DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
CHARLESTON, SOUTH CAROLINA 29403-5107

REPLY TO
ATTENTION OF

March 9, 2016

RECEIVED
MAR 14 2016
Environmental Management
SCDOT

Regulatory Division

Mr. Sean Connolly
South Carolina Department of Transportation
Post Office Box 191
Columbia, South Carolina 29202-0191

Dear Mr. Connolly:

This is in response to your letter which was received on August 28, 2015, requesting a Preliminary Jurisdictional Determination (Preliminary JD), on behalf of South Carolina Department of Transportation, for an 1170 acre project area, within a project known as Carolina Crossroads that is located on and along segments of I-20, I-26, & I-126 adjacent to, and including the I/20/I-26/I-126 Interchange in Richland and Lexington Counties, South Carolina (SCDOT PIN 27662). The project area is depicted on the sketches, Figures 6-1 to 6-30 (on enclosed computer disc), prepared by Mead & Hunt entitled "Delineated Waters of the U.S., Carolina Crossroads" and dated November 19, 2015. A Preliminary JD is used to indicate that this office has identified wetlands and/or other waters on the property, and that in lieu of making an Approved Jurisdictional Determination, relies on the presumption of jurisdiction for the purpose of expediting the request for a Preliminary JD.

Based on an on-site inspection, a review of aerial photography, topographic maps, National Wetlands Inventory maps, soil survey information, and Wetland Determination Data Forms, it has been concluded that the boundaries shown on the referenced sketches are a reasonable approximation of the wetlands and/or other waters found within the project area. The site in question contains approximately 7.718 acres and 21,664 linear feet of federally defined wetlands and/or other waters. You are cautioned that the boundaries of the delineated wetlands and/or other waters depicted on the enclosed sketch are approximate and subject to change.

This office should be contacted prior to performing any work in or around these wetlands and/or other waters. In order for a definitive determination of jurisdiction to be provided, you must submit a request for an Approved Jurisdictional Determination (Approved JD) rather than the presumption of jurisdiction provided in this letter. Enclosed is a Preliminary Jurisdictional Determination Form describing the areas in question and clarifying the option to request an Approved JD. You should also be aware that the areas identified as wetlands and/or other waters may be subject to restrictions or requirements of other state or local government entities.

Please note that since this is a Preliminary JD, it is subject to change and therefore is not an appealable action under the Corps of Engineers administrative appeal procedures defined at 33 CFR 331. If a permit application is forthcoming as a result of this Preliminary JD, a copy of this letter, as well as the sketches should be submitted as part of the application. Otherwise, a delay could occur in confirming that a Preliminary JD was performed for the proposed project area.

This Preliminary JD is a non-binding action and as such has no expiration until it is superseded by an Approved JD. If you intend to request an Approved JD in the future, you are advised not to commence work in these wetlands and/or waters prior to receiving the Approved JD.

This delineation/determination has been conducted pursuant to Corps of Engineers regulatory authority for the purpose of identifying the geographic extent of waters on the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

In future correspondence concerning this matter, please refer to SAC 2015-1080-DS. You may still need state or local assent. Prior to performing any work, you should contact the South Carolina Department of Health and Environmental Control. A copy of this letter is being forwarded to them for their information.

Enclosed are two copies of the Preliminary Jurisdictional Determination Form signed by our office. Please sign both copies, retain one copy for your records and return one signed copy to this office in the enclosed self-addressed envelope.

If you have any questions concerning this matter, please contact Stephen Brumagin at 803-253-3445.

Respectfully,

for Travis G. Hughes
Chief, Regulatory Branch

Enclosures:
Computer Disc-sketches of delineated waters
Preliminary Jurisdictional Determination Form

Copy Furnished:

South Carolina Department of
Health and Environmental Control
Attn: Mr. Chuck Hightower
Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201

Mead & Hunt
Mr. Matt DeWitt, PWS
307 W. Main Street
Lexington, SC 29072

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): February 17, 2016

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Mr. Sean Connolly, Environmental Permits Manager
S.C. Department of Transportation
P.O. Box 191, 955 Park St.
Columbia, S.C. 29202-0191

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:Charleston District, SCDOT Carolina Crossroads in Richland & Lexington Counties, SAC 2015-1080-DS

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: Project is located on and along segments of I-20, I-26, & I-126, and at the Interchange in Richland and Lexington Counties

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State:South Carolina County/parish/borough: Lexington & Richland City: Columbia
Center coordinates of site (lat/long in degree decimal format): Lat. 34.03674° N, Long. 81.110607° W.
Universal Transverse Mercator: NAD 83
Name of nearest waterbody: Broad River & Saluda River

Identify (estimate) amount of waters in the review area:
Non-wetland waters: 21,664 linear feet: variable width (ft) and/or (Ponds) 0.219 acres.
Cowardin Class: Riverine
Stream Flow: Perennial
Wetlands: 7.499 acres.
Cowardin Class: Forested

Name of any water bodies on the site that have been identified as Section 10 waters:
Tidal: N/A
Non-Tidal: N/A

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: February 17, 2016
☒ Field Determination. Date(s): October 13, 2015

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.
This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Mead & Hunt.
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  ☐ Office concurs with data sheets/delineation report.
  ☐ Office does not concur with data sheets/delineation report.

Although the Corps may not agree with all the information provided by the agent in the data forms describing delineated waters, the Corps agrees with the conclusion and boundary established from site information documented.

☐ Data sheets prepared by the Corps: .
☒ Corps navigable waters' study:1977 Navigability Study.
☒ U.S. Geological Survey Hydrologic Atlas:HA 730-G, 1990.
  ☐ USGS NHD data.
  ☒ USGS 8 and 12 digit HUC maps. 03050106-07 Broad River & 03050109-14 Lower Saluda River
☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000, Columbia North.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Lexington County Soil Survey pg 13, Richland County Soil Survey pgs 20, 25, 26, & 32. Georgeville, Alta Vista, Orange, Orangeburg, Herndon, Congare, Chastain, Nason, Craven, Chenneby, Enon, Dothan, and Mecklenburg series..
☒ National wetlands inventory map(s). Cite name:PUBHh & R2UBH.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):(1999) 11206:23 & 11202:104.
  or ☒ Other (Name & Date):Provided by applicant in JD request.
☐ Previous determination(s). File no. and date of response letter: .
☒ Other information (please specify):Field view October 13, 2015.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory Project Manager (REQUIRED)

Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

3-14-16

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Tributary 1	34.100805	-81.180096	Riverine	11 linear feet	non-section 10 – non-wetland
Tributary 2	34.101448	-81.176719	Riverine	234 linear feet	non-section 10 – non-wetland
Tributary 3	34.09604	-81.172771	Riverine	440 linear feet	non-section 10 – non-wetland
Tributary 4	34.09066	-81.171458	Riverine	160 linear feet	non-section 10 – non-wetland
Tributary 5	34.09066	-81.171458	Riverine	157 linear feet	non-section 10 – non-wetland
Tributary 6	34.089468	-81.167239	Riverine	22 linear feet	non-section 10 – non-wetland
Tributary 7	34.087991	-81.162715	Riverine	970 linear feet	non-section 10 – non-wetland
Tributary 8	34.084707	-81.159478	Riverine	571 linear feet	non-section 10 – non-wetland
Tributary 9	34.081844	-81.156363	Riverine	188 linear feet	non-section 10 – non-wetland
Tributary 10	34.080574	-81.148647	Riverine	86 linear feet	non-section 10 – non-wetland
Tributary 11	34.072878	-81.147494	Riverine	924 linear feet	non-section 10 – non-wetland
Tributary 12	34.073142	-81.147209	Riverine	10 linear feet	non-section 10 – non-wetland
Tributary 13	34.071775	-81.145557	Riverine	14 linear feet	non-section 10 – non-wetland
Tributary 14	34.070221	-81.144383	Riverine	126 linear feet	non-section 10 – non-wetland
Tributary 15	34.066157	-81.142308	Riverine	164 linear feet	non-section 10 – non-wetland
Tributary 16	34.060913	-81.136281	Riverine	94 linear feet	non-section 10 – non-wetland
Tributary 17	34.059971	-81.135047	Riverine	25 linear feet	non-section 10 – non-wetland
Tributary 18	34.050479	-81.123828	Riverine	441 linear feet	non-section 10 – non-wetland
Tributary 19	34.05093	-81.123805	Riverine	117 linear feet	non-section 10 – non-wetland

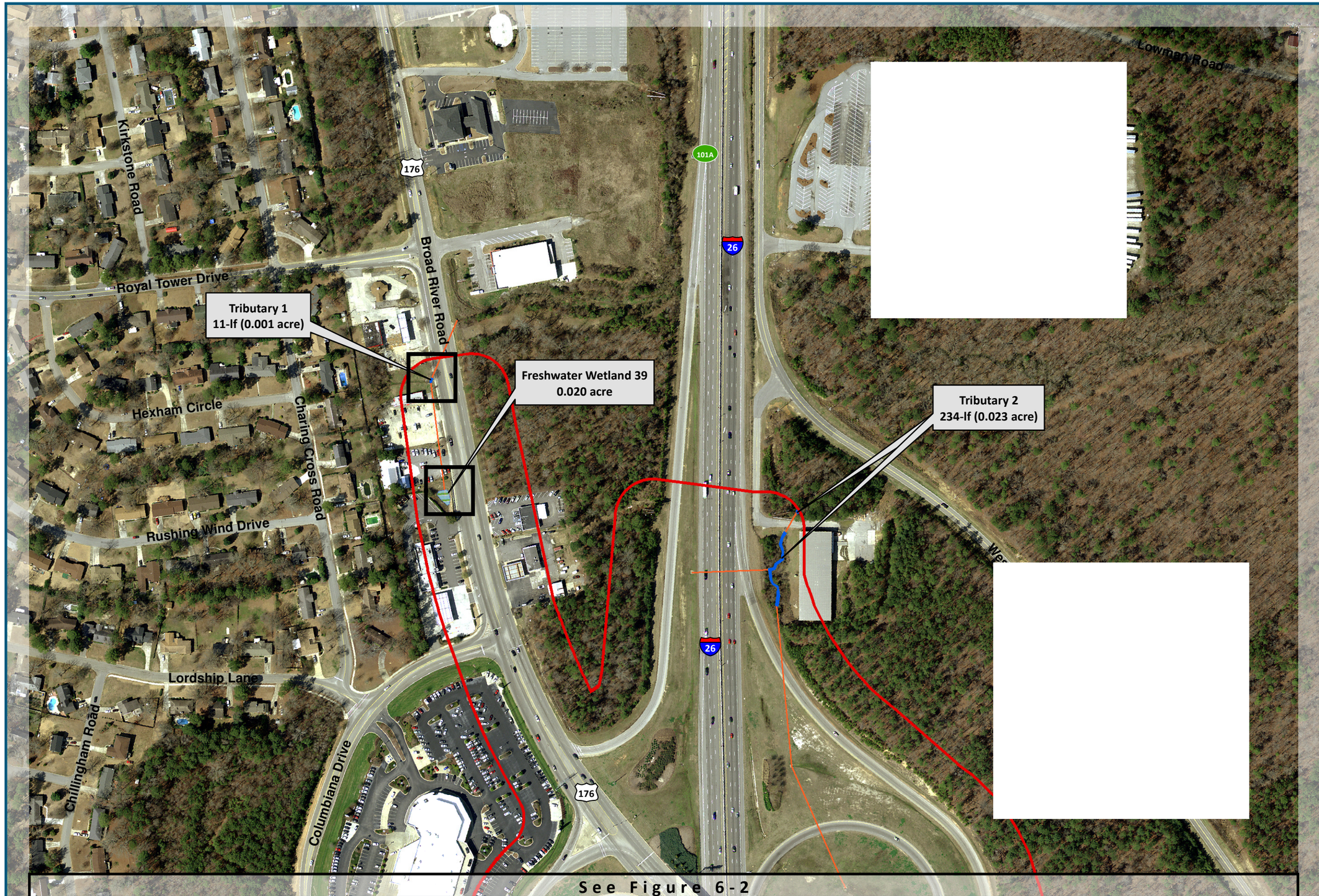
Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Tributary 20	34.049089	-81.121757	Riverine	98 linear feet	non-section 10 – non-wetland
Tributary 21	34.044806	-81.11784	Riverine	433 linear feet	non-section 10 – non-wetland
Tributary 22	34.041751	-81.114315	Riverine	90 linear feet	non-section 10 – non-wetland
Tributary 23	34.033991	-81.119682	Riverine	288 linear feet	non-section 10 – non-wetland
Tributary 24	34.032011	-81.123012	Riverine	323 linear feet	non-section 10 – non-wetland
Tributary 25	34.031487	-81.122957	Riverine	94 linear feet	non-section 10 – non-wetland
Tributary 26	34.031166	-81.123047	Riverine	295 linear feet	non-section 10 – non-wetland
Tributary 27	34.026873	-81.127653	Riverine	752 linear feet	non-section 10 – non-wetland
Tributary 28	34.02617	-81.128813	Riverine	153 linear feet	non-section 10 – non-wetland
Tributary 29	34.026067	-81.128988	Riverine	56 linear feet	non-section 10 – non-wetland
Tributary 30	34.024054	-81.102974	Riverine	1333 linear feet	non-section 10 – non-wetland
Tributary 31	34.024643	-81.128479	Riverine	76 linear feet	non-section 10 – non-wetland
Tributary 32	34.03498	-81.115679	Riverine	70 linear feet	non-section 10 – non-wetland
Tributary 33	34.035067	-81.115263	Riverine	101 linear feet	non-section 10 – non-wetland
Tributary 34	34.036103	-81.115221	Riverine	382 linear feet	non-section 10 – non-wetland
Tributary 35	34.038172	-81.104822	Riverine	412 linear feet	non-section 10 – non-wetland
Tributary 36	34.037663	-81.104892	Riverine	76 linear feet	non-section 10 – non-wetland
Tributary 37	34.037931	-81.104056	Riverine	261 linear feet	non-section 10 – non-wetland
Tributary 38	34.039484	-81.096045	Riverine	296 linear feet	non-section 10 – non-wetland

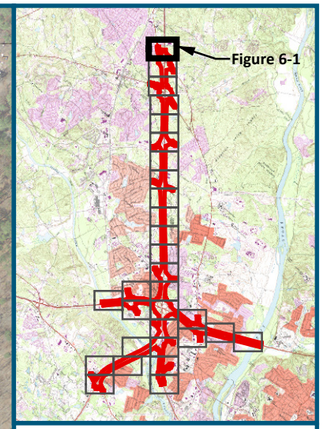
Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Tributary 39	34.046068	-81.076604	Riverine	3958 linear feet	non-section 10 – non-wetland
Tributary 40	34.047922	-81.073314	Riverine	531 linear feet	non-section 10 – non-wetland
Tributary 41	34.031886	-81.10648	Riverine	337 linear feet	non-section 10 – non-wetland
Tributary 42	34.0319	-81.104388	Riverine	839 linear feet	non-section 10 – non-wetland
Tributary 43	34.024206	-81.10383	Riverine	2244 linear feet	non-section 10 – non-wetland
Tributary 44	34.02573	-81.100279	Riverine	229 linear feet	non-section 10 – non-wetland
Tributary 45	34.025041	-81.098961	Riverine	209 linear feet	non-section 10 – non-wetland
Tributary 46	34.023438	-81.097774	Riverine	39 linear feet	non-section 10 – non-wetland
Tributary 47	34.021424	-81.09598	Riverine	499 linear feet	non-section 10 – non-wetland
Tributary 48	34.021618	-81.096122	Riverine	29 linear feet	non-section 10 – non-wetland
Tributary 49	34.019802	-81.094272	Riverine	170 linear feet	non-section 10 – non-wetland
Tributary 50	34.021823	-81.104989	Riverine	889 linear feet	non-section 10 – non-wetland
Tributary 51	34.022232	-81.105048	Riverine	21 linear feet	non-section 10 – non-wetland
Tributary 52	34.021203	-81.10534	Riverine	35 linear feet	non-section 10 – non-wetland
Tributary 53	34.015736	-81.107293	Riverine	933 linear feet	non-section 10 – non-wetland
Tributary 54	34.015648	-81.108009	Riverine	46 linear feet	non-section 10 – non-wetland
Tributary 55	34.015248	-81.108179	Riverine	70 linear feet	non-section 10 – non-wetland
Tributary 56	34.015233	-81.108155	Riverine	20 linear feet	non-section 10 – non-wetland
Tributary 57	34.015505	-81.106705	Riverine	187 linear feet	non-section 10 – non-wetland
Tributary 58	34.002236	-81.110428	Riverine	16 linear feet	non-section 10 – non-wetland

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Wetland 1	34.09632	-81.173066	Palustrine	0.045 acre	non-section 10 – wetland
Wetland 2	34.090909	-81.171742	Palustrine	0.061 acre	non-section 10 – wetland
Wetland 3	34.09282	-81.16609	Palustrine	0.014 acre	non-section 10 – wetland
Wetland 4	34.07401	-81.148074	Palustrine	0.02 acre	non-section 10 – wetland
Wetland 5	34.071566	-81.145617	Palustrine	0.092 acre	non-section 10 – wetland
Wetland 6	34.065804	-81.139786	Palustrine	0.051acre	non-section 10 – wetland
Wetland 7	34.059946	-81.13528	Palustrine	0.125 acre	non-section 10 – wetland
Wetland 8	34.055801	-81.13072	Palustrine	0.226 acre	non-section 10 – wetland
Wetland 9	34.027409	-81.127256	Palustrine	0.358 acre	non-section 10 – wetland
Wetland 10	34.027467	-81.126949	Palustrine	0.04 acre	non-section 10 – wetland
Wetland 11	34.026924	-81.126008	Palustrine	0.45 acre	non-section 10 – wetland
Wetland 12	34.02658	-81.127972	Palustrine	0.057 acre	non-section 10 – wetland
Wetland 13	34.038591	-81.104649	Palustrine	0.066 acre	non-section 10 – wetland
Wetland 14	34.034778	-81.113052	Palustrine	0.01 acre	non-section 10 – wetland
Wetland 15	34.038813	-81.103902	Palustrine	0.091 acre	non-section 10 – wetland
Wetland 16	34.046865	-81.07754	Palustrine	0.041 acre	non-section 10 – wetland
Wetland 17	34.047259	-81.076495	Palustrine	0.393 acre	non-section 10 – wetland
Wetland 18	34.047161	-81.076129	Palustrine	0.251 acre	non-section 10 – wetland
Wetland 19	34.04774	-81.075625	Palustrine	0.015 acre	non-section 10 – wetland

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Wetland 20	34.028767	-81.10411	Palustrine	0.046 acre	non-section 10 – wetland
Wetland 21	34.026707	-81.10323	Palustrine	0.189 acre	non-section 10 – wetland
Wetland 22	34.025802	-81.103096	Palustrine	0.579 acre	non-section 10 – wetland
Wetland 23	34.025377	-81.10158	Palustrine	1.3 acre	non-section 10 – wetland
Wetland 24	34.025711	-81.101606	Palustrine	0.148 acre	non-section 10 – wetland
Wetland 25	34.025366	-81.100592	Palustrine	0.022 acre	non-section 10 – wetland
Wetland 26	34.025225	-81.099811	Palustrine	0.2 acre	non-section 10 – wetland
Wetland 27	34.024399	-81.098791	Palustrine	0.25 acre	non-section 10 – wetland
Wetland 28	34.025523	-81.09824	Palustrine	0.007 acre	non-section 10 – wetland
Wetland 29	34.021882	-81.096388	Palustrine	0.039 acre	non-section 10 – wetland
Wetland 30	34.019935	-81.094701	Palustrine	0.104 acre	non-section 10 – wetland
Wetland 31	34.019481	-81.093825	Palustrine	0.106 acre	non-section 10 – wetland
Wetland 32	34.022004	-81.105387	Palustrine	0.166 acre	non-section 10 – wetland
Wetland 33	34.021233	-81.105484	Palustrine	0.085 acre	non-section 10 – wetland
Wetland 34	34.020842	-81.104509	Palustrine	0.026 acre	non-section 10 – wetland
Wetland 35	34.016895	-81.107349	Palustrine	0.47 acre	non-section 10 – wetland
Wetland 36	34.015562	-81.108226	Palustrine	0.168 acre	non-section 10 – wetland
Wetland 37	34.015337	-81.108604	Palustrine	0.022 acre	non-section 10 – wetland
Wetland 38	34.014804	-81.108667	Palustrine	0.474 acre	non-section 10 – wetland

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Wetland 39	34.100229	-81.179335	Palustrine	0.02 acre	non-section 10 – wetland
Wetland 40	34.097296	-81.175482	Palustrine	0.226 acre	non-section 10 – wetland
Wetland 41	34.09106	-81.170956	Palustrine	0.011 acre	non-section 10 – wetland
Wetland 42	34.088072	-81.161944	Palustrine	0.262 acre	non-section 10 – wetland
Wetland 43	34.08779	-81.159624	Palustrine	0.034 acre	non-section 10 – wetland
Wetland 44	34.079769	-81.151557	Palustrine	0.04 acre	non-section 10 – wetland
Wetland 45	34.07402	-81.147876	Palustrine	0.018 acre	non-section 10 – wetland
Wetland 46	34.065964	-81.142298	Palustrine	0.051 acre	non-section 10 – wetland
Wetland 47	34.0604	-81.134089	Palustrine	0.03 acre	non-section 10 – wetland
Pond 1	34.08214	-81.156035	Lacustrine	0.035 acre	non-section 10 – non-wetland
Pond 2	34.022466	-81.105255	Lacustrine	0.023 acre	non-section 10 – non-wetland
NPDES Basin 1	34.026997	-81.127944	Lacustrine	0.161 acre	non-section 10 – non-wetland





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.020 acre)
- Pond / Water
- Tributary (245-lf / 0.024 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-1
Delineated Waters of the U.S.

11/19/2015 Sheet 1 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

See Figure 6-1

Freshwater Wetland 40*
0.226 acre

Non-Jurisdictional
Linear Conveyance

Freshwater Wetland 1
0.045 acre

Tributary 3
440-lf (0.046 acre)

Chillingham Road

Shetford Road

Columbiana Drive

Western Lane

Broad River Road

North Wingard Road

Columbiana Drive

101A

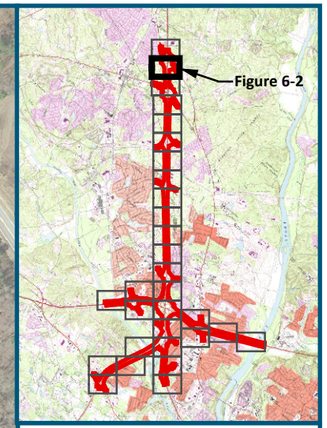
101B

176

26

* Freshwater Wetland 40 was inaccessible during field reviews due to an encompassing fence. The boundary of the wetland is based on aerial interpretation, contour data, and field observations.

See Figure 6-3



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.271 acre)
- Pond / Water
- Tributary (388-lf / 0.041 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-2
Delineated Waters of the U.S.

11/19/2015 Sheet 2 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

See Figure 6-2

Freshwater Wetland 2
0.061 acre

Freshwater Wetland 41
0.011 acre

Tributary 4
160-lf (0.019 acre)

Tributary 5
157-lf (0.022 acre)

Freshwater Wetland 3
0.014 acre

Tributary 6
22-lf (0.003 acre)

Columbiana Drive

Lake Murray Boulevard

Evergreen Drive

Shady Lane

Gaillard Street

Kinley Road

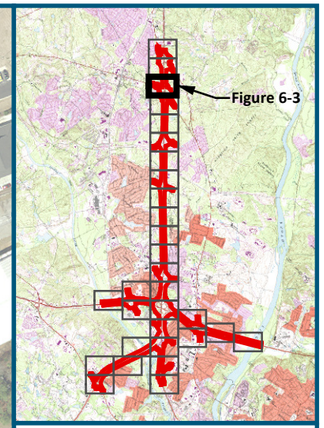
102A

102B

26

60

See Figure 6-4



0 125 250
Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.086 acre)
- Pond / Water
- Tributary (339-lf / 0.044 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-3
Delineated Waters of the U.S.

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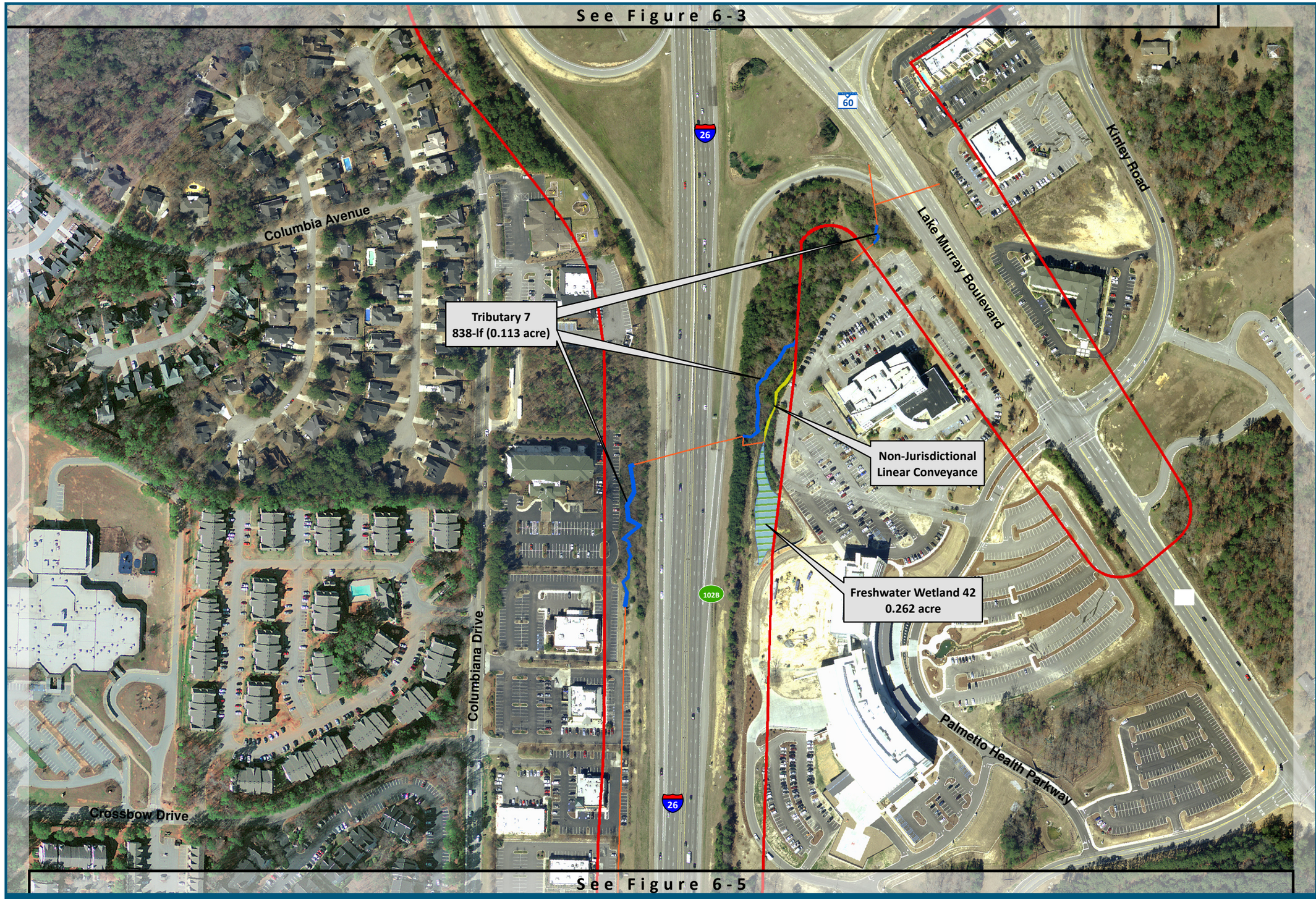
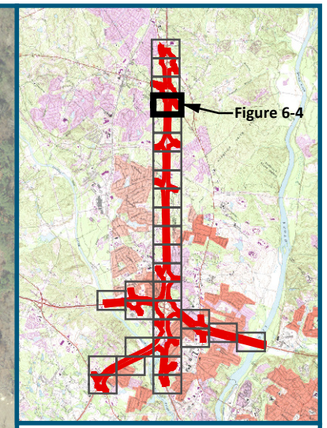
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

See Figure 6-3



See Figure 6-5



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.262 acre)
- Pond / Water
- Tributary (838-lf / 0.113 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-4
Delineated Waters of the U.S.

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SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

See Figure 6-4

Tributary 7
132-lf (0.017 acre)

Freshwater Wetland 43
0.034 acre

Tributary 8
571-lf (0.070 acre)

Pond 1
0.035 acre

Tributary 9
188-lf (0.014 acre)

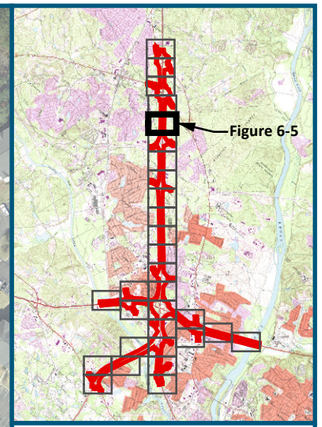
Palmetto Health Parkway

Columbiana Drive

Columbiana Circle

Parkridge Drive

26



0 125 250
Feet
1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.034 acre)
- Pond / Water (0.035 acre)
- Tributary (891-lf / 0.101 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

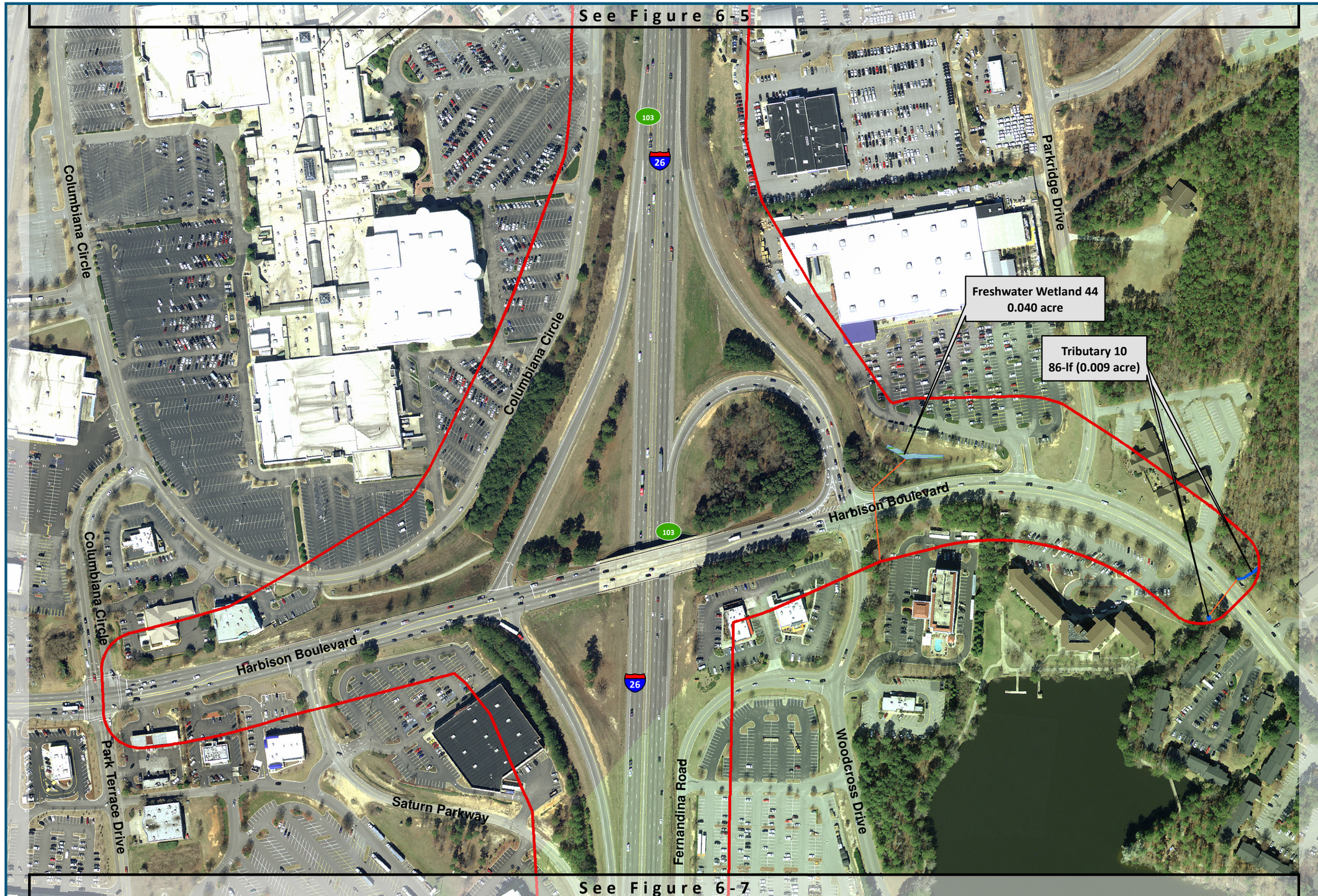
Figure 6-5
Delineated Waters of the U.S.

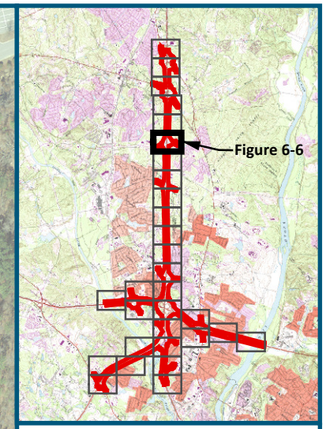
11/19/2015 Sheet 5 of 30

See Figure 6-6

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.040 acre)
- Pond / Water
- Tributary (86-lf / 0.009 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-6
Delineated Waters of the U.S.

11/19/2015 Sheet 6 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

See Figure 6-6

Saturn Parkway

Fernandina Road

Woodcross

26

Freshwater Wetland 4
0.020 acre

Freshwater Wetland 45
0.018 acre

Tributary 11
924-lf (0.121 acre)

Tributary 12
10-lf (0.001 acre)

Bower Parkway

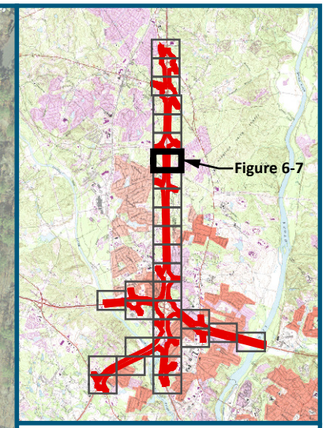
Saturn Parkway

Giles Parkway

Harbison Way

Woodcross Drive

See Figure 6-8



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.038 acre)
- Pond / Water
- Tributary (934-lf / 0.122 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

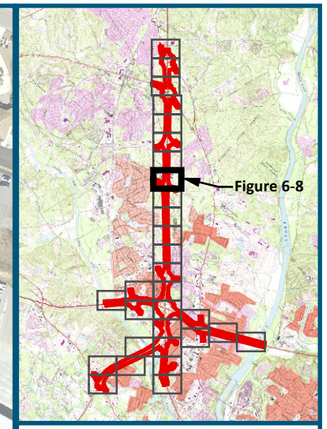
Figure 6-7
Delineated Waters of the U.S.

11/19/2015 Sheet 7 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.115 acre)
- Pond / Water
- Tributary (304-lf / 0.035 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

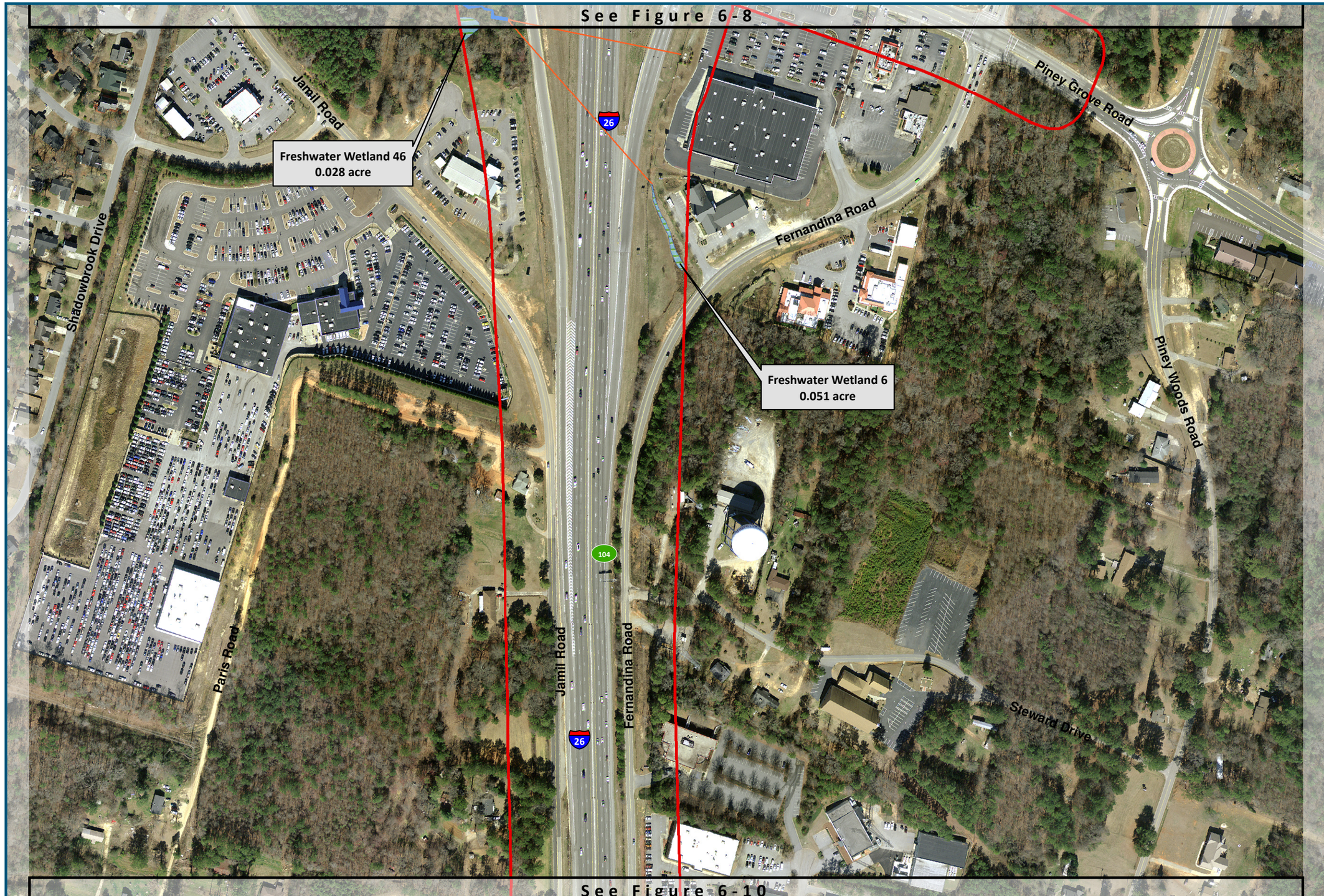
Figure 6-8
Delineated Waters of the U.S.

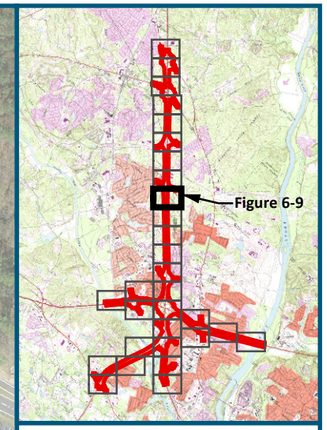
11/19/2015 Sheet 8 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.079 acre)
- Pond / Water
- Tributary
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

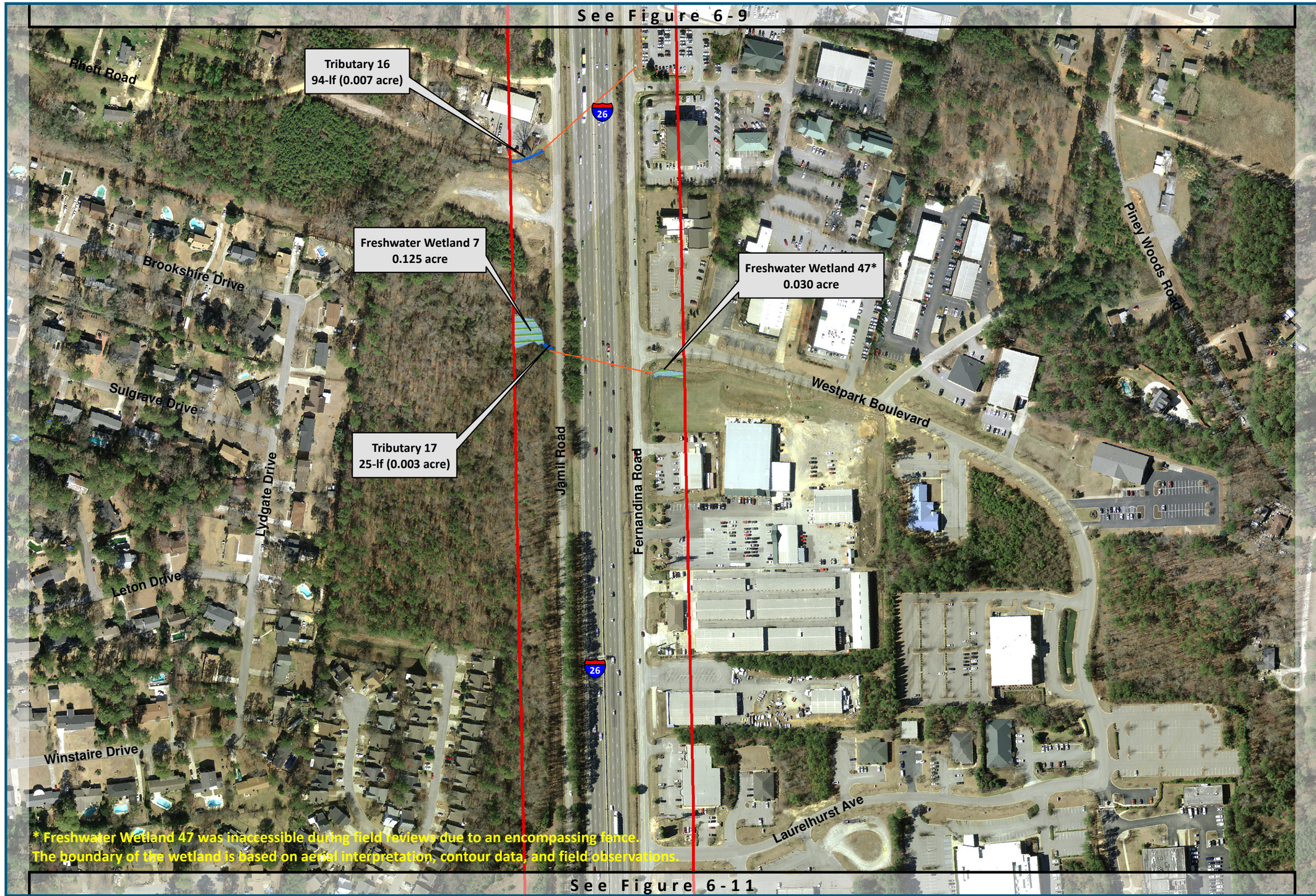
Figure 6-9
Delineated Waters of the U.S.

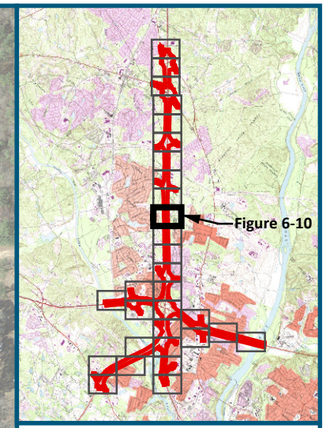
11/19/2015 Sheet 9 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.155 acre)
- Pond / Water
- Tributary (119-lf / 0.010 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-10
Delineated Waters of the U.S.

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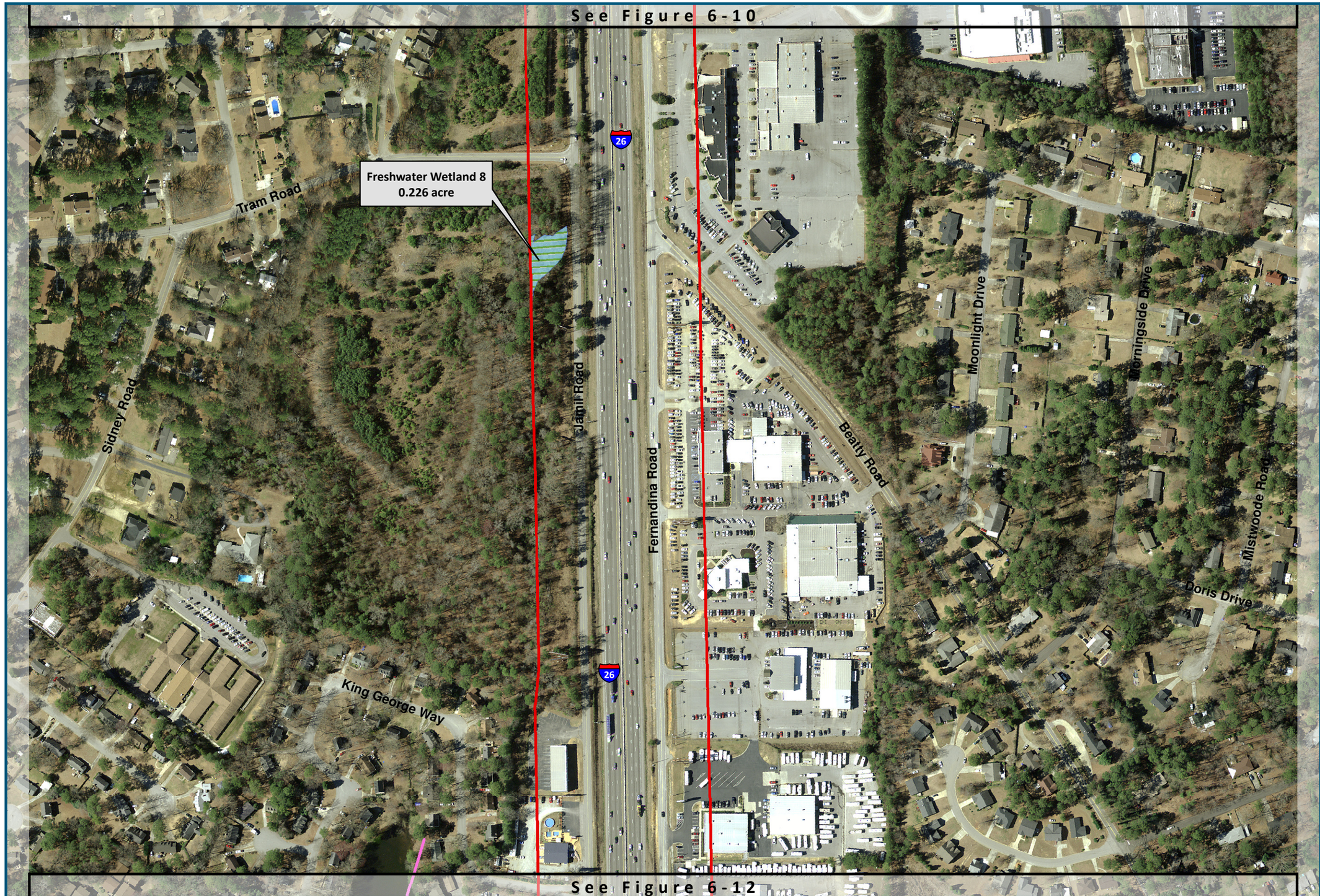
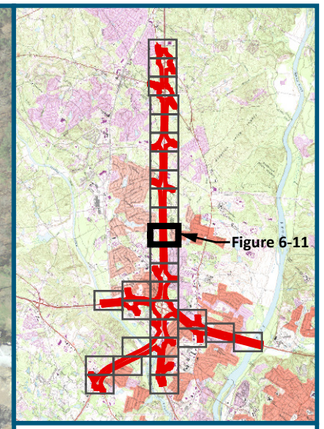
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.226 acre)
- Pond / Water
- Tributary
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-11
Delineated Waters of the U.S.

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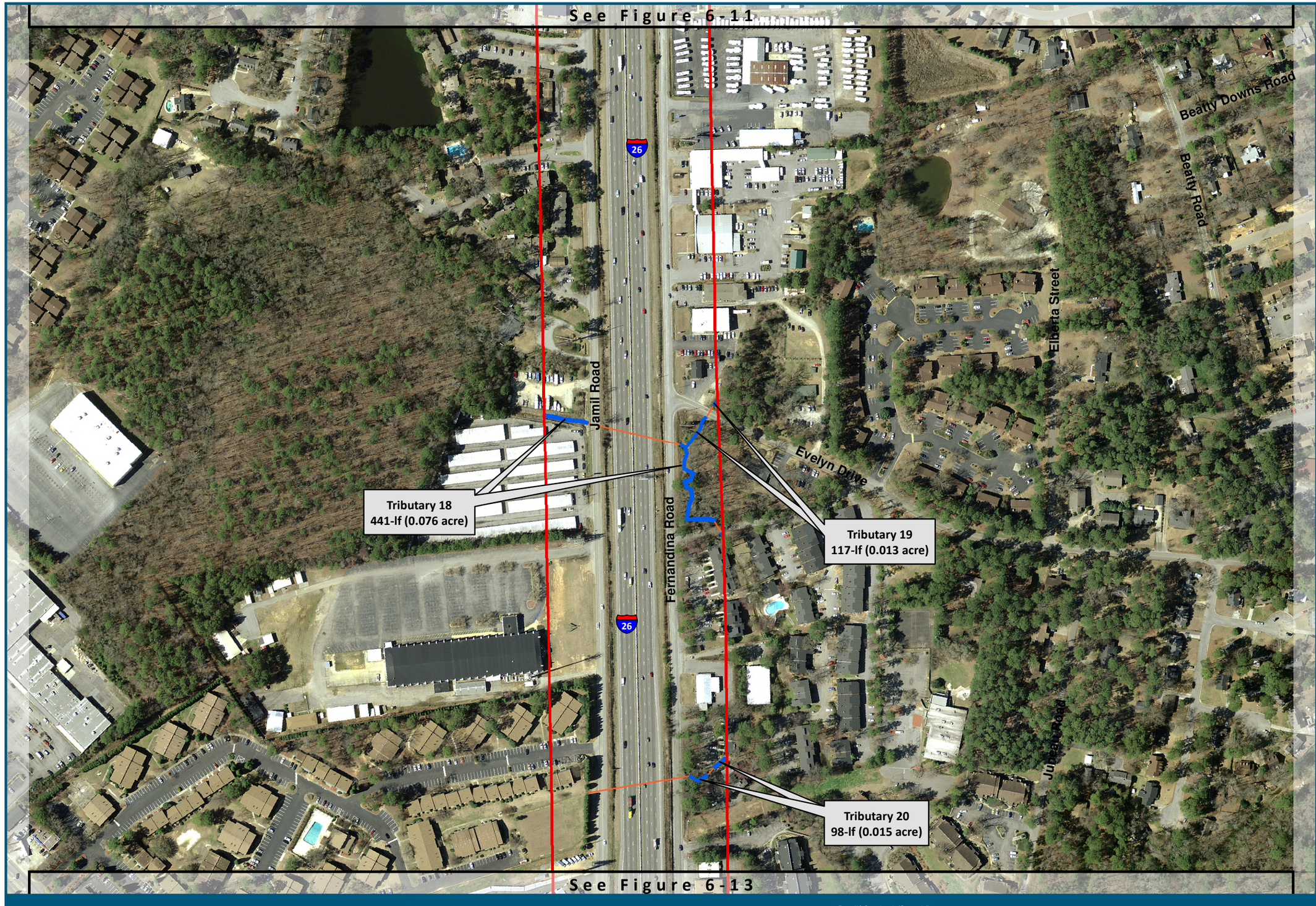
SCDOT South Carolina Department of Transportation

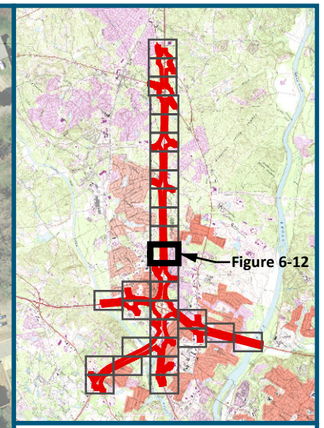
U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS

See Figure 6-11



See Figure 6-13



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (656-lf / 0.104 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-12
Delineated Waters of the U.S.

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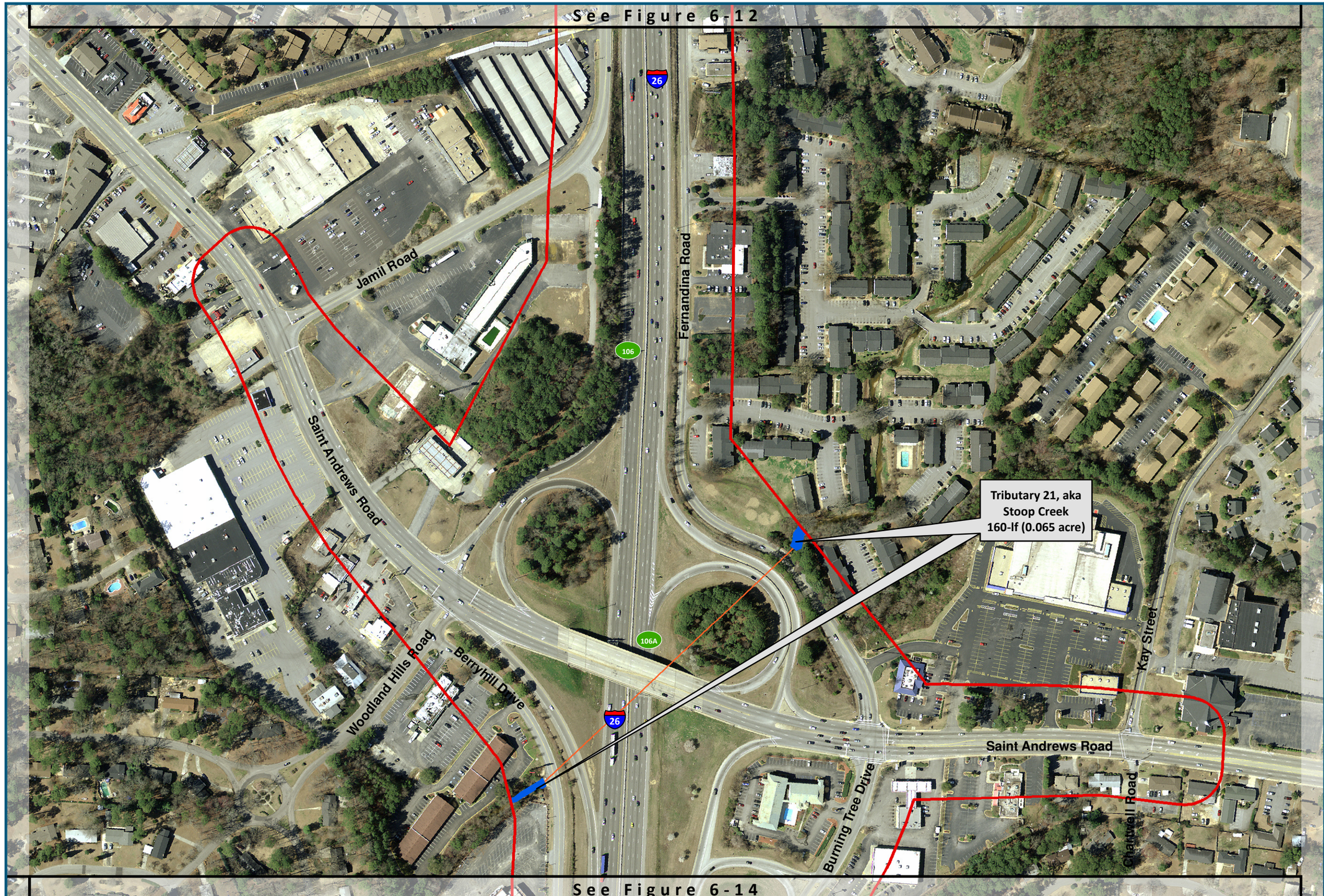
SCDOT South Carolina Department of Transportation

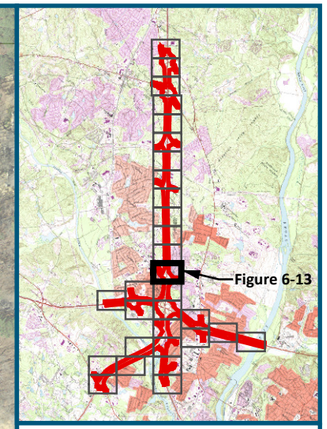
U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS

See Figure 6-12



See Figure 6-14



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (160-lf / 0.065 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-13
Delineated Waters of the U.S.

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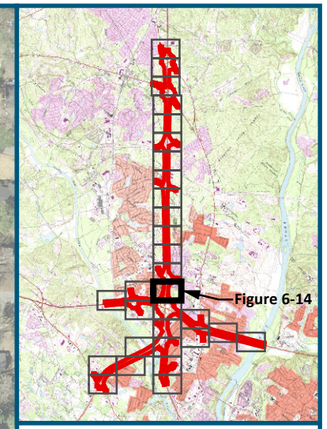
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (157-lf / 0.050 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-14
Delineated Waters of the U.S.

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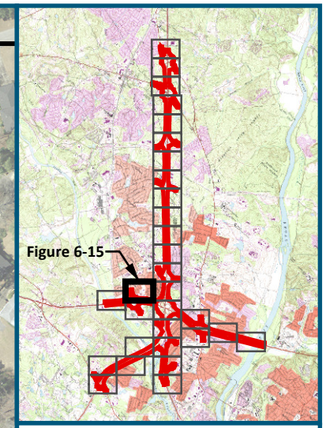
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (822-lf / 0.079 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-15
Delineated Waters of the U.S.

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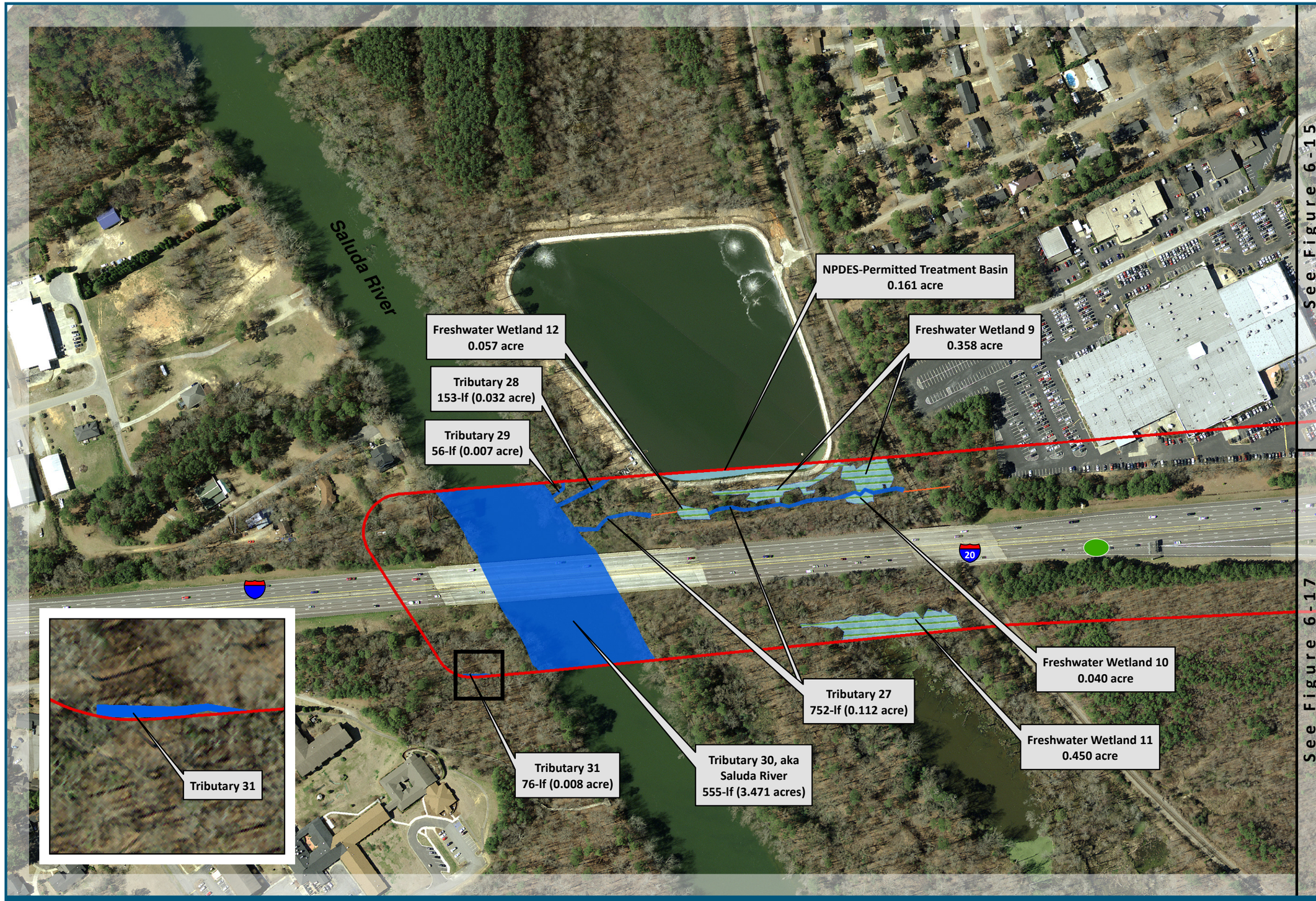
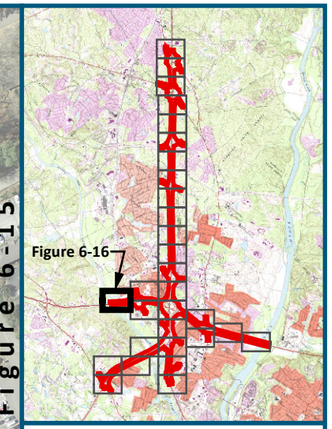
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.905 acre)
- Pond / Water (0.161 acre)
- Tributary (1,592-lf / 3.630 acres)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- Exit Location/Number

Figure 6-16
Delineated Waters of the U.S.

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SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

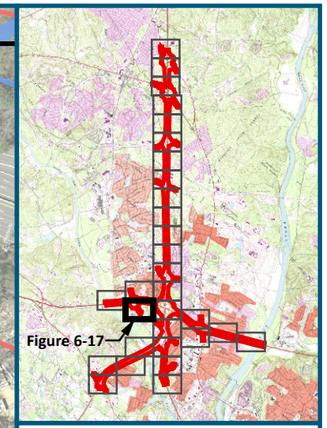
CAROLINA CROSSROADS

See Figure 6-15

See Figure 6-16

See Figure 6-18





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (525-lf / 0.154 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-17
Delineated Waters of the U.S.

11/19/2015 Sheet 17 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

See Figure 6-14

Tributary 21, aka Stoop Creek 30-lf (0.020 acre)

Berryhill Drive

Tributary 34 382-lf (0.043 acre)

Browning Road

Zimalcrest Drive

Freshwater Wetland 13 0.066 acre

Tributary 35 412-lf (0.041 acre)

Freshwater Wetland 14 0.010 acre

Zimalcrest Drive

Tributary 36 76-lf (0.005 acre)

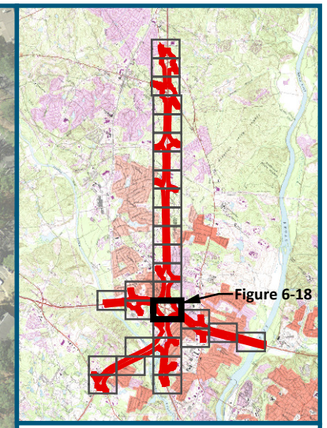
Tributary 37 261-lf (0.023 acre)

Browning Road

See Figure 6-17

See Figure 6-19

See Figure 6-23



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.076 acre)
- Pond / Water
- Tributary (1,161-lf / 0.132 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- Exit Location/Number

Figure 6-18
Delineated Waters of the U.S.

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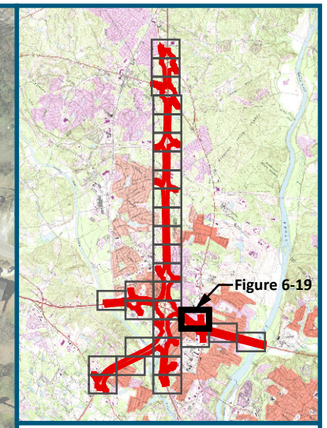
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.091 acre)
- Pond / Water
- Tributary (29-lf / 0.003 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-19
Delineated Waters of the U.S.

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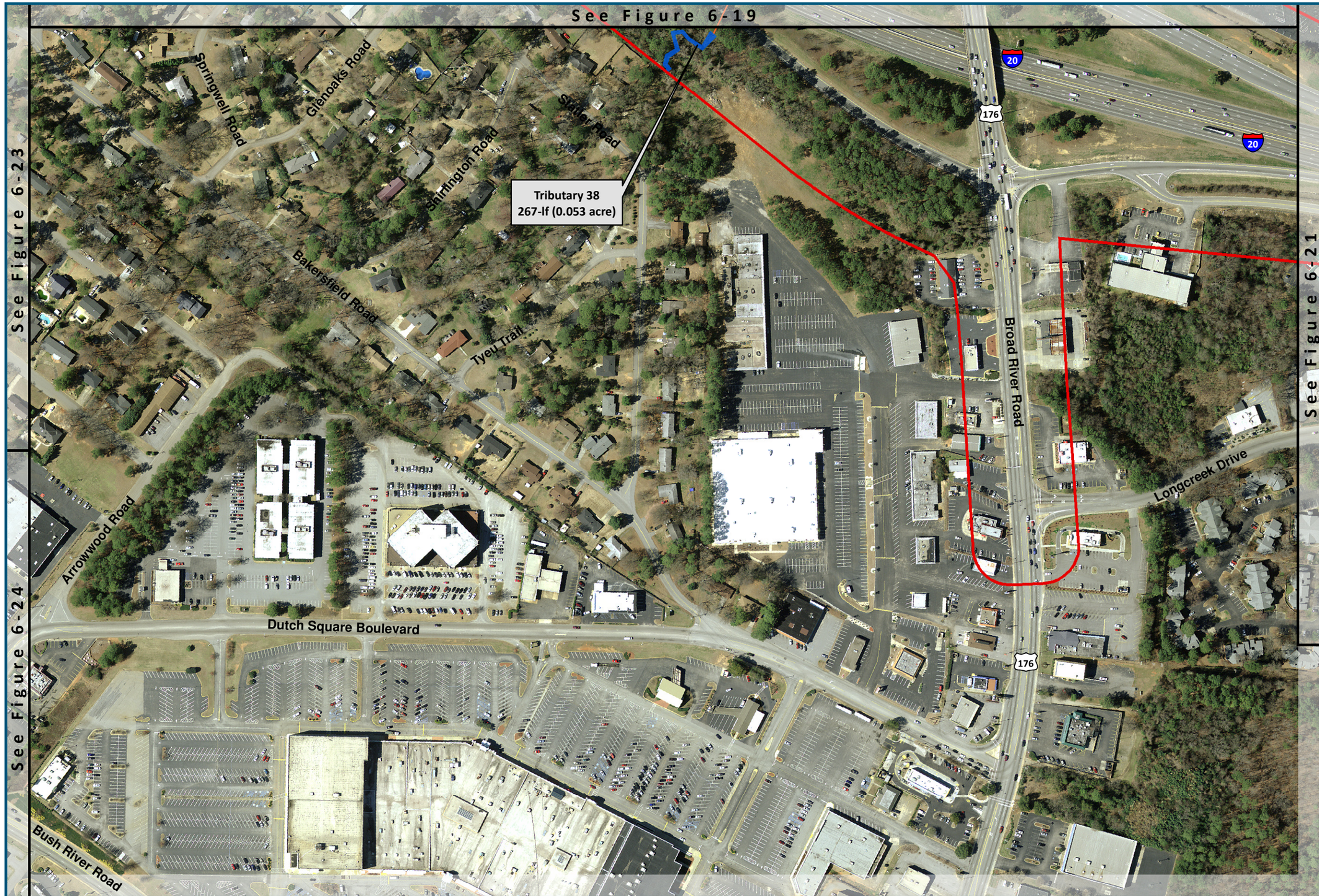
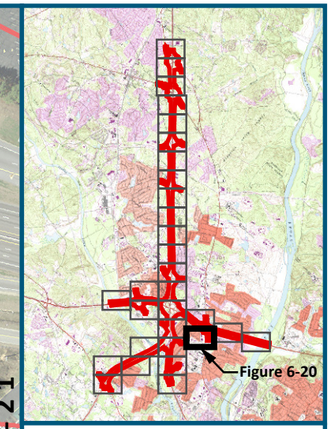
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (267-lf / 0.053 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-20
Delineated Waters of the U.S.

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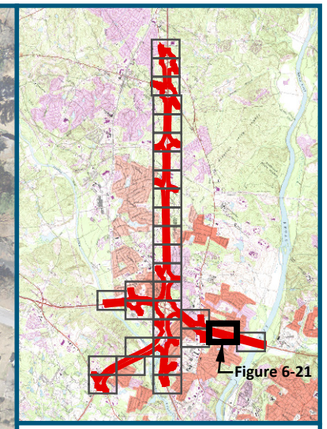
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (1,790-lf / 0.234 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- Exit Location/Number

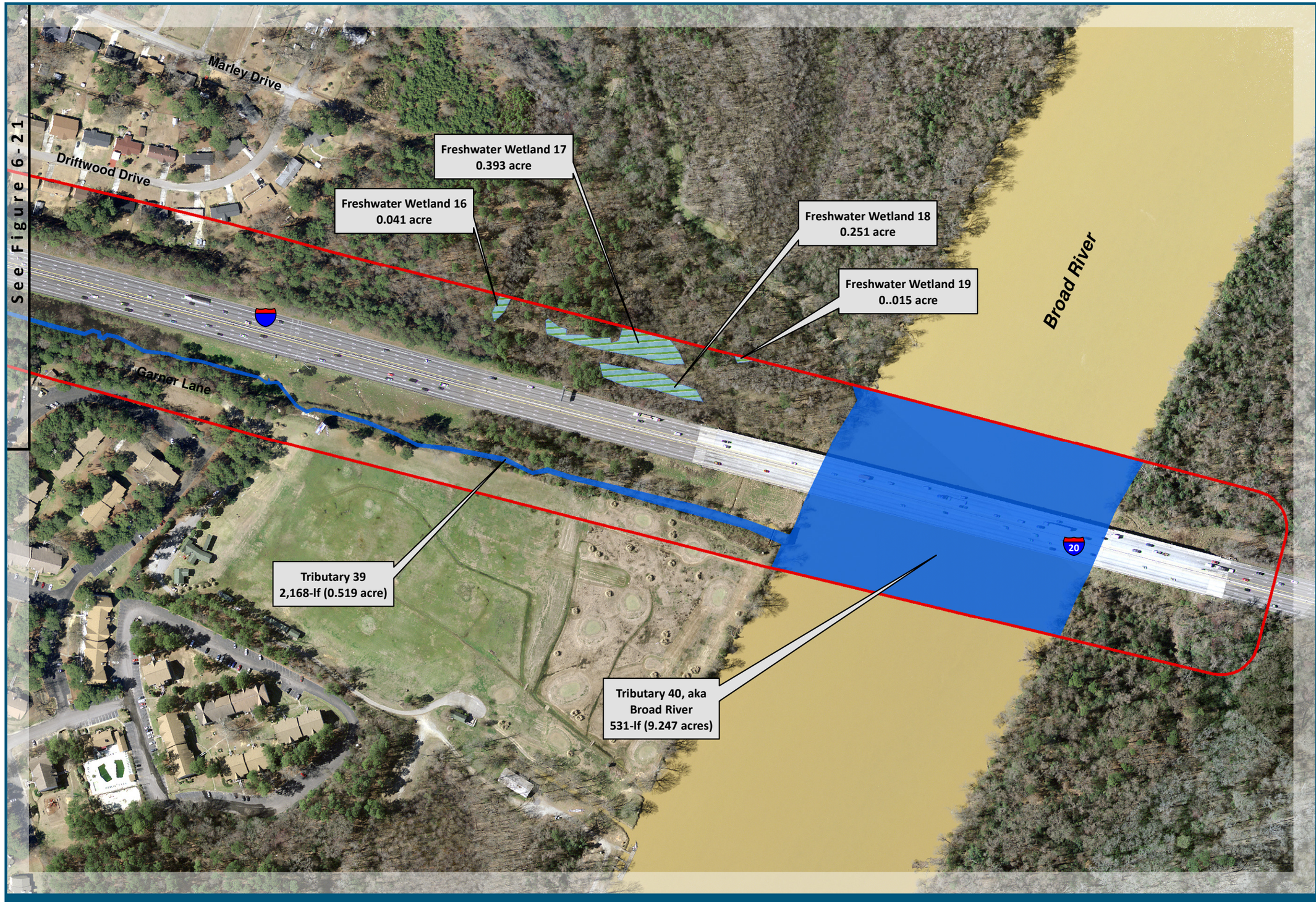
Figure 6-21
Delineated Waters of the U.S.

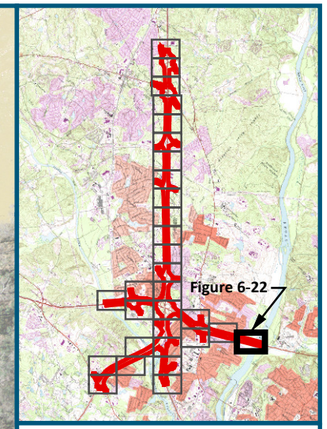
11/19/2015 Sheet 21 of 30

SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.700 acre)
- Pond / Water
- Tributary (2,699-lf / 9.766 acres)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- Exit Location/Number

Figure 6-22
Delineated Waters of the U.S.

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SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration

CAROLINA CROSSROADS

See Figure 6-18

See Figure 6-19

See Figure 6-20

See Figure 6-24

Tributary 41
337-lf (0.046 acre)

Tributary 42
839-lf (0.069 acre)

Freshwater Wetland 20
0.046 acre

Tributary 43
534-lf (0.177 acre)

Bush River Road

Zimalcrest Drive

Browning Road

Fairhaven Drive

Hollingsworth Drive

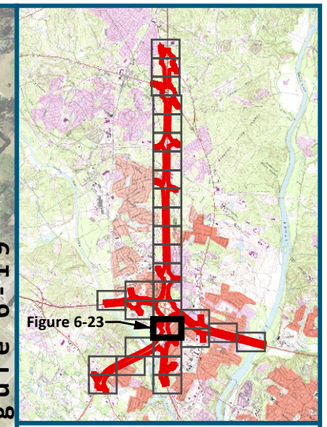
Luster Lane

Morninghill Drive

Burnette Drive

108A

26



0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.046 acre)
- Pond / Water
- Tributary (1,710-lf / 0.292 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-23
Delineated Waters of the U.S.

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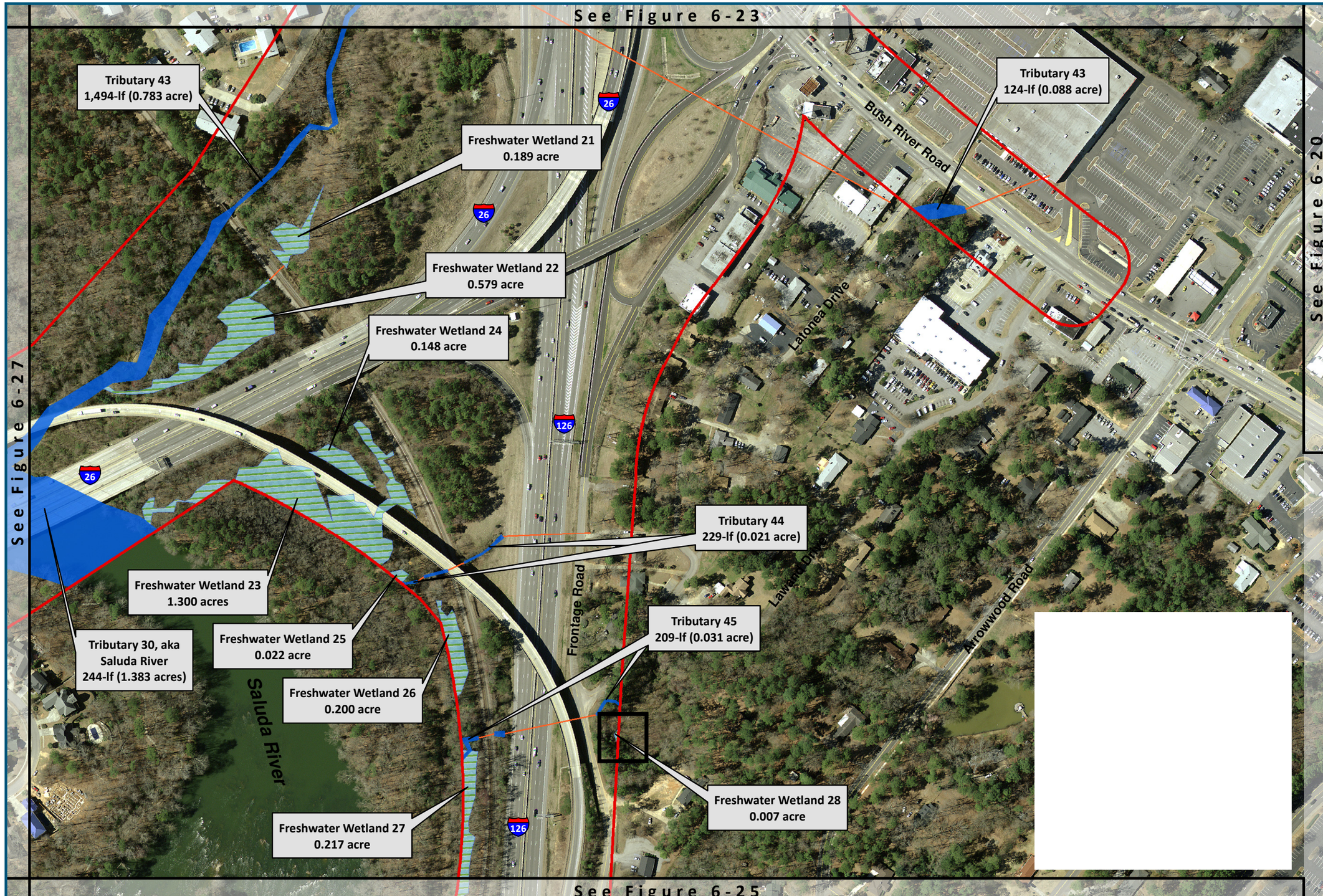
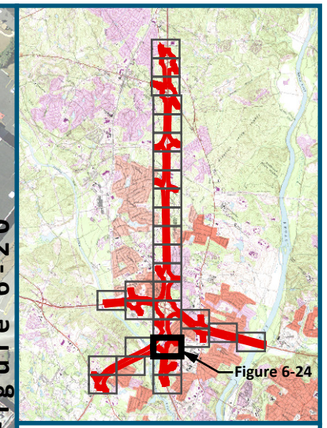
U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (2.662 acres)
- Pond / Water
- Tributary (2,300-lf / 2.306 acres)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-24
Delineated Waters of the U.S.

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U.S. Department of Transportation Federal Highway Administration

See Figure 6-24

Freshwater Wetland 27
0.033 acre

Tributary 46
39-lf (0.005 acre)

Freshwater Wetland 29
0.039 acre

Tributary 47
499-lf (0.094 acre)

Tributary 48
29-lf (0.010 acre)

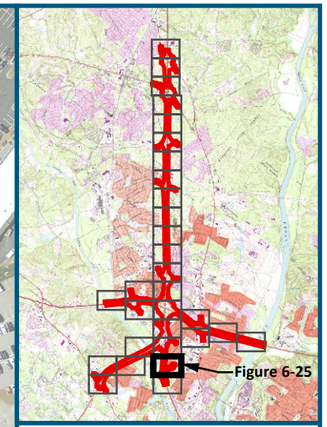
Freshwater Wetland 30
0.104 acre

Freshwater Wetland 31
0.068 acre

Tributary 49
170-lf (0.013 acre)

Saluda River
Lawand Drive
Arrowwood Road
Redbud Drive
Lancewood Road
Colonial Life Boulevard
Arrowwood Road
Gracern Road
126

See Figure 6-26



0 125 250
Feet
1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.244 acre)
- Pond / Water
- Tributary (737-lf / 0.122 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-25
Delineated Waters of the U.S.

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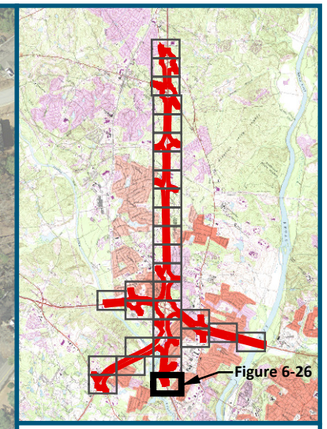
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.038 acre)
- Pond / Water
- Tributary
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-26
Delineated Waters of the U.S.

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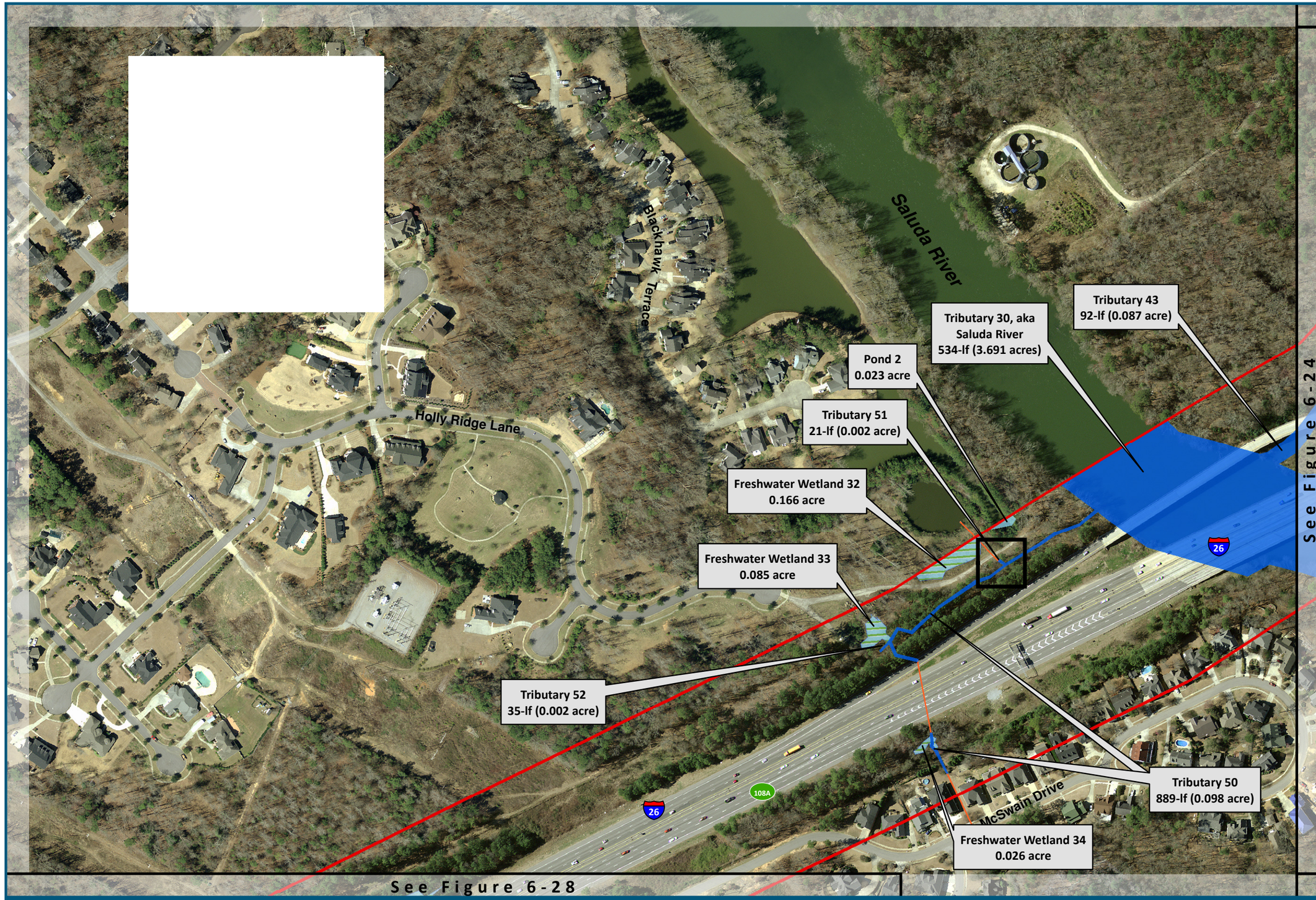
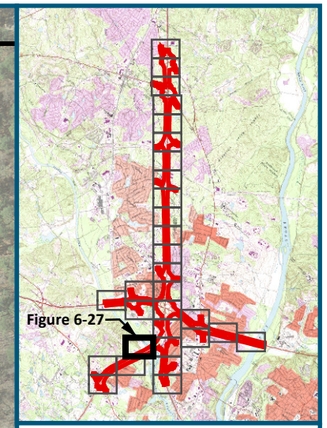
U.S. Department of Transportation Federal Highway Administration





0 125 250

Feet

1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (0.277 acre)
- Pond / Water (0.023 acre)
- Tributary (1,571-lf / 3.880 acres)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-27
Delineated Waters of the U.S.

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See Figure 6-27

See Figure 6-29

Freshwater Wetland 36
0.168 acre

Freshwater Wetland 35
0.470 acre

Freshwater Wetland 37
0.022 acre

Freshwater Wetland 38
0.474 acre

Tributary 54
46-lf (0.004 acre)

Tributary 53, aka
Senn Branch
933-lf (0.279 acre)

Tributary 57
187-lf (0.027 acre)

Tributary 56
20-lf (0.001 acre)

Tributary 55
70-lf (0.005 acre)

26

McSwain Drive

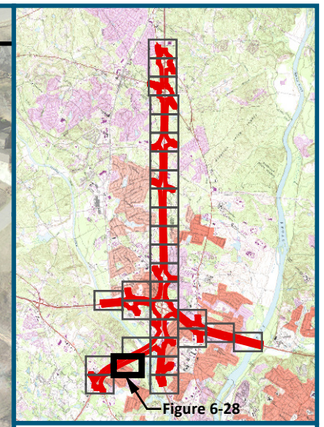
Holly Hill Drive

Terrace View Drive

Robin Crest Drive

Robin Crest Drive

Riviera Drive



0 125 250
Feet
1 inch = 250 feet
@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland (1.134 acres)
- Pond / Water
- Tributary (1,256-lf / 0.316 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-28
Delineated Waters of the U.S.

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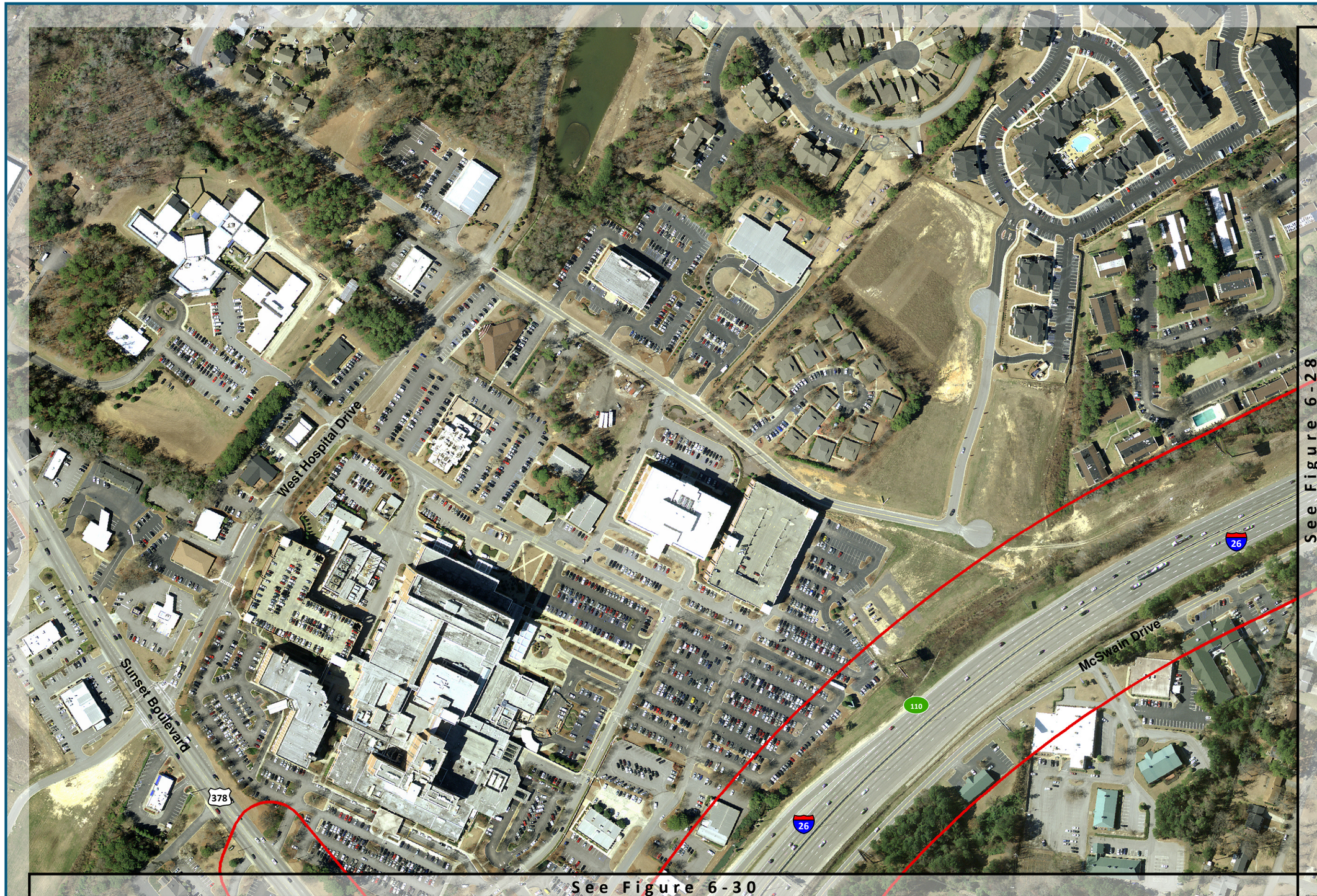

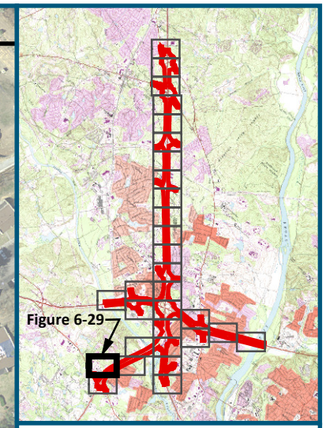

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Feet

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@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-29
Delineated Waters of the U.S.

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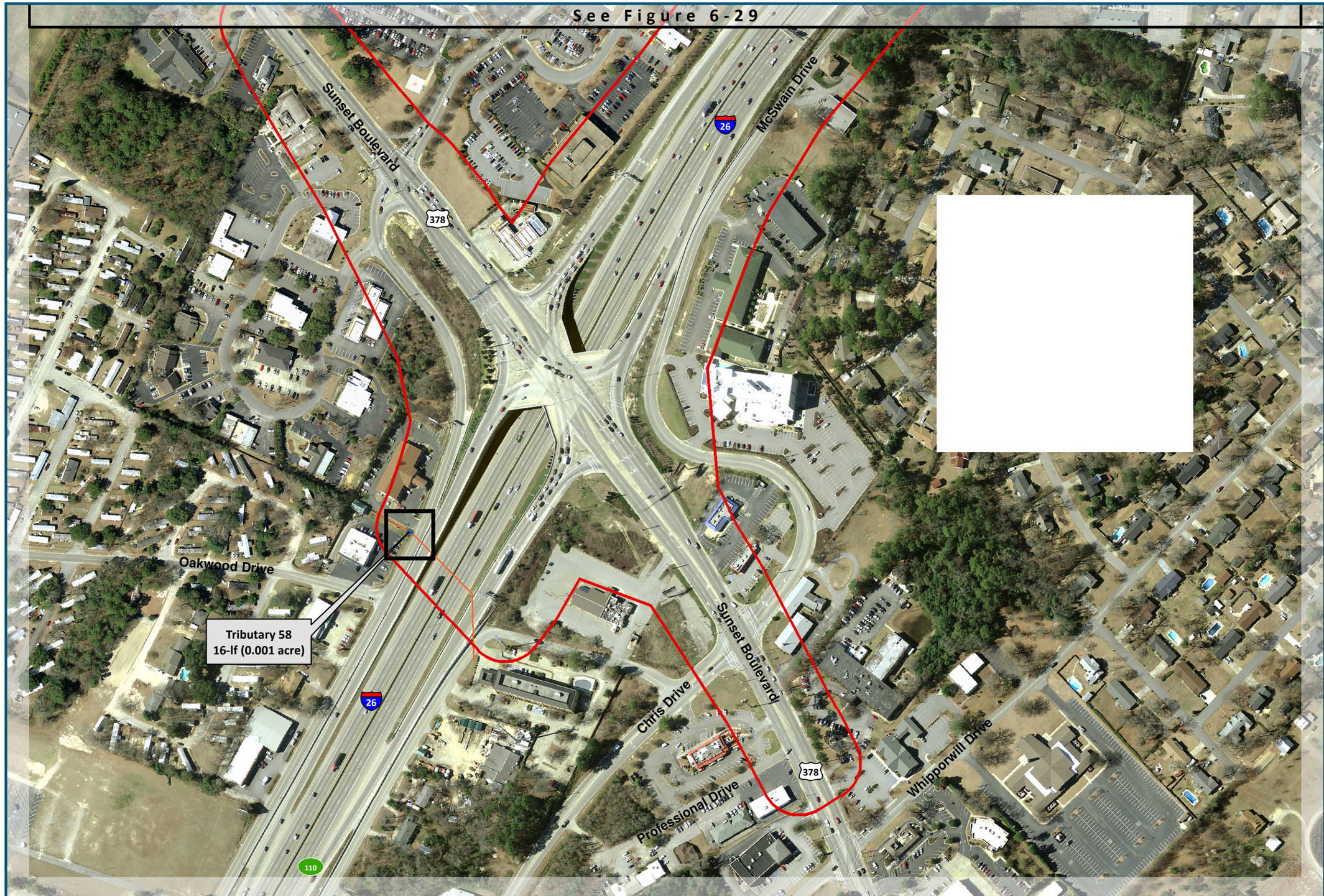
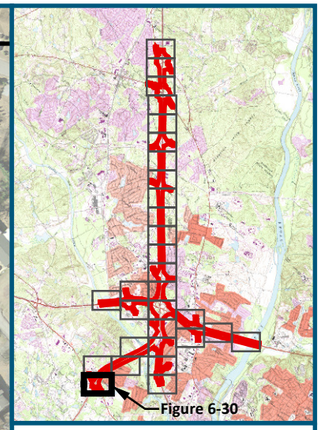
SCDOT South Carolina Department of Transportation

U.S. Department of Transportation Federal Highway Administration





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Feet

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@ 11 x 17 inches

Projection: Lambert Conformal Conic
State Plane South Carolina FIPS 3900 Intl Feet
North American Datum of 1983
Source: USGS High Resolution Orthoimagery
for Columbia, SC (2014)

Legend

- Project Study Area (1,170 acres)
- Freshwater Wetland
- Pond / Water
- Tributary (16-lf / 0.001 acre)
- Conveyance / Non-Water
- Culvert / Pipe / Flume
- 83 Exit Location/Number

Figure 6-30
Delineated Waters of the U.S.

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