

William Hilton Parkway Gateway Corridor Independent Review Advisory Committee Meeting

April 10th, 2024



Agenda

- Update on Project Progress
- Presentation of Traffic Operational Findings for Alternative #4
- Presentation of Roadway/ROW Findings for All Alternatives
- Presentation of Environmental Findings for All Alternatives
- Presentation of Overall Scoring Matrix for All Alternatives



Update on Project Progress

(Key Tasks Completed & Continuing to Work on Since Last Meeting)

- ✓ Completed preliminary traffic analyses & Synchro modeling for proposed Alternative #4.
- ✓ Determined preliminary Roadway, ROW, and Environmental impacts for Alternatives #1, #2, #3, & #4.
- ✓ Developed preliminary scoring matrix for all Alternatives

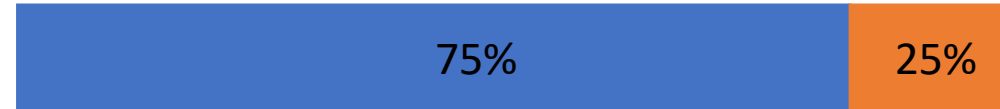
Update on Overall Project Progress (as of 4/5/24)

Overall ~50% Complete



• Task #1: Project Initiation and Coordination

○ ~75% Complete



○ Key Subtasks On-Going:

➤ Remaining scheduled meetings with Town (Bi-Weekly) staff and Committee (Monthly)

○ Key Subtask Deliverables Forthcoming:

➤ Brief technical memo formally documenting Lochmueller's professional opinion RE: viability of 4 lanes; second bridge; modifications to existing transit system, or other Transportation Demand Management strategies.

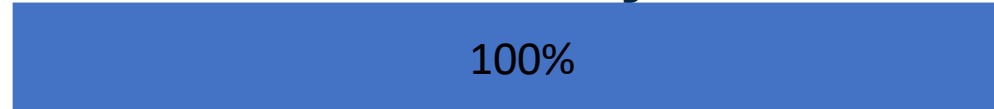
➤ Review of SCDOT Seismic Study (when rec'd), and documenting Lochmeuller's professional opinion RE: viability of retrofit/rehab of existing bridges.

➤ Deliverables to be provided prior to 5/8 Committee Meeting

Update on Overall Project Progress (as of 4/5/24)

Task #2: Review of Travel Demand Model & Evaluation of 2023 Existing Operating Conditions (Entire Study Area)

- 100% Complete



Update on Overall Project Progress (as of 4/5/24)

- Task #3: Traffic Model and Operational Update – Modified Original Project Study Area

- ~55% Complete



- Key Subtasks On-Going:

- Formal documentation efforts related to all traffic, roadway, and environmental analyses completed to date

- Key Subtasks Forthcoming:

- Prepare Draft Summary of Findings Memo RE: Task #3 Alternatives Analysis to be provided prior to 5/8 Committee Meeting

- Final Summary of Findings Memo RE: Task #3 Alternatives Analysis to be presented to Town Council (June 2024, date TBD)

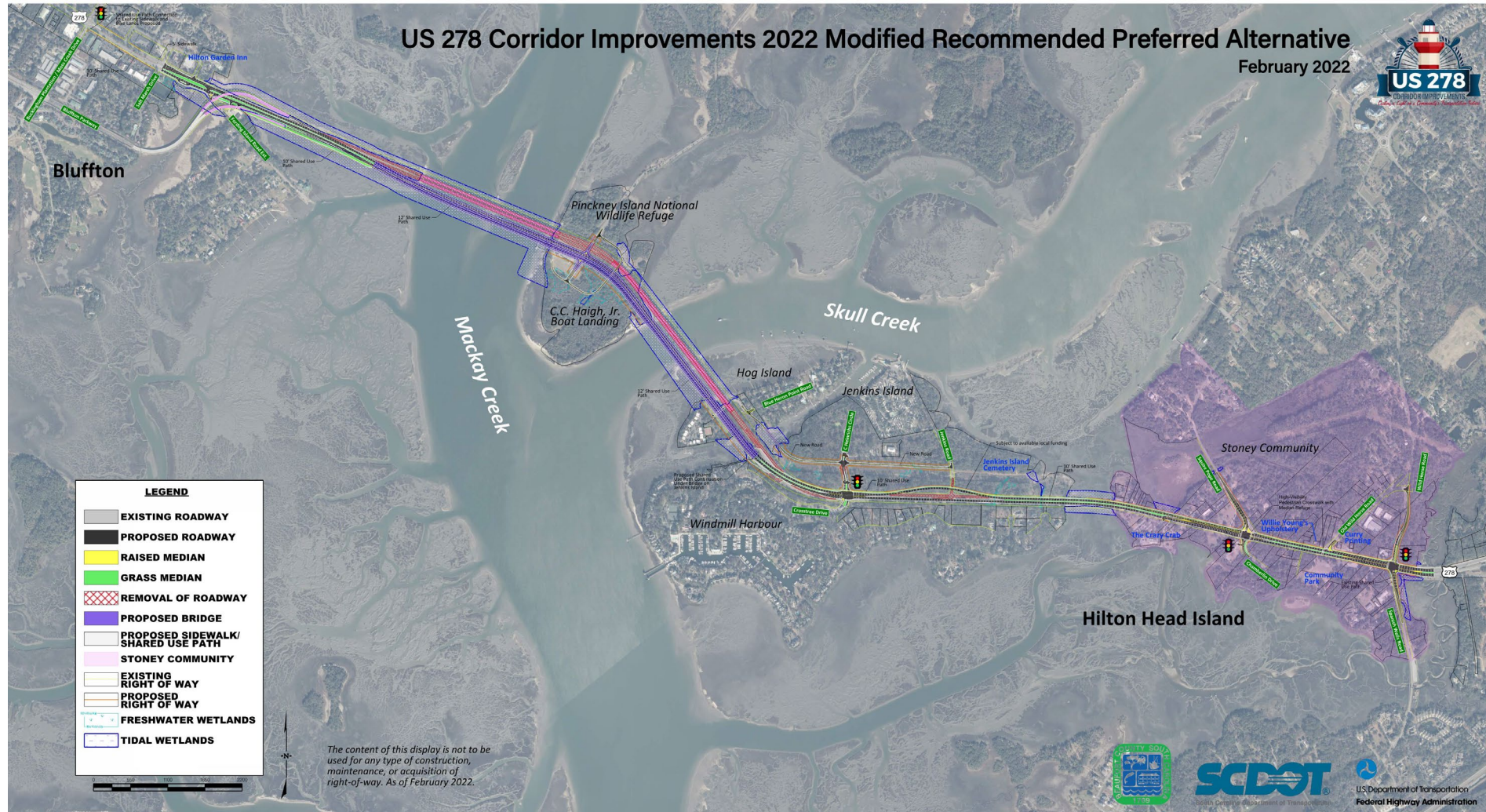
Update on Overall Project Progress (as of 4/5/24)

- **Task #4: Traffic Model and Operational Update – Entire Project Study Area**
 - Will commence immediately following 4/10 Committee meeting
 - Key Subtasks Forthcoming:
 - Selection of recommended Alternative from Task #3
 - Begin traffic analyses and modeling (Synchro & VISSIM) RE: 2045 Build Year conditions at intersections downstream of CIP.

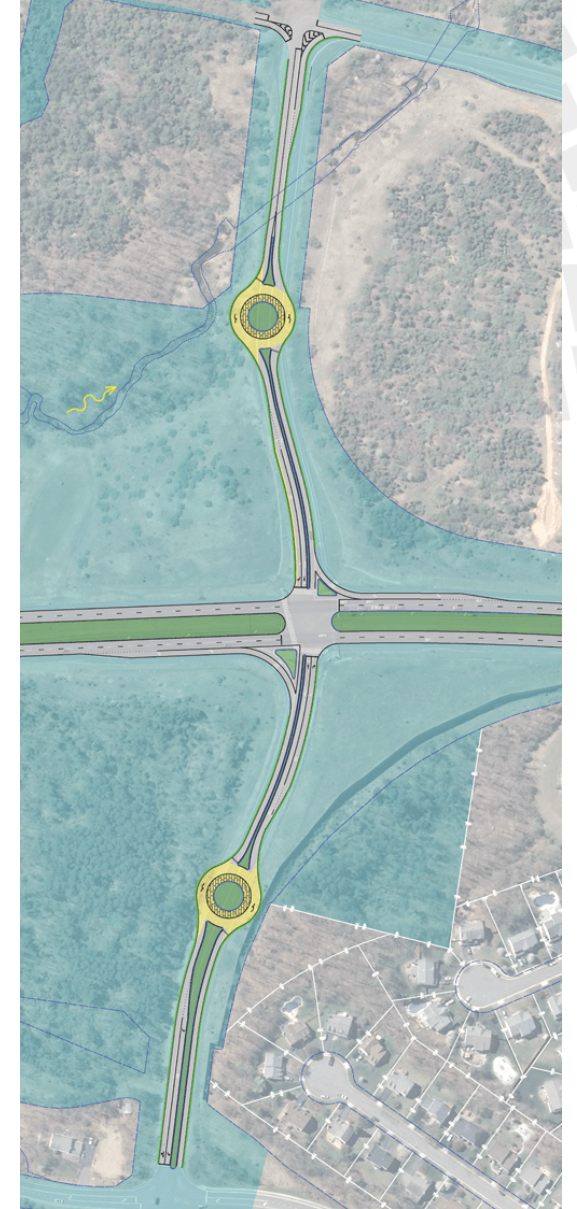
Recommended Alternative Improvements

- Alternative 1: SCDOT Modified Recommended Preferred
- Alternative 2: Bowties at Squire Pope and Spanish Wells
- Alternative 3: Echelon / Center Turn Overpass
 - Grade Separated Intersection at either Squire Pope or Spanish Wells
- Alternative 4: Elevated Bypass

Alternative #1 – SCDOT Modified Recommended Preferred



Alternative #2 – Bowties at Squire Pope and Spanish Wells



Alternative #3 – Echelon / Center Turn Overpass



Echelon



Center-Turn Overpass

Alternative #4 – Elevated Bypass



Alternative #4 – Elevated Bypass



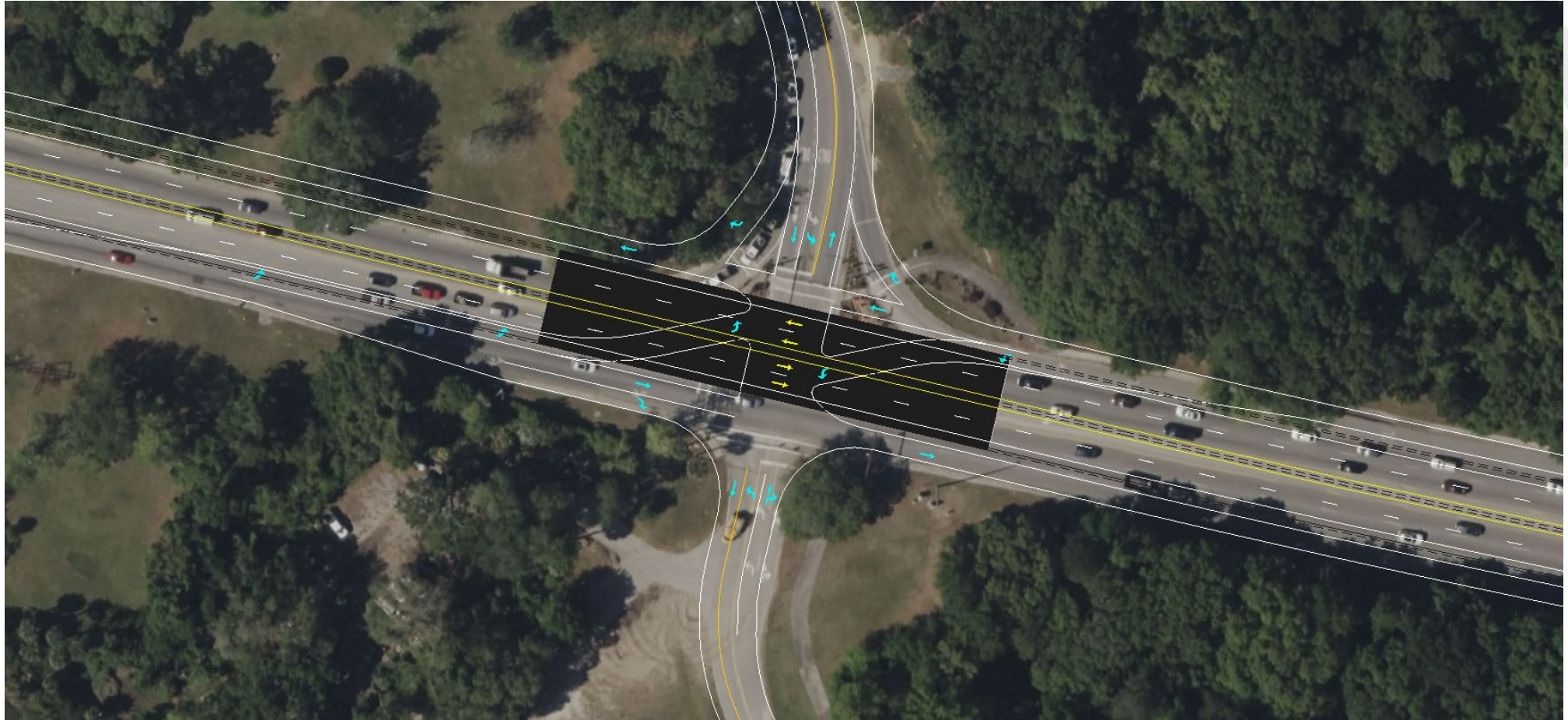
Alternative #4 – Elevated Bypass



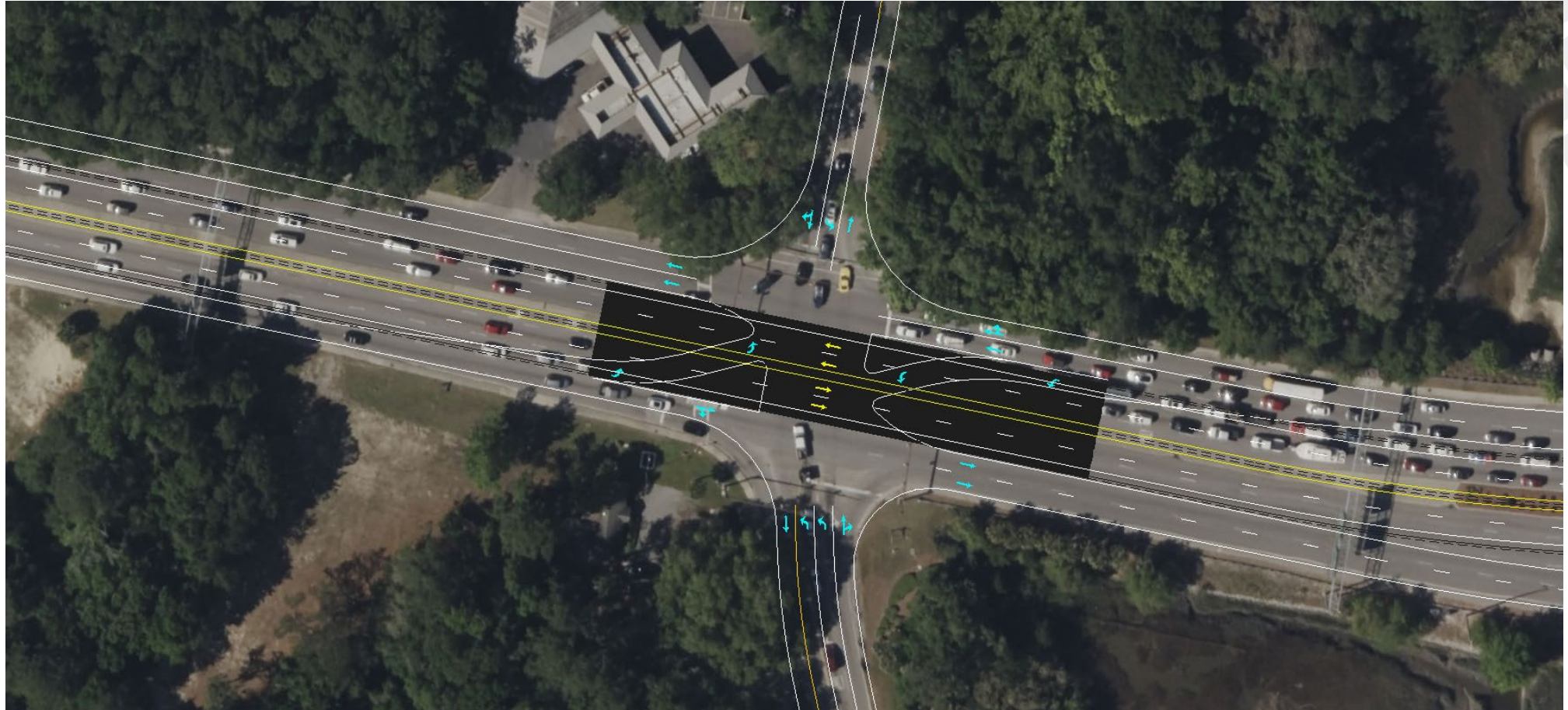
Alternative #4 – Elevated Bypass



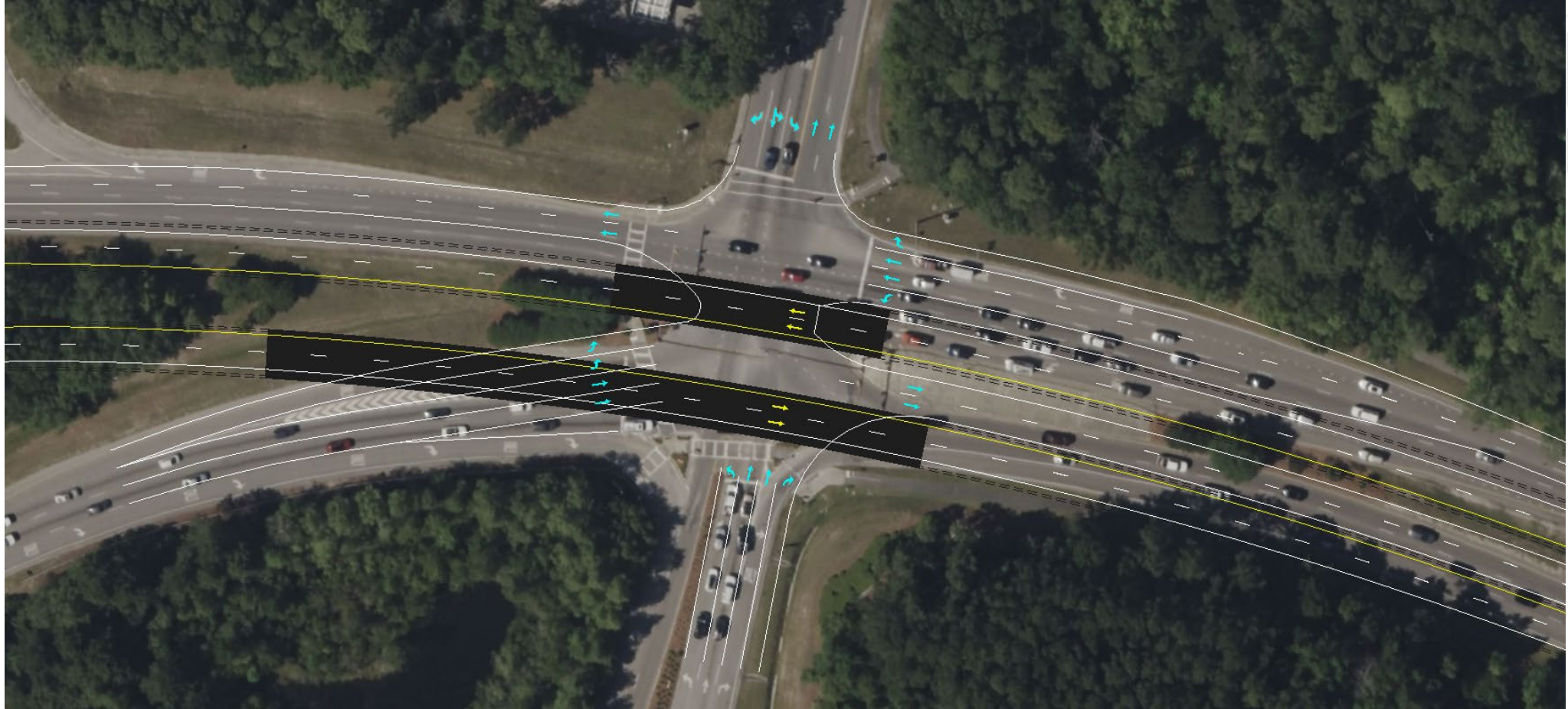
Alternative #4 – Elevated Bypass (Squire Pope)



Alternative #4 – Elevated Bypass (Spanish Wells)



Alternative #4 – Elevated Bypass (Gumtree)



Alternative 4 – Elevated Bypass

- Pros of Elevated Bypass

- Improves safety as fewer through vehicles would remain at grade, reducing the conflicts between vehicles and pedestrians
- Increases the efficiency of the at-grade signalized intersections
- Significantly reduces the size of at-grade intersections
- Provides room for growth along the corridor

- Cons of Elevated Bypass

- Most expensive alternative
- Results in the largest construction impact
- Requires grade separation
- Requires a change in decision making as drivers looking to go through the local intersections of Squire Pope, Old Wildhorse Drive, and Spanish Wells would need to enter the bypass.
 - However, full access would still be provided at-grade

Alternative 4 – Elevated Bypass

- Summary of forecasted operating conditions:
 - The following at-grade intersections would be able to be reduced in size and would be expected to operate at an overall LOSC or better:
 - Squire Pope
 - Spanish Wells
 - Gumtree
 - Full access could be available at Old Wild Horse
 - Overall, the study intersections are expected to operate acceptably under Alternative 4
 - The signalized intersections throughout the corridor are expected to operate with a LOSC or better overall
 - Side-street and unsignalized approaches throughout the corridor may still experience long delays
- Travel times were performed in Synchro along the Hilton Parkway corridor between Moss Creek and Indigo Run.
 - When compared to the 2045 No Build Scenario, the following changes in travel time were calculated:

Scenario		Difference in Travel Time (seconds) when Compared to 2045 No Build		% Difference	
		AM	PM	AM	PM
2045 Alternative 4: Elevated Bypass	EB	-126	27	-19.1%	4.1%
	WB	+4	-330	0.5%	-43.7%

Travel Time Comparison

Scenario		Difference in Travel Time (seconds) when Compared to 2045 No Build		% Difference	
		AM	PM	AM	PM
2045 Alternative 1: SCDOT Modified Recommended Preferred	EB	-109	+18	-16.1%	2.7%
	WB	+43	-276	6.3%	-34.2%
2045 Alternative 2: Bowties at Squire Pope and Spanish Wells	EB	-104	-39	-15.3%	-6.6%
	WB	+9	-290	1.4%	-36.4%
2045 Alternative 3: Echelon at Squire Pope	EB	-67	-51	-9.4%	-8.9%
	WB	+17	-297	2.5%	-37.7%
2045 Alternative 3: Echelon at Spanish Wells	EB	-103	+16	-15.1%	2.5%
	WB	-15	-331	-2.3%	-44.0%
2045 Alternative 3: Center Turn Overpass at Squire Pope	EB	-122	+23	-18.4%	3.5%
	WB	-21	-319	-3.3%	-41.6%
2045 Alternative 3: Center Turn Overpass at Spanish Wells	EB	-134	-17	-20.6%	-2.9%
	WB	-16	-339	-2.5%	-45.4%
2045 Alternative 4: Elevated Bypass	EB	-126	+27	-19.1%	4.1%
	WB	+4	-330	0.5%	-43.7%

Note that the travel times were completed in Synchro for the Hilton Parkway corridor between Moss Creek and Indigo Run

Traffic and Operations Overview Matrix - Scoring

Resource/Category	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Travel Time along US 278	4	4	2	1
Overall Intersection Operations	4	3	3	1
Side-Street Operations	4 Movements with a LOS F at a signalized intersection: Squire Pope: • Northbound approach (PM)	2 No movements have a LOS F at a signalized intersection. However, some movements are expected to have a LOS E at signalized intersections between Squire Pope and Gumtree.	4 Movements with a LOS F at a signalized intersection: <u>Echelon at Squire Pope:</u> Squire Pope: • Southbound approach (PM) <u>Center Turn Overpass at Squire Pope:</u> • Spanish Wells: Northbound Approach (PM)	1 All movements are expected to have a LOS D or better at signalized intersections between Squire Pope and Gumtree.
TOTAL	12	9	9	3
RANK	4	3	3	1

Bike/Ped Impact

Resource/Category	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Pedestrian Crossing Distance	Longest pedestrian crossing distances.	Reduced pedestrian crossing distances and exposure to motor vehicle traffic.	Reduced pedestrian crossing distances and exposure to motor vehicle traffic.	Reduced pedestrian crossing distances and exposure to motor vehicle traffic.
Potential for Refuge Islands	No refuge islands on north-south crossings.	Potential for median refuge island on east and west crosswalk legs at Squire Pope	Refuge islands between directional traffic allow pedestrians to more comfortably navigate the complex intersection.	Refuge islands between directional traffic allow pedestrians to more comfortably navigate the complex intersection; HOWEVER, multiple refuge islands per leg and long end-to-end crossing distances increase intersection complexity and the likelihood of pedestrians needing two or more stages to complete a north-south crossing.
Conflict Points	Multiple turning movements and potential conflict points along each leg.	Fewer ped/vehicle conflict points and vehicle turning movements.	Fewer ped/vehicle conflict points and vehicle turning movements.	Fewer ped/vehicle conflict points and vehicle turning movements.

Safety Impacts

- **Alternative 1**
 - 32 conflict points
- **Alternative 2**
 - 20 conflict points
- **Alternative 3**
 - Echelon = 22 conflict points
 - Center Turn Overpass = 24 conflict points
- **Alternative 4**
 - Crash Modification Factors (CMF) indicate that a reduction in crashes of approximately 30%-50% could be realized.
 - Note that the potential reduction in crashes for each alternative would need to be verified by an in-depth safety analysis



Roadway/ROW Impacts

- **Alternate 1 (+0.2 ac)**
 - Add 2nd SB left turn lane at Gumtree
- **Alternate 2 (+1.1 ac)**
 - Add 2nd SB left turn lane at Gumtree
 - Roundabouts on local system at Squire Pope and Spanish Wells
 - Potentially less ROW on WHP due to removing left turn lanes
- **Alternate 3 – Echelon and Center Turn Overpass (+1.4 ac)**
 - Add 2nd SB left turn lane at Gumtree
 - Roundabouts/turn arounds on local system at Squire Pope and Spanish Wells
 - Additional ROW on WHP for turn lanes
- **Alternate 4 – Elevated Bypass (0 ac)**
 - No additional ROW needed.



Additional ROW Req'd vs SCDOT Alternative Alternative #1 –SCDOT Modified Preferred



Additional ROW Req'd vs SCDOT Alternative Alternative #2 - Bowties



Additional ROW Req'd vs SCDOT Alternative Alternative #3 - Echelons



Additional ROW Req'd vs SCDOT Alternative Alternative #3 - Center Turn Overpass



Right of Way and Cost Matrix - Scoring

Resource/Category	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Estimated Additional Right of Way Acres	0.2	1.1	1.4	0
Right of Way Score	2	3	4	1
Cost	1	2	3	4
TOTAL	3	5	7	5
RANK	1	3	4	3

Environmental Overview Parameters

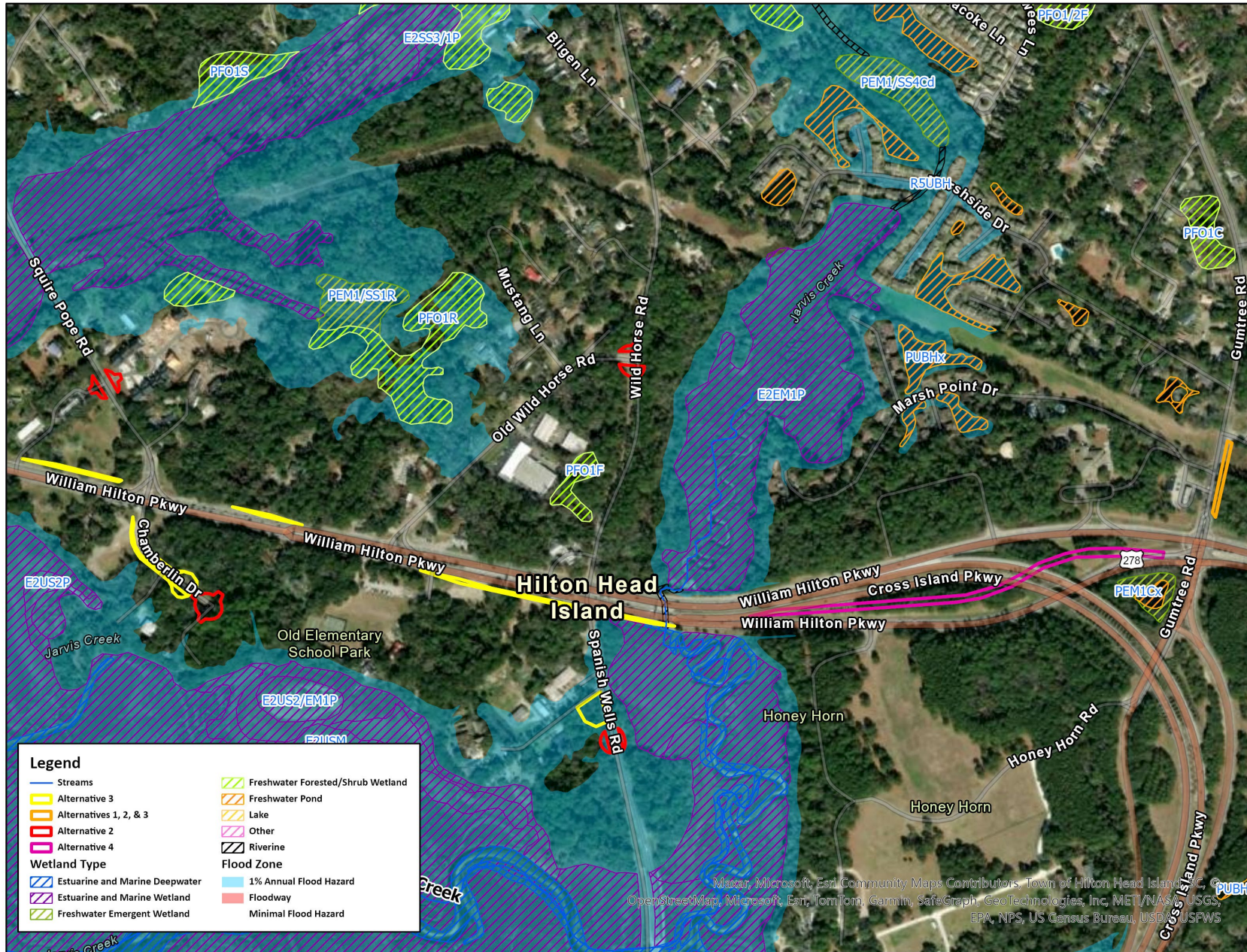
What the Environmental Overview Accomplishes:

- Assessment of resources completed at a high-level
 - Define “Red Flag” areas for consideration in advancement of design / specific alternatives
 - Archival geographic information system (GIS) data that is publicly available
 - Use of “Red Flag” areas to screen alternatives and provide high-level assessment of risk (cost/schedule)
 - Acceptable method for initial screening of multiple alternatives in the NEPA process
 - No field investigations occurred to verify resources

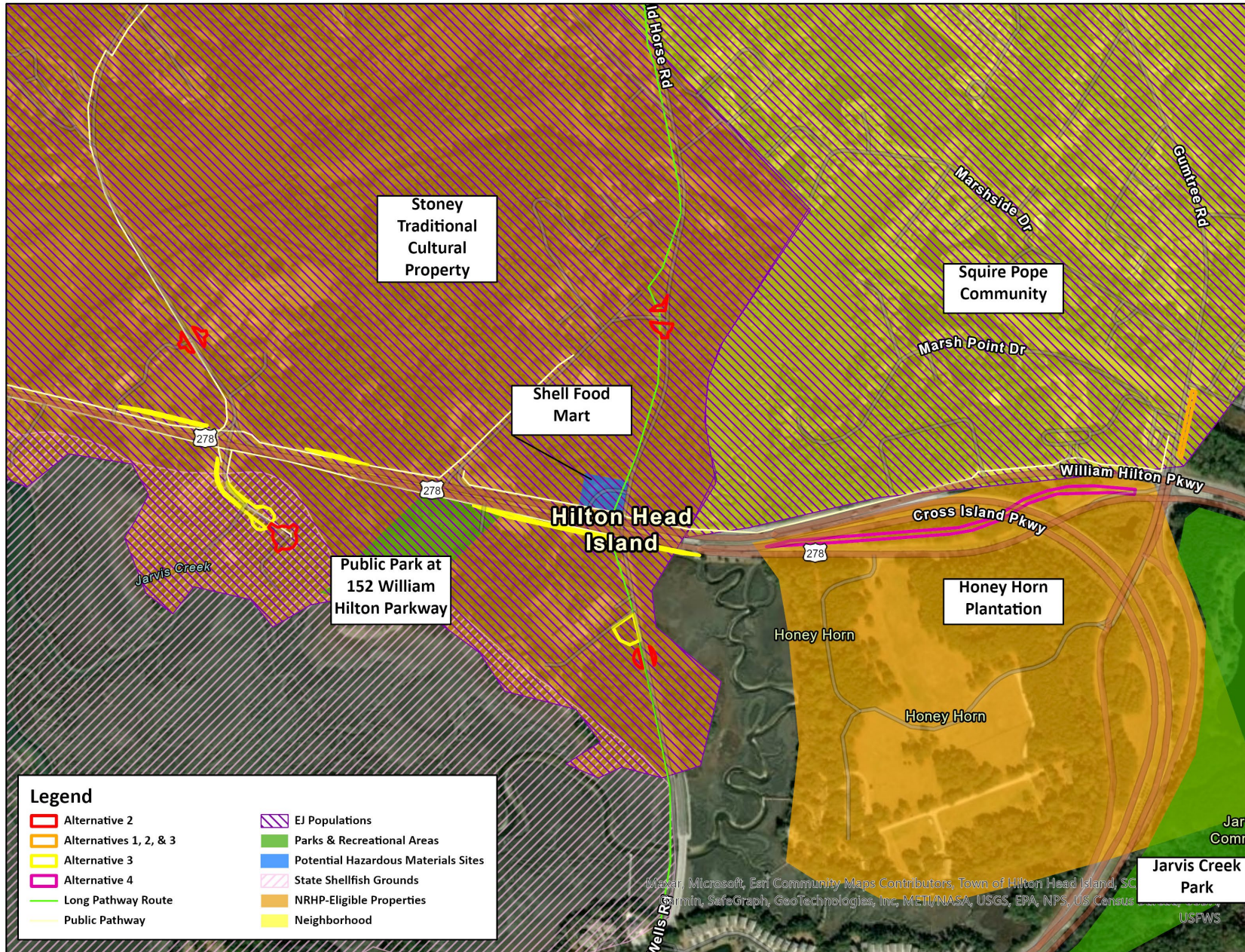
Limitations of the Environmental Overview:

- Assessment not vetted through coordination with resource agencies
- Field investigations to verify resources not completed
- Stakeholders & public have not provided input

Environmental Overview Mapping (Ecological)



Environmental Overview Mapping (Social)



Environmental Overview Matrix - Data

Resource/Category	Units	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Additional Right-of-Way Impacts	Acres No. of Tracts	0.2 1	1.1 11	1.4 19	0 0
Additional Relocations	No.	0	0	0	0
National Wetland Inventory (NWI) Wetlands	Acres	0	0	0.005 (Estuarine and Marine Wetland)	0
Streams	No. Est. Linear Feet	0 0	0 0	1 5	1 65
Floodplains	Acres	0	0.1	0.4	0
Essential Fish Habitat Types • Estuarine Emergent Wetland	Acres	0	0	0.75	0.05
Threatened & Endangered Species	--	May Affect, Not Likely to Adversely Affect	May Affect, Not Likely to Adversely Affect	May Affect, Not Likely to Adversely Affect	May Affect, Not Likely to Adversely Affect
Neighborhoods	No.	1 (Squire Pope)	2 (Stoney & Squire Pope)	2 (Stoney & Squire Pope)	0
Environmental Justice	No.	1 (Squire Pope)	2 (Stoney & Squire Pope)	2 (Stoney & Squire Pope)	0
Cultural Resources	No.	0	1 (Stoney TCP)	1 (Stoney TCP)	1 (Honey Horn Plantation)
Section 4(f) Resources (Hist. Properties / Public Recreational Areas / Wildlife Refuges)	No.	0	1 (Stoney TCP)	2 (Stoney TCP & Park at 152 WHP)	0

Environmental Overview Matrix – Scoring/Ranking

Resource/Category	Units	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Additional Right-of-Way Impacts	Acres No. of Tracts	2	3	4	1
Additional Relocations	No.	1	1	1	1
National Wetland Inventory (NWI) Wetlands	Acres	1	1	2	1
Streams	No. Est. Linear Feet	1	1	3	4
Floodplains	Acres	1	3	4	1
Essential Fish Habitat Types • Estuarine Emergent Wetland	Acres	1	1	4	3
Threatened & Endangered Species	--	1	1	1	1
Neighborhoods	No.	2	4	4	1
Environmental Justice	No.	2	4	4	1
Cultural Resources	No.	1	2	2	2
Section 4(f) Resources	No.	1	3	4	1
TOTAL		14	24	33	17
RANK		1	3	4	2

Environmental Overview Risk Assessment (Alternative 1)

Resource/Category Type		Baseline (SCDOT Recommended Preferred – Alt. 4a)	Alternative 1 (Mod. SCDOT Recommended Preferred)	Total Adjusted	Risk Considerations
Ecological	Wetlands	22.9 acres	0 additional acres	22.9 acres (No change)	While no changes in key ecological features are identified, additional time will be necessary for field investigations of new areas added and coordination with the appropriate regulatory agencies.
	Streams	Includes in wetland quantities	0 additional acres	No change	
	Floodplains	145 acres	0 additional acres	145 acres (No change)	
	Threatened & Endangered Species	May Affect, Not Likely to Adversely Affect Finding	Likely remain a “May Affect, Not Likely to Adversely Affect” finding	No change to finding anticipated	
Community & Social	Relocations	2	0 additional	2 (No change)	No risks identified.
	Right-of-Way	34 acres	0.2 acre additional	34.2 acres	Risks same as noted in ecological.
	Neighborhoods	1 (Stoney / 4.77 acres)	1 new neighborhood (Squire Pope / 0.2 acre)	2 (Stoney & Squire Pope / 4.97 acres total)	New impacts to Squire Pope community will require additional outreach and engagement opportunities to inform of project updates.
	Environmental Justice	1 (Stoney / 4.77 acres)	Same as neighborhoods	Same as neighborhoods	Risks same as noted in neighborhoods
	Cultural Resources	2 (Stoney TCP & Site 38BU66)	0	2 (No change)	Current Section 106 finding is “Adverse Effect” for impacts to archaeological site 38BU66; no change to finding is expected. Additional project elements at Gum Tree may require consideration of Squire Pope as a TCP.
	Section 4(f) Resources	3 (Stoney TCP / 4.77 acres, PINWR / 32 acres, & Park at 152 WHP / 0.22 acre)	0	3 (No change)	No change expected to current 4(f) findings in EA. Potential for Squire Pope to be considered a TCP. Right-of-way required unlikely to be considered a conversion (“use”).

Environmental Overview Risk Assessment (Alternative 2)

Resource/Category Type		Baseline (SCDOT Recommended Preferred – Alt. 4a)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Total Adjusted	Risk Considerations
Ecological	Wetlands	22.9 acres	0 additional acres	22.9 acres (No change)	While no changes in key ecological features are identified, additional time will be necessary for field investigations of new areas added and coordination with the appropriate regulatory agencies.
	Streams	Includes in wetland quantities	0 additional acres	No change	
	Floodplains	145 acres	0.1 additional acres	145.1 acres	
	Threatened & Endangered Species	May Affect, Not Likely to Adversely Affect Finding	Likely remain a “May Affect, Not Likely to Adversely Affect” finding	No change to finding anticipated	
Community & Social	Relocations	2	0 additional	2 (No change)	No risks identified.
	Right-of-Way	34 acres	1.1 acres additional	35.1 acres	Risks same as noted in ecological.
	Neighborhoods	1 (Stoney / 4.77 acres)	1 new neighborhood (Squire Pope / 0.2 acre new) (0.9 acre additional from Stoney)	2 (Stoney & Squire Pope / 5.87 acres total)	Additional impacts within Stoney and new impacts to Squire Pope community will require additional outreach and engagement opportunities to inform of project updates. Turning limitations will bring additional traffic into neighborhood at bowtie locations.
	Environmental Justice	1 (Stoney / 4.77 acres)	Same as neighborhoods	Same as neighborhoods	Risks same as noted in neighborhoods
	Cultural Resources	2 (Stoney TCP & Site 38BU66)	0	2 (No change)	Current Section 106 finding is “Adverse Effect” for impacts to archaeological site 38BU66, additional ROW from Stoney; no change to finding is expected. Additional project elements at Gum Tree may require consideration of Squire Pope as a TCP.
	Section 4(f) Resources	3 (Stoney TCP / 4.77 acres, PINWR / 32 acres, & Park at 152 WHP / 0.22 acre)	0 (additional 0.9 acre from Stoney)	3 (No change in no. of resources; total use of Stoney TCP = 5.67 acres)	No change expected to current 4(f) findings in EA. Potential for Squire Pope to be considered a TCP. Right-of-way required unlikely to be considered a conversion (“use”).

Environmental Overview Risk Assessment (Alternative 3)

Resource/Category Type		Baseline (SCDOT Recommended Preferred – Alt. 4a)	Alternative 3 (Echelon / Center Turn Overpass)	Total Adjusted	Risk Considerations
Ecological	Wetlands	22.9 acres	0.005 additional acres	22.905 acres	While no changes in key ecological features are identified, additional time will be necessary for field investigations of new areas added and coordination with the appropriate regulatory agencies.
	Streams	Includes in wetland quantities	< 0.1 additional acres	Minimal change	
	Floodplains	145 acres	0.4 additional acres	145.4 acres	
	Threatened & Endangered Species	May Affect, Not Likely to Adversely Affect Finding	Likely remain a “May Affect, Not Likely to Adversely Affect” finding	No change to finding anticipated	
Community & Social	Relocations	2	0 additional	2 (No change)	No risks identified.
	Right-of-Way	34 acres	1.4 acres additional	35.4 acres	Risks same as noted in ecological.
	Neighborhoods	1 (Stoney / 4.77 acres)	1 new neighborhood (Squire Pope / 0.2 acre new) (1.2 acres additional from Stoney)	2 (Stoney & Squire Pope / 6.17 acres total)	Additional impacts within Stoney and new impacts to Squire Pope community will require additional outreach and engagement opportunities to inform of project updates. Echelons within Stoney creates potential barriers.
	Environmental Justice	1 (Stoney / 4.77 acres)	Same as neighborhoods	Same as neighborhoods	Risks same as noted in neighborhoods
	Cultural Resources	2 (Stoney TCP & Site 38BU66)	0	2 (No change)	Additional ROW from Stoney and elevated project elements creates visual effects; likely elevating Stoney TCP from NAE to AE, MOA amendment. Additional project elements at Gum Tree may require consideration of Squire Pope as a TCP.
	Section 4(f) Resources	3 (Stoney TCP / 4.77 acres, PINWR / 32 acres, & Park at 152 WHP / 0.22 acre)	0	3 (No change in no. of resources; total use of Stoney TCP & Park at 152 WHP = 5.97 acres)	Additional “use” at Stoney & park at 152 WHP; likely AE at Stoney TCP may require additional 4(f) evaluations. Potential for Squire Pope to be considered a TCP. Right-of-way required unlikely to be considered a conversion (“use”).

Environmental Overview Risk Assessment (Alternative 4)

Resource/Category Type		Baseline (SCDOT Recommended Preferred – Alt. 4a)	Alternative 4 (Elevated Bypass)	Total Adjusted	Risk Considerations
Ecological	Wetlands	22.9 acres	0.005 additional acres	22.9 acres (No change)	While no changes in key ecological features are identified, additional time will be necessary for field investigations of new areas added and coordination with the appropriate regulatory agencies.
	Streams	Includes in wetland quantities	< 0.1 additional acres	65 additional feet (< 0.1 acre)	
	Floodplains	145 acres	0.4 additional acres	145 acres (No change)	
	Threatened & Endangered Species	May Affect, Not Likely to Adversely Affect Finding	Likely remain a “May Affect, Not Likely to Adversely Affect” finding	No change to finding anticipated	
Community & Social	Relocations	2	0 additional	2 (No change)	No risks identified.
	Right-of-Way	34 acres	0 acres additional	34 acres (No change)	Risks same as noted in ecological.
	Neighborhoods	1 (Stoney / 4.77 acres)	0	1 (Stoney / 4.77 acres)	Additional outreach and engagement opportunities needed to inform of project updates. While no additional ROW acquired, the elevated bypass lane within Stoney creates a potential barrier dividing community.
	Environmental Justice	1 (Stoney / 4.77 acres)	0	1 (Stoney / 4.77 acres)	Risks same as noted in neighborhoods
	Cultural Resources	2 (Stoney TCP & Site 38BU66)	1 (Honey Horn Plantation)	3 (Site 38BU66, Stoney TCP, and Honey Horn Plantation)	Elevated project elements within Stoney TCP creates visual effects; likely elevating Stoney TCP from NAE to AE. New impacts to Honey Horn Plantation require consideration.
	Section 4(f) Resources	3 (Stoney TCP / 4.77 acres, PINWR / 32 acres, & Park at 152 WHP / 0.22 acre)	0	3	Likely AE at Stoney TCP, when added to impacts identified in EA, may require additional 4(f) evaluations. Project elements within Honey Horn Plantation unlikely to be considered a conversion (“use”).

Environmental Overview Risk Weight & Mitigation

Alternative		RISK CATEGORIES (related to cost and schedule implications to the NEPA process)			Env. Overview Score (A)	Risk Adjustment (B1+B2+B3)	Weighted Rank (A x B)
		Section 106 (Cultural Resources) (B1)	Section 4(f) (B2)	Community & Social Impacts (B3)			
Alt. 1 – Mod. SCDOT Rec. Preferred Alt.	Risk Considerations	Moderate (2)	Low (1)	Low (1)	14	4	56 (1)
	Mitigation Opp.	Unlikely additional mitigation considerations would be required for this alternative.					
Alt. 2 – Bowties at Squire Pope and Spanish Wells	Risk Considerations	Moderate (2)	Moderate (2)	Moderate (2)	24	6	144 (2)
	Mitigation Opp.	Mitigation for Section 106 and Section 4(f) unlikely. Community impacts may require mitigation. Concepts could include traffic calming measures, inclusion of Gullah art in bowties, or creation of unique gateway.					
Alt. 3 – Echelon / Center Turn Overpass	Risk Considerations	High (3)	High (3)	Moderate (2)	33	8	264 (4)
	Mitigation Opp.	Interpretive signage about Gullah community along trails. Incorporation of Gullah art into the transportation infrastructure (crosswalks, wall murals, lighting, asphalt painting, sculptures). Walking tour pamphlet or video documentary about the Gullah. Include design elements that encourage connectivity of community on either side of US 278 and traffic calming on intersecting roadways. Evaluate context sensitive design opportunities.					
Alt. 4 – Elevated Bypass	Risk Considerations	High (3)	High (3)	High (3)	17	9	153 (3)
	Mitigation Opp.	Same as Alternative 3.					

Environmental Overview Summary

What the Environmental Alternatives Matrix Identified:

- Alternative 1 has the least concern for additional environmental impacts
- Alternatives 2 & 4 have moderate concerns for additional environmental impacts
- Alternative 3 has the highest concern for additional environmental impacts

Matrix Focus Areas:

- Minimal additional impacts to ecological resources when added to SCDOTs alternative
- More emphasis of concern on additional impacts (direct & indirect) to social resources (cultural properties, EJ populations, neighborhoods/communities)

Next Steps:

- Expectation of SCDOTs consultant to fold into the NEPA analysis for the US 278 Corridor Improvements Project
 - Resources can be field-verified
 - Appropriate coordination with resource agencies can occur & engagement with stakeholders/public
 - Refinement of resource impact quantities

Overall Scoring Matrix

Resource/Category	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Traffic Operations (Throughput and Traffic Simulations)	4	3	3	1
ROW Impact	2	3	4	1
Environmental Impact	1	2	4	3
Safety	4	3	3	1
Bike/Pedestrian Impact	4	3	1	2
Community and Social Impact	1	4	4	3
Aesthetic	2	1	3	4
Cost	1	2	3	4
TOTAL	19	21	25	19
RANK	1	3	4	1

1 = Highest Ranking

QUESTIONS?



<https://www.islandpacket.com/news/local/traffic/article235209867.html>