



Appendix G

Preliminary Jurisdictional Determination

June 2021

JD Checklist*

Action		SCDOT Confirmation		Consultant Confirmation	
1	Is the <i>Jurisdictional Determination Request</i> Form completed and signed?	Y	N	Y	N
2	Does the JD packet include:	Y	N	Y	N
	a) Location Map	Y	N	Y	N
	b) Aerial photograph with project boundary?	Y	N	Y	N
	c) Topographic map with project boundary?	Y	N	Y	N
	d) Soil survey map with project boundary?	Y	N	Y	N
	e) Photographs of the site, wetlands, streams, ditches, etc?	Y	N	Y	N
	f) Table with Latitude and Longitude for each jurisdictional feature (wetland, stream pond, etc.)?	Y	N	Y	N
3	Is the project boundary large enough to encompass all potential impacts including construction access?	Y	N	Y	N
4	Is the acreage for the project area included on the wetland map?	Y	N	Y	N
5	Are all wetlands and streams identified on a map or drawing?	Y	N	Y	N
6	Is there a map included showing the surface connection of how the stream, wetland, or ditch connects to a downstream (named) tributary?	Y	N	Y	N
	b) Do all identified streams contain a clear line or polygon with linear footage?	Y	N	Y	N
7	Could you use the maps and drawings to easily locate the site and the boundaries of the wetlands within the project area <u>without the consultant present</u> ?	Y	N	Y	N
8	Data Sheets:				
	a) Are data sheets included?	Y	N	Y	N
	b) Is a reference map included to indicate where the data points are located?	Y	N	Y	N

Chris Beckham

SCDOT

T Russell Chandler

Consultant

* This checklist includes information that is not necessarily required for a Jurisdictional Determination but will ensure a streamlined review

U.S. Army Corps of Engineers – Charleston District - Regulatory Division
REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD) / DELINEATION
 (For Jurisdictional Status and Identifying Wetlands and Other Aquatic Resources)

I. PROPERTY AND AGENT INFORMATION

A. Site Details/Location:

Site Name: _____ Date: _____
 City/Township/Parish: _____ County: _____
 Latitude/Longitude: _____ Acreage: _____
 Tax Map Sequence (TMS) #(s): _____
 Property Address(es): _____

____ Please attach a survey/plat map and vicinity map identifying location and review area for the JD/delineation.
 An accurate depiction of the review area must be provided (survey, tax map, or GPS coordinates). Tax maps may only be used if the site includes the entire tax map parcel.

B. Requestor of Jurisdictional Determination/Delineation (if there are multiple property owners, please attach additional pages)

Name: _____
 Company Name (if applicable): _____
 Address: _____
 Phone: _____ Email: _____
 Check one: I currently own this property
 I plan to purchase this property
 Other, please explain _____

C. Agent/Environmental Consultant Acting on Behalf of the Requestor (if applicable):

Consultant/Agent Name: _____
 Company Name: _____
 Address: _____ Phone: _____
 Email: _____

II. REASON FOR REQUEST (check all that apply)

- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all aquatic resources.
- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps, and the Jurisdictional Determination would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps; this request is accompanied by my permit application and the jurisdictional determination is to be used in the permitting process.
- I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is subject to the ebb and flow of the tide.
- A Corps jurisdictional determination is required in order to obtain my local/state authorization.
- I intend to contest jurisdiction over a particular aquatic resource and the request the Corps to confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- I believe that the site may be comprised entirely of dry land.
- Other: _____

<p>Charleston Office: US Army Corps of Engineers Regulatory Division 69A Hagood Avenue Charleston, SC 29403 (ph) 843-329-8044 SAC.RD.Charleston@usace.army.mil</p>	<p>Columbia Office: US Army Corps of Engineers Regulatory Office 1835 Assembly Street, Room 865 B-1 Columbia, SC 29201 (ph) 803-253-3444 SAC.RD.Columbia@usace.army.mil</p>	<p>Conway Office: US Army Corps of Engineers Regulatory Office 1949 Industrial Park Road, Room 140 Conway, SC 29526 (ph) 843-365-4239 SAC.RD.Conway@usace.army.mil</p>	<p>Greenville Office: US Army Corps of Engineers Regulatory Office 150 Executive Center Drive, Suite 205 Greenville, SC 29615 (ph) 864-609-4326 SAC.RD.Greenville@usace.army.mil</p>
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***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

III. TYPE OF REQUEST:

Delineation Concurrence¹

Approved² Jurisdictional Determination (AJD) Only

Preliminary³ Jurisdictional Determination (PJD) Only

Approved Jurisdictional Determination (AJD) with submittal of a Pre-Construction Notification or Department of the Army permit application

Preliminary Jurisdictional Determination (PJD) with submittal of a Pre-Construction Notification or Department of the Army permit application

Delineation of Wetlands and/or Other Aquatic Resources Only Conducted By Agent/Environmental Consultant with submittal of a Pre-Construction Notification or Department of the Army permit application (No jurisdictional determination requested)

I request that the **Corps delineate** the wetlands and/or other aquatic resources that may be present on my property with the attached **Pre-Construction Notification or Department of the Army permit application**

I request that the **Corps delineate** the wetlands and/or other aquatic resources that may be present on my property **with a Delineation Only, an AJD or PJD**

“No Permit Required” (NPR) Letter as I believe my proposed activity is not regulated⁴

Unclear as to which jurisdictional determination I would like to request and require additional information to inform my decision

¹ Delineation Concurrence (DC) – A DC provides concurrence that the delineated boundaries of wetlands on a property are a reasonable representation of the aquatic resources on-site. A DC does not address the jurisdictional status of the aquatic resources.

² Approved – An AJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, an AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status. AJDs are valid for 5 years.

³ Preliminary – A PJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, a PJD is used to indicate that this office has identified the approximate location(s) and boundaries of wetlands and/or other aquatic resources on a site that are presumed to be subject to regulatory jurisdiction of the Corps of Engineers. Unlike an AJD, a PJD does not represent a definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a site, and does not have an expiration date.

⁴ “No Permit Required” (NPR) Letter- A NPR letter may be provided by the Corps to notify the requestor that an activity will not require a permit (authorization) from the Corps; this letter can only be used if the proposed activity is not a regulated activity, regardless of where the activity may occur. A NPR letter cannot be used to indicate the presence or absence of wetlands and/or other aquatic resources, nor can it be used to determine their jurisdictional status.

IV. LEGAL RIGHT OF ENTRY

By signing below, I am indicating that I have the authority, or am acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant U.S. Army Corps of Engineers personnel right of entry to legally access the property(ies) subject to this request for the purposes of conducting on-site investigations (e.g., digging and refilling shallow holes) and issuing a jurisdictional determination. I acknowledge that my signature is an affirmation that I possess the requisite property rights to request a jurisdictional determination on the properties subject to this request.

Mailing Address

Property Address / TMS #(s)

Email Address

Daytime Phone Number

Chris Beckham

Chris Beckham 2/2/2021

*Signature:

Printed Name and Date

*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

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US 278 Corridor Improvements

Beaufort County, South Carolina

Preliminary Jurisdictional Determination Package



Prepared for:



South Carolina Department of Transportation

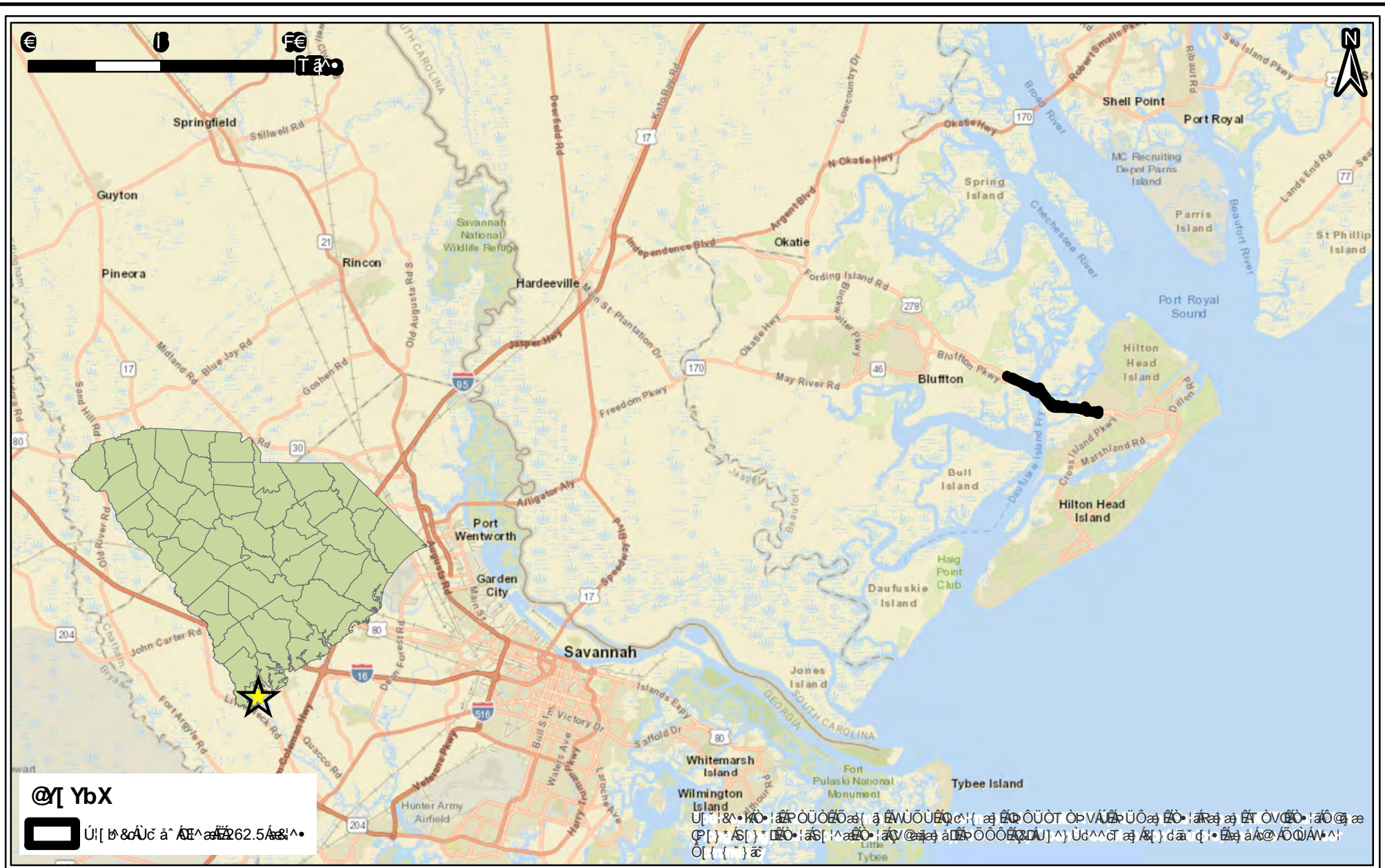
Prepared by:



1022 State Street, Building 2
Cayce, South Carolina 29033

January 22, 2020

Supplemental
Maps



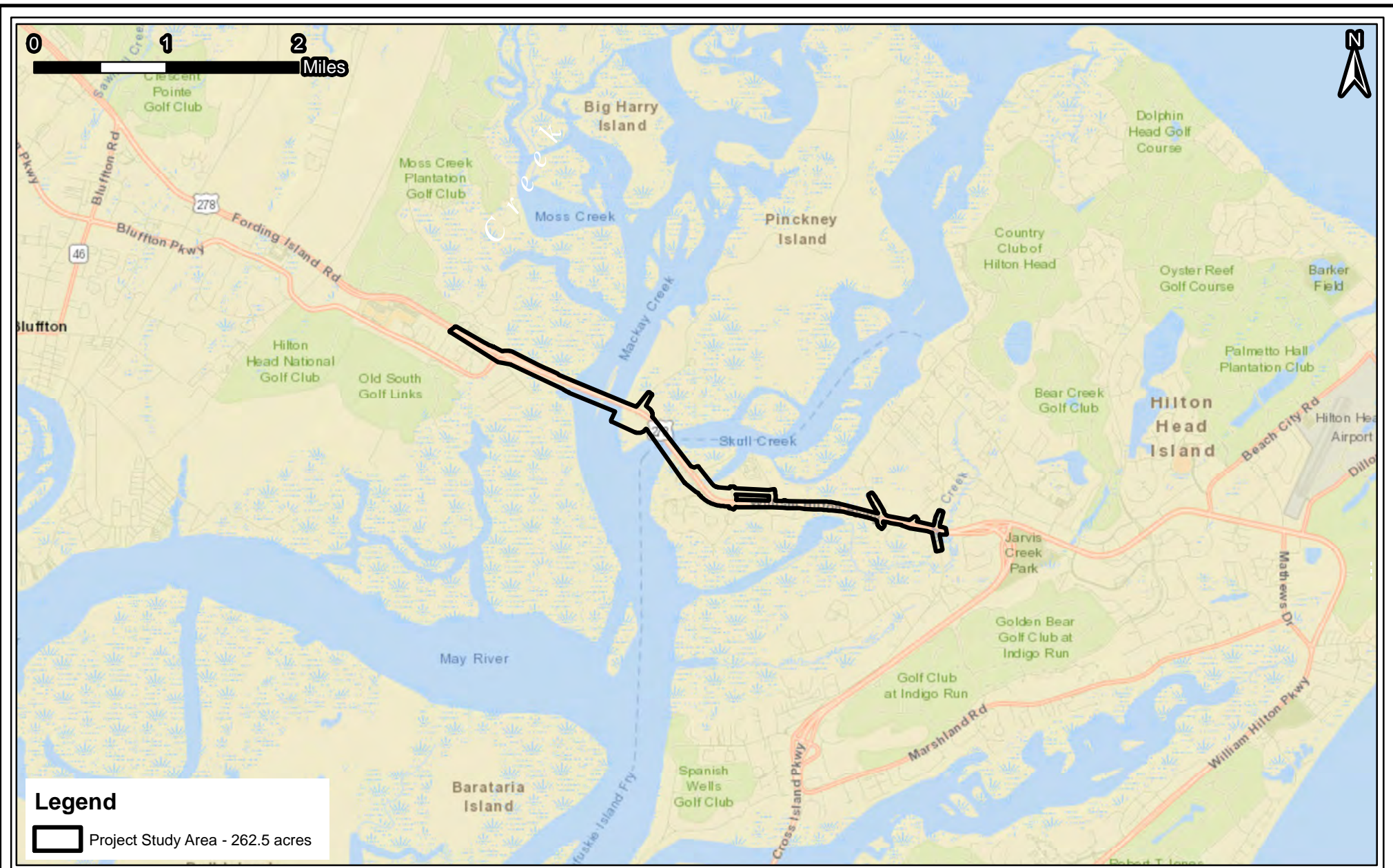
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Legend

 Project Study Area - 262.5 acres



Prepared For:



US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

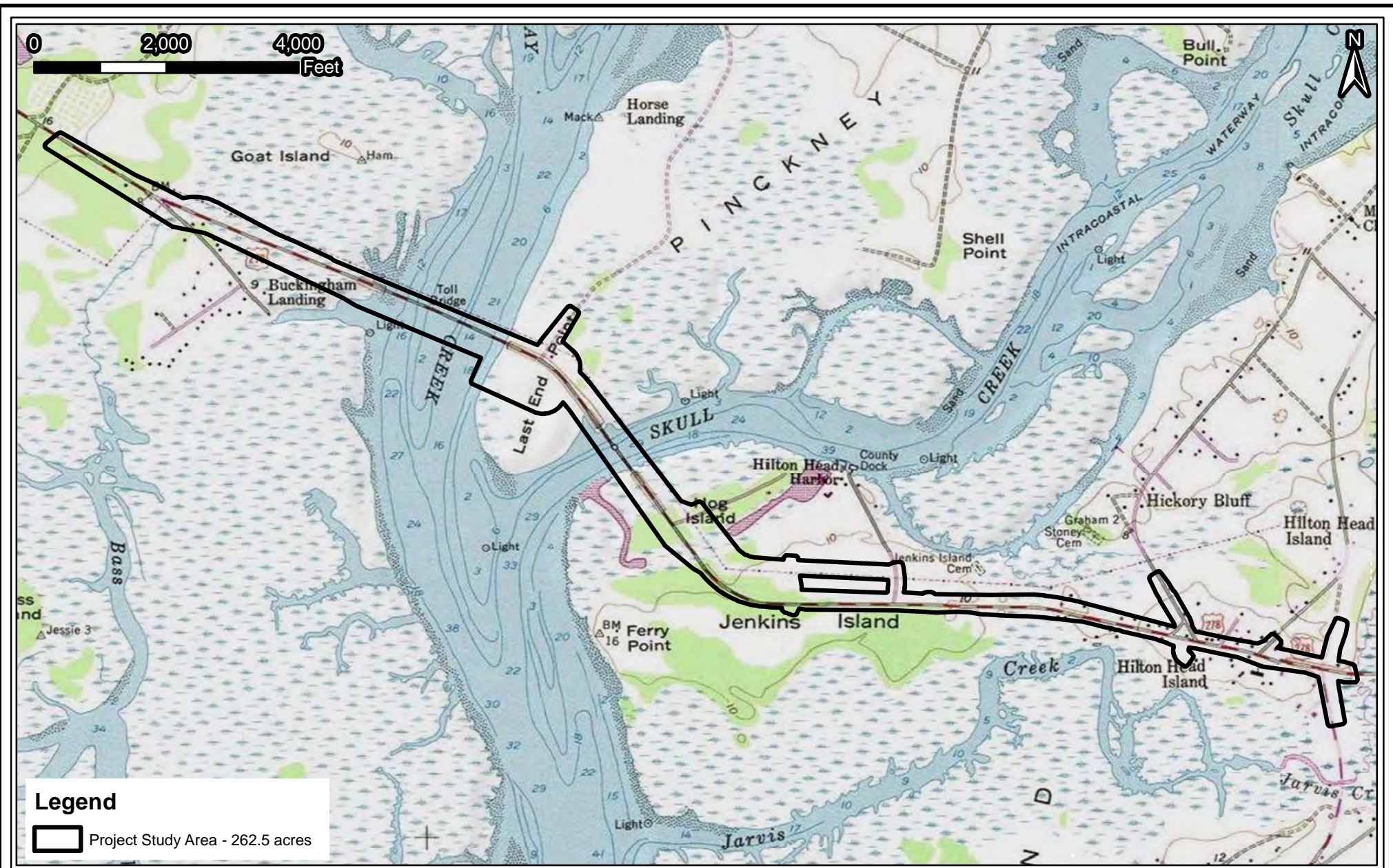
Date:
January 22, 2021

Scale:
1 inch = 1 miles


Job No.:
P030450

Drawn By: WCB	Checked By: TRC
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**Large
Scale
Location
Map**



Legend

 Project Study Area - 262.5 acres



Prepared For:



US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

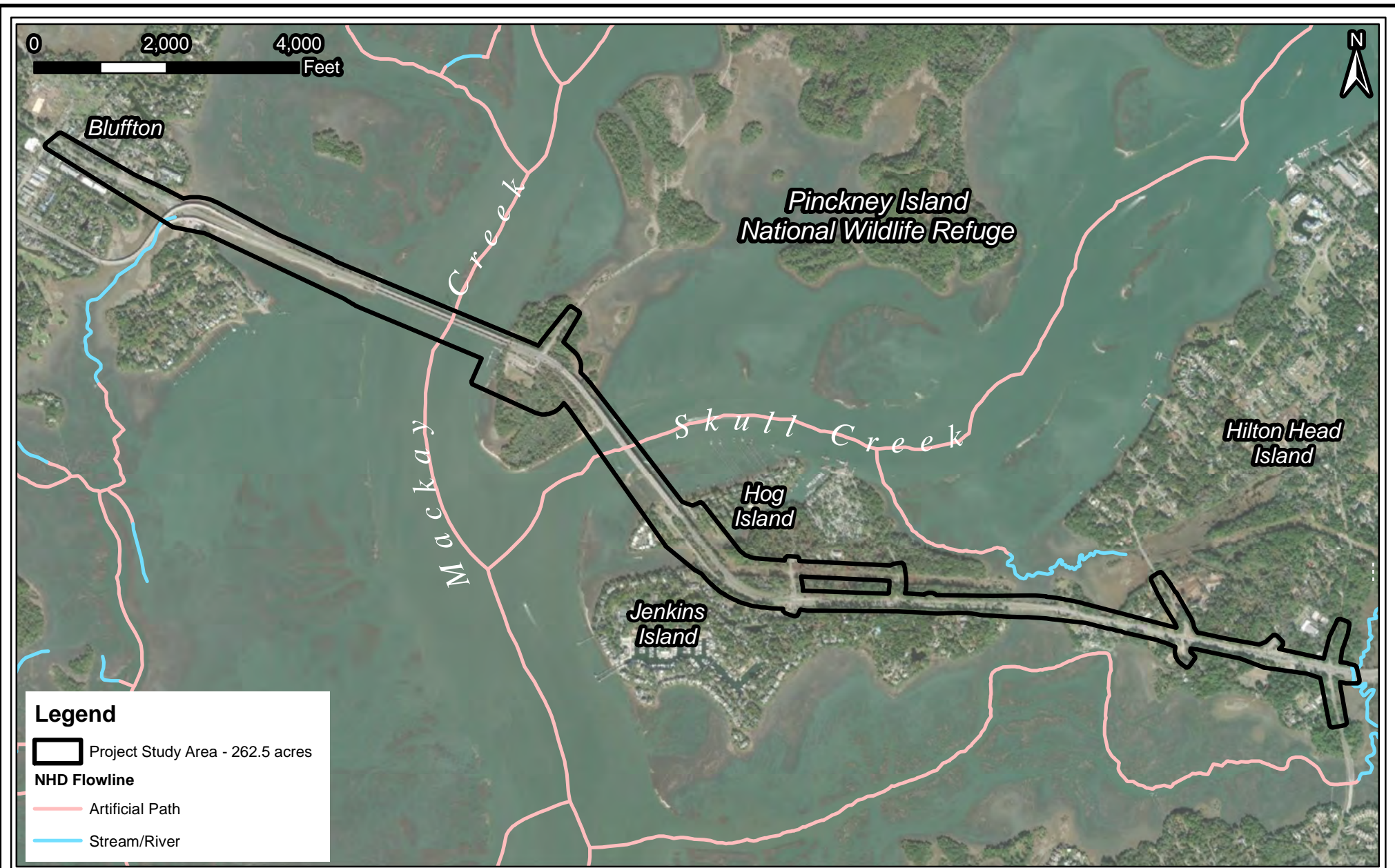
Date:
January 22, 2021

Scale:
1 inch = 2,000 feet

Job No.:
P030450

Drawn By: WCB	Checked By: TRC
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Topographic Map



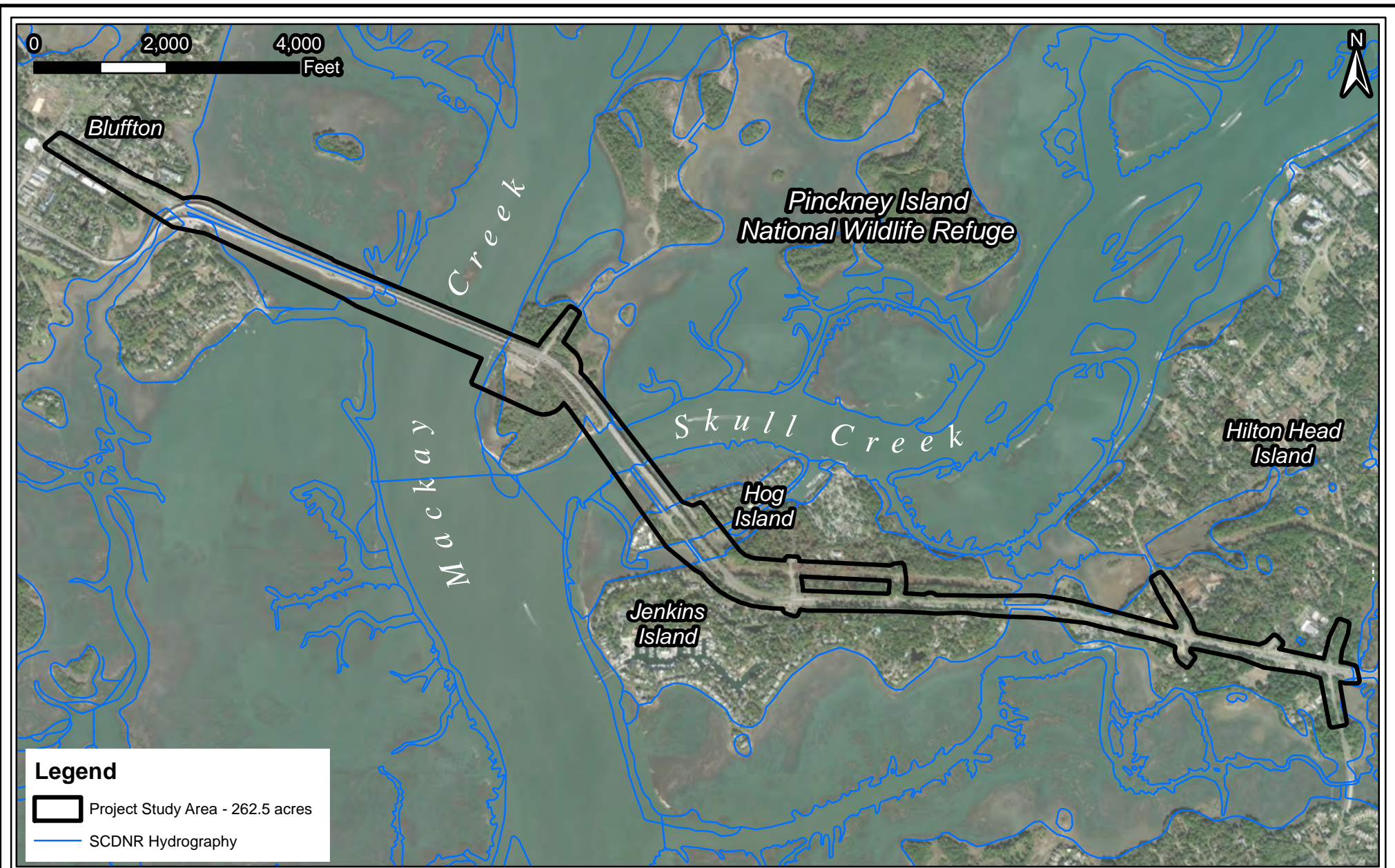
Prepared For:



US 278 Corridor Improvements
 Preliminary Jurisdictional Determination
 Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 2,000 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

National Hydrography Data

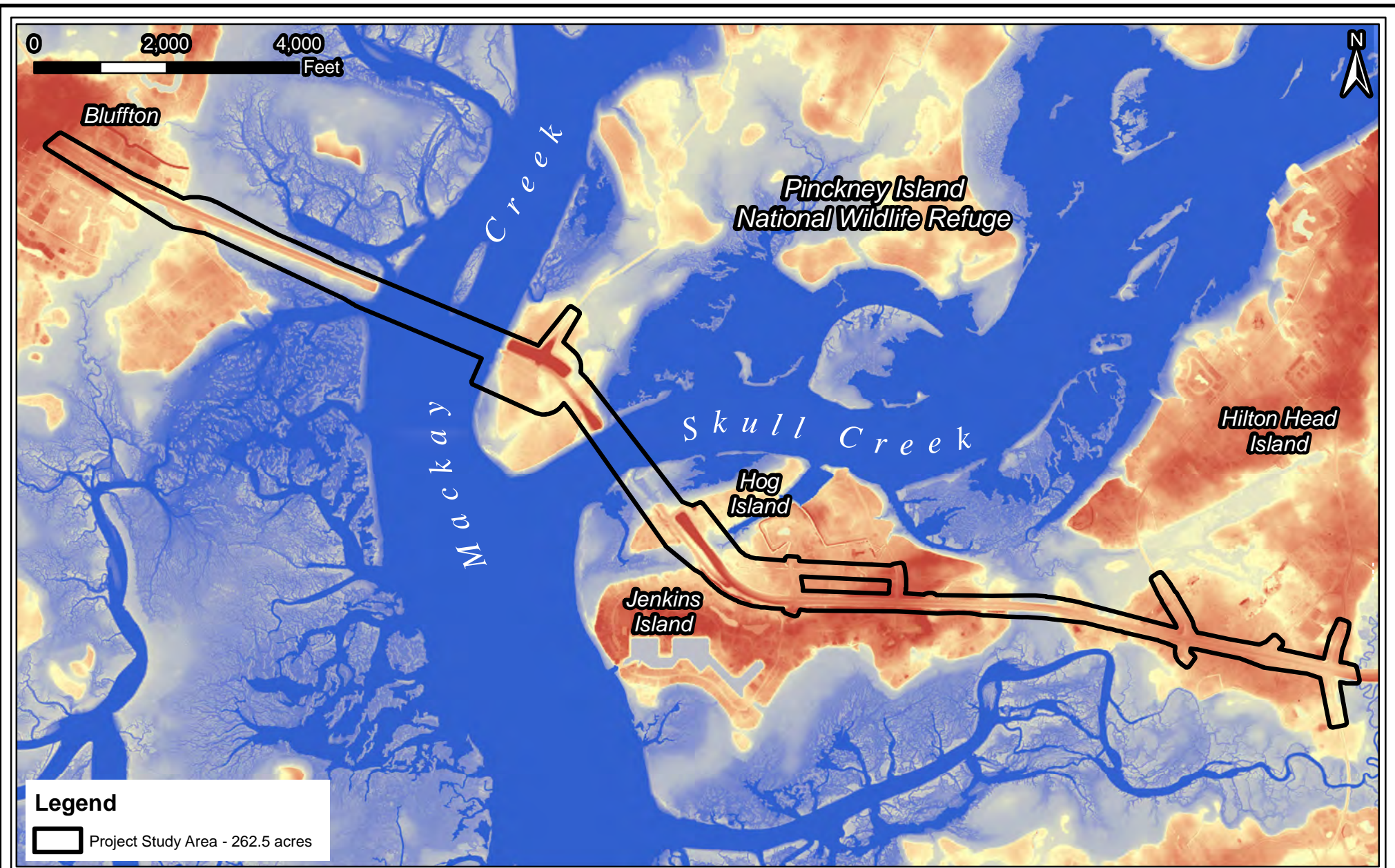


US 278
CORRIDOR IMPROVEMENTS
Castling a Light on the Community's Transportation Future

US 278 Corridor Improvements
Preliminary
Jurisdictional Determination
Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 2,000 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

SCDNR
Hydrography
Data



Prepared For:



US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

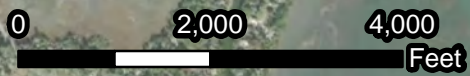
Date:
January 22, 2021

Scale:
1 inch = 2,000 feet


Job No.:
P030450

Drawn By: WCB	Checked By: TRC
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**Digital
Elevation
Model**



Legend

 Project Study Area - 262.5 acres



Prepared For:

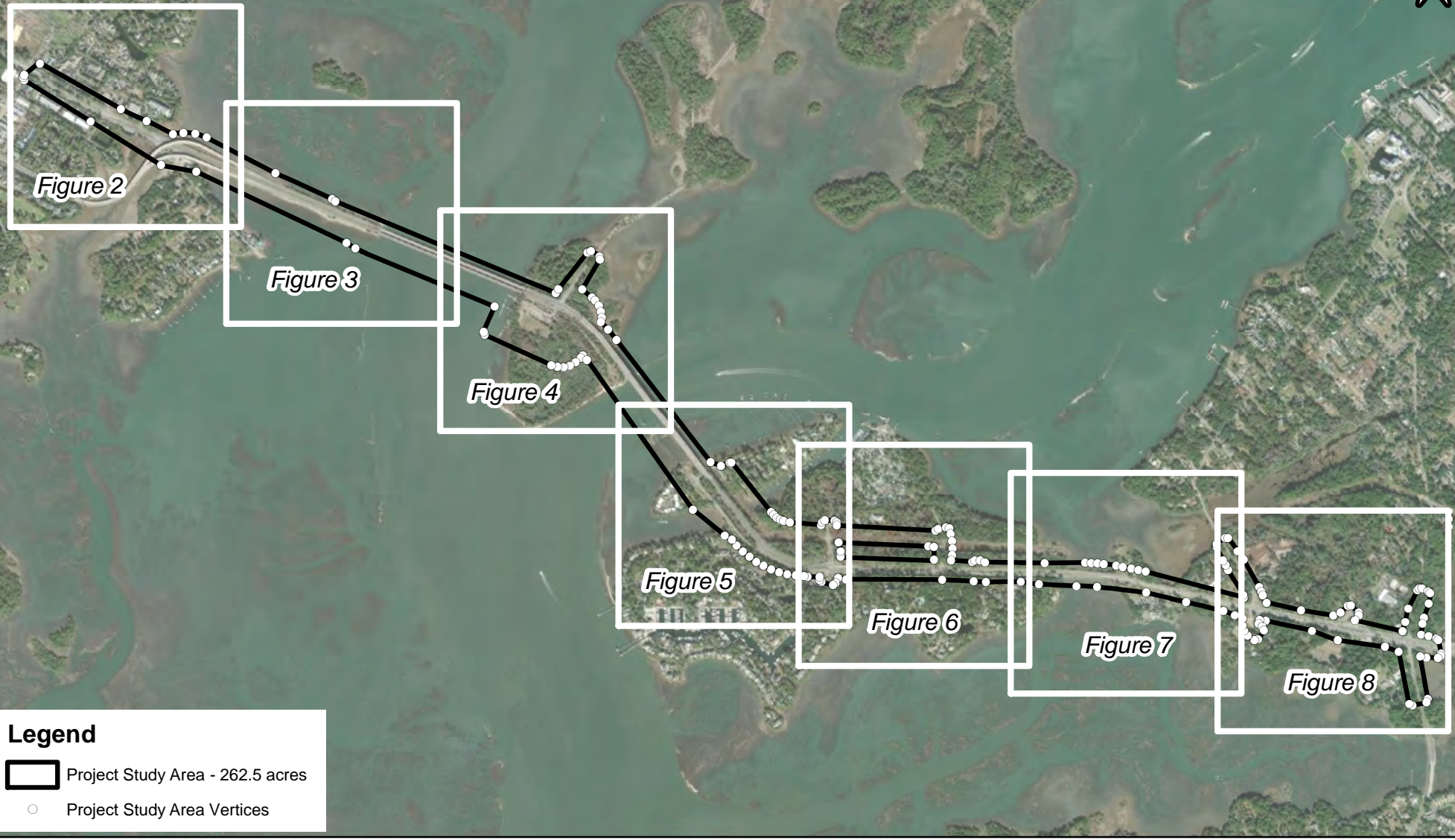
 South Carolina Department of Transportation



US 278 Corridor Improvements
 Preliminary Jurisdictional Determination
 Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 2,000 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Aerial Imagery



Legend

- Project Study Area - 262.5 acres
- Project Study Area Vertices



Prepared For:



US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 2,000 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Study Area Vertices

Figure 1



Legend

- Project Study Area - 262.5 acres
- Project Study Area Vertices



Prepared For:



US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Study Area Vertices

Figure 2



US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Study Area Vertices

Figure 3



Prepared For:

US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Study Area Vertices

Figure 4



Prepared For:

US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021

Scale: 1 inch = 400 feet

Job No.: P030450

Drawn By: WCB Checked By: TRC

Study Area Vertices

Figure 5



Prepared For:

US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021

Scale: 1 inch = 400 feet

Job No.: P030450

Drawn By: WCB Checked By: TRC

Study Area Vertices

Figure 6



Prepared For:

US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Study Area Vertices

Figure 7



Prepared For:

US 278 Corridor Improvements
 Preliminary
 Jurisdictional Determination
 Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Study Area Vertices
Figure 8

Table 1: Project Study Area Vertices

Vertex #	Latitude	Longitude
1	32.23786	-80.80937
2	32.23610	-80.80571
3	32.23564	-80.80455
4	32.23513	-80.80336
5	32.23518	-80.80288
6	32.23514	-80.80234
7	32.23499	-80.80183
8	32.23361	-80.79872
9	32.23263	-80.79617
10	32.23253	-80.79602
11	32.22899	-80.78606
12	32.22915	-80.78593
13	32.23056	-80.78460
14	32.23061	-80.78446
15	32.23038	-80.78406
16	32.23027	-80.78406
17	32.22913	-80.78485
18	32.22880	-80.78442
19	32.22870	-80.78428
20	32.22850	-80.78410
21	32.22827	-80.78400
22	32.22803	-80.78398
23	32.22787	-80.78401
24	32.22758	-80.78369
25	32.22717	-80.78330
26	32.22248	-80.77906
27	32.22234	-80.77859
28	32.22246	-80.77821
29	32.22245	-80.77811
30	32.22055	-80.77633
31	32.22043	-80.77621
32	32.22033	-80.77607
33	32.22025	-80.77591
34	32.22019	-80.77575
35	32.22014	-80.77548
36	32.22004	-80.77407
37	32.22016	-80.77403
38	32.22023	-80.77391
39	32.22021	-80.77347
40	32.22014	-80.77336
41	32.22002	-80.77335

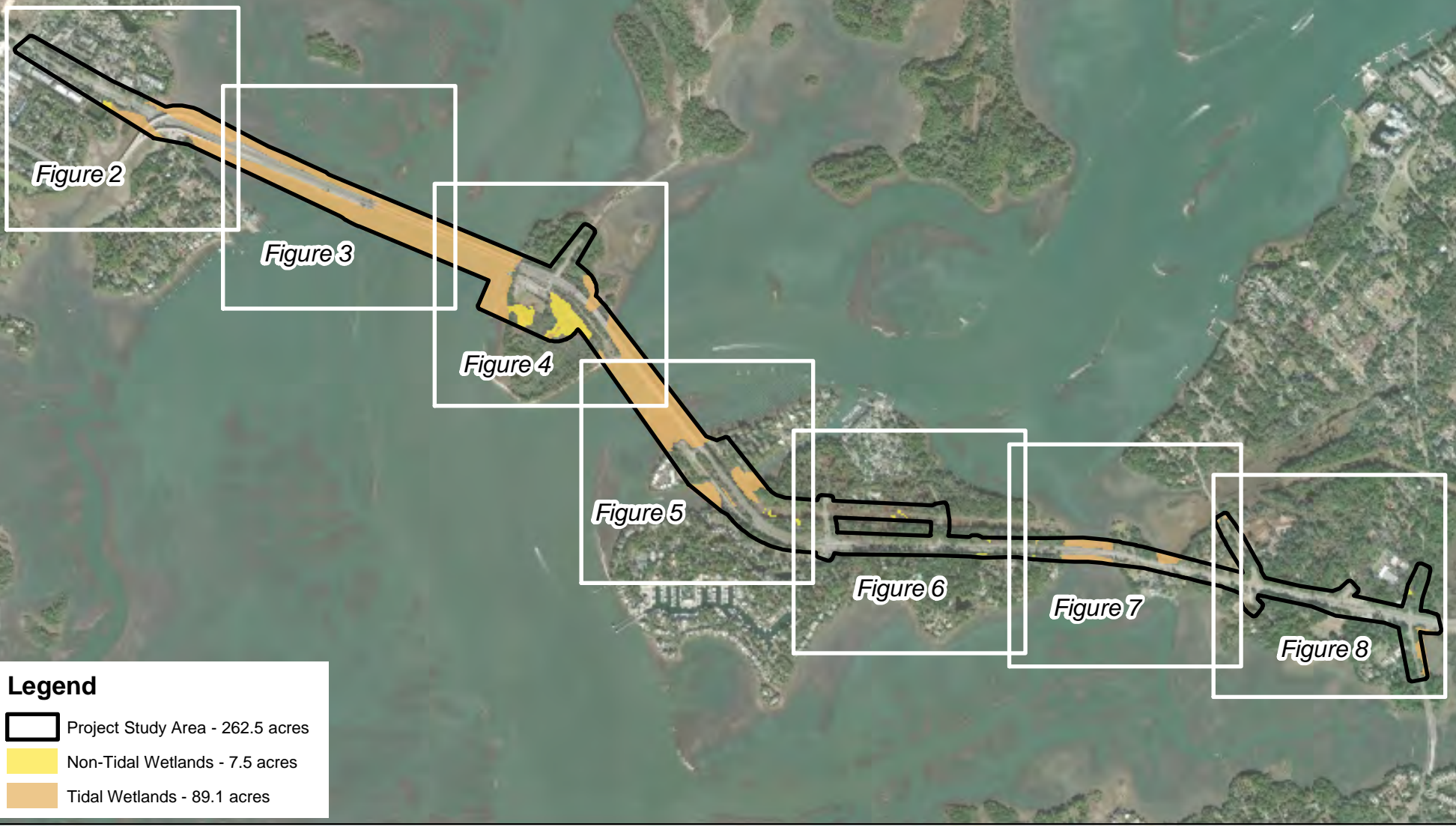
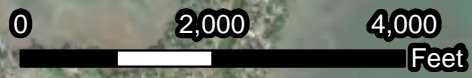
Vertex #	Latitude	Longitude
42	32.21983	-80.76891
43	32.21989	-80.76877
44	32.21995	-80.76843
45	32.21990	-80.76828
46	32.21970	-80.76820
47	32.21942	-80.76815
48	32.21915	-80.76814
49	32.21888	-80.76815
50	32.21868	-80.76820
51	32.21863	-80.76725
52	32.21868	-80.76711
53	32.21869	-80.76687
54	32.21861	-80.76667
55	32.21857	-80.76397
56	32.21858	-80.76213
57	32.21857	-80.76185
58	32.21855	-80.76157
59	32.21853	-80.76129
60	32.21846	-80.76074
61	32.21842	-80.76044
62	32.21834	-80.76004
63	32.21829	-80.75973
64	32.21823	-80.75941
65	32.21723	-80.75497
66	32.21732	-80.75498
67	32.21828	-80.75567
68	32.21847	-80.75577
69	32.21866	-80.75590
70	32.21917	-80.75618
71	32.21928	-80.75619
72	32.21952	-80.75580
73	32.21951	-80.75567
74	32.21900	-80.75523
75	32.21873	-80.75503
76	32.21867	-80.75495
77	32.21764	-80.75426
78	32.21744	-80.75415
79	32.21730	-80.75411
80	32.21703	-80.75393
81	32.21673	-80.75238
82	32.21652	-80.75092

Vertex #	Latitude	Longitude
83	32.21663	-80.75059
84	32.21688	-80.75027
85	32.21691	-80.75012
86	32.21662	-80.74977
87	32.21652	-80.74976
88	32.21634	-80.74995
89	32.21592	-80.74779
90	32.21628	-80.74767
91	32.21679	-80.74752
92	32.21749	-80.74712
93	32.21756	-80.74704
94	32.21756	-80.74691
95	32.21745	-80.74662
96	32.21737	-80.74653
97	32.21698	-80.74659
98	32.21643	-80.74681
99	32.21621	-80.74688
100	32.21577	-80.74696
101	32.21573	-80.74659
102	32.21564	-80.74627
103	32.21556	-80.74617
104	32.21506	-80.74604
105	32.21495	-80.74607
106	32.21489	-80.74620
107	32.21490	-80.74672
108	32.21494	-80.74699
109	32.21331	-80.74666
110	32.21317	-80.74672
111	32.21307	-80.74735
112	32.21314	-80.74749
113	32.21512	-80.74796
114	32.21531	-80.74859
115	32.21557	-80.75072
116	32.21594	-80.75189
117	32.21633	-80.75397
118	32.21637	-80.75425
119	32.21622	-80.75429
120	32.21610	-80.75413
121	32.21595	-80.75405
122	32.21562	-80.75433
123	32.21557	-80.75449




Vertex #	Latitude	Longitude
124	32.21577	-80.75480
125	32.21594	-80.75495
126	32.21614	-80.75503
127	32.21643	-80.75503
128	32.21656	-80.75538
129	32.21670	-80.75588
130	32.21705	-80.75757
131	32.21742	-80.75939
132	32.21764	-80.76160
133	32.21768	-80.76254
134	32.21775	-80.76422
135	32.21785	-80.76506
136	32.21783	-80.76662
137	32.21788	-80.76719
138	32.21793	-80.76860
139	32.21796	-80.77297
140	32.21801	-80.77330
141	32.21781	-80.77342
142	32.21773	-80.77355
143	32.21787	-80.77405
161	32.22660	-80.78483
162	32.22649	-80.78492
163	32.22631	-80.78515
164	32.22619	-80.78541
165	32.22614	-80.78570
166	32.22615	-80.78598
167	32.22622	-80.78627
168	32.22739	-80.78928
169	32.22750	-80.78932
170	32.22846	-80.78882
171	32.23072	-80.79511
172	32.23094	-80.79552
173	32.23367	-80.80231
174	32.23393	-80.80389
175	32.23563	-80.80708
176	32.23723	-80.81009
177	32.23732	-80.81012
178	32.23741	-80.81008
179	32.21938	-80.77328
180	32.21922	-80.76923
181	32.21919	-80.76896

Vertex #	Latitude	Longitude
182	32.21870	-80.76897
183	32.21881	-80.77319
184	32.21905	-80.77320
144	32.21795	-80.77415
145	32.21804	-80.77415
146	32.21806	-80.77468
147	32.21809	-80.77486
148	32.21811	-80.77523
149	32.21817	-80.77560
150	32.21825	-80.77597
151	32.21835	-80.77633
152	32.21849	-80.77668
153	32.21865	-80.77701
154	32.21883	-80.77732
155	32.21904	-80.77761
156	32.21927	-80.77789
157	32.21949	-80.77811
158	32.21965	-80.77842
159	32.22065	-80.77987
160	32.22641	-80.78464

Delineated Features
Map & Table



Legend

-  Project Study Area - 262.5 acres
-  Non-Tidal Wetlands - 7.5 acres
-  Tidal Wetlands - 89.1 acres



Prepared For:




US 278 Corridor Improvements

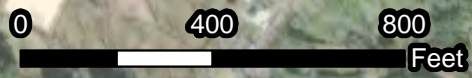
Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 2,000 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features

Figure 1



Legend

- Project Study Area - 262.5 acres
- Non-Tidal Wetlands - 7.5 acres
- Tidal Wetlands - 89.1 acres Photo
- Location & Direction



Prepared For:



US 278 Corridor Improvements

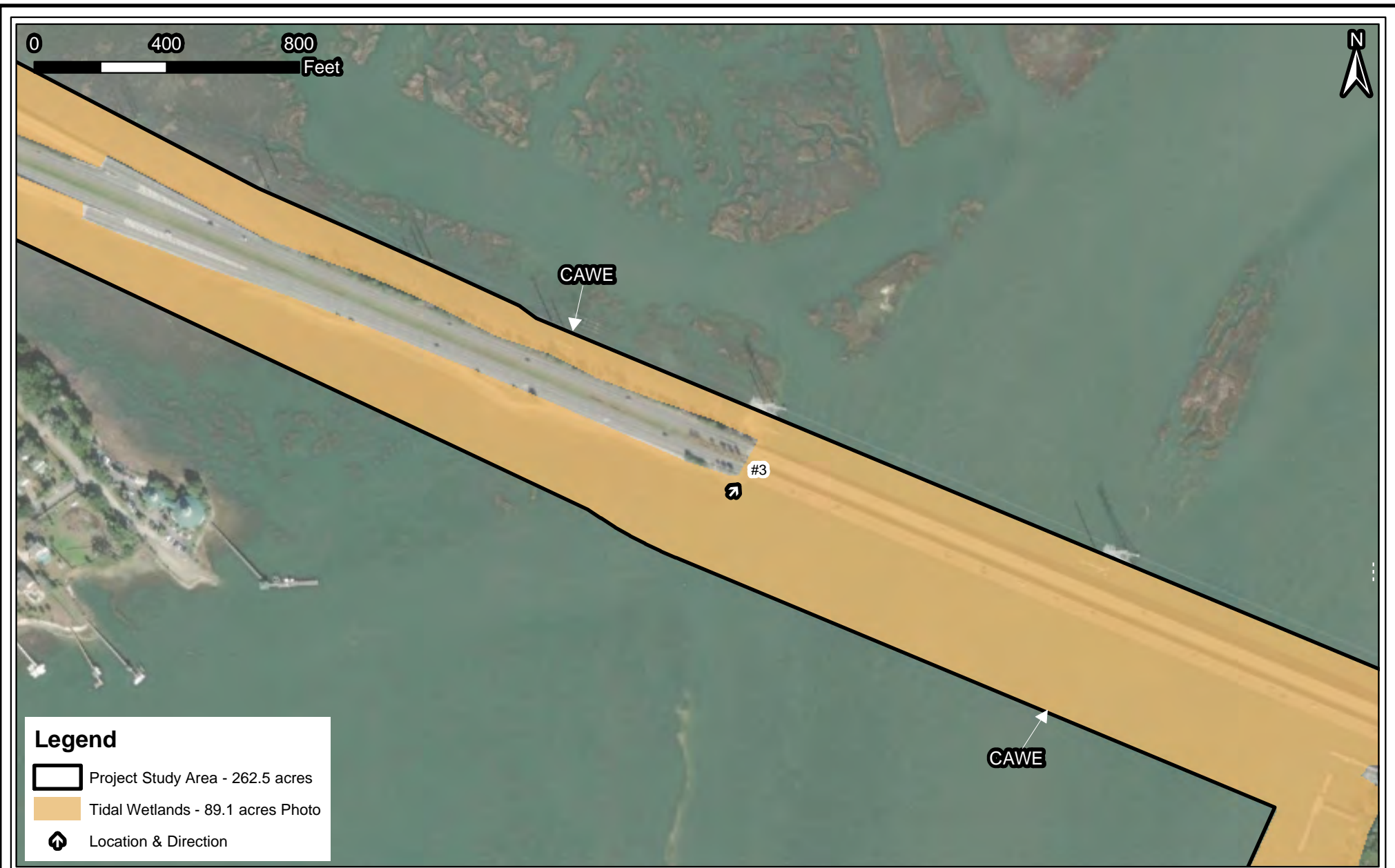
Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features

Figure 2



Prepared For:



South Carolina Department of Transportation



US 278 Corridor Improvements

Preliminary Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features

Figure 3



Legend

- Project Study Area - 262.5 acres
- Non-Tidal Wetlands - 7.5 acres
- Tidal Wetlands - 89.1 acres
- Wetland Data Point
- Upland Data Point
- Photo Location & Direction



Prepared For:

US 278 Corridor Improvements

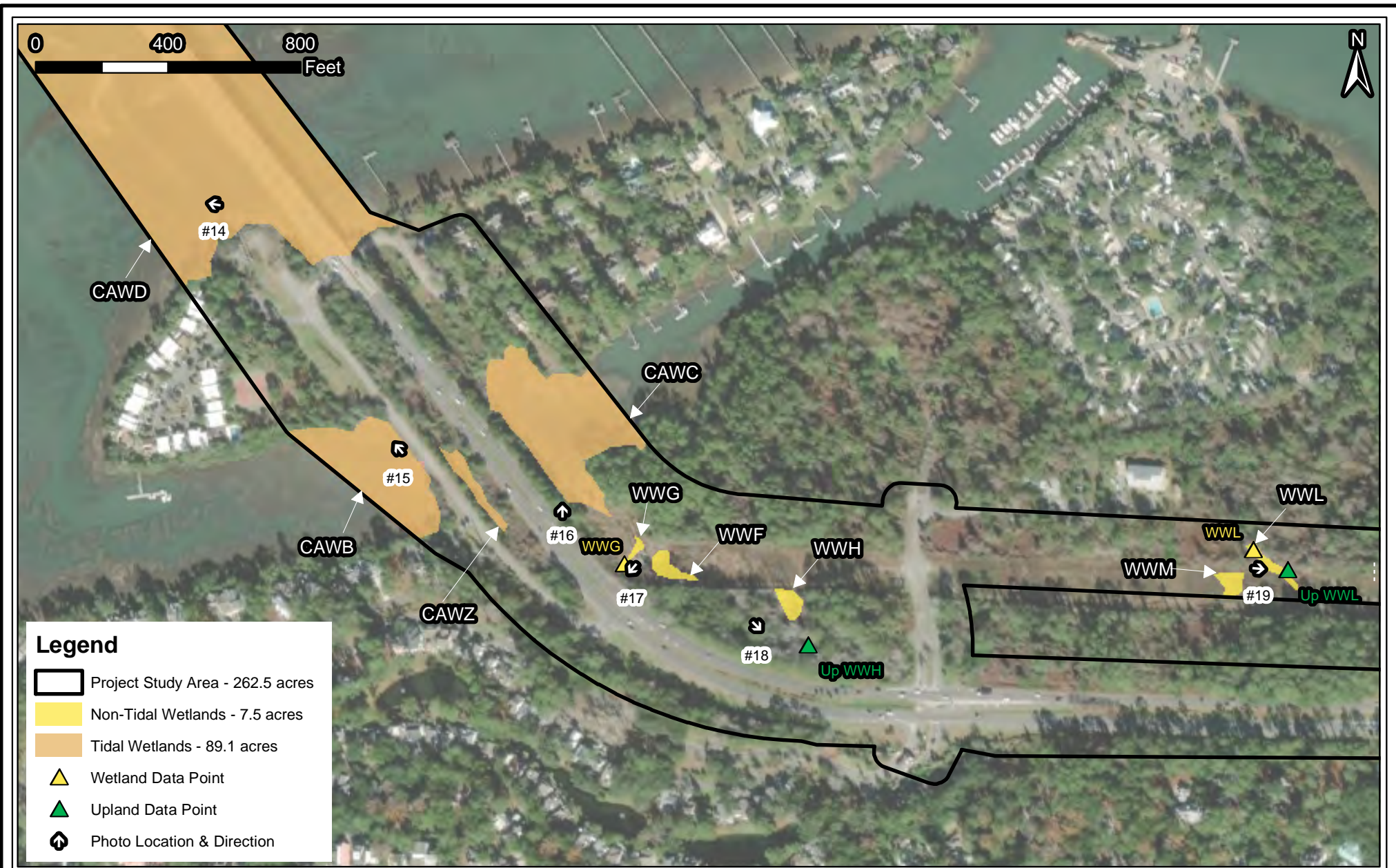
Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features

Figure 4



Legend

- Project Study Area - 262.5 acres
- Non-Tidal Wetlands - 7.5 acres
- Tidal Wetlands - 89.1 acres
- Wetland Data Point
- Upland Data Point
- Photo Location & Direction



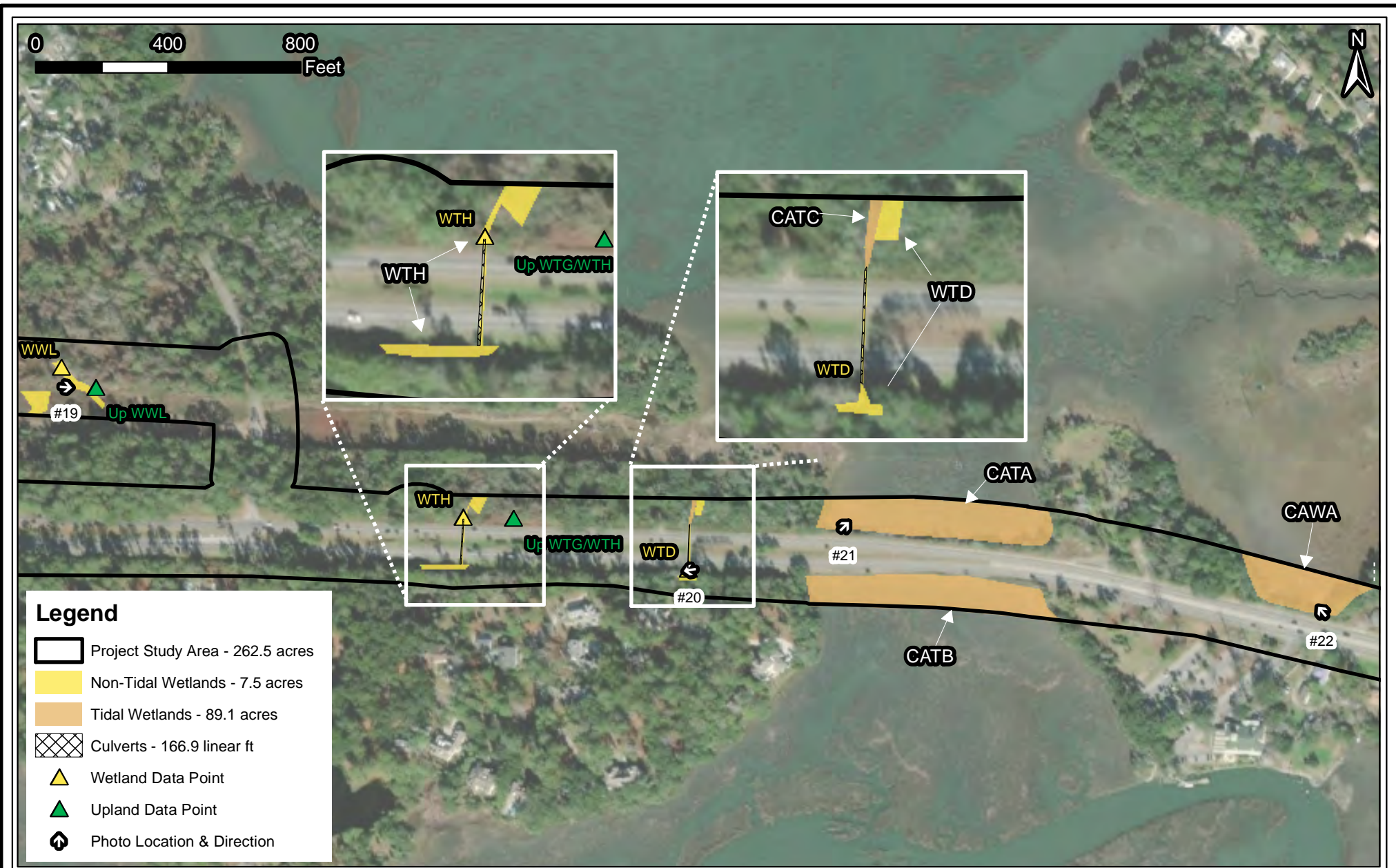
Prepared For:



US 278 Corridor Improvements
 Preliminary Jurisdictional Determination
 Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features
Figure 5



Legend

- Project Study Area - 262.5 acres
- Non-Tidal Wetlands - 7.5 acres
- Tidal Wetlands - 89.1 acres
- Culverts - 166.9 linear ft
- ▲ Wetland Data Point
- ▲ Upland Data Point
- ↗ Photo Location & Direction



Prepared For:

SCDOT[®]

South Carolina Department of Transportation



US 278 Corridor Improvements

Preliminary Jurisdictional Determination

Beaufort County, SC





Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features

Figure 6



Legend

-  Project Study Area - 262.5 acres
-  Non-Tidal Wetlands - 7.5 acres
-  Tidal Wetlands - 89.1 acres Photo
-  Location & Direction



Prepared For:




US 278 Corridor Improvements

Preliminary
Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021	
Scale: 1 inch = 400 feet	
Job No.: P030450	
Drawn By: WCB	Checked By: TRC

Delineated Features

Figure 7



Prepared For:

SCDOT
South Carolina Department of Transportation



US 278 Corridor Improvements

Preliminary Jurisdictional Determination

Beaufort County, SC

Date: January 22, 2021

Scale: 1 inch = 400 feet

Job No.: P030450

Drawn By: WCB Checked By: TRC

Delineated Features

Figure 8

Table 2: Delineated Features

Delineated Features				
Freshwater Wetlands	Area (acres)	Lat	Long	Figure
WTD	0.05	32.218258	-80.764284	6
WTH	0.11	32.218277	-80.76656	6
WWA	0.12	32.216517	-80.747501	8
WWF	0.13	32.219539	-80.776162	5
WWG	0.05	32.219656	-80.776517	5
WWH	0.12	32.219248	-80.774978	5
WWI	0.37	32.235184	-80.805966	2
WWJ	1.78	32.227175	-80.787312	4
WWK	4.55	32.226979	-80.785386	4
WWL	0.10	32.219551	-80.77029	5,6
WWM	0.11	32.219393	-80.770693	5,6
Total	7.5			
Delineated Features				
Critical Area Wetlands	Area (acres)	Lat	Long	Figure
CATA	1.72	32.218403	-80.761888	6,7
CATB	1.63	32.217786	-80.761992	6,7
CATC	0.02	32.218479	-80.764299	6
CATD	1.68	32.227976	-80.784217	4
CATF	0.23	32.226423	-80.786009	4
CAWA	0.89	32.217834	-80.758368	6,7
CAWB	1.80	32.220348	-80.778996	5
CAWC	2.69	32.220754	-80.777217	5
CAWD	22.32	32.224167	-80.781604	4,5
CAWE	51.65	32.231083	-80.794122	2,3,4
CAWF	2.60	32.234554	-80.804594	2
CAWW	1.54	32.214408	-80.746895	8
CAWX	0.06	32.219445	-80.755746	7,8
CAWY	0.05	32.219284	-80.756121	7,8
CAWZ	0.22	32.220232	-80.778074	5
Total	89.1			

Photo Log



Photo #1

CAWE, facing US 278 and Bluffton Pkwy ramp
(32.233728, -80.801883)

Figure 2



Photo #2

CAWE, north of US 278
(32.234634, -80.80178)

Figure 2



Photo #3

CAWE, facing beneath US 278 bridge
(32.231095, -80.794091)

Figure 3



Photo #4

CAWE, from Pinckney Island NWR facing Mackay Creek
(32.227826, -80.788218)

Figure 4



Photo #5

WWJ (Pinckney Island NWR)
(32.227104, -80.787348)

Figure 4



Photo #6

CATF, facing WWK (Pinckney Island NWR)
(32.226362, -80.786122)

Figure 4



Photo #7

WWK, near boat ramp entrance (Pinckney Island NWR)
(32.227853, -80.786027)

Figure 4



Photo #8

WWK (Pinckney Island NWR)
(32.227614, -80.785389)

Figure 4



Photo #9

WWK (Pinckney Island NWR)

(32.226719, -80.785202)

Figure 4



Photo #10

WWK (Pinckney Island NWR)

(32.226789, -80.784675)

Figure 4



Photo #11

CAWD, near Skull Creek (Pinckney Island NWR)

(32.22708, -80.783524)

Figure 4



Photo #12

CAWD, facing Skull Creek and Hog Island (Pinckney Island NWR)

(32.226315, -80.782894)

Figure 4



Photo #13

Beach of Pinckney Island NWR along Skull Creek
(32.225523, -80.783528)

Figure 4



Photo #14

CAWD, facing Skull Creek from Hog Island
(32.222557, -80.780585)

Figure 5



Photo #15

CAWB, near Blue Heron Point Rd
(32.220524, -80.778787)

Figure 5



Photo #16

CAWC, facing proposed Hog Island Connector road
(32.220005, -80.777193)

Figure 5



Photo #17

WWG meets roadside ditch, north of US 278
(32.219521, -80.77651)

Figure 5



Photo #18

Near UpWWH, facing densely vegetated uplands
(32.219045, -80.775298)

Figure 5 and 6



Photo #19

WWL, through powerline corridor
(32.219509, -80.770397)

Figure 6



Photo #20

WTD, south of US 278
(32.217973, -80.764317)

Figure 6



Photo #21
CATA, north of US 278
(32.218338, -80.762809)
Figure 7



Photo #22
CAWA, north of US 278
(32.219509, -80.770397)
Figure 6



Photo #23

WWA, off of Wild Horse Rd
(32.216518, -80.747368)

Figure 8



Photo #24

CAWW, East of intersection between US 278, Spanish Wells Rd
and Wild Horse Rd
(32.215073, -80.746658)

Figure 8



Photo #25
WWI, facing US 278
(32.235216, -80.806128)
Figure 2



Photo #26
CAWX, by Squire Pope Rd
(32.219337, -80.755858)
Figure 7

Data Forms

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/10/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WWJ
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.227225 Long: -80.78696 Datum: NAD83
 Soil Map Unit Name: Yemassee loamy fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
---	--

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Rained in the morning

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WWJ

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Quercus virginiana</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Sabal palmetto</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Celtis laevigata</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
4. <u>Pinus taeda</u>	<u>8</u>	<u>No</u>	<u>FAC</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>78</u> =Total Cover		
	50% of total cover: <u>39</u>	20% of total cover: <u>16</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Quercus nigra</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>30</u> =Total Cover		
	50% of total cover: <u>15</u>	20% of total cover: <u>6</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal minor</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Ilex vomitoria</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>70</u>	x 2 = <u>140</u>
FAC species <u>108</u>	x 3 = <u>324</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>178</u> (A)	<u>464</u> (B)
Prevalence Index = B/A = <u>2.61</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No _____

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WWJ

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					Loamy/Clayey	
4-6	10YR 3/1	100					Loamy/Clayey	
6-12	10YR 6/2	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/10/19
 Applicant/Owner: SCDOT State: SC Sampling Point: Up WWK
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24k
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 3%
 Subregion (LRR or MLRA): LRR T Lat: 32.22738 Long: -80.78617 Datum: NAD83
 Soil Map Unit Name: Bertie loamy fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
---	---

Remarks:
 This data form reflects conditions for uplands between WWK and WWJ

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
--	---

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: Up WWK

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis laevigata</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Sabal palmetto</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Quercus virginiana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>25</u> =Total Cover		
	50% of total cover: <u>13</u>	20% of total cover: <u>5</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Morella cerifera</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Ilex vomitoria</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Morella cerifera</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Ilex vomitoria</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>60</u> =Total Cover		
	50% of total cover: <u>30</u>	20% of total cover: <u>12</u>	

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>25</u> =Total Cover		
	50% of total cover: <u>13</u>	20% of total cover: <u>5</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)

Total Number of Dominant Species Across All Strata: 10 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 90.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>130</u>	x 3 = <u>390</u>
FACU species <u>5</u>	x 4 = <u>20</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>145</u> (A)	<u>430</u> (B)
Prevalence Index = B/A = <u>2.97</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: Up WWK

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	98	2.5YR 2.5/4	2	C	PL	Sandy	Prominent redox concentrations
6-16	10YR 3/2	95	2.5YR 2.5/4	5	C	PL	Sandy	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**
- Polyvalue Below Surface (S8)
(LRR S, T, U)
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Barrier Islands 1 cm Muck (S12)
(MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Floodplain Soils (F20)
(MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22)
(MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16)
(outside MLRA 150A)
- Reduced Vertic (F18)
(outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20)
(MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
(outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7)
(MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Project/Site: US 278 Corridor Improvement City/County: Hilton Head Island/ Beaufort Sampling Date: 07/19/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WWK2
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.227413 Long: -80.785962 Datum: NAD83
 Soil Map Unit Name: Bertie laomy fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input checked="" type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)

Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>3</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Rained in AM

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WWK2

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Triadica sebifera</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Sabal palm</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Celtis laevigata</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>50</u> =Total Cover		
50% of total cover:	<u>25</u>	20% of total cover:	<u>10</u>

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Quercus virginiana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
3. <u>Ilex vomitoria</u>	<u>3</u>	<u>No</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>23</u> =Total Cover		
50% of total cover:	<u>12</u>	20% of total cover:	<u>5</u>

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Ilex vomitoria</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Morella cerifera</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
4. <u>Celtis laevigata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>40</u> =Total Cover		
50% of total cover:	<u>20</u>	20% of total cover:	<u>8</u>

Herb Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Echinochloa crus-galli</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Typha angustifolia</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	<u>45</u> =Total Cover		
50% of total cover:	<u>23</u>	20% of total cover:	<u>9</u>

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>10</u> =Total Cover		
50% of total cover:	<u>5</u>	20% of total cover:	<u>2</u>

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 10 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 90.9% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>15</u>	x 1 = <u>15</u>
FACW species <u>45</u>	x 2 = <u>90</u>
FAC species <u>103</u>	x 3 = <u>309</u>
FACU species <u>5</u>	x 4 = <u>20</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>168</u> (A)	<u>434</u> (B)
Prevalence Index = B/A = <u>2.58</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WWK2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 2/1	100					Mucky Loam/Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Barrier Islands 1 cm Muck (S12) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | (MLRA 153B, 153D) | <input type="checkbox"/> Coast Prairie Redox (A16) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | (outside MLRA 150A) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Depleted Matrix (F3) | (outside MLRA 150A, 150B) |
| <input checked="" type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T) |
| <input checked="" type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Anomalous Bright Floodplain Soils (F20) |
| <input checked="" type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Redox Depressions (F8) | (MLRA 153B) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Marl (F10) (LRR U) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | (outside MLRA 138, 152A in FL, 154) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input checked="" type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | <input type="checkbox"/> Barrier Islands Low Chroma Matrix (TS7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | (MLRA 153B, 153D) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | <input type="checkbox"/> Anomalous Bright Floodplain Soils (F20) | |
| <input type="checkbox"/> Polyvalue Below Surface (S8) | (MLRA 149A, 153C, 153D) | |
| (LRR S, T, U) | <input type="checkbox"/> Very Shallow Dark Surface (F22) | |
| | (MLRA 138, 152A in FL, 154) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/10/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WWK1
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 3%
 Subregion (LRR or MLRA): LRR T Lat: 32.226456 Long: -80.784297 Datum: NAD83
 Soil Map Unit Name: Yemassee loamy fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: 	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Rained in the morning

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WWK1

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis laevigata</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Sabal palmetto</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>80</u> =Total Cover		
	50% of total cover: <u>40</u>	20% of total cover: <u>16</u>	
Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis laevigata</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Sabal palmetto</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>30</u> =Total Cover		
	50% of total cover: <u>15</u>	20% of total cover: <u>6</u>	
Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex vomitoria</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Sabal palmetto</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>80</u> =Total Cover		
	50% of total cover: <u>40</u>	20% of total cover: <u>16</u>	
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>60</u>	x 2 = <u>120</u>
FAC species <u>165</u>	x 3 = <u>495</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>225</u> (A)	<u>615</u> (B)
Prevalence Index = B/A = <u>2.73</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WWK1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					Loamy/Clayey	
4-9	10YR 3/1	100					Loamy/Clayey	
9-12	10YR 6/2	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Barrier Islands 1 cm Muck (S12) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | (MLRA 153B, 153D) | <input type="checkbox"/> Coast Prairie Redox (A16) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | (outside MLRA 150A) |
| <input checked="" type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input checked="" type="checkbox"/> Depleted Matrix (F3) | (outside MLRA 150A, 150B) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Anomalous Bright Floodplain Soils (F20) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Redox Depressions (F8) | (MLRA 153B) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Marl (F10) (LRR U) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | (outside MLRA 138, 152A in FL, 154) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | <input type="checkbox"/> Barrier Islands Low Chroma Matrix (TS7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | (MLRA 153B, 153D) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | <input type="checkbox"/> Anomalous Bright Floodplain Soils (F20) | |
| <input type="checkbox"/> Polyvalue Below Surface (S8) | (MLRA 149A, 153C, 153D) | |
| (LRR S, T, U) | <input type="checkbox"/> Very Shallow Dark Surface (F22) | |
| | (MLRA 138, 152A in FL, 154) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 05/22/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WWG
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.219563 Long: -80.776589 Datum: NAD83
 Soil Map Unit Name: Yemassee loamy fine sand NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
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Remarks:
 This data form is representative of wetlands WWF and WWG

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WWG

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Myrica cerifera</u>	8	Yes	FAC
2. <u>Sesbania herbacea</u>	5	Yes	FACW
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	13 = Total Cover		
	50% of total cover: <u>7</u>	20% of total cover: <u>3</u>	

Herb Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juncus effusus</u>	15	Yes	OBL
2. <u>Carex sp.</u>	15	Yes	FACW
3. <u>Typha latifolia</u>	15	Yes	OBL
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	45 = Total Cover		
	50% of total cover: <u>23</u>	20% of total cover: <u>9</u>	

Woody Vine Stratum (Plot size: <u>30ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>30</u>	x 1 = <u>30</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>8</u>	x 3 = <u>24</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>58</u> (A)	<u>94</u> (B)
Prevalence Index = B/A = <u>1.62</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)
 Very distinct break in herbaceous vegetation along wetland boundary.

SOIL

Sampling Point: WWG

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 4/2	80	7.5YR 4/6	20	C	M	Sandy	Prominent redox concentrations
4-16	10YR 4/1	50	7.5YR 5/8	10	C	M	Sandy	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8)
(LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12)
(MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20)
(MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22)
(MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16)
(outside MLRA 150A)
- Reduced Vertic (F18)
(outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20)
(MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
(outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7)
(MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

The other colors observed 4-16" were [10YR 6/1, 25%, sand] and [6/10GY, 15%, clay]

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 05/22/19
 Applicant/Owner: SCDOT State: SC Sampling Point: Up WWH
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24k
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 3%
 Subregion (LRR or MLRA): LRR T Lat: 32.18886 Long: -80.774795 Datum: NAD83
 Soil Map Unit Name: Yemassee loamy fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: Up WWH

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Sabal palmetto</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>45</u> =Total Cover		
	50% of total cover: <u>23</u>	20% of total cover: <u>9</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>10</u> =Total Cover		
	50% of total cover: <u>5</u>	20% of total cover: <u>2</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex vomitoria</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>40</u> =Total Cover		
	50% of total cover: <u>20</u>	20% of total cover: <u>8</u>	

Herb Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>10</u> =Total Cover		
	50% of total cover: <u>5</u>	20% of total cover: <u>2</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>105</u>	x 3 = <u>315</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>105</u> (A)	<u>315</u> (B)
Prevalence Index = B/A = <u>3.00</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes X No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: Up WWH

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5YR 4/3	100					Sandy	~80% coating

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**
- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16) **(outside MLRA 150A)**
- Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/10/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WWL
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24k
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.21967 Long: -80.770447 Datum: NAD83
 Soil Map Unit Name: Bertie loamy fine sand NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: Occurs within powerline corridor	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WWL

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Morus rubra</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>
3. <u>Triadica sebifera</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>60</u> =Total Cover		
	50% of total cover: <u>30</u>	20% of total cover: <u>12</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Morus rubra</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Acer rubrum</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>50</u> =Total Cover		
	50% of total cover: <u>25</u>	20% of total cover: <u>10</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex vomitoria</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Morella cerifera</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Acer rubrum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>50</u> =Total Cover		
	50% of total cover: <u>25</u>	20% of total cover: <u>10</u>	

Herb Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juncus effusus</u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	<u>5</u> =Total Cover		
	50% of total cover: <u>3</u>	20% of total cover: <u>1</u>	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus pensilvanicus</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Ampelopsis arborea</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
3. <u>Vitis rotundifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>30</u> =Total Cover		
	50% of total cover: <u>15</u>	20% of total cover: <u>6</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)
 Total Number of Dominant Species Across All Strata: 11 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 81.8% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>165</u>	x 3 = <u>495</u>
FACU species <u>25</u>	x 4 = <u>100</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>195</u> (A)	<u>600</u> (B)
Prevalence Index = B/A = <u>3.08</u>	

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0¹
- Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present?

Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WWL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/2	100					Loamy/Clayey	
3-14	10YR 3/2	90	5YR 3/4	10	C	PL	Loamy/Clayey	Prominent redox concentrations
14-16	10YR 5/2	60					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	(MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	(outside MLRA 150A)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	(outside MLRA 150A, 150B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	(MLRA 153B)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	(outside MLRA 138, 152A in FL, 154)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Barrier Islands Low Chroma Matrix (TS7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	(MLRA 153B, 153D)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Polyvalue Below Surface (S8)	(MLRA 149A, 153C, 153D)	
(LRR S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
	(MLRA 138, 152A in FL, 154)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 14-16: 10YR 4/2 40%

Project/Site: US 278 Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/02/20
 Applicant/Owner: SCDOT State: SC Sampling Point: Up WWL
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017) 24k
 Landform (hillside, terrace, etc.): none Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR or MLRA): LRR T Lat: 32.219501 Long: -80.77011 Datum: NAD 83
 Soil Map Unit Name: Bertie loamy fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: Up WWL

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis occidentalis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>5</u> = Total Cover			
50% of total cover: <u>3</u>		20% of total cover: <u>1</u>	

Sapling Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>20</u> = Total Cover			
50% of total cover: <u>10</u>		20% of total cover: <u>4</u>	

Shrub Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Baccharis halimifolia</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Phytolacca americana</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>45</u> = Total Cover			
50% of total cover: <u>23</u>		20% of total cover: <u>9</u>	

Herb Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Solidago sp.</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Setaria faberi</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>
3. <u>Verbena brasiliensis</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
<u>25</u> = Total Cover			
50% of total cover: <u>13</u>		20% of total cover: <u>5</u>	

Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ampelopsis arborea</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Vitis rotundifolia</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Rubus pensilvanicus</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
<u>70</u> = Total Cover			
50% of total cover: <u>35</u>		20% of total cover: <u>14</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 63.6% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species <u>125</u>	x 3 = <u>375</u>
FACU species <u>25</u>	x 4 = <u>100</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>165</u> (A)	<u>535</u> (B)
Prevalence Index = B/A = <u>3.24</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: Up WWL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10yr 3/2	100					Sandy	Not 100% coated
12-16	7.5yr 3/2	95	5yr 4/6	5	C	M	Sandy	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**
- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16) **(outside MLRA 150A)**
- Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Project/Site: US 278 Corridor Improvement City/County: Hilton Head Island/Beaufort Sampling Date: 07/10/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WTH
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.21842 Long: -80.766528 Datum: NAD83
 Soil Map Unit Name: Wando fine sand, 0 to 6 percent slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: Occurs within powerline corridor.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>2</u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WTH

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
_____ = Total Cover			
50% of total cover: _____		20% of total cover: _____	

Sapling Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
_____ = Total Cover			
50% of total cover: _____		20% of total cover: _____	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Juniperus virginiana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
_____ = Total Cover			
50% of total cover: <u>5</u>		20% of total cover: <u>2</u>	

Herb Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juncus effusus</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>
2. <u>Sesbania herbacea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Lamiaceae</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
4. <u>Carex sp.</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
_____ = Total Cover			
50% of total cover: <u>18</u>		20% of total cover: <u>7</u>	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ipomoea purpurea</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>
2. <u>Ampelopsis arborea</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Vitis rotundifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
4. <u>Rubus pensilvanicus</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
5. <u>Vitis aestivalis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
_____ = Total Cover			
50% of total cover: <u>25</u>		20% of total cover: <u>10</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>15</u>	x 1 = <u>15</u>
FACW species <u>15</u>	x 2 = <u>30</u>
FAC species <u>45</u>	x 3 = <u>135</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>95</u> (A)	<u>270</u> (B)
Prevalence Index = B/A = <u>2.84</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No _____

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WTH

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR 2/1	100					Mucky Sand	
1-13	10YR 4/1	83	10YR 4/6	5	C	PL	Sandy	Prominent redox concentrations
13-16	10YR 4/1	60					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

1-13: 10YR 6/2 10%; 13-16: 10YR 6/2 20%, 10YR 6/4 10%, Gley 1 6/2 10%

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 05/21/19
 Applicant/Owner: SCDOT State: SC Sampling Point: Up WTH
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 3%
 Subregion (LRR or MLRA): LRR T Lat: 32.21841 Long: -80.766034 Datum: NAD83
 Soil Map Unit Name: Seabrook fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:
 There was no precipitation within a month prior.
 This data form represents the conditions present in the roadside uplands around WTH and WTD.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: Up WTH

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Pinus taeda</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Quercus virginiana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
3. <u>Quercus laurifolia</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>15</u> =Total Cover		
	50% of total cover: <u>8</u>	20% of total cover: <u>3</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Prunus caroliniana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
2. <u>Cornus asperifolia</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Ilex vomitoria</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
4. <u>Prunus serotina</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex vomitoria</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Cornus asperifolia</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
3. <u>Prunus caroliniana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>90</u> =Total Cover		
	50% of total cover: <u>45</u>	20% of total cover: <u>18</u>	

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Vitis aestivalis</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>13</u> =Total Cover		
	50% of total cover: <u>7</u>	20% of total cover: <u>3</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 62.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>25</u>	x 2 = <u>50</u>
FAC species <u>95</u>	x 3 = <u>285</u>
FACU species <u>33</u>	x 4 = <u>132</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>153</u> (A)	<u>467</u> (B)
Prevalence Index = B/A = <u>3.05</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: Up WTH

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 4/2	100					Sandy	
12-16	10YR 5/6	60					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**
- Polyvalue Below Surface (S8)
(LRR S, T, U)

- Thin Dark Surface (S9) **(LRR S, T, U)**
- Barrier Islands 1 cm Muck (S12)
(MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Floodplain Soils (F20)
(MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22)
(MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16)
(outside MLRA 150A)
- Reduced Vertic (F18)
(outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20)
(MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
(outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7)
(MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
12-16: 10YR 4/2 40%

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/ Beaufort Sampling Date: 05/20/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WTD
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.217983 Long: -80.764331 Datum: NAD83
 Soil Map Unit Name: Seabrook fine sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: There was no precipitation within a month prior	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)

Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>3</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WTD

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Quercus virginiana</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Celtis laevigata</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Sabal palmetto</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>35</u> =Total Cover		
	50% of total cover: <u>18</u>	20% of total cover: <u>7</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis laevigata</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>10</u> =Total Cover		
	50% of total cover: <u>5</u>	20% of total cover: <u>2</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex vomitoria</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Sabal palmetto</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>25</u> =Total Cover		
	50% of total cover: <u>13</u>	20% of total cover: <u>5</u>	

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	_____ =Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Ampelopsis arborea</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>15</u> =Total Cover		
	50% of total cover: <u>8</u>	20% of total cover: <u>3</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>25</u>	x 2 = <u>50</u>
FAC species <u>45</u>	x 3 = <u>135</u>
FACU species <u>15</u>	x 4 = <u>60</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>85</u> (A)	<u>245</u> (B)
Prevalence Index = B/A = <u>2.88</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WTD

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/1	85					Sandy	
3-12	7.5YR 2.5/1	80	2.5YR 4/8	10	C	PL	Sandy	Prominent redox concentrations
12-16	7.5YR 2.5/1	90	10YR 2/1	5	C	PL		Faint redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	(MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	(outside MLRA 150A)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Depleted Matrix (F3)	(outside MLRA 150A, 150B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	(MLRA 153B)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	(outside MLRA 138, 152A in FL, 154)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Barrier Islands Low Chroma Matrix (TS7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	(MLRA 153B, 153D)
<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input checked="" type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Polyvalue Below Surface (S8)	(MLRA 149A, 153C, 153D)	
(LRR S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
	(MLRA 138, 152A in FL, 154)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

0-3: 10YR 3/3 15%; 3-12: 7.5YR 4/2 5%, 10YR 2/1 5%; 12-16: 2.5YR 4/8 5%

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/10/19
 Applicant/Owner: SCDOT State: SC Sampling Point: WWA
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017), 24K
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.216441 Long: -80.747453 Datum: NAD83
 Soil Map Unit Name: Wando fine sand, 0 to 6 percent slopes NWI classification: PFO1F
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: There was no precipitation within a month prior	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>5</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WWA

Tree Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Liquidambar styraciflua</u>	<u>10</u>	<u>No</u>	<u>FAC</u>
2. <u>Acer rubrum</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Diospyros virginiana</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
4. <u>Celtis laevigata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
5. <u>Quercus virginiana</u>	<u>3</u>	<u>No</u>	<u>FACU</u>
6. _____	_____	_____	_____
	<u>63</u> =Total Cover		
	50% of total cover: <u>32</u>	20% of total cover: <u>13</u>	

Sapling Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Liquidambar styraciflua</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Diospyros virginiana</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
	<u>20</u> =Total Cover		
	50% of total cover: <u>10</u>	20% of total cover: <u>4</u>	

Shrub Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Liquidambar styraciflua</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Diospyros virginiana</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Quercus nigra</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
4. <u>Quercus laurifolia</u>	<u>5</u>	<u>No</u>	<u>FACW</u>
5. <u>Acer rubrum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>
6. _____	_____	_____	_____
	<u>45</u> =Total Cover		
	50% of total cover: <u>23</u>	20% of total cover: <u>9</u>	

Herb Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Carex comosa</u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>
2. <u>Acer rubrum</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	<u>8</u> =Total Cover		
	50% of total cover: <u>4</u>	20% of total cover: <u>2</u>	

Woody Vine Stratum (Plot size: <u>30 ft radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	<u>8</u> =Total Cover		
	50% of total cover: <u>4</u>	20% of total cover: <u>2</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>126</u>	x 3 = <u>378</u>
FACU species <u>3</u>	x 4 = <u>12</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>144</u> (A)	<u>415</u> (B)
Prevalence Index = B/A = <u>2.88</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No _____

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: WWA

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/1	100					Loamy/Clayey	
5-16	7.5YR 2.5/1	90	10YR 3/6	10	C	PL	Loamy/Clayey	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Project/Site: US 278 Corridor Improvements City/County: Hilton Head Island/Beaufort Sampling Date: 07/02/20
 Applicant/Owner: SCDOT State: SC Sampling Point: Up WWA
 Investigator(s): Three Oaks Engineering Section, Township, Range: Bluffton, SC (2017) 24k
 Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None Slope (%): 1%
 Subregion (LRR or MLRA): LRR T Lat: 32.216358 Long: -80.747449 Datum: NAD 83
 Soil Map Unit Name: Wandofine sand, 0-6% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
--	---

Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: Up WWA

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Liquidambar styraciflua</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>5</u> =Total Cover			
50% of total cover: <u>3</u>		20% of total cover: <u>1</u>	

Sapling Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Liquidambar styraciflua</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Quercus nigra</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Ligustrum japonicum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
4. <u>Prunus serotina</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>45</u> =Total Cover			
50% of total cover: <u>23</u>		20% of total cover: <u>9</u>	

Shrub Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ligustrum japonicum</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Ilex glabra</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Elaeagnus sp.</u>	<u>3</u>	<u>No</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>23</u> =Total Cover			
50% of total cover: <u>12</u>		20% of total cover: <u>5</u>	

Herb Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
_____ =Total Cover			
50% of total cover: _____		20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vitis rotundifolia</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
<u>20</u> =Total Cover			
50% of total cover: <u>10</u>		20% of total cover: <u>4</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species <u>75</u>	x 3 = <u>225</u>
FACU species <u>13</u>	x 4 = <u>52</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>93</u> (A)	<u>287</u> (B)
Prevalence Index = B/A = <u>3.09</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below.)

SOIL

Sampling Point: Up WWA

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10yr 6/4	100					Sandy	
10-16	10yr 6/4	60					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**
- Polyvalue Below Surface (S8)
(LRR S, T, U)

- Thin Dark Surface (S9) **(LRR S, T, U)**
- Barrier Islands 1 cm Muck (S12)
(MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Floodplain Soils (F20)
(MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22)
(MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Coast Prairie Redox (A16)
(outside MLRA 150A)
- Reduced Vertic (F18)
(outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) **(LRR P, T)**
- Anomalous Bright Floodplain Soils (F20)
(MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
(outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7)
(MLRA 153B, 153D)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

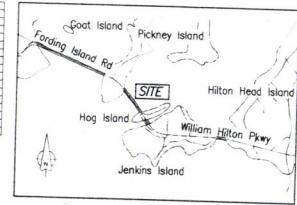
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Additional colors: 10-16in 10yr 5/4 40%

CRITICAL AREA	AREA #	AREA #	AREA #
AREA 1	26,141	42,264	
AREA 2	11,153.5	4,300	
AREA 3	22,488.5	17,241	
AREA 4	104,489.2	3,343	
AREA 5	78,151.7	1,393	
AREA 6	24,114	3,211	
AREA 7	11,113.5	2,203	
AREA 8	806	1,243	
AREA 9	20,534	1,243	
AREA 10	10,517	1,243	
AREA 11	38,243	0.22	
AREA 12	10,101	0.22	
AREA 13	10,101	0.22	
AREA 14	10,101	0.22	
AREA TOTAL	307,811.2	88.05	

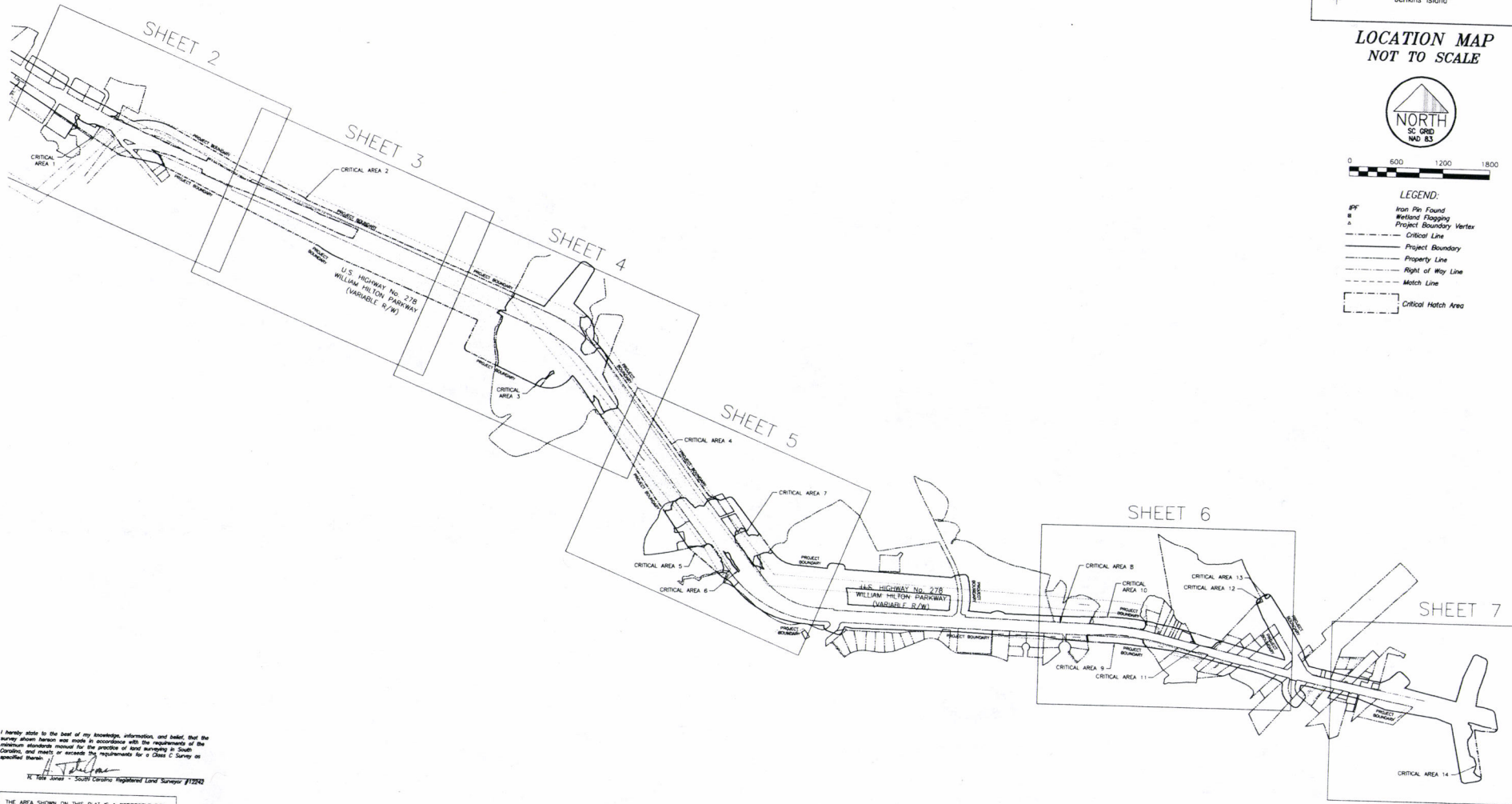


LOCATION MAP
NOT TO SCALE



LEGEND:

- Iron Pin Found
- Wetland Flopping
- Project Boundary
- Property Line
- Right of Way Line
- Match Line
- Critical Line
- Critical Hatch Area



No.	REVISION	Date
1	CLERY COMMENTS	01-20-2021

Project No.	251800390	Drawn By	JTB/SBC	Checked By	JTB	Date	09/20/20	Scale	1" = 600'
Field Surveyed	06/10/20								

ACAD FILE NAME
251800390.CRD
Wetlands Plat.DWG

**CRITICAL LINE PLAT
SHOWING CRITICAL AREA ALONG
U.S. HIGHWAY 278 CORRIDOR**
HILTON HEAD ISLAND
HILTON HEAD, SOUTH CAROLINA

Sheet No.
1 of 7

File Number:
251800390

I hereby state to the best of my knowledge, information, and belief, that the survey shown herein was made in accordance with the requirements of the minimum standards required for the practice of land surveying in South Carolina, and meets or exceeds the requirements for a Class C Survey as specified therein.

K. Late Jones - South Carolina Registered Land Surveyor #12242

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF DEPARTMENT (SDHC-OCRM) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME BY DELINEATING THE PRESENT AUTHORITY OF SCORING. SCORING IN NO WAY WAIVES ITS RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY. THEREFORE, OR NOT.

John Hill Date **3-29-21**

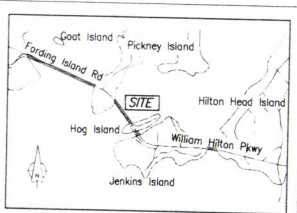
The colors and shades on this plat is valid for five years from the date of this signature, subject to the customary language above.



Station	Bearing	Distance
L1	N 13° 15' 00" E	15.48
L2	N 18° 20' 17" W	36.51
L3	N 72° 28' 41" W	76.11
L4	N 18° 49' 18" W	79.05
L5	N 20° 51' 15" E	36.25
L6	S 30° 22' 23" E	32.68
L7	S 1° 34' 03" E	44.81
L8	S 86° 45' 38" E	81.82
L9	S 90° 17' 06" E	55.97
L10	M 88° 35' 15" E	93.37
L11	S 74° 24' 49" E	62.88
L12	S 34° 15' 36" E	49.54
L13	S 1° 18' 05" E	59.06
L14	N 76° 42' 34" W	6.14
L15	N 60° 49' 27" W	5.14
L16	N 41° 38' 22" W	8.14

Station	Bearing	Distance
L17	N 17° 26' 46" E	25.83
L18	N 80° 14' 42" E	43.81
L19	N 83° 30' 23" E	41.81
L20	N 88° 48' 03" E	41.81
L21	N 89° 57' 19" E	41.81
L22	S 89° 42' 34" E	41.89
L23	S 72° 28' 35" E	41.82
L24	S 80° 17' 16" E	41.81
L25	S 74° 24' 49" E	49.06
L26	S 73° 30' 18" E	49.06
L27	S 37° 08' 18" E	41.81
L28	S 1° 18' 05" E	41.81
L29	S 1° 18' 05" E	41.81
L30	S 1° 18' 05" E	41.81
L31	S 1° 18' 05" E	41.81
L32	S 1° 18' 05" E	41.81
L33	S 1° 18' 05" E	41.81
L34	S 1° 18' 05" E	41.81
L35	S 1° 18' 05" E	41.81
L36	S 1° 18' 05" E	41.81
L37	S 1° 18' 05" E	41.81
L38	S 1° 18' 05" E	41.81
L39	S 1° 18' 05" E	41.81
L40	S 1° 18' 05" E	41.81
L41	S 1° 18' 05" E	41.81
L42	S 1° 18' 05" E	41.81
L43	S 1° 18' 05" E	41.81
L44	S 1° 18' 05" E	41.81
L45	S 1° 18' 05" E	41.81
L46	S 1° 18' 05" E	41.81
L47	S 1° 18' 05" E	41.81
L48	S 1° 18' 05" E	41.81
L49	S 1° 18' 05" E	41.81
L50	S 1° 18' 05" E	41.81
L51	S 1° 18' 05" E	41.81
L52	S 1° 18' 05" E	41.81
L53	S 1° 18' 05" E	41.81
L54	S 1° 18' 05" E	41.81
L55	S 1° 18' 05" E	41.81
L56	S 1° 18' 05" E	41.81
L57	S 1° 18' 05" E	41.81
L58	S 1° 18' 05" E	41.81
L59	S 1° 18' 05" E	41.81
L60	S 1° 18' 05" E	41.81
L61	S 1° 18' 05" E	41.81
L62	S 1° 18' 05" E	41.81
L63	S 1° 18' 05" E	41.81
L64	S 1° 18' 05" E	41.81
L65	S 1° 18' 05" E	41.81
L66	S 1° 18' 05" E	41.81
L67	S 1° 18' 05" E	41.81
L68	S 1° 18' 05" E	41.81
L69	S 1° 18' 05" E	41.81
L70	S 1° 18' 05" E	41.81
L71	S 1° 18' 05" E	41.81
L72	S 1° 18' 05" E	41.81
L73	S 1° 18' 05" E	41.81
L74	S 1° 18' 05" E	41.81
L75	S 1° 18' 05" E	41.81
L76	S 1° 18' 05" E	41.81
L77	S 1° 18' 05" E	41.81
L78	S 1° 18' 05" E	41.81
L79	S 1° 18' 05" E	41.81
L80	S 1° 18' 05" E	41.81
L81	S 1° 18' 05" E	41.81
L82	S 1° 18' 05" E	41.81
L83	S 1° 18' 05" E	41.81
L84	S 1° 18' 05" E	41.81
L85	S 1° 18' 05" E	41.81
L86	S 1° 18' 05" E	41.81
L87	S 1° 18' 05" E	41.81
L88	S 1° 18' 05" E	41.81
L89	S 1° 18' 05" E	41.81
L90	S 1° 18' 05" E	41.81
L91	S 1° 18' 05" E	41.81
L92	S 1° 18' 05" E	41.81
L93	S 1° 18' 05" E	41.81
L94	S 1° 18' 05" E	41.81
L95	S 1° 18' 05" E	41.81
L96	S 1° 18' 05" E	41.81
L97	S 1° 18' 05" E	41.81
L98	S 1° 18' 05" E	41.81
L99	S 1° 18' 05" E	41.81
L100	S 1° 18' 05" E	41.81

CRITICAL AREA	ACRES
AREA 1	113153.6
AREA 2	2249426.0
AREA 3	1148826.0
AREA 4	1148826.0
AREA 5	1148826.0
AREA 6	1148826.0
AREA 7	1148826.0
AREA 8	1148826.0
AREA 9	1148826.0
AREA 10	1148826.0
AREA 11	1148826.0
AREA 12	1148826.0
AREA 13	1148826.0
AREA 14	1148826.0
AREA TOTAL	3878118.0

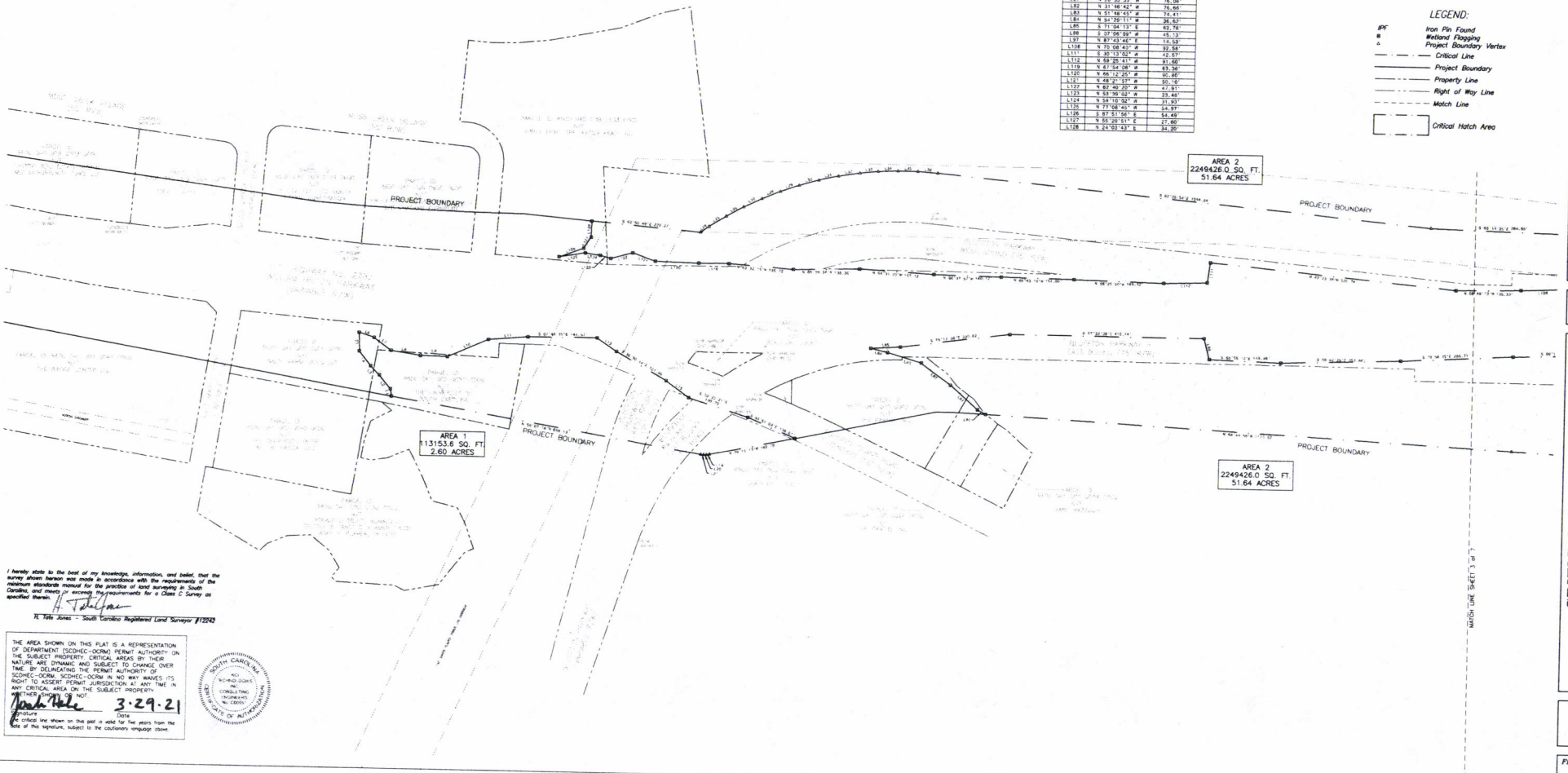


LOCATION MAP
NOT TO SCALE



LEGEND:

- IPF Iron Pin Found
- Wetland Flapping
- Project Boundary Vertex
- Critical Line
- Property Boundary
- Right of Way Line
- Match Line
- Critical Hatch Area



I hereby state to the best of my knowledge, information, and belief, that the survey shown herein was made in accordance with the requirements of the profession standards required for the practice of land surveying in South Carolina, and meets or exceeds the requirements for a Class C Survey as specified therein.

Keith Jones
State of South Carolina
Professional Land Surveyor #12245

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF DEPARTMENT (SCDNR) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME BY DELINEATING THE PERMIT AUTHORITY OF SCDCDNR SCHEMATIC-DOWN IS NO WAY WAIVES ITS RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY.

DATE: 3-29-21
As critical line shown on the past is void for the plans from the use of this signature, subject to the customary language clause.



Date	Revision	Comments
01-20-2021		
	1	CLIENT COMMENTS

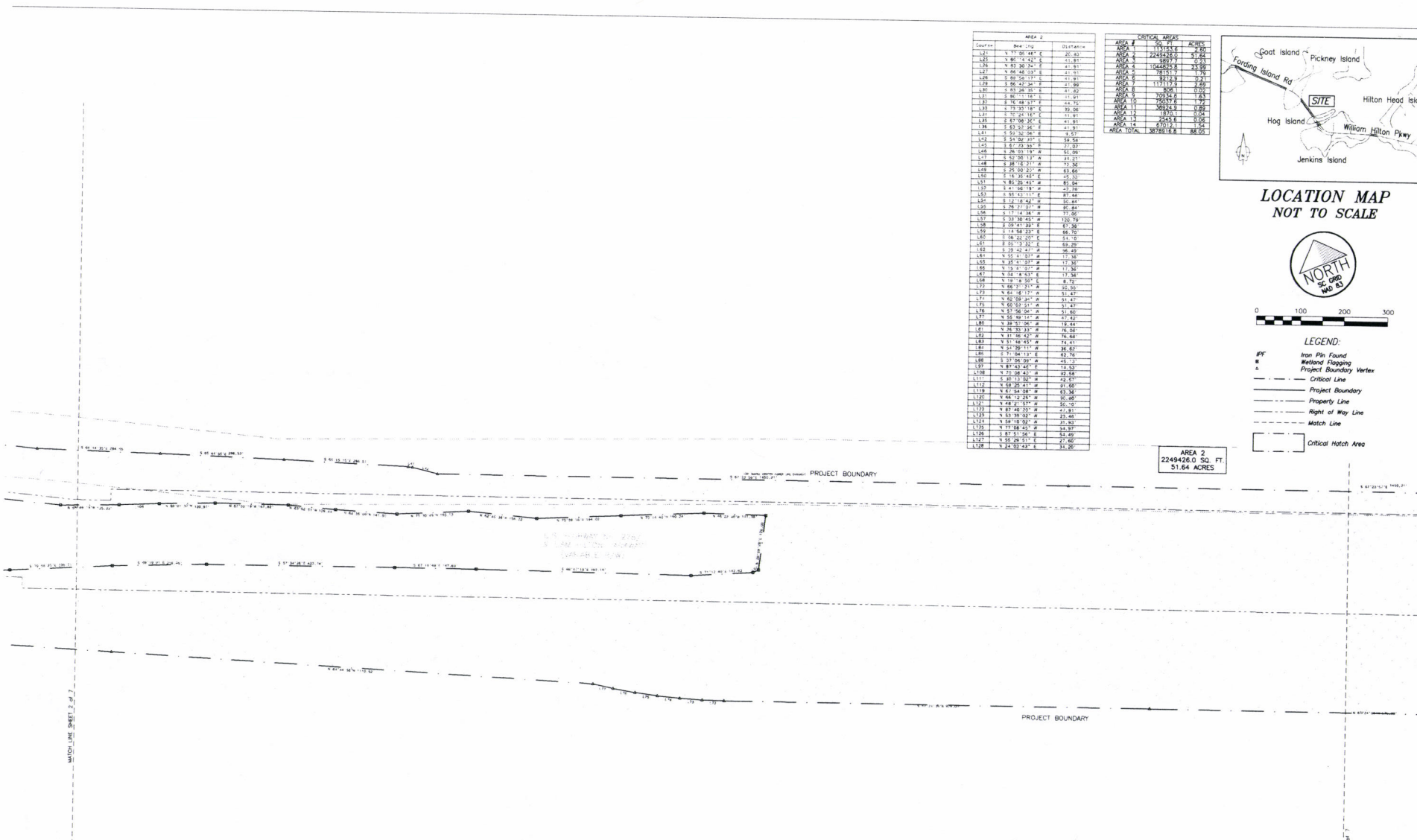
Project No. 251800390
Field Surveyed: 08/12/20
Drawn By: JWB/JWC
Checked By: JWB/JWC
Date: 08/20/20
Scale: 1" = 100'

ACAD FILE NAME: 251800390.CRD
Wetlands Plat.DWG

CRITICAL LINE PLAT
SHOWING CRITICAL AREA ALONG
U.S. HIGHWAY 278 CORRIDOR
HILTON HEAD ISLAND
HILTON HEAD, SOUTH CAROLINA

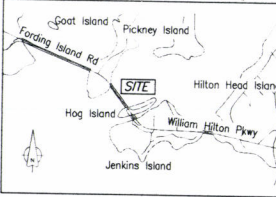
Sheet No.
2 of 7

File Number:
251800390



Code	Bearing	Dist.	Area
L21	N 71° 05' 48" E	20.43	
L22	N 88° 12' 42" E	22.43	
L23	N 83° 30' 26" E	41.91	
L24	N 68° 48' 28" E	41.91	
L25	N 88° 58' 13" E	41.91	
L26	N 88° 42" E	41.91	
L27	N 88° 42" E	41.91	
L28	N 88° 42" E	41.91	
L29	N 88° 42" E	41.91	
L30	N 88° 42" E	41.91	
L31	N 88° 42" E	41.91	
L32	N 88° 42" E	41.91	
L33	N 88° 42" E	41.91	
L34	N 88° 42" E	41.91	
L35	N 88° 42" E	41.91	
L36	N 88° 42" E	41.91	
L37	N 88° 42" E	41.91	
L38	N 88° 42" E	41.91	
L39	N 88° 42" E	41.91	
L40	N 88° 42" E	41.91	
L41	N 88° 42" E	41.91	
L42	N 88° 42" E	41.91	
L43	N 88° 42" E	41.91	
L44	N 88° 42" E	41.91	
L45	N 88° 42" E	41.91	
L46	N 88° 42" E	41.91	
L47	N 88° 42" E	41.91	
L48	N 88° 42" E	41.91	
L49	N 88° 42" E	41.91	
L50	N 88° 42" E	41.91	
L51	N 88° 42" E	41.91	
L52	N 88° 42" E	41.91	
L53	N 88° 42" E	41.91	
L54	N 88° 42" E	41.91	
L55	N 88° 42" E	41.91	
L56	N 88° 42" E	41.91	
L57	N 88° 42" E	41.91	
L58	N 88° 42" E	41.91	
L59	N 88° 42" E	41.91	
L60	N 88° 42" E	41.91	
L61	N 88° 42" E	41.91	
L62	N 88° 42" E	41.91	
L63	N 88° 42" E	41.91	
L64	N 88° 42" E	41.91	
L65	N 88° 42" E	41.91	
L66	N 88° 42" E	41.91	
L67	N 88° 42" E	41.91	
L68	N 88° 42" E	41.91	
L69	N 88° 42" E	41.91	
L70	N 88° 42" E	41.91	
L71	N 88° 42" E	41.91	
L72	N 88° 42" E	41.91	
L73	N 88° 42" E	41.91	
L74	N 88° 42" E	41.91	
L75	N 88° 42" E	41.91	
L76	N 88° 42" E	41.91	
L77	N 88° 42" E	41.91	
L78	N 88° 42" E	41.91	
L79	N 88° 42" E	41.91	
L80	N 88° 42" E	41.91	
L81	N 88° 42" E	41.91	
L82	N 88° 42" E	41.91	
L83	N 88° 42" E	41.91	
L84	N 88° 42" E	41.91	
L85	N 88° 42" E	41.91	
L86	N 88° 42" E	41.91	
L87	N 88° 42" E	41.91	
L88	N 88° 42" E	41.91	
L89	N 88° 42" E	41.91	
L90	N 88° 42" E	41.91	
L91	N 88° 42" E	41.91	
L92	N 88° 42" E	41.91	
L93	N 88° 42" E	41.91	
L94	N 88° 42" E	41.91	
L95	N 88° 42" E	41.91	
L96	N 88° 42" E	41.91	
L97	N 88° 42" E	41.91	
L98	N 88° 42" E	41.91	
L99	N 88° 42" E	41.91	
L100	N 88° 42" E	41.91	

CRITICAL AREA	AREA	ACRES
AREA 1	100.00	2.28
AREA 2	2249426.00	51.64
AREA 3	100.00	2.28
AREA 4	100.00	2.28
AREA 5	100.00	2.28
AREA 6	100.00	2.28
AREA 7	100.00	2.28
AREA 8	100.00	2.28
AREA 9	100.00	2.28
AREA 10	100.00	2.28
AREA 11	100.00	2.28
AREA 12	100.00	2.28
AREA 13	100.00	2.28
AREA 14	100.00	2.28
AREA TOTAL	38780.00	88.00



LOCATION MAP
NOT TO SCALE



- LEGEND:**
- IPF Iron Pin Found
 - W Wetland Flopping
 - P Project Boundary Vertex
 - Critical Line
 - Project Boundary
 - Property Line
 - Right of Way Line
 - Match Line
 - Critical Hatch Area

AREA 2
2249426.0 SQ. FT.
51.64 ACRES

I hereby state to the best of my knowledge, information, and belief, that the survey shown herein was made in accordance with the requirements of the minimum standards required for the practice of land surveying in South Carolina, and meets or exceeds the requirements for a Class C Survey as specified therein.

[Signature]
K. Lee Jones - South Carolina Registered Land Surveyor #12282

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF DEPARTMENT (SCDHEC-SDNR) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS, BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME. BY DELINEATING THE PERMIT AUTHORITY OF SCHEC-SDNR (SCDHEC-SDNR) IN NO WAY WAIVES HIS RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY, WHETHER OR NOT.

[Signature]
3-29-21

The critical line shown on this plat is valid for two years from the date of this signature, subject to the cautionary language above.



KCI
CONSULTANTS
INC.
1700 W. 11th Street
Hilton Head Island, SC 29928

Date
01-30-2021

No.	Revision	CLIENT COMMENTS
1		

Project No. 251800390
 Field Surveyed: 06/10/20
 Drawn By: PWS/SWC
 Checked By: 06/20/20
 Date: 06/20/20
 Scale: 1" = 100'

ACAD FILE NAME
251800390.CRD
Wetlands Plat.DWG

CRITICAL LINE PLAT
SHOWING CRITICAL AREA ALONG
U.S. HIGHWAY 278 CORRIDOR
HILTON HEAD ISLAND
HILTON HEAD, SOUTH CAROLINA

Sheet No.
3 of 7

File Number:
251800390

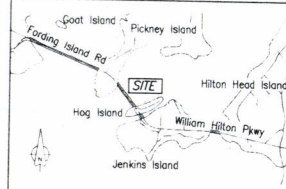
AREA 5		
Course	Bearing	Distance
L213	N 73° 17' 00" E	13.82
L214	N 88° 44' 41" E	17.58
L215	N 82° 39' 44" E	15.08
L216	S 82° 37' 51" E	20.61
L217	S 79° 03' 38" E	40.76
L218	N 25° 58' 21" E	20.47
L219	N 81° 48' 11" E	48.13
L220	S 89° 52' 21" E	60.94
L221	S 78° 12' 51" E	79.87
L222	S 57° 08' 32" E	26.12
L223	S 17° 08' 38" E	81.48
L224	S 58° 24' 03" E	48.60
L225	N 11° 32' 34" E	63.36
L226	S 74° 04' 25" E	6.47
L227	N 46° 45' 31" E	8.74
L228	N 37° 45' 39" E	10.33

AREA 6		
Course	Bearing	Distance
L229	N 55° 08' 11" E	18.81
L230	S 39° 33' 32" E	18.96
L231	N 60° 38' 56" E	22.66
L232	N 42° 30' 20" E	28.88
L233	N 41° 27' 00" E	39.90
L234	N 43° 39' 40" E	40.88
L235	N 25° 48' 24" E	51.57
L236	N 31° 11' 11" E	22.21
L237	N 33° 25' 02" E	38.74
L238	N 46° 45' 01" E	25.29
L239	N 33° 25' 02" E	21.81
L240	N 41° 12' 24" E	24.46
L241	N 45° 17' 04" E	20.48
L242	N 43° 12' 24" E	40.48
L243	N 25° 38' 49" E	40.23
L244	N 37° 08' 24" E	41.78
L245	N 50° 27' 03" E	32.48
L246	N 37° 08' 24" E	40.48

AREA 7		
Course	Bearing	Distance
L247	S 00° 54' 14" W	15.20
L248	S 36° 16' 38" W	22.49
L249	N 76° 35' 05" W	53.13
L250	N 87° 48' 05" W	19.20
L251	S 67° 42' 23" W	21.15
L252	S 69° 11' 53" W	58.45
L253	S 11° 25' 48" E	50.42
L254	S 37° 01' 48" E	49.78
L255	S 57° 38' 17" E	37.88
L256	S 39° 57' 28" E	17.90
L257	N 62° 33' 13" E	17.71
L258	S 69° 07' 27" E	21.93
L259	N 85° 34' 17" E	1.89
L260	S 70° 48' 03" E	22.82
L261	N 37° 18' 37" E	17.80
L262	N 38° 19' 17" E	18.73
L263	N 48° 23' 24" E	1.82
L264	N 48° 23' 24" E	1.82
L265	N 70° 27' 48" E	18.33
L266	N 33° 40' 17" E	46.13
L267	N 63° 19' 03" E	40.53
L268	N 27° 14' 48" E	38.20
L269	N 81° 34' 58" E	17.99
L270	N 1° 37' 06" E	28.20
L271	N 45° 47' 01" E	22.82
L272	S 84° 48' 02" E	17.99
L273	S 86° 43' 03" E	22.54
L274	S 38° 47' 02" E	18.74
L275	N 03° 35' 56" E	18.73
L276	S 38° 47' 02" E	18.74
L277	S 45° 12' 00" E	32.92
L278	N 61° 48' 20" E	12.42
L279	N 87° 38' 51" E	20.25
L280	S 70° 38' 78" E	32.24
L281	N 31° 38' 02" E	58.42

AREA 8		
Course	Bearing	Distance
L282	S 11° 34' 53" E	28.84
L283	S 38° 12' 00" E	10.94
L284	N 37° 38' 12" E	28.24
L285	N 37° 35' 44" E	35.17

AREA	Acres	Address
AREA 1	111.11	7.89
AREA 2	111.11	21.74
AREA 3	2242.22	21.74
AREA 4	1044.82	23.99
AREA 5	7815.17	1.79
AREA 6	9212.9	0.21
AREA 7	11111.9	2.69
AREA 8	800.1	0.00
AREA 9	7924.9	0.83
AREA 10	7263.9	1.92
AREA 11	2874.9	0.04
AREA 12	1873.1	0.04
AREA 13	244.1	0.01
AREA 14	6707.1	1.84
AREA TOTAL	37818.1	88.05



LOCATION MAP NOT TO SCALE



- LEGEND:
- IPF Iron Pin Found
 - W Wetland Flagging
 - P Project Boundary Vertex
 - - - Critical Line
 - Property Line
 - - - Right of Way Line
 - - - Match Line
 - Critical Hatch Area

AREA 4
1044825.8 SQ. FT.
23.99 ACRES

AREA 7
11111.9 SQ. FT.
2.69 ACRES

AREA 6
9212.9 SQ. FT.
0.21 ACRES

AREA 5
7815.17 SQ. FT.
1.79 ACRES

I hereby state to the best of my knowledge, information, and belief, that the survey shown herein was made in accordance with the requirements of the minimum standards required for the practice of land surveying in South Carolina, and hereby certify the requirements for a Class C Survey as specified therein.

[Signature]
K. Tele Areas - South Carolina Registered Land Surveyor #1292

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF DEPARTMENT (SCHEMATIC) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME. BY DELINEATING THE PERMIT AUTHORITY OF SCHEMATIC, SCHEMATIC IN NO WAY WAIVES ITS RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY.

[Signature]
3/29/21
DATE

All critical line shown on this plat is used for fee split from the date of this signature, subject to the customary language above.



Date	Revised	Comments
01-05-2021		

No.	Client Comments
1	

Project No. 201800390
Field Surveyed: 08/10/20
Drawn By: JVD/SWC
Checked By: JVD
Date: 08/29/20
Scale: 1" = 100'

ACAD FILE NAME
201800390.CXD
Wetlands Plat.DWG

CRITICAL LINE PLAT
SHOWING CRITICAL AREA ALONG
U.S. HIGHWAY 278 CORRIDOR
HILTON HEAD ISLAND
HILTON HEAD, SOUTH CAROLINA

Sheet No.
5 of 7

File Number:
251800390

Course	Bearing	Distance
L296	N 1° 02' 11" E	3.51
L297	N 17° 56' 22" E	85.42
L298	S 25° 18' 11" E	19.99
L299	S 37° 43' 26" E	59.22
L300	N 43° 24' 14" E	71.09
L301	N 83° 59' 52" E	87.28
L302	N 84° 33' 12" E	98.76
L303	N 85° 58' 18" E	98.76
L304	N 87° 33' 28" E	98.76
L305	N 88° 48' 33" E	97.54
L306	S 84° 50' 11" W	1.25

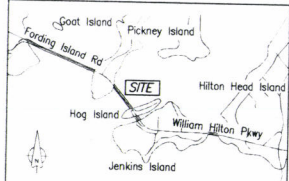
Course	Bearing	Distance
L313	S 83° 56' 28" E	98.76
L314	S 85° 43' 48" E	86.75
L315	S 84° 30' 43" E	98.45
L316	S 83° 09' 28" E	98.45
L317	S 81° 50' 51" E	117.99
L318	S 79° 53' 58" E	137.77
L319	S 78° 00' 51" E	172.46
L320	S 80° 38' 32" E	115.59
L321	S 86° 55' 28" E	121.91
L322	S 88° 03' 11" E	95.40
L323	S 85° 05' 41" E	95.82
L324	S 87° 31' 43" E	95.82

Course	Bearing	Distance
L327	S 81° 00' 28" W	19.81
L328	S 79° 58' 2" W	41.54
L329	S 84° 45' 06" W	82.47
L330	N 81° 55' 57" E	100.46
L331	N 74° 48' 24" E	116.39
L332	N 55° 05' 24" E	26.78
L333	N 23° 36' 04" E	71.08
L334	N 14° 48' 28" E	47.44

Course	Bearing	Distance
L336	N 13° 57' 29" W	8.88
L337	N 10° 13' 01" W	8.50
L338	N 07° 03' 41" E	8.35
L339	N 04° 54' 19" E	8.50
L340	N 04° 54' 19" E	8.50
L341	N 05° 28' 23" E	8.35
L342	N 04° 42' 11" E	8.35
L343	N 03° 58' 56" E	8.35
L344	N 03° 58' 56" E	8.35
L345	N 03° 58' 56" E	8.35
L346	N 03° 58' 56" E	8.35
L347	N 03° 58' 56" E	8.35
L348	N 03° 58' 56" E	8.35
L349	N 03° 58' 56" E	8.35
L350	N 03° 58' 56" E	8.35

Course	Bearing	Distance
L351	S 82° 27' 11" E	4.53
L352	S 78° 31' 12" E	8.41
L353	S 44° 54' 19" E	8.41
L354	S 35° 10' 27" E	8.41
L355	S 20° 42' 22" E	8.41
L356	S 08° 12' 24" E	5.36
L357	S 01° 05' 27" E	43.09
L358	S 01° 05' 27" E	29.89
L359	N 81° 12' 01" E	41.78
L360	N 81° 38' 09" E	29.43
L361	N 81° 38' 09" E	29.43

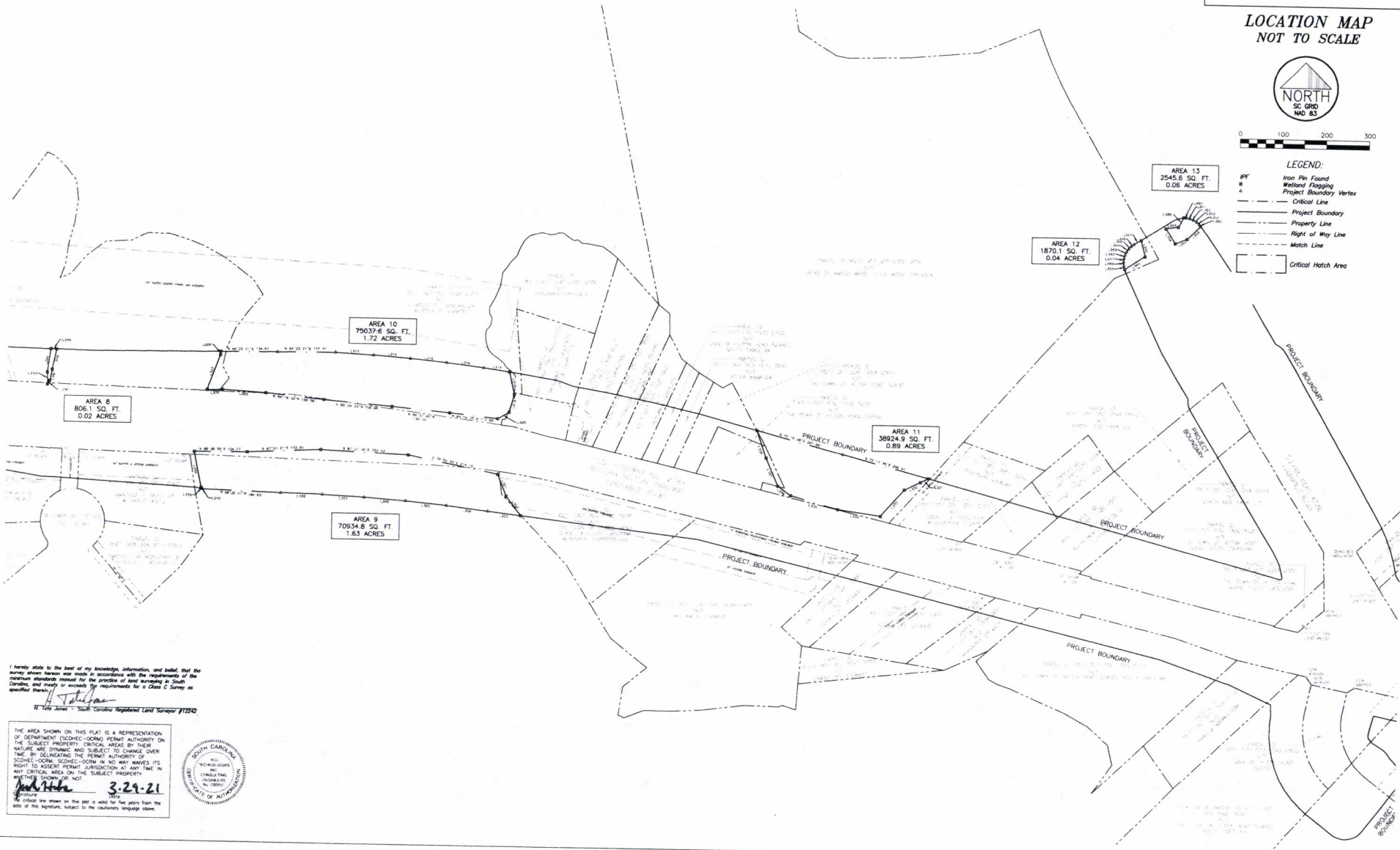
AREA	ACRES
AREA 1	25745.6
AREA 2	224829.0
AREA 3	104485.2
AREA 4	104485.2
AREA 5	78191.7
AREA 6	24191.7
AREA 7	117119.8
AREA 8	806.1
AREA 9	70934.8
AREA 10	75037.6
AREA 11	36924.9
AREA 12	1870.1
AREA 13	2545.0
AREA 14	38781.8
AREA TOTAL	38781.8



LOCATION MAP NOT TO SCALE



- LEGEND:**
- IPF Iron Pin Found
 - W Wetland Flopping
 - Project Boundary Vertex
 - Project Boundary
 - Property Line
 - Right of Way Line
 - Match Line
 - Critical Hatch Area



I hereby state to the best of my knowledge, information, and belief, that the survey shown herein was made in accordance with the requirements of the provisions stipulated herein for the purpose of land surveying in South Carolina, and meets or exceeds the requirements for a Class C Survey as specified therein.

H. Tate Jones
 H. Tate Jones - South Carolina Registered Land Surveyor #12242

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF DEPARTMENT (SCOTEC) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE CHANGING AND SUBJECT TO CHANGE OVER TIME. BY DELINEATING THE PERMIT AUTHORITY OF SCOTEC (SCOTEC) SURVEYING IN NO WAY WAIVES ITS RIGHT TO ADJUST PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY. THIS SURVEY IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PERMIT.

J. H. H. H.
 3-29-21
 DATE

No. Critical line shown on this plat is valid for two years from the date of this signature, subject to the customary language above.



KCI
 ENGINEERING, INC.
 1001 W. PALM BLVD.
 SUITE 100
 FORT WORTH, TEXAS 76102
 TEL: 817.339.1111
 FAX: 817.339.1112

No.	Revision	DATE	CLIENT COMMENTS
1		01-29-2021	

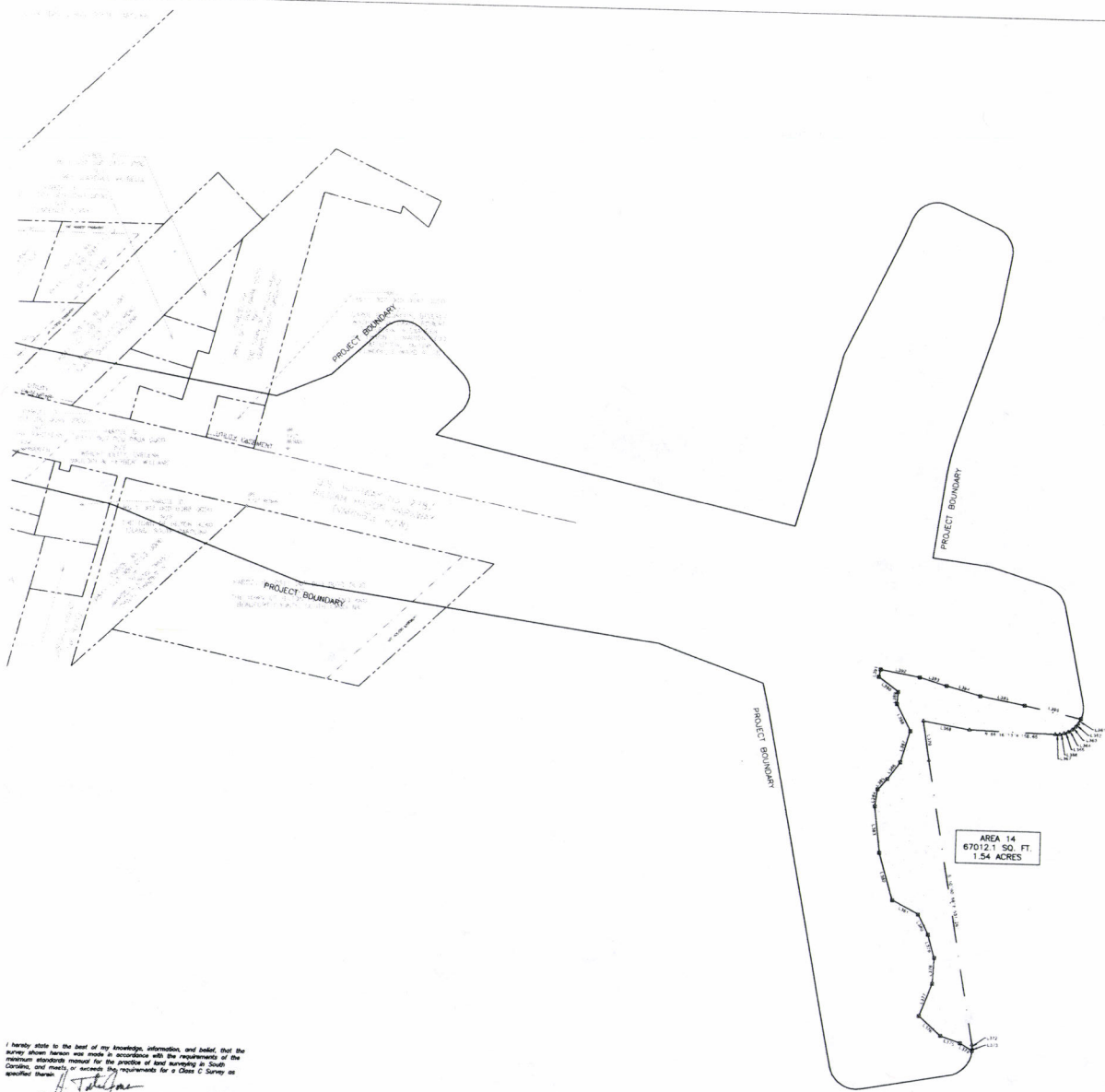
Project No. 201800390
 Field Skipped: 08/10/20
 Drawn By: JPH/SWC
 Checked By: HJF
 Date: 08/20/20
 Scale: 1" = 100'

ACAD FILE NAME
 251800390.CRD
 Wetlands_Plat.DWG

CRITICAL LINE PLAT
SHOWING CRITICAL AREA ALONG
U.S. HIGHWAY 278 CORRIDOR
 HILTON HEAD ISLAND
 HILTON HEAD, SOUTH CAROLINA

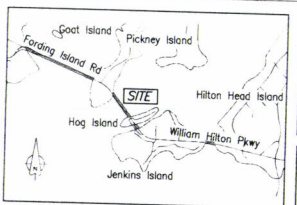
Sheet No.
6 of 7

File Number:
251800390



AREA 13		
Course	Bear. Ang.	Distance
L301	S 88° 52' 13" W	8.27
L302	S 88° 53' 31" W	8.22
L303	S 89° 14' 41" W	8.22
L304	S 88° 44' 22" W	8.22
L305	S 89° 08' 42" W	8.22
L306	S 77° 35' 25" W	8.22
L307	S 87° 00' 02" W	8.22
L308	N 83° 28' 27" W	88.72
L309	S 83° 33' 31" E	79.27
L310	S 85° 30' 38" E	79.27
L311	S 85° 17' 48" W	8.12
L312	N 82° 0' 26" W	25.04
L313	N 75° 30' 48" W	84.00
L314	N 44° 24' 05" W	84.14
L315	N 71° 29' 17" E	84.34
L316	N 61° 07' 17" E	77.81
L317	N 51° 07' 17" E	44.48
L318	N 42° 37' 25" W	34.74
L319	N 18° 4' 16" W	36.82
L320	N 26° 54' 23" W	86.70
L321	N 37° 54' 24" E	31.55
L322	N 41° 00' 35" E	28.48
L323	N 48° 52' 14" E	89.00
L324	N 10° 37' 16" L	55.78
L325	N 21° 45' 23" E	33.81
L326	N 34° 23' 54" E	22.84
L327	N 53° 74' 28" E	45.11
L328	N 12° 42' 07" E	14.33
L329	S 75° 48' 22" E	73.33
L330	S 73° 38' 05" E	52.27
L331	S 74° 28' 33" E	14.87
L332	S 78° 22' 17" E	83.72
L333	N 76° 06' 41" E	127.23

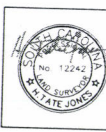
CRITICAL AREAS		
AREA #	Size	ACRES
AREA 1	171151.7	3.90
AREA 2	2248426.0	51.24
AREA 3	2667.0	0.06
AREA 4	1044852.6	23.92
AREA 5	2413.9	0.05
AREA 6	1171719.5	26.81
AREA 7	806.5	0.02
AREA 8	70534.8	1.61
AREA 9	105071.5	2.39
AREA 10	38211.5	0.87
AREA 11	38211.5	0.87
AREA 12	18101.5	0.41
AREA 13	3545.8	0.08
AREA 14	67012.1	1.54
AREA TOTAL	327812.8	74.05



LOCATION MAP
NOT TO SCALE



- LEGEND:
- IPF Iron Pin Found
 - W Wetland Flopping
 - Project Boundary
 - - - Critical Line
 - Property Line
 - - - Right of Way Line
 - - - Match Line
 - Critical Hatch Area



No.	Revision	Date

Project No. 251800390
Field Surveyed: 06/10/20
Drawn By: JWG/SRE
Checked By: JWG
Date: 01/19/21
Scale: 1" = 100'

ACAD FILE NAME
251800390.CSD
Wetlands Plat.DWG

CRITICAL LINE PLAT
SHOWING CRITICAL AREA ALONG
U.S. HIGHWAY 278 CORRIDOR
HILTON HEAD ISLAND
HILTON HEAD, SOUTH CAROLINA

Sheet No.
6 of 7

File Number:
251800390

I hereby state to the best of my knowledge, information, and belief, that the survey shown herein was made in accordance with the requirements of the minimum standards required for the production of land surveys in South Carolina, and meets or exceeds the requirements for a Class C Survey as specified therein.

[Signature]
K. LATE JONES - South Carolina Registered Land Surveyor #12242

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF DEPARTMENT (SCDHEC-DCRM) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME BY EXERCISING THE PERMIT AUTHORITY OF SCDHEC-DCRM. SCDHEC-DCRM IN NO WAY WAIVES ITS RIGHT TO EXERCISE PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY.

[Signature] 3-29-21
DATE

NO CRITICAL AREAS SHOWN ON THIS PLAT ARE VALID FOR PERIODS FROM THE DATE OF THIS SIGNATURE, SUBJECT TO THE OBLIGATORY LANGUAGE ABOVE.

