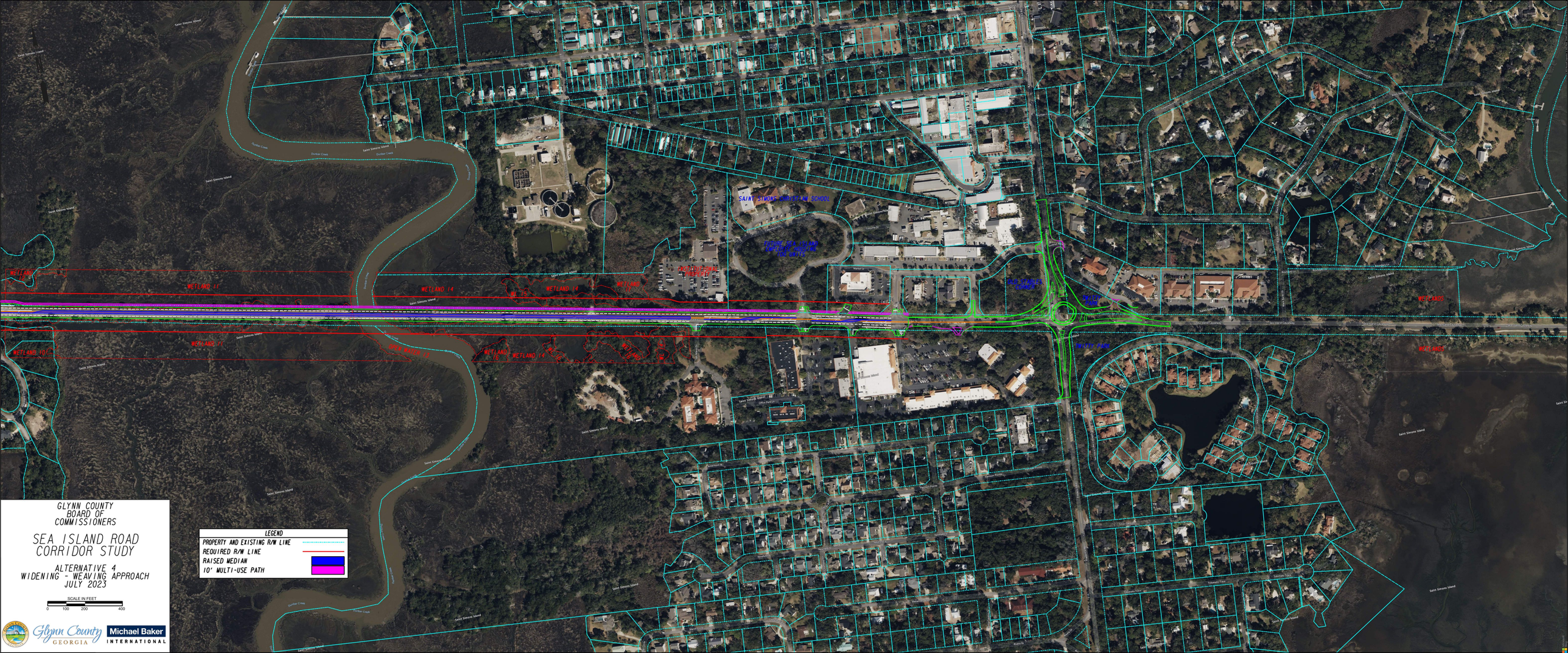
As a further recommendation:

- A speed study and reduction of the speed limit to 35 MPH along Sea Island Road should be conducted as part of any future project work.
- A Roundabout evaluation is recommended at the intersection of Sea Island Road and Hamilton Landing Drive as a part of future work.

A Draft Concept Report suitable for a Georgia Department of Transportation project is included in the Appendix.

Appendix A
Preferred Alternative – Alternative 4 – Weaving Option


GLYNN COUNTY
BOARD OF
COMMISSIONERS
SEA ISLAND ROAD
CORRIDOR STUDY
ALTERNATIVE 4
WIDENING - WEAVING APPROACH
JULY 2023
SCALE IN FEET
0 100 200 400
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
RAISED MEDIAN
10' MULTI-USE PATH
Glynn County
GEORGIA
Michael Baker
INTERNATIONAL
WETLAND 3
WETLAND 2
WETLAND 1
WETLAND 5
WETLAND 6
WETLAND 7
WETLAND 8
FREDERICA ACADEMY
INSTITUTIONAL PROPERTY 2
LIVE OAK TREES


SAINT SIMONS MIDDLE SCHOOL
WETLANDS
WETLAND 11
WETLAND 14
WETLAND 10
WETLAND 16
Saint Simons Island
Dunbar Creek
Frederica River
Mallory St
Kelly St
Frankfort St
Sea Island Causeway
Retreat St
Arnold St
Ross St
Hampton Place
Hampton Place Cir
Hampton Place Ct
Hampton Place Dr
Hampton Place Ln
Hampton Place Pl
Hampton Place Way
Hampton Place Wy
Hampton Place Trace
Hampton Place Tr
Hampton Place Terrace
Hampton Place Ter
Hampton Place Circle
Hampton Place Cir
Hampton Place Court
Hampton Place Ct
Hampton Place Drive
Hampton Place Dr
Hampton Place Lane
Hampton Place Ln
Hampton Place Place

Appendix B
Draft Concept Report

Project Concept Report

Template version: 2023.06.26

Project Type:	Widening	P.I. Number:	0019246
GDOT District:	5	County:	Glynn
Federal Route Number:	N/A	State Route Number:	N/A
Project Number:	XXXXXX		

A widening project along the Sea Island Road corridor, from the intersection of Frederica Road to the intersection with Demere Road. The project will widen Sea Island Road to four lanes with a raised median and will include operational improvements at intersections within the project limits.

Submitted for approval:

Consultant Designer & Firm *or* GDOT Design Phase Office Head & Office — Date

Local Government Sponsor — Date

State Program Delivery Administrator — Date

GDOT Project Manager — Date

Recommendation for approval:

State Environmental Administrator — Date

State Traffic Engineer — Date

Project Review Engineer — Date

State Utilities Engineer — Date

District Engineer — Date

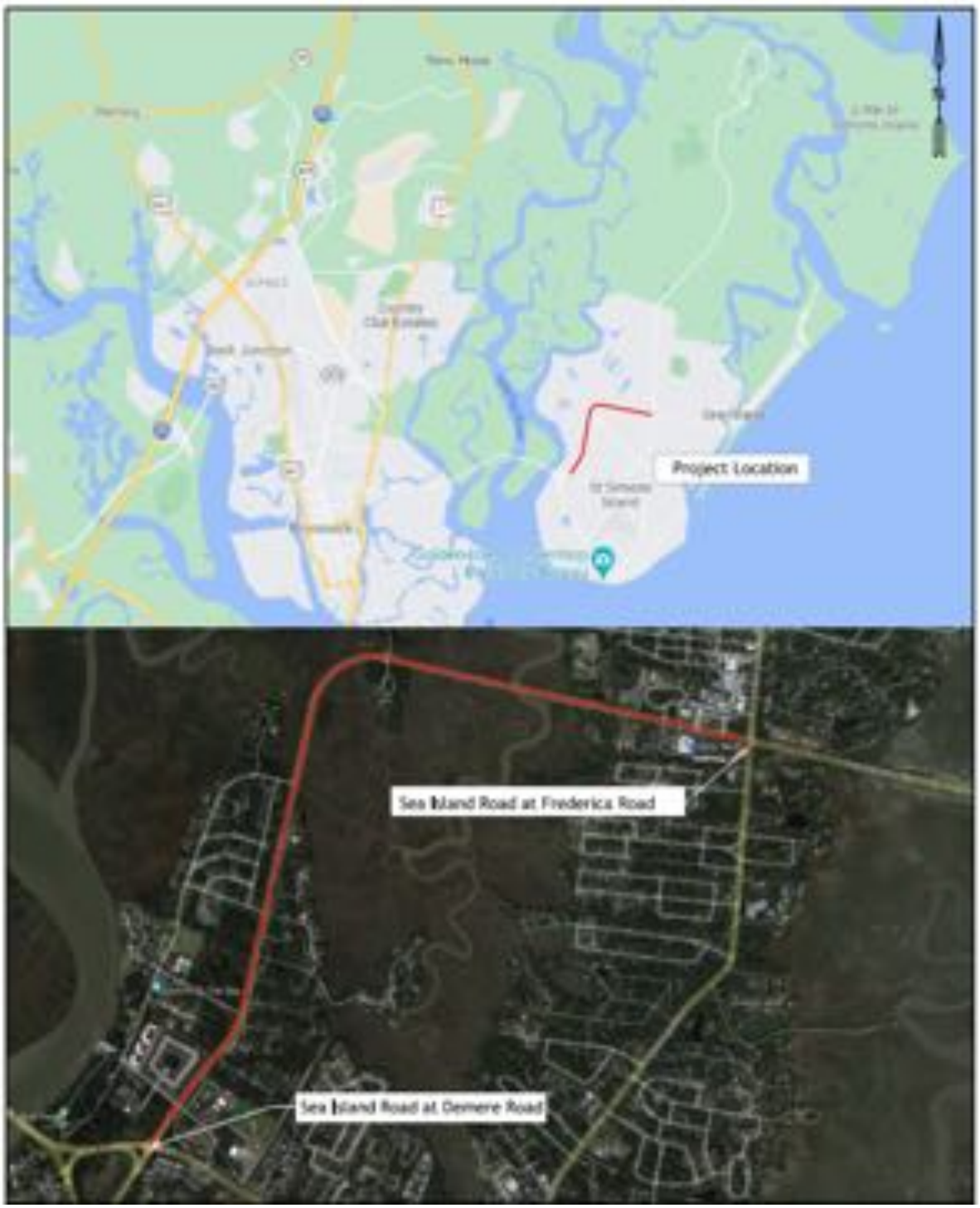
State Bridge Engineer — Date

☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).

☐ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

for Division of Planning — Date

PROJECT LOCATION MAP



SEA ISLAND ROAD WIDENING

PLANNING AND BACKGROUND

Prepared By: Michael Baker International **Date Completed:** *7/28/2023*
Project Justification Statement: The intent of this project is to improve the corridor, from the intersection of Frederica Road to the intersection with Demere Road, in response to the recommendations of the BATS 2045 MTP, St. Simons Island Sector Study and the Sea Island Road Corridor Study.

Sea Island Road is currently congested during AM and PM peak hours with daily commuters. Over the weekends and during summertime, this congestion increases with tourists visiting local shops, beaches, restaurants, etc. A crash review of the Sea Island Road corridor indicated the majority of crashes are rear-end and intersection-related, which is an indicator of congested travel patterns. In addition, there were a relatively high number of "non-roadway" collisions, such as run-off-the-road crashes, likely due to substandard roadside ditches.

Multi-modal mobility through the corridor was identified in multiple studies, and during public workshops and comment periods, as an important need. There are limited sidewalk facilities near the Demere Road, but no multimodal facilities throughout the rest of the corridor.

There are several driveways and unsignalized intersections along the corridor which provide access to commercial and residential complexes. Traffic congestion prevents left-turning vehicles from exiting the side streets and driveways within reasonable time periods during the peak hours. Most side streets do not have dedicated left turn bays for vehicles to queue while turning left off of Sea Island Road.

The corridor serves as an important hurricane evacuation route for St. Simons Island and Sea Island residents. Maximizing the ability of residents to move off the island in case of an emergency is a project goal.

All available solutions (e.g., right-in-right-outs, consolidation of driveways, and elimination of existing runarounds) will be examined in order to reduce vehicular conflicts and provide safe and reliable travel though the corridor. It is recommended that the intersection of Sea Island Rd. and Hamilton Landing Dr. be analyzed for intersection improvements. It is also recommended that the current speed limit of 45mph be reduced to 35mph for operations and safety of the traveling public, as well as all non-motorized transportation (Pedestrian, bicyclists, etc.).

The project begins at Demere Road and ends at Frederica Road. There are other projects currently programmed/planned by Glynn County at these two intersections: the Gateway Study which may upgrade the Sea Island Road at Demere Road intersection, and the roundabout project at the Sea Island Road/Frederica Road intersection. The proposed improvements along Sea Island Road, combined with the improvements from the Gateway/Roundabout projects, will reduce congestion, improve operations, and increase safety aspects of the entire Sea Island Road corridor.

The goal of this project is to reduce congestion, improve mobility, reduce crashes, improve evacuation efforts, and provide multimodal access along the Sea Island Road Corridor.

Existing conditions: This project is the widening of Sea Island Roadway from the intersections of Frederica Road to Demere Road. The existing roadway along this corridor is a rural two-lane roadway with 12-foot travel lanes, auxiliary lanes, and 1-to-2-foot-wide rural shoulders. There is a multi-use path and sidewalk between Demere Road and Hamilton Road, but no other bicycle or pedestrian facilities exist along the corridor. Utilities are present on both sides of the roadway within the project limits and there are three signalized intersections at Demere Road, Market Drive, and Frederica Road.

Other projects in the area
CR 583/Sea Island Road at Dunbar Creek (PI No. 0014914) – Preliminary Design
St. Simons Island Gateway Traffic Study – In progress
Sea Island at Frederica Road Roundabout – Preliminary Design

MPO: *Brunswick* **TIP #:** N/A
Congressional District(s): *1*

Federal Oversight: ☐ **PoDI** ☒ **Exempt** ☐ **State Funded** ☐ **Other**

Projected Traffic: 24 HR T: 3 % Current Year (2021): 17,550
Open Year (2027): 18,625 Design Year (2047): 22,725
Traffic data source: Glynn County, TADA, and field counts
Traffic Projections Performed by: Michael Baker International
Date approved by the GDOT Office of Planning: *7/20/2021*

AASHTO Functional Classification (Mainline): Minor Arterial
AASHTO Context Classification (Mainline): Rural Town
AASHTO Project Type (Mainline): Construction on existing roads
Is the project located on an NHS roadway? ☒ No ☐ Yes

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:
Warrants met: ☐ None ☒ Bicycle ☒ Pedestrian ☐ Transit
A local bike/walk plan has been adopted by Glynn County/St. Simons Island since 2012. This is also the only remaining segment without bike/ped facilities to close the loop back to Frederica Road.

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? ☒ No ☐ Yes

Pavement Evaluation and Recommendations
Initial Pavement Evaluation Summary Report Required? ☐ No ☒ Yes
Feasible Pavement Alternatives: ☒ HMA ☒ PCC ☐ HMA & PCC

Is the project located on a Special Roadway or Network? ☒ No ☐ Yes *Network*

Do the limits of the project include one or more signalized intersections? ☐ No ☒ Yes

Is Federal Aviation Administration coordination anticipated? ☐ No ☒ Yes
St. Simons Island Airport at McKinnon Field – located within 2 miles of the project

DESIGN AND STRUCTURAL

Description of the proposed project: This project consists of the widening of Sea Island Road on St. Simons Island, Georgia to four lanes (two each inbound and outbound). The roadway widening and the position of the centerline of Sea Island Road is adjusted throughout the corridor to accommodate the need for additional pavement and right of way while reducing impacts to environmental resources, private property, and live oak trees. Along with the addition of vehicular travel lanes, the design includes a raised median, turn bays, and a multi-use path along the west/north side of the corridor. The total length of this project is approximately 2.7 miles. There is an existing bridge over Dunbar Creek that is being replaced by the CR 583/Sea Island Road @ Dunbar Creek project (PI No. 0014914).

Major Structures:

Structure	Existing	Proposed
Bridge ID 127-0066-0	The existing bridge is 325 feet long and consists of 13 25-foot spans. The bridge is 24 feet gutter-to-gutter with an overall bridge width of 31 feet 6 inches. The bridge superstructure consists of precast channel beams with substandard traffic rails. The substructure consists of PSC pile bents.	The proposed bridge is anticipated to be 360 feet long by 40 feet wide gutter to gutter with an overall bridge width of 43 feet 3 inches. The bridge will carry 2–12-foot lanes with 8-foot shoulders.

Accelerated Bridge Construction (ABC) techniques anticipated: ☒ No ☐ Yes

Mainline Design Features:

Sea Island Road	**Functional Classification:** *Minor Arterial*		
Feature	**Existing**	***Policy**	**Proposed**
Typical Section:			
- Number of Through Lanes	2		4
- **Lane Width(s) (-ft)**	**12**	**11-12**	**12**
- **Median Width (-ft) & Type**	**None**	**24-ft raised**	**14-ft raised**
- **Shoulder Width (-ft) (Outside)**	**Overall – 1-2 Paved – 1**	**Overall – 10 Paved – 6.5**	**18**
- **Cross Slope (%)**	**2**	**2**	**2**
- **Outside Shoulder Slope (%)**	**Unknown**	**6**	**6**
- **Sidewalks (-ft)**	**5-ft sidewalk 8-ft multi-use**	**N/A**	**10-ft multi-use path**
- Auxiliary Lanes (# LTL, RTL or TWLTL / -ft width)	10 LTL – 12-ft 7 RTL – 12-ft		11 LTL – 12-ft 4 RTL – 12-ft
- **Bike Accommodations**	**None**	**On shoulder**	**Multi-use path**
Posted Speed (mph)	35/45		35
Design Speed (mph)	**35/45**	**35/45**	**35**
Minimum Horizontal Curve Radius (-ft)	Unknown	340 (35 mph) 643 (45 mph)	1000
Maximum Superelevation Rate (%)	Unknown	6 or 8	TBD
Maximum Grade (%)	Unknown	5	TBD
Access Control	**Permit**	**Permit**	**Permit**
Design Vehicle	Unknown		WB-40
Check Vehicle	N/A		N/A
Pavement Type	HMA		HMA

**According to current GDOT Design Policy if applicable*

Design Exceptions/Design Variances to FHWA or GDOT Controlling Criteria anticipated:

FHWA or GDOT Controlling Criteria	No	Undetermined	Yes	DE or DV	Approval Date (if available)
1. Design Speed	☒	☐	☐		
2. Design Loading Structural Capacity	☒	☐	☐		
3. Stopping Sight Distance	☒	☐	☐		
4. Horizontal Curve Radius	☒	☐	☐		
5. Maximum Grade	☒	☐	☐		
6. Vertical Clearance	☒	☐	☐		
7. Superelevation Rate	☒	☐	☐		
8. Lane Width	☒	☐	☐		
9. Cross Slope	☒	☐	☐		
10. Shoulder Width	☒	☐	☐		

Design Variances to GDOT Standard Criteria anticipated:

GDOT Standard Criteria	No	Undetermined	Yes	Approval Date (if applicable)
1. Access Control	☒	☐	☐	
2. Shoulder Width	☒	☐	☐	
3. Intersection Sight Distance	☒	☐	☐	
4. Intersection Skew Angle	☒	☐	☐	
5. Tangent Lengths on Reverse Curves	☒	☐	☐	
6. Lateral Offset to Obstruction	☒	☐	☐	
7. Rumble Strips	☒	☐	☐	
8. Safety Edge	☒	☐	☐	
9. Median Usage	☐	☐	☒	
10. Roundabout Illumination Levels	☒	☐	☐	
11. Complete Streets Warrants	☒	☐	☐	
12. ADA Requirements in PROWAG	☒	☐	☐	
13. GDOT Construction Standards	☒	☐	☐	
14. GDOT Drainage Manual	☒	☐	☐	

A Design Variance will be required for the 14-ft raised median. However, it is recommended that a design variance be requested instead for use of a 4-ft flush median with the recommendation of lowering the speed to 35 mph in order to greatly reduce environmental and right of way impacts.

VE Study anticipated: ☐ No ☒ Yes ☐ Completed: *Date*

Lighting Proposed: ☐ No ☐ Yes ☒ Undetermined

Off-site Detours Anticipated: ☒ No ☐ Undetermined ☐ Yes

If yes: Roadway type to be closed: ☐ Local Road ☐ State Route
Detour route selected: ☐ Local Road ☐ State Route
District concurrence with detour route: ☐ No/Pending ☐ Received *Date*
Detour presented to public: ☐ No ☐ Yes *Date*

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant ☐ Significant

TMP Components Anticipated: ☒ TTC ☐ TO ☐ PI

INTERCHANGES AND INTERSECTIONS

Interchanges/Major Intersections:

- Sea Island Road at Demere Road – signalized
- Sea Island Road at Hamilton Road
- Sea Island Road at Epworth Road
- Sea Island Road at Hamilton Landing Drive
- Sea Island Road at Lady Huntington Street
- Sea Island Road at Arthur J. Moore Drive
- Sea Island Road at Hawkins Island Drive
- Sea Island Road at Market Street – signalized
- Sea Island Road at Frederica Road – signalized

Intersection Control Evaluation (ICE) Required: ☐ No ☒ Yes

Roundabout Concept Validation Required: ☐ No ☒ Yes ☐ Completed *Date*

UTILITY AND PROPERTY

Railroad Involvement: N/A

Utility Involvements:

- AT&T – Telephone
- Comcast – Cable Television
- Brunswick-Glynn Co. Joint Water & Sewer Commission – Water & Sewer
- GA Power – Transmission
- GA Power – Distribution

SUE Required: ☐ No ☒ Yes ☐ Undetermined

Public Interest Determination Policy and Procedure recommended: ☒ No ☐ Yes

Right-of-Way (ROW): Existing width: 80-102ft. Proposed width: TBD

Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined

Easements anticipated: ☐ None ☒ Temporary ☒ Permanent * ☐ Utility ☐ Other

** Permanent easements include the right to place utilities.*

Anticipated total number of impacted parcels:		63
Displacements anticipated:	Businesses:	0
	Residences:	0
	Other:	0
Total Displacements:		0

Location and Design approval: ☐ Not Required ☒ Required

Impacts to federally managed property anticipated: ☐ No ☐ Yes ☒ Undetermined

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document: *NEPA ~ EA-FONSI.*

Level of Environmental Analysis – The environmental considerations are based on:

☒ A preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.

☐ Completion of resource identification and delineation and are subject to revision after the completion of agency concurrence.

☐ Completion of resource identification, delineation, and agency concurrence.

GDOT MS4 Permit Compliance – Is the project located in a GDOT MS4 area? ☒ No ☐ Yes
If yes, is the GDOT MS4 Permit anticipated to apply to all or part of this project? ☐ No ☐ Yes

Is ecology water quality mitigation anticipated? ☒ No ☐ Yes

Will a Non-MS4 Detention Report be required during preliminary design? ☒ No ☐ Yes

Environmental Permits/Variances/Commitments/Coordination anticipated:

Permit/Variance/Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	☒	☐	
2. Forest Service/NPS	☒	☐	
3. CWA Section 404 Permit	☐	☒	
4. Tennessee Valley Authority Permit	☒	☐	
5. USACE Real Estate Outgrant	☒	☐	
6. Buffer Variance	☐	☒	
7. Coastal Zone Management Coordination	☐	☒	
8. NPDES	☐	☒	
9. FEMA	☐	☒	
10. Cemetery Permit	☒	☐	
11. Other Permits	☐	☒	Revocable License
12. Other Commitments	☐	☒	Special Provisions 107.23H and 165.03.5
13. Other Coordination	☐	☒	NMFS for EFH and EFH mitigation

Is a PAR required? ☐ No ☐ Yes ☒ Completed *Date*

Environmental Comments and Information:

NEPA/GEPA: It is anticipated that the proposed project would not be eligible for a Categorical Exclusion due to the expectation that an Individual Permit would be required to permit the unavoidable impacts to waters of the U.S. It is anticipated that impacts to waters of the U.S. would exceed the threshold that would allow the project to be permitted utilizing a general permit (i.e., Regional Permit 34).

Ecology:

IDENTIFIED WATERS, DITCHES AND WETLANDS

Open Water 1 – This aquatic resource is a jurisdictional open water located in the southeast quadrant of the Sea Island Road at Demere Road intersection. This resource provides suitable foraging habitat for the federally protected wood stork (Mycteria americana) and is also considered a buffered water of the state.

Wetland 2 – This aquatic resource is a tidally influenced forested wetland located in the southwest quadrant of the Sea Island Road at Demere Road intersection. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 3 – This aquatic resource is a tidally influenced emergent wetland located in the northwest and northeast quadrants of the Sea Island Road at Demere Road intersection. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail (Laterallus jamaicensis jamaicensis). It also provides suitable habitat for the state-protected diamondback terrapin (Malaclemys terrapin) and suitable foraging habitat for the state-protected least tern (Sternula antillarum). This resource is also considered a buffered water of the state.
Non-Jurisdictional Ditch A – This aquatic resource is a non-jurisdictional drainage ditch located along the west side of Sea Island Road, north of Wetland 3 and south of Margaret A Pitts Drive. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 4 – This aquatic resource is a tidally influenced emergent wetland located east and west of Sea Island Road. The majority of the wetland is located north of the Arthur J. Moore Drive intersection, extending north/northeast to the Hawkins Island Drive intersection. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail. It also provides suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the state-protected least tern. This resource is also considered a buffered water of the state.

Wetland 5 – This aquatic resource is a tidally influenced forested wetland located within the eastern portion of Wetland 4. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 6 [Wetland 1 in the Ecology Resource Survey Report (ERSR) for PI No. 0014914] – This aquatic resource is a tidally influenced forested wetland located along the south side of Sea Island Road and east of the Hawkins Island Drive intersection. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 7 (Wetland 2 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced emergent wetland located north and south of Sea Island Road, east of the Hawkins Island Drive intersection and west of the Dunbar Creek crossing. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail. It also provides suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the state-protected least tern. This resource is also considered a buffered water of the state.

Wetland 8 (Wetland 3 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located north of Sea Island Road and east of the Hawkins Island Drive intersection. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Open Water 9 / Dunbar Creek (Open Water 4 / Dunbar Creek in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced creek / open water located underneath the Dunbar Creek bridge, east of Wetland 8 and west of Wetland 10. This resource provides suitable habitat for the federally protected shortnose sturgeon (Acipenser brevirostrum), Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus), and West Indian manatee (Trichechus manatus). It also services as suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the bald eagle (Haliaeetus leucocephalus). This resource is considered a buffered water of the state.

Wetland 10 (Wetland 5 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced emergent wetland located north and south of Sea Island Road, east of Open Water 9 / Dunbar Creek. This resource provides suitable foraging habitat for the federally protected wood stork and eastern black rail. It also provides suitable habitat for the state-protected diamondback terrapin and suitable foraging habitat for the state-protected least tern. This resource is also considered a buffered water of the state.

Wetland 11 (Wetland 6 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located north of Sea Island Road, east of Open Water 9 / Dunbar Creek, and within Wetland 10. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 12 (Wetland 7 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located south of Sea Island Road, east of Open Water 9 / Dunbar Creek and within Wetland 10. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

Wetland 13 (Wetland 8 in the ERSR for PI No. 0014914) – This aquatic resource is a tidally influenced forested wetland located north of Sea Island Road and east of Wetland 10. This resource provides suitable foraging habitat for the federally protected wood stork. This resource is not considered a buffered water of the state.

STATE MANDATED BUFFERS

The following aquatic resources are considered buffered waters of the state; therefore, they require a 25-foot vegetated buffer measured from the point of wrested vegetation: Wetland 3, Wetland 4, Wetland 7, Open Water 9 / Dunbar Creek, and Wetland 10.

ESSENTIAL FISH HABITAT

The following aquatic resources are considered Essential Fish Habitat (EFH) for snapper (*Lutjanus* spp.) and grouper (*Epinephelus* spp.): Wetland 3, Wetland 4, and Wetland 7. Open Water 9 / Dunbar Creek is considered EFH for snapper, grouper, and spiny lobster (*Palinuridae* spp.).

History: There are approximately four (4) resources 50 years or age or older in the estimated Area of Potential Effect (APE). There is a historic residential neighborhood, conference center, school campus, and water treatment plant. Both the conference center and the residential neighborhood were surveyed in 2021 as part of a post-Hurricane Irma survey. There are two (2) historic cemeteries in the surrounding area, but they do not appear to be within the project area. There is a historic bridge, but it was determined not eligible for the NRHP in the Georgia Historic Bridge Survey (GHBS). There are no historic railroads or other linear resources, and there are no NRHP-listed resources within the APE. The project would require a field survey and preparation of a Historic Resource Survey Report to determine eligibility of these resources.

Archaeology: Seven (7) previously recorded archaeological sites, one (1) cemetery, the Gullah Geechee Cultural Heritage Corridor, and one (1) Georgia Department of Natural Resources (GDNR) tract are located within 1 kilometer (km) of the survey area.

Air Quality:

Is the project located in an Ozone Non-attainment area?	☒ No	☐ Yes
Is a Carbon Monoxide hotspot analysis required?	☒ No	☐ Yes

Noise Effects: The proposed project is classified as a Type I project (i.e., capacity increasing project); therefore, a full Noise Impact Analysis will be required. The analysis will include modeling of the preferred build alternative and a noise abatement analysis.

Public Involvement: A Public Workshop was held on March 8, 2023, in order to obtain information from the public regarding known environmentally sensitive areas and social environment concerns along the project corridor. The workshop also gave local residents an opportunity to provide their comments to the project designers prior to the

concept development phase. Comments were taken at the meeting and on the county's website during a 30-day comment period.

Future public involvement in the form of a Public Information Open House (PIOH) is anticipated. The PIOH would be held once the project concept has been approved by GDOT and the concept layouts are ready to be shared within the public.

Major stakeholders: GDOT, Glynn County Board of Commissioners, Glynn County Director of Economic Development/MPO, Federal agencies, Golden Isles Chamber of Commerce, Bike/Walk Golden Isles

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Seasonal Environmental Restrictions such as work within waters and possibly marsh.

Early Completion Incentives recommended for consideration: ☐ No ☒ Yes
To be verified at a later date

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Team Meeting: TBD

Concept Team Meeting: TBD

Other coordination to date:

- Sea Island Road Corridor Study, Public comment period 6/12/2023 to 7/12/2023
- Brunswick Area Transportation Study (BATS) Policy Committee 6/12/2023

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Glynn Co./Consultant Firm
Design	Glynn Co./Consulting Firm
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT Utilities – District 5
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT Construction – District 5
Providing Material Pits	Contractor
Providing Detours	N/A
Environmental Studies, Documents, & Permits	Glynn Co./Consulting Firm
Environmental Mitigation	GDOT ENV Services
Construction Inspection & Materials Testing	GDOT Construction – District 5

Project Cost Estimate Summary and Funding Responsibilities:						
	PE Activities		ROW	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Date of Estimate:	N/A	N/A	N/A	N/A	N/A	
Proposed Funding Source(s):	Federal/State	Federal/State	Local	Federal/State	Federal/State	
Programmed Cost:	N/A		N/A	N/A	N/A	N/A
Estimated Cost:	UNK	$16,800,000	$23,290,000	UNK	$31,280,000	$71,370,000
Total Cost Difference:						

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Asphalt Fuel Price Adjustment.

ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternative (Alternative 4 – "Weaving Option"): Alternative 4 is a widening of Sea Island Road to four lanes. The roadway widening and the position of the centerline of Sea Island Road would be shifted back and forth along the corridor to accommodate the need for additional pavement and right of way. The shifts ("weaves") would be to avoid or reduce environmental impacts, private property, or other constraints.			
Estimated Property Impacts:	**63**	**Estimated Total Cost:**	**$71,370,000**
Estimated ROW Cost:	**$23,290,000**	**Estimated CST Time:**	**30 Months**
Rationale: Alternative 4 has the least environmental impacts of the four-lane options, but greater environmental impacts than Alternatives 5 and 6. Similar to all four-lane widening alternatives, this alternative will serve more vehicles by virtue of added lane capacity, reduce total predicted vehicle stops by 15%, increase evacuation capabilities, and incorporate a multi-use path. Using the developed evaluation criteria in the Sea Island Road Corridor Study, this alternative had the highest ranking among all alternatives considered.			

** Estimated ROW cost by design team.*

No-Build Alternative: Maintain the existing layout of the corridor.			
Estimated Property Impacts:	**N/A**	**Estimated Total Cost:**	**N/A**
Estimated ROW Cost:	**N/A**	**Estimated CST Time:**	**N/A**
Rationale: Eliminated as it does not support the project justification statement.			

Alternative 1 – "North Side Widening": Alternative 1 is a widening of Sea Island Road to four lanes. The roadway would be widened mostly to the west/north side of Sea Island Road to accommodate the need for additional pavement and right of way.			
Estimated Property Impacts:	**63**	**Estimated Total Cost:**	**$71,530,000**
Estimated ROW Cost:	**$23,450,000**	**Estimated CST Time:**	**30 Months**
Rationale: Similar to the preferred alternative, this alternative will serve more vehicles by virtue of added lane capacity, reduce total predicted vehicle stops by 15%, increase evacuation capabilities, and incorporate a multi-use path. However, alternative 1 has greater environmental impacts and right of way (ROW) costs than the preferred alternative.			

** Estimated ROW cost by design team.*

Alternative 2 – "South Side Widening": Alternative 2 is a widening of Sea Island Road to four lanes. The roadway would be widened mostly to the east/south side of Sea Island Road to accommodate the need for additional pavement and right of way.			
Estimated Property Impacts:	**63**	**Estimated Total Cost:**	**$70,632,000**
Estimated ROW Cost:	**$22,552,000**	**Estimated CST Time:**	**30 Months**
Rationale: Similar to the preferred alternative, this alternative will serve more vehicles by virtue of added lane capacity, reduce total predicted vehicle stops by 15%, increase evacuation capabilities, and incorporate a multi-use path. However, alternative 2 has greater environmental impacts than the preferred alternative.			

** Estimated ROW cost by design team.*

Alternative 3 – "Symmetrical Widening": Alternative 3 is a "symmetrical" widening of Sea Island Road to four lanes. The roadway would be evenly widened from the current location of Sea Island Road to accommodate the need for additional pavement and right of way.			
Estimated Property Impacts:	**63**	**Estimated Total Cost:**	**$71,443,000**
Estimated ROW Cost:	**$23,363,000**	**Estimated CST Time:**	**30 Months**
Rationale: Similar to the preferred alternative, this alternative will serve more vehicles by virtue of added lane capacity, reduce total predicted vehicle stops by 15%, increase evacuation capabilities, and incorporate a multi-use path. However, alternative 3 has greater environmental impacts and right of way (ROW) costs than the preferred alternative.			

** Estimated ROW cost by design team.*

Alternative 5 – "Weaving Three-Lane": Alternative 5 is a widening of Sea Island Road to three lanes with the middle lane used as a center turn lane and potential evacuation route. The roadway widening and the position of the centerline of Sea Island Road would be shifted back and forth along the corridor to accommodate the need for additional pavement and right of way. The shifts ("weaves") would be to avoid environmental impacts, private property, or other constraints.			
Estimated Property Impacts:	**62**	**Estimated Total Cost:**	**$41,186,000**
Estimated ROW Cost:	**$14,186,000**	**Estimated CST Time:**	**24 Months**
Rationale: Similar to the preferred alternative, this alternative will increase evacuation capabilities and incorporate a multi-use path. While the environmental impacts and right of way (ROW) costs are less than the preferred alternative, this alternative does not address concerns regarding travel time and safety and would require additional work from a controlling agency to enable evacuation on the center lane in a safe manner.			

** Estimated ROW cost by design team.*

Alternative 6 – "Operational Improvements": Alternative is a widening of Sea Island Road to accommodate turn lanes at targeted intersections and a multi-use path along the west/north side of Sea Island Road through the length of the corridor.			
Estimated Property Impacts:	**43**	**Estimated Total Cost:**	**$10,379,000**
Estimated ROW Cost:	**$5,779,000**	**Estimated CST Time:**	**18 Months**
Rationale: Similar to the preferred alternative, this alternative will incorporate a multi-use path. While the environmental impacts and right of way (ROW) costs are less than the preferred alternative, this alternative does not address concerns regarding travel time, safety, and evacuation.			

** Estimated ROW cost by design team.*

Comments: None

LIST OF ATTACHMENTS/SUPPORTING DATA

List supporting data in the attached order, remove lines if not relevant. Cover pages for each attachment group are not required but may be useful for larger reports.

1. Concept Layout – Preferred Alternative *Layout should include north arrow, scale bar, legend, road and waterway names, estimated existing & required R/W, anticipated easements, property lines, ESA boundaries, and project begin and end labels as applicable. For longer projects, it may be helpful to include an overall project layout and provide break-out sheets with matchlines for clarity. For rural context, "less detail" should be the norm, which means that concept level cross-sections are seldom required. For suburban/urban context, "more detail" is often necessary, particularly where additional effort is needed to develop strategies for reducing footprint and/or impacts along a segment of roadway. For New Construction projects, concept level cross-sections cut/fill limits may be necessary to evaluate and minimize impacts to property and resources.*
    a. On-site Detour Layout *If an on-site detour is required, include the detour/staging layout with pavement and lane shift tapers labeled.*
2. Typical sections *Include conceptual roadway and bridge typical sections showing proposed lane & shoulder configurations*
3. Detailed Cost Estimates:
    a. Construction Cost Estimate *CST estimates should be generated using AASHTOWare and include Revisions to Programmed Costs and Cost Estimate Worksheets [see R.O.A.D.S.> Design Manuals> Design Related Resources> Engineering Services> Revisions to Programmed Costs template: http://www.dot.ga.gov/PS/DesignManuals/DesignResources]*
    b. Right-of-Way *Attach GDOT ROW Cost Estimate Summary page. If ROW Cost Estimate was not developed or approved by GDOT Office of ROW, add footnote to ROW Cost Estimate Summary Page identifying author & organization on summary. Do not include ROW cost worksheets.*
    c. Section 404 Mitigation *Mitigation cost estimates from the Office of Environmental Services Special Projects Coordinator (currently Lisa Westberry)*
    d. Utilities *Include Railroad costs if applicable. If RR costs were not developed by GDOT Utilities personnel, identify author & organization on cost estimate*
4. Concept Utility Report *Obtained from District Utilities office*
5. Crash summaries and diagrams
6. Design Traffic diagrams
7. Capacity analysis summary *Tabular format recommended*
8. Summary of TE Study and/or Signal Warrant Analysis
9. Stage 1 ICE Report(s) or Approved ICE Waiver *If applicable – see ICE Policy*
10. Roundabout Data *If applicable – see GDOT Design Policy Manual*
11. S I & A Report(s) *Bridge/Structural Inventory & Assessment Report(s) - If applicable*
12. MS4 Concept Report Summary *If applicable – Only for projects within a designated GDOT MS4 (Municipal Separate Storm Sewer System) permit area*
13. Pavement studies *E.g., Initial Pavement Type Selection Report, etc.*
14. Utility Risk Management Plan *If available - Derived from the Public Interest Determination Policy and Procedure*
15. Conforming plan's network schematics showing thru lanes. *Required for capacity-adding projects in air quality non-attainment areas only; Provided by Office of Planning Congestion Mitigation and Air Quality Improvement (CMAQ) unit*
16. Minutes of Concept meetings
17. Minutes of any meetings that shows support or objection to the concept *E.g., PIOH, PHOH, Town Hall Meeting, etc.*
18. PFA's and/or SAA's
19. Other items referred to in the body of the report *Delete this line if not used. Example of information to be included: High-level concept layouts & other information on non-preferred alternatives with performance almost equal to the preferred alternative in terms of cost, impacts, and/or performance sufficient for comparison to the preferred alternative*

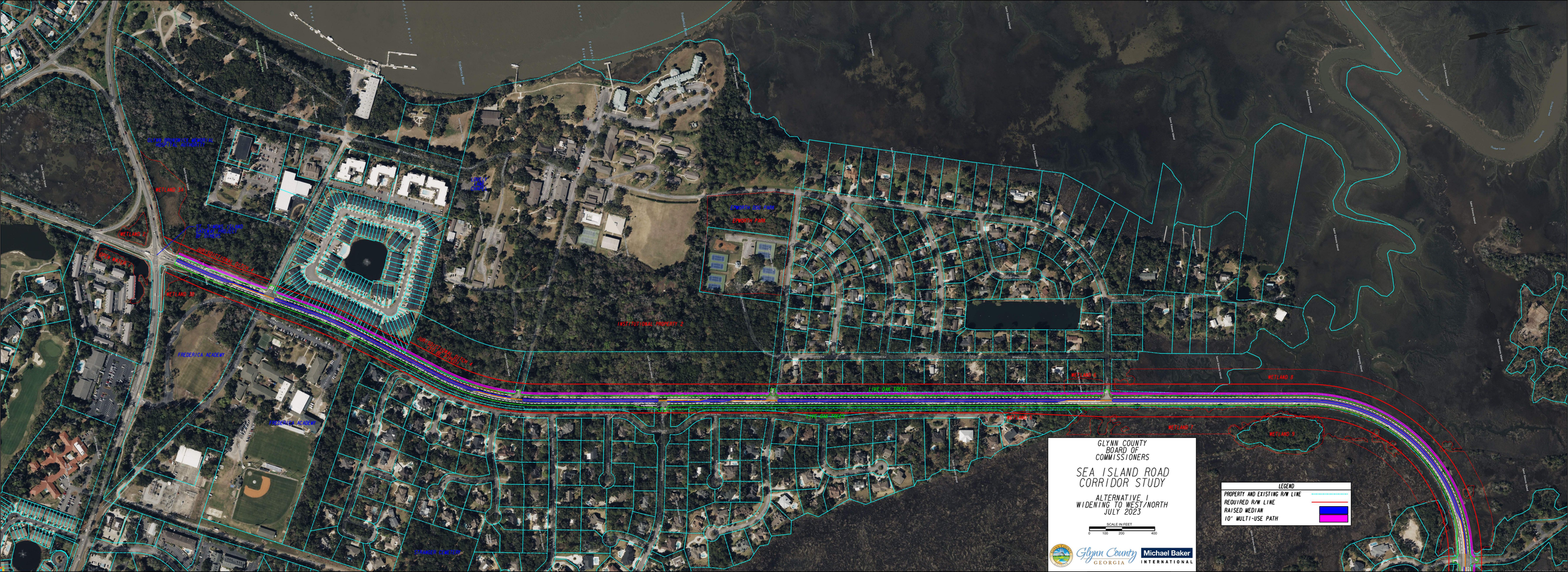
APPROVALS

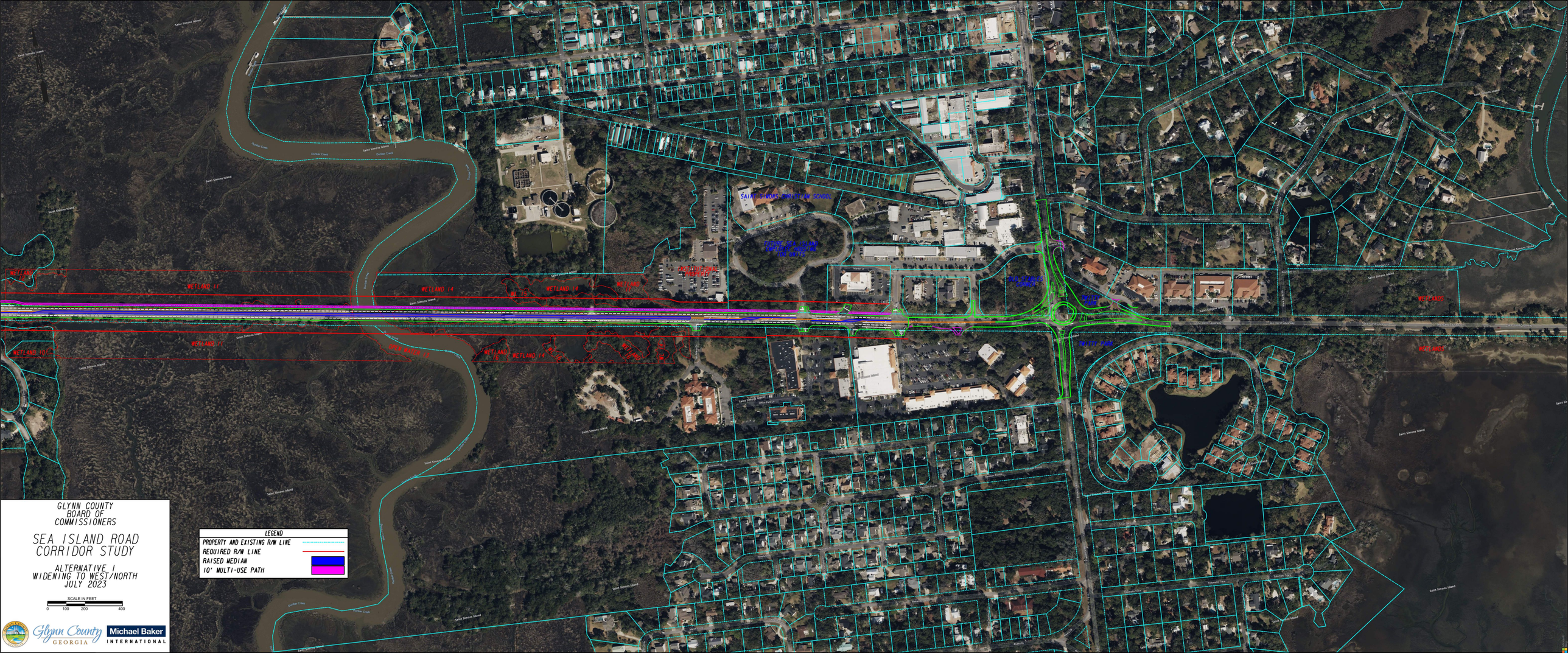
Concur: _____ _____
Director of Engineering Date

Approve: _____ _____
Division Administrator, FHWA Date

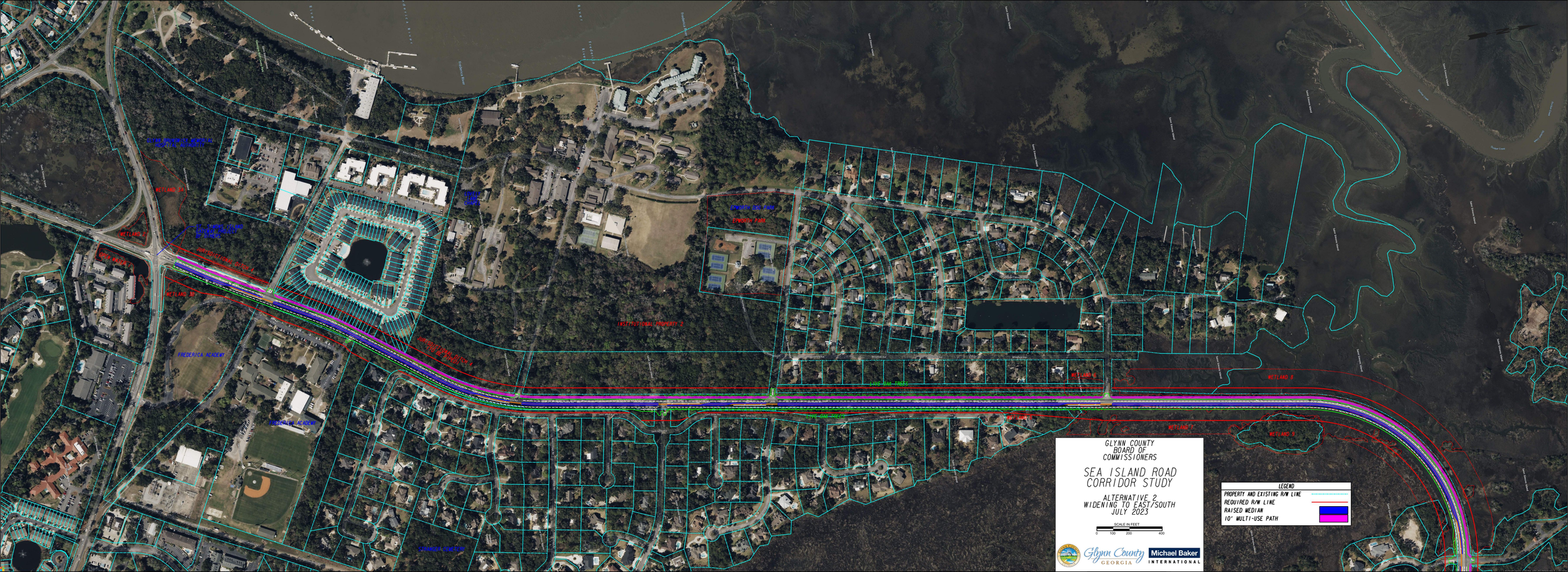
Approve: _____ _____
Chief Engineer Date

Appendix C
Alternative 1 – North Side Widening


GLYNN COUNTY
BOARD OF
COMMISSIONERS
SEA ISLAND ROAD
CORRIDOR STUDY
ALTERNATIVE 1
WIDENING TO WEST/NORTH
JULY 2023
SCALE IN FEET
0 100 200 400
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
RAISED MEDIAN
10' MULTI-USE PATH
Glynn County
GEORGIA
Michael Baker
INTERNATIONAL
WETLAND 31
WETLAND 32
WETLAND 30
WETLAND 6
WETLAND 8
WETLAND 7
WETLAND 5
FREDERICA ACADEMY
LINCOLNSHIRE ACADEMY
INSTITUTIONAL PROPERTY 2
LIVE OAK TREES
PROPERTY LINE
LINCOLNSHIRE PARK


SAINT SIMONS MIDDLE/HIGH SCHOOL
WETLAND 11
WETLAND 14
WETLAND 10
WETLANDS
Saint Simons Island
Dunbar Creek
Frederica River
Mallory St
Kelly St
Franklin St
Sea Island Causeway
Retail Center Drive
Retail Center Drive
Retail Center Drive

Appendix D
Alternative 2 – South Side Widening


GLYNN COUNTY
BOARD OF
COMMISSIONERS
SEA ISLAND ROAD
CORRIDOR STUDY
ALTERNATIVE 2
WIDENING TO EAST/SOUTH
JULY 2023
SCALE IN FEET
0 100 200 400
Glynn County
GEORGIA
Michael Baker
INTERNATIONAL
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
RAISED MEDIAN
10' MULTI-USE PATH
WETLAND 8
WETLAND 5
WETLAND 6
WETLAND 7
WETLAND 9
WETLAND 10
WETLAND 11
WETLAND 12
WETLAND 13
WETLAND 14
WETLAND 15
WETLAND 16
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WETLAND 19
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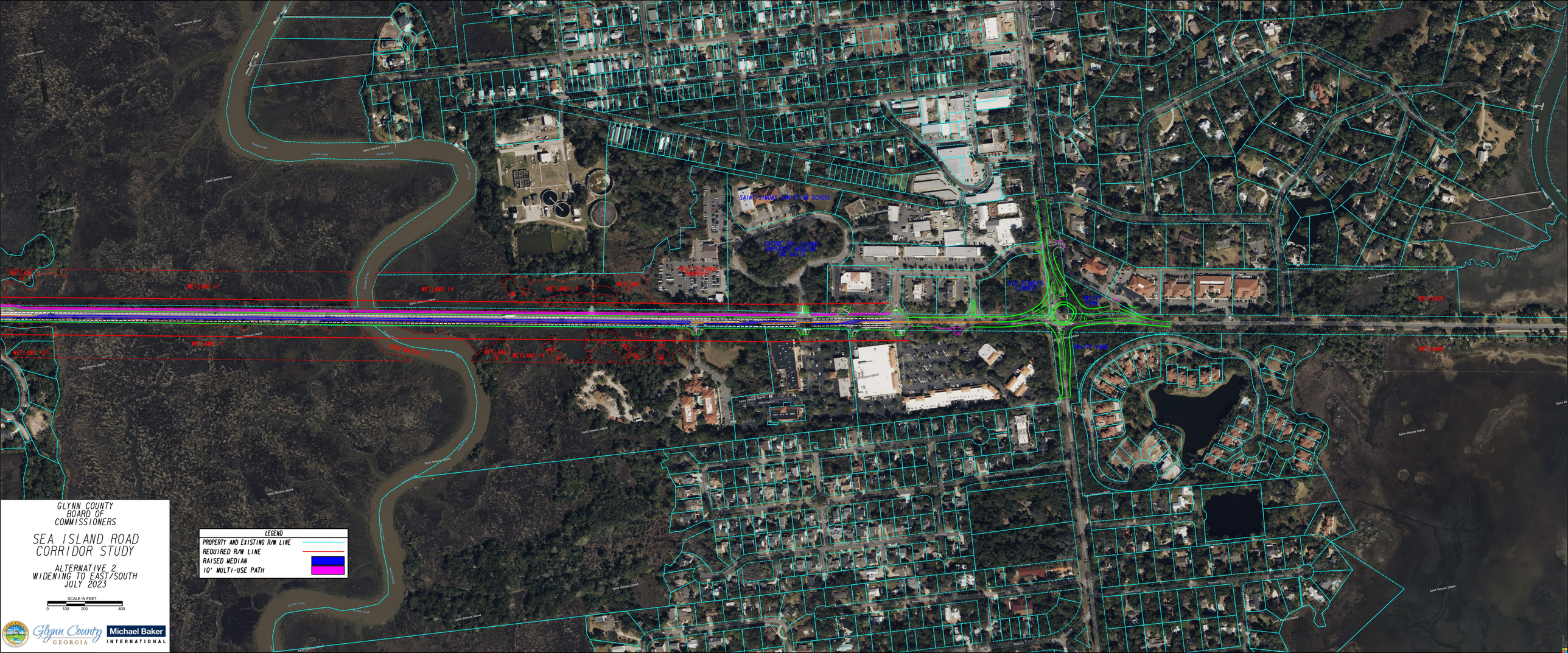
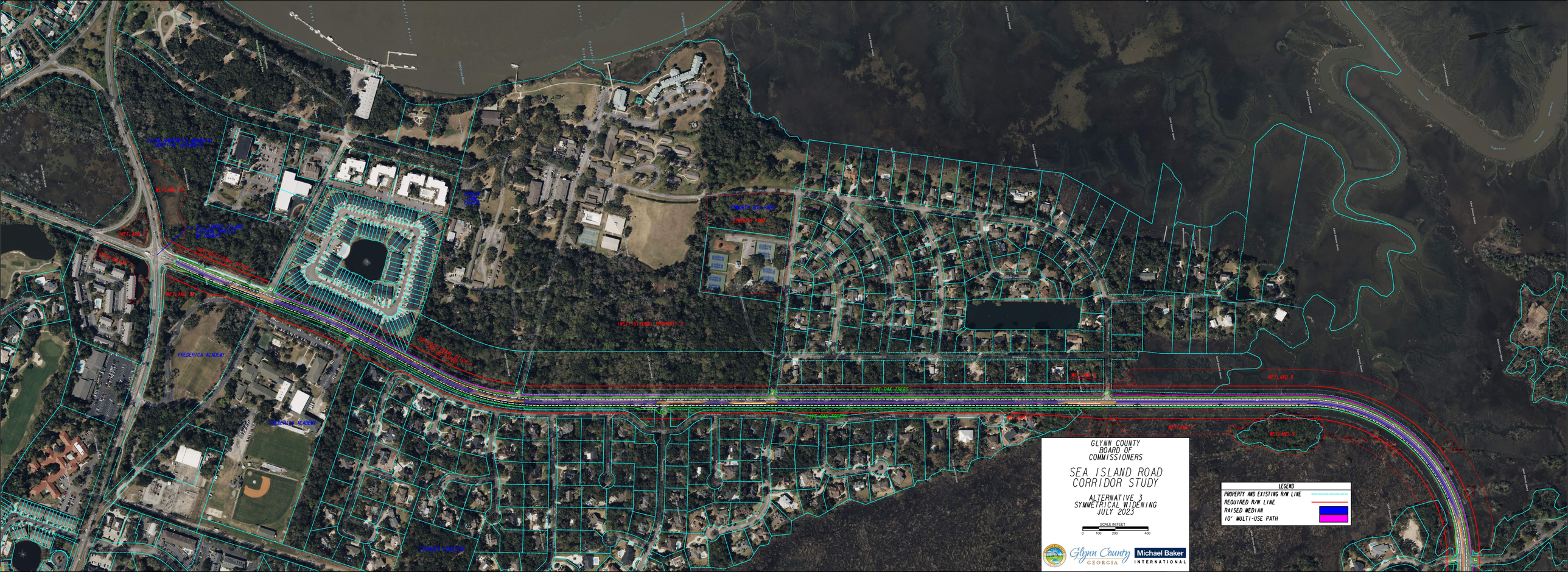
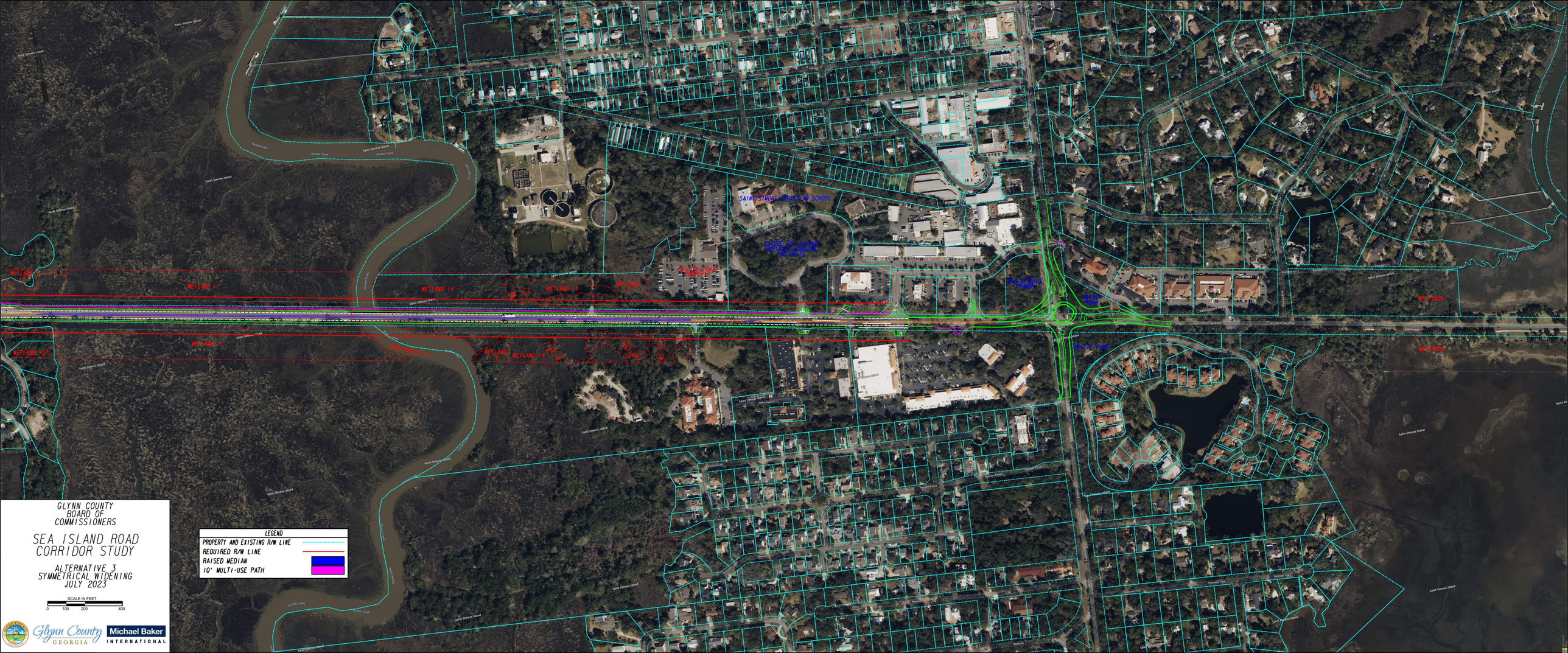
WETLAND 27
WETLAND 28
WETLAND

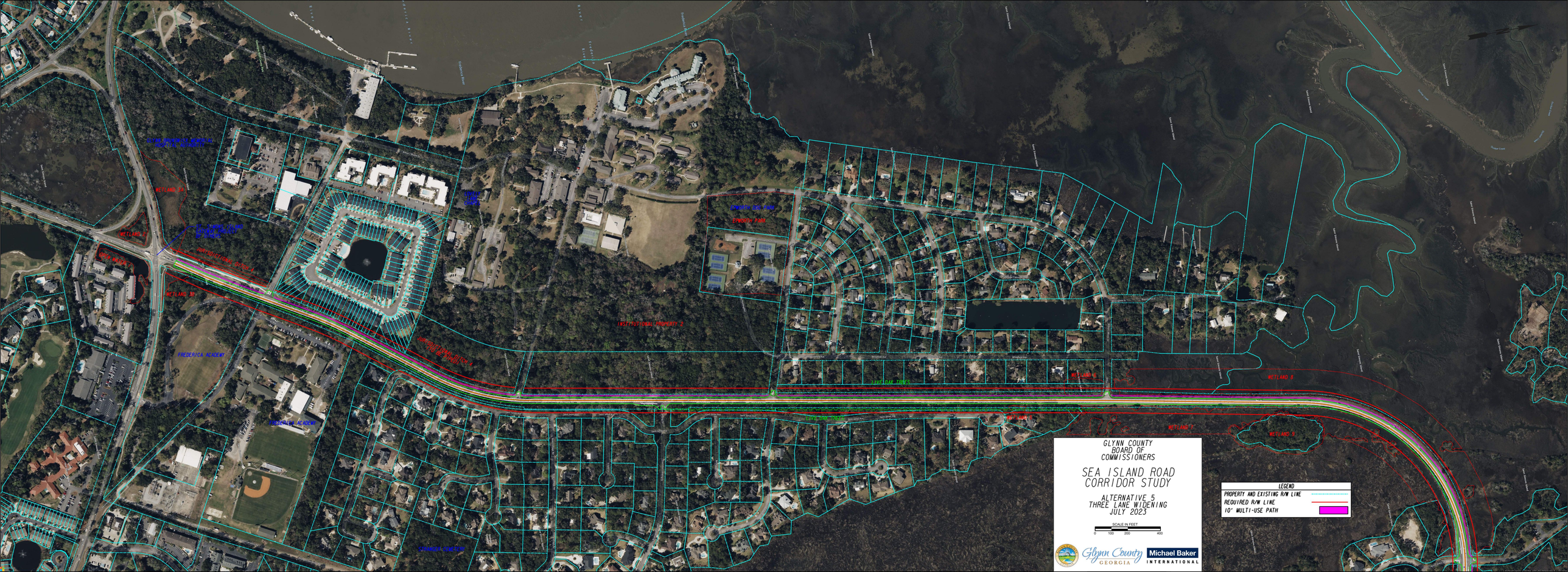

SAINT SIMONS JUNIOR HIGH SCHOOL
WETLANDS
WETLAND 11
WETLAND 14
WETLAND 15
WETLAND 16
WETLAND 17
WETLAND 10
DEAD WATER
Saint Simons Island
Dunbar Creek
Frederica River
Mackay Creek
Kelsey Creek
Hampton River
Gascoigne Bluff
Retreat Creek
Frederica Creek
Mallory Creek
Fancy Bluff Creek
Jones Creek
Gulnare Creek
Long Island Creek

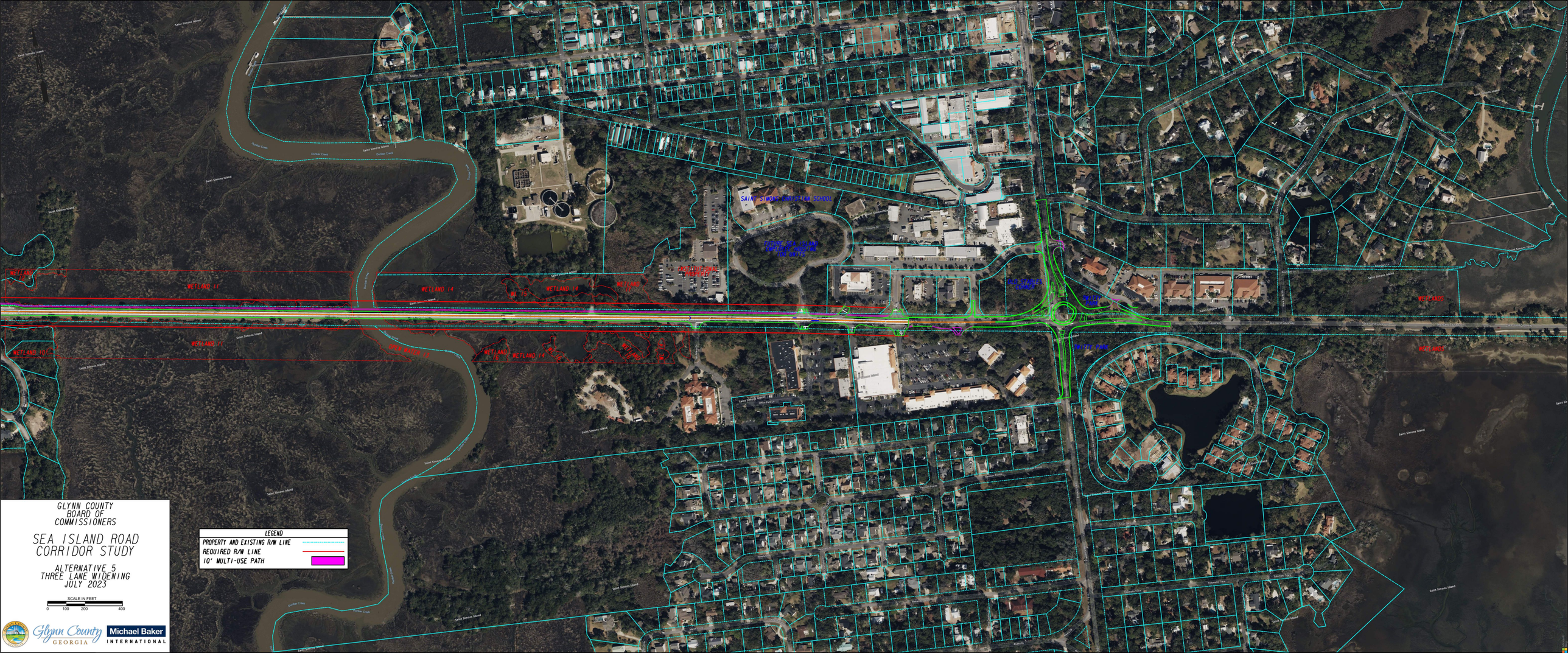
Appendix E
Alternative 3 - Symmetrical Widening


GLYNN COUNTY
BOARD OF
COMMISSIONERS
SEA ISLAND ROAD
CORRIDOR STUDY
ALTERNATIVE 3
SYMMETRICAL WIDENING
JULY 2023
SCALE IN FEET
0 100 200 400
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
RAISED MEDIAN
10' MULTI-USE PATH
Glynn County
GEORGIA
Michael Baker
INTERNATIONAL
WETLAND 91
WETLAND 92
WETLAND 90
WETLAND 8
WETLAND 7
WETLAND 5
INSTITUTIONAL PROPERTY 2
FREDERICA ACADEMY
LIVE OAK TRACES
STONEGATE CONDOS


GLYNN COUNTY
BOARD OF
COMMISSIONERS
SEA ISLAND ROAD
CORRIDOR STUDY
ALTERNATIVE 3
SYMMETRICAL WIDENING
JULY 2023
SCALE IN FEET
0
100
200
400
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
RAISED MEDIAN
10' MULTI-USE PATH
Glynn County
GEORGIA
Michael Baker
INTERNATIONAL
SAINT SIMONS COMMUNITY SCHOOL
WETLAND 11
WETLAND 14
WETLAND 15
WETLAND 16
WETLANDS
Saint Simons Island
Dunbar Creek

Appendix F
Alternative 5 – Three Lane


GLYNN COUNTY
BOARD OF
COMMISSIONERS
SEA ISLAND ROAD
CORRIDOR STUDY
ALTERNATIVE 5
THREE LANE WIDENING
JULY 2023
SCALE IN FEET
0 100 200 400
LEGEND
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
10' MULTI-USE PATH
Glynn County
GEORGIA
Michael Baker
INTERNATIONAL
FREDERICA ACADEMY
INSTITUTIONAL PROPERTY 3
WETLAND 8
WETLAND 5
WETLAND 1
WETLAND 3
WETLAND 2
WETLAND 9
LIVEOAK TRACE
STONEGATE CONDOS


SAINT SIMONS PRESBYTERIAN SCHOOL
WETLANDS
WETLAND 11
WETLAND 12
WETLAND 13
WETLAND 14
WETLAND 15
WETLAND 16
WETLAND 17
WETLAND 18
WETLAND 19
WETLAND 20
Saint Simons Island
Dunbar Creek
Frederica River
Mackay Creek
Kelsey Creek
Gloucester St
Mallory St
Frankfort St
Retreat St
Kelsey St
Arnold St
Sea Island Causeway
Frederica Rd
Sea Island Drive
Ocean Blvd
Kingfisher Way
Hampton Place
Hampton Lane
Sea Island Lane
Sea Island Cottages
Sea Island Golf Club
Sea Island Golf Course
Sea Island Golf Course Clubhouse
Sea Island Golf Course Pro Shop
Sea Island Golf Course Practice Facility
Sea Island Golf Course Practice Facility Parking
Sea Island Golf Course Practice Facility Parking Lot
Sea Island Golf Course Practice Facility Parking Lot Entrance
Sea Island Golf Course Practice Facility Parking Lot Exit
Sea Island Golf Course Practice Facility Parking Lot Entrance Road
Sea Island Golf Course Practice Facility Parking Lot Exit Road
Sea Island Golf Course Practice Facility Parking Lot Entrance Road Intersection
Sea Island Golf Course Practice Facility Parking Lot Exit Road Intersection
Sea Island Golf Course Practice Facility Parking Lot Entrance Road Intersection Signal
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Appendix G
Traffic Forecasting Analysis

See Supplemental Appendices

Appendix H
Public Comments from Public Workshop

See Supplemental Appendices

Appendix I
Public Comments from Comment Period

See Supplemental Appendices