



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

APR 28 2017

RECEIVED

MAY 1 2017

Environmental Management  
SCDOT

Regulatory Division

Ms. Ann-Marie Altman  
South Carolina Department of Transportation  
Post Office Box 191  
Columbia, South Carolina 29202-0191

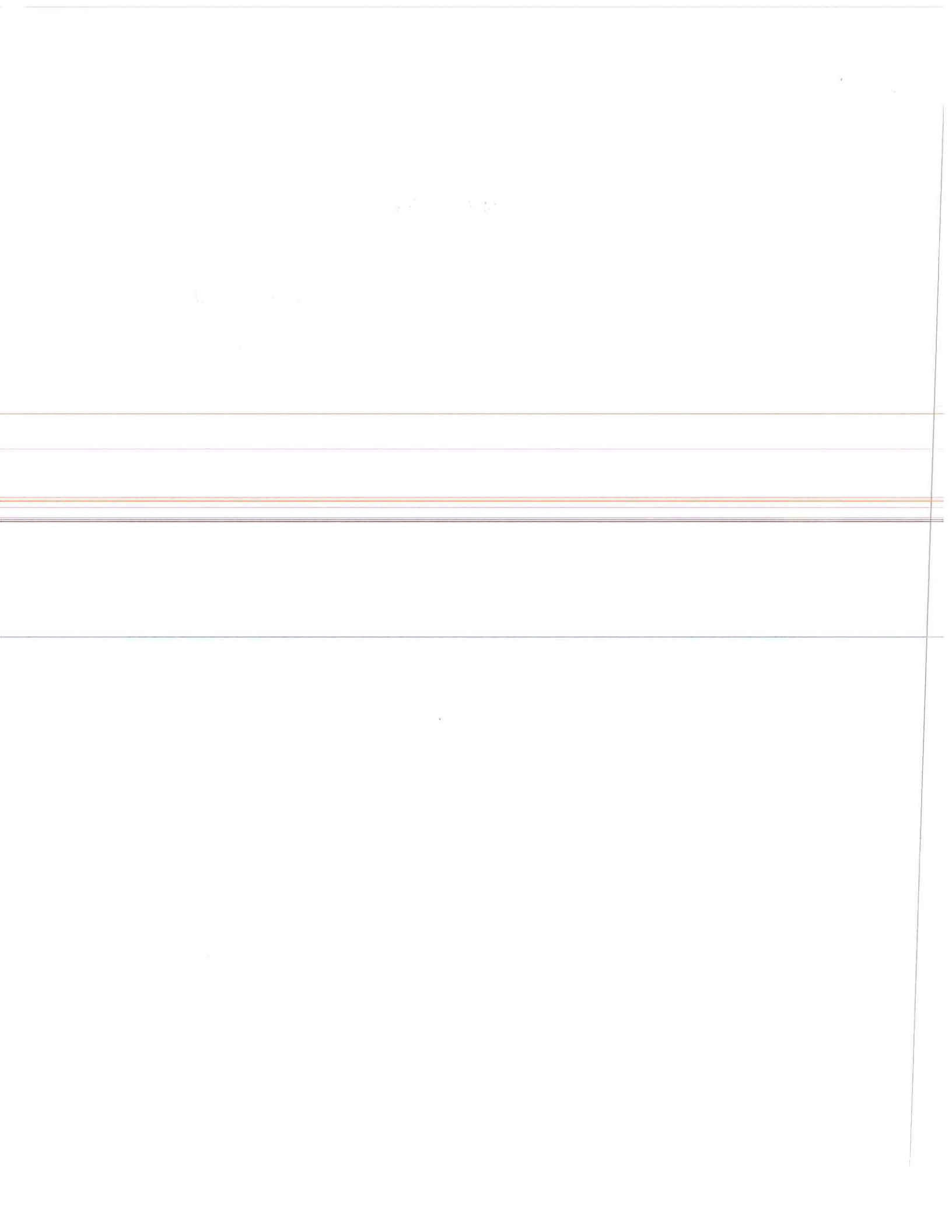
Dear Ms. Altman:

This letter is in response to your request for a Preliminary Jurisdictional Determination (Preliminary JD) (SAC-2017-00184) received in our office on February 9, 2017, for a 1,035-acre site located along Interstate 85 (I-85), from approximately 1-mile north of Exit 96 to the North Carolina/South Carolina State Line (just past Exit 106), in Gaffney and Blacksburg, Cherokee County, South Carolina (Start: Latitude: 35.114881°N, Longitude: -81.580003°W; End: Latitude: 35.167890°N, Longitude: -81.443573°W). The site in question is depicted on the enclosed thirty-one sheets, entitled "Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106), Cherokee County, South Carolina", which includes a single sheet of Figure 1: Site Location Map, dated November 2016, and thirty sheets of Figure 7: Surface Hydrology Connectivity, Data Forms, and Photo Points, revised March 2017, and all prepared by Three Oaks Engineering. 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 pursuant to 33 CFR 328.3(a) for the purpose of expediting the request for a Preliminary JD.

Based on site inspections conducted on March 6 and 7, 2017, a review of aerial photography, topographic maps, National Wetlands Inventory maps, soil survey information, and submitted Wetland Determination Data Forms, it has been concluded that the boundaries shown on the referenced figure is a reasonable approximation of the wetlands and/or other waters found within the site. The site in question contains approximately 6.7502-acres of federally defined wetlands, 0.706-acre of open waters, and 25,407 linear feet (17.9731-acres) of tributary waters. You are cautioned that the boundaries of the delineated wetlands and/or other waters depicted on the enclosed figures are approximate and subject to change.

You should be aware that a permit from this office may be required for certain activities in the areas identified as wetlands and/or other presumed waters of the United States, and these areas may be subject to restrictions or requirements of other state or local government entities. In order for a definitive determination of jurisdiction to be provided, you must submit a request for an Approved Jurisdictional Determination (Approved JD). Enclosed is a Preliminary Jurisdictional Determination Form describing the areas in question and clarifying the option to request an Approved JD.

Please note that this is a Preliminary JD, and as such 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



sketch 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.

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.

Your cooperation in the protection and preservation of our navigable waters and natural resources is appreciated. In all future correspondence concerning this matter, please refer to file number SAC-2017-00184. A copy of this letter is being forwarded to certain State and/or Federal agencies for their information. If you have any questions concerning this matter, please contact John N. Policarpo at 843-329-8043 or at [John.N.Policarpo@usace.army.mil](mailto:John.N.Policarpo@usace.army.mil).

Sincerely,



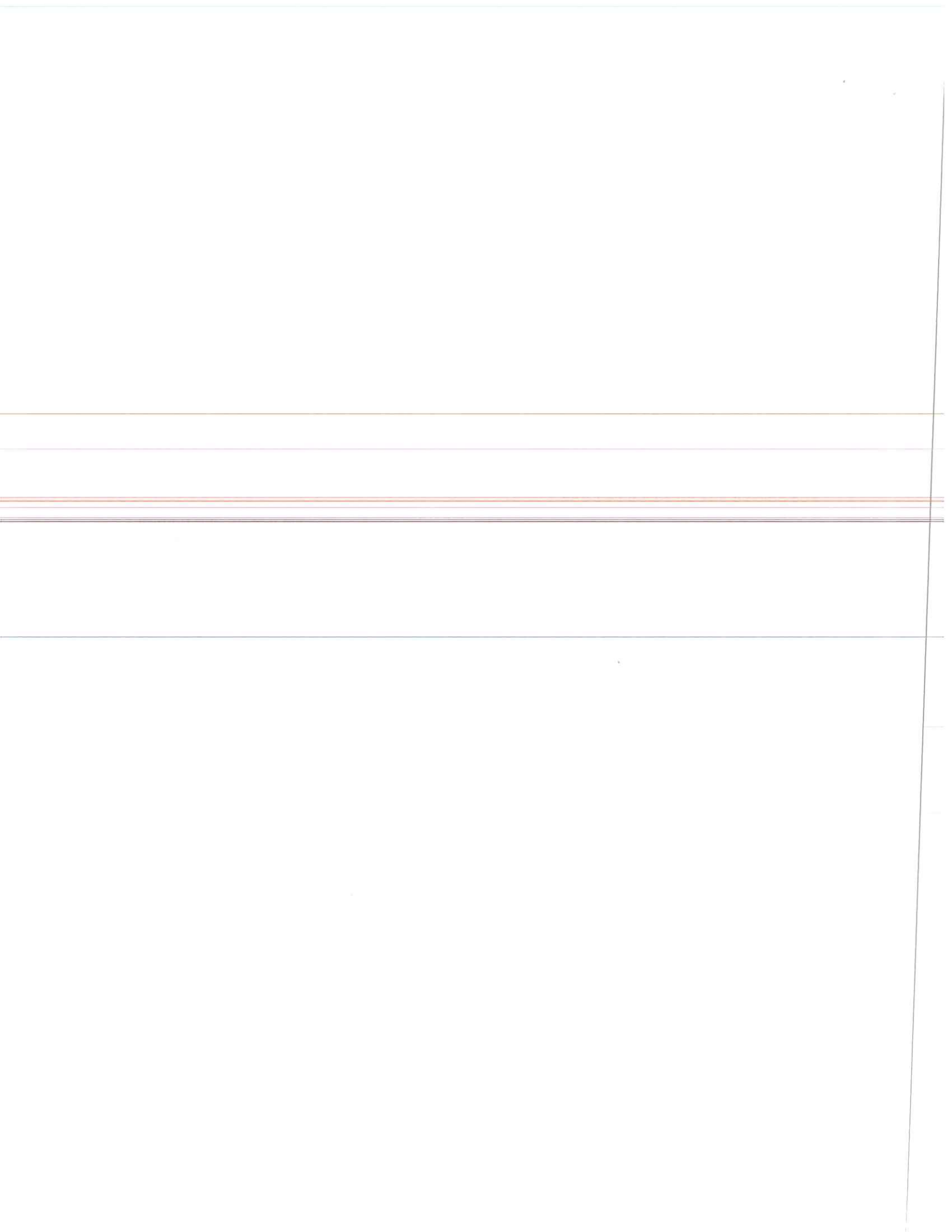
Elizabeth G. Williams  
Chief, Special Projects Branch

Enclosures:  
Preliminary Jurisdictional Determination Forms (2)  
Site Figures

Copies Furnished:

Mr. Skip Johnson  
Three Oaks Engineering  
1230 Sumter Street, Suite 400  
Columbia, South Carolina 29201

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



**PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM**

**BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR PJD:** April 19, 2017

**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:**

Ms. Ann-Marie Altman  
 South Carolina Department of Transportation  
 Post Office Box 191  
 Columbia, South Carolina 29202-0191

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Charleston; I-85 Widening & Interchange Improvements from MM 96 to MM 106; SAC-2017-00184

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:  
 (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC  
 RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)**

State: SC County/parish/borough: Cherokee City: Gaffney & Blacksburg

Center coordinates of site (lat/long in degree decimal format): Start: Lat.: 35.114881°N

Long.: -81.580003°W; End: Lat.: 35.167890°N Long.: -81.443573°W

Universal Transverse Mercator:

Name of nearest waterbody: Broad River, Buffalo Creek, Bee Branch, Mill Creek, & Kings Creek

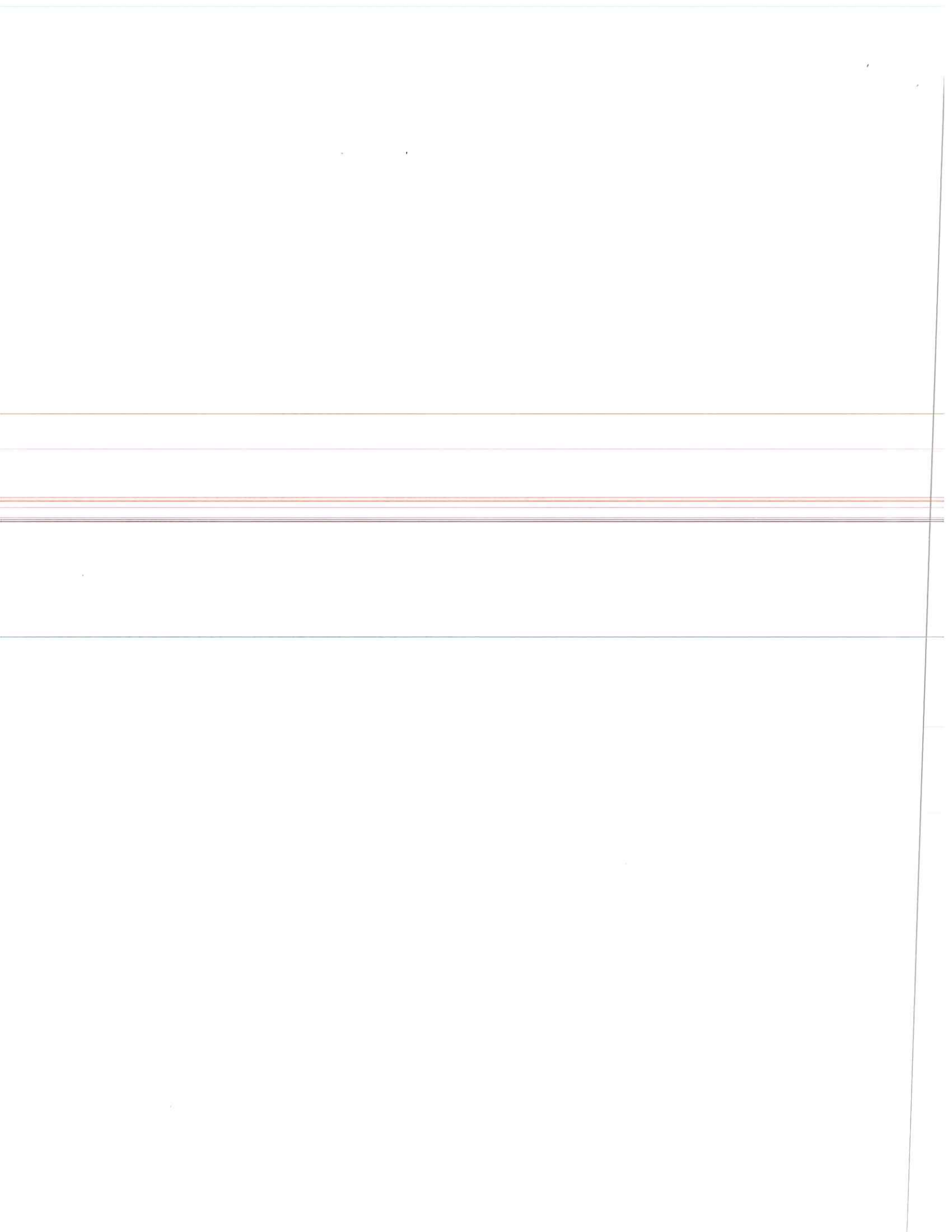
**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date:

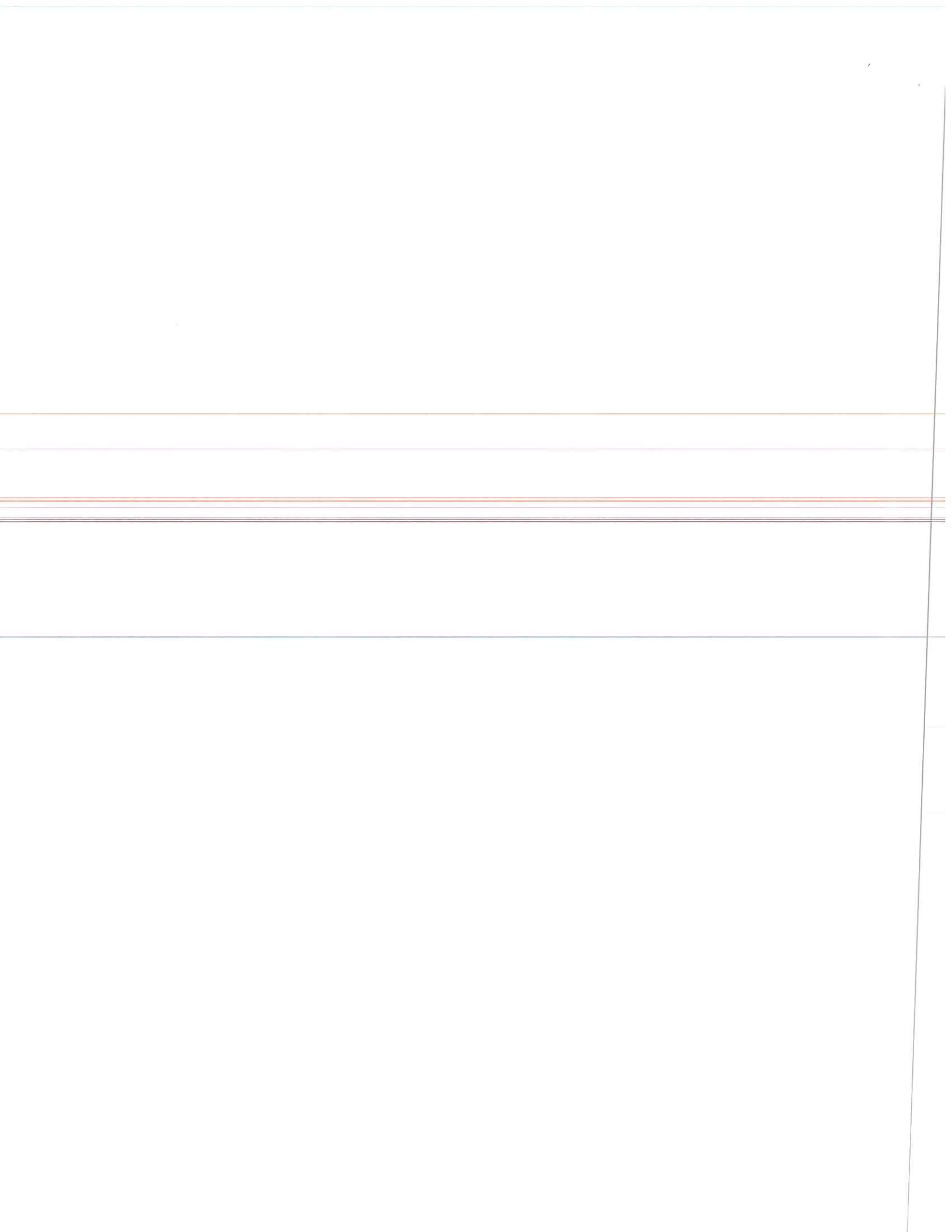
Field Determination. Date(s): March 6 & 7, 2017

**TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION**

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resources in review area (acreage and linear feet, if applicable)	Type of aquatic resources (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or 10/404)
Pond 1	35.127038	-81.558263	0.032-acre	Non-Wetland Waters	Section 404
Pond 2	35.142722	-81.502848	0.216-acre	Non-Wetland Waters	Section 404
Pond 3	35.167192	-81.448047	0.053-acre	Non-Wetland Waters	Section 404
Pond 4	35.144896	-81.507289	0.405-acre	Non-Wetland Waters	Section 404

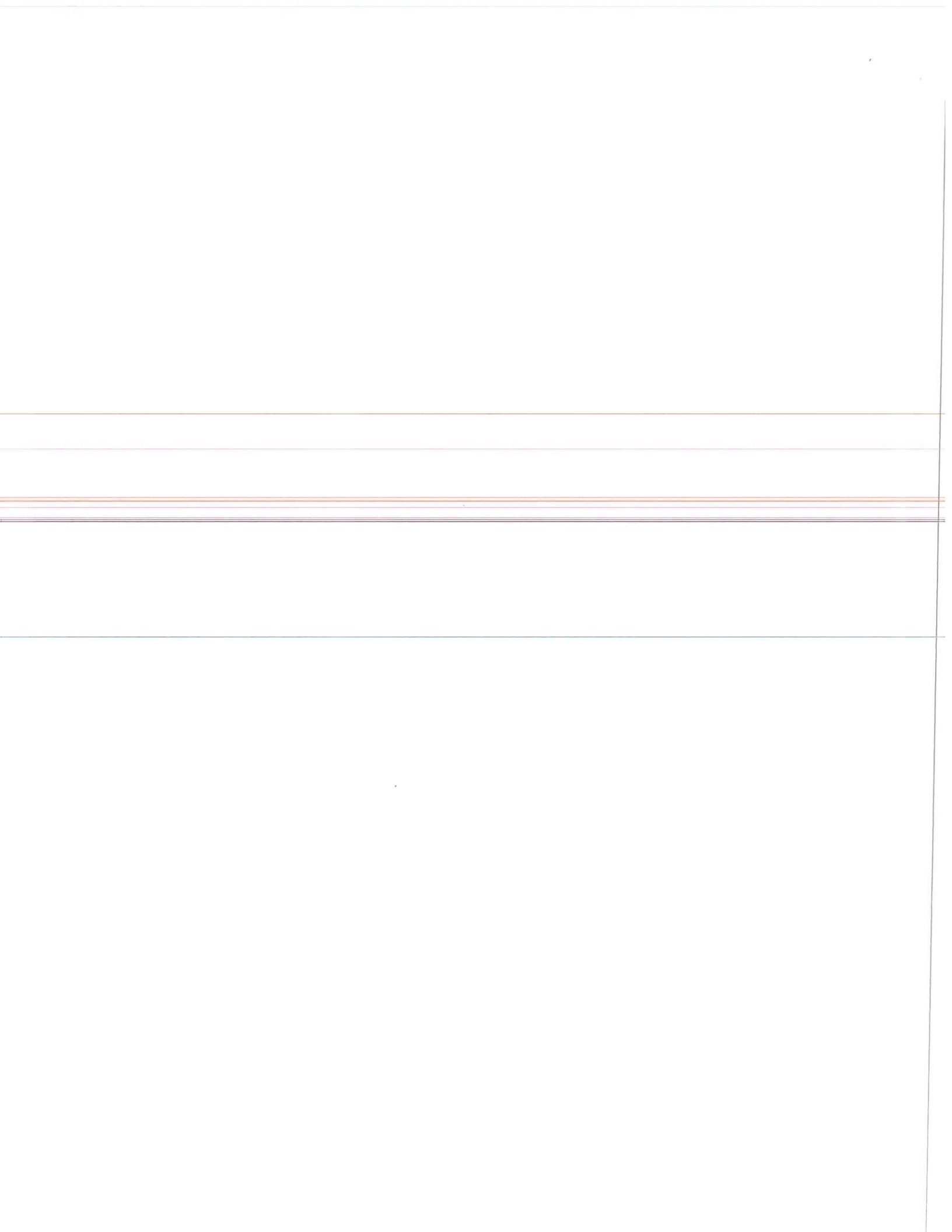


Wetland WA	35.161177	-81.458139	0.0123-acre	Wetland	Section 404
Wetland WB	35.159644	-81.462089	0.0338-acre	Wetland	Section 404
Wetland WC	35.158606	-81.461904	0.0525-acre	Wetland	Section 404
Wetland WD	35.158699	-81.461708	0.0096-acre	Wetland	Section 404
Wetland WE	35.160080	-81.472241	0.1095-acre	Wetland	Section 404
Wetland WF	35.159729	-81.470785	0.2229-acre	Wetland	Section 404
Wetland WG	35.160687	-81.472278	0.1155-acre	Wetland	Section 404
Wetland WH	35.160675	-81.473307	0.3129-acre	Wetland	Section 404
Wetland WDD	35.115034	-81.578729	0.0691-acre	Wetland	Section 404
Wetland WEE	35.115917	-81.574779	0.0014-acre	Wetland	Section 404
Wetland WFF	35.117047	-81.578188	0.3033-acre	Wetland	Section 404
Wetland WGG	35.115483	-81.580303	0.0051-acre	Wetland	Section 404
Wetland WII	35.119451	-81.573427	0.0429-acre	Wetland	Section 404
Wetland WKK	35.126973	-81.550876	0.0088-acre	Wetland	Section 404
Wetland WLL	35.127020	-81.551173	0.0171-acre	Wetland	Section 404
Wetland WMM	35.127057	-81.550249	0.0455-acre	Wetland	Section 404
Wetland WNN	35.129574	-81.554357	0.0065-acre	Wetland	Section 404
Wetland WOO	35.132435	-81.535939	0.5382-acre	Wetland	Section 404

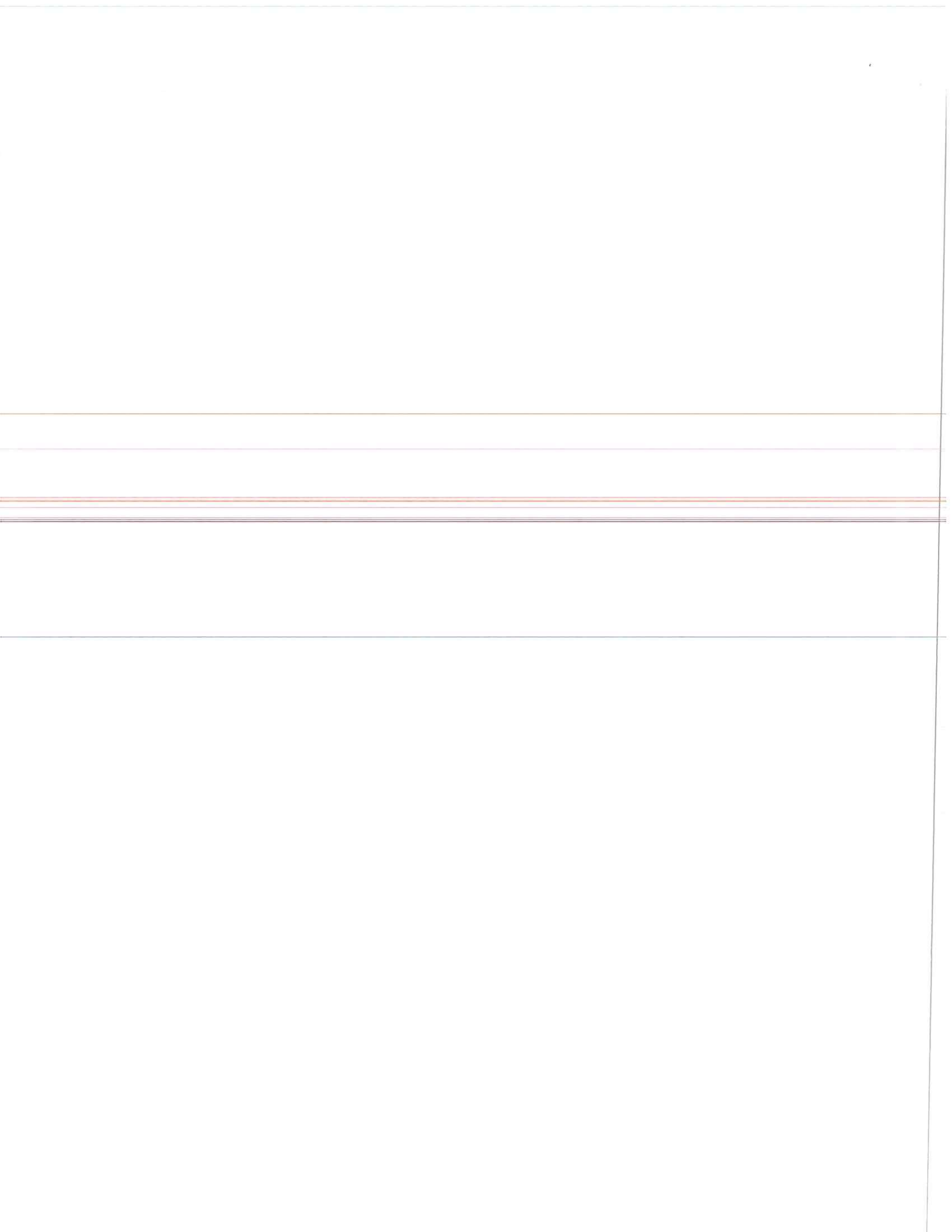




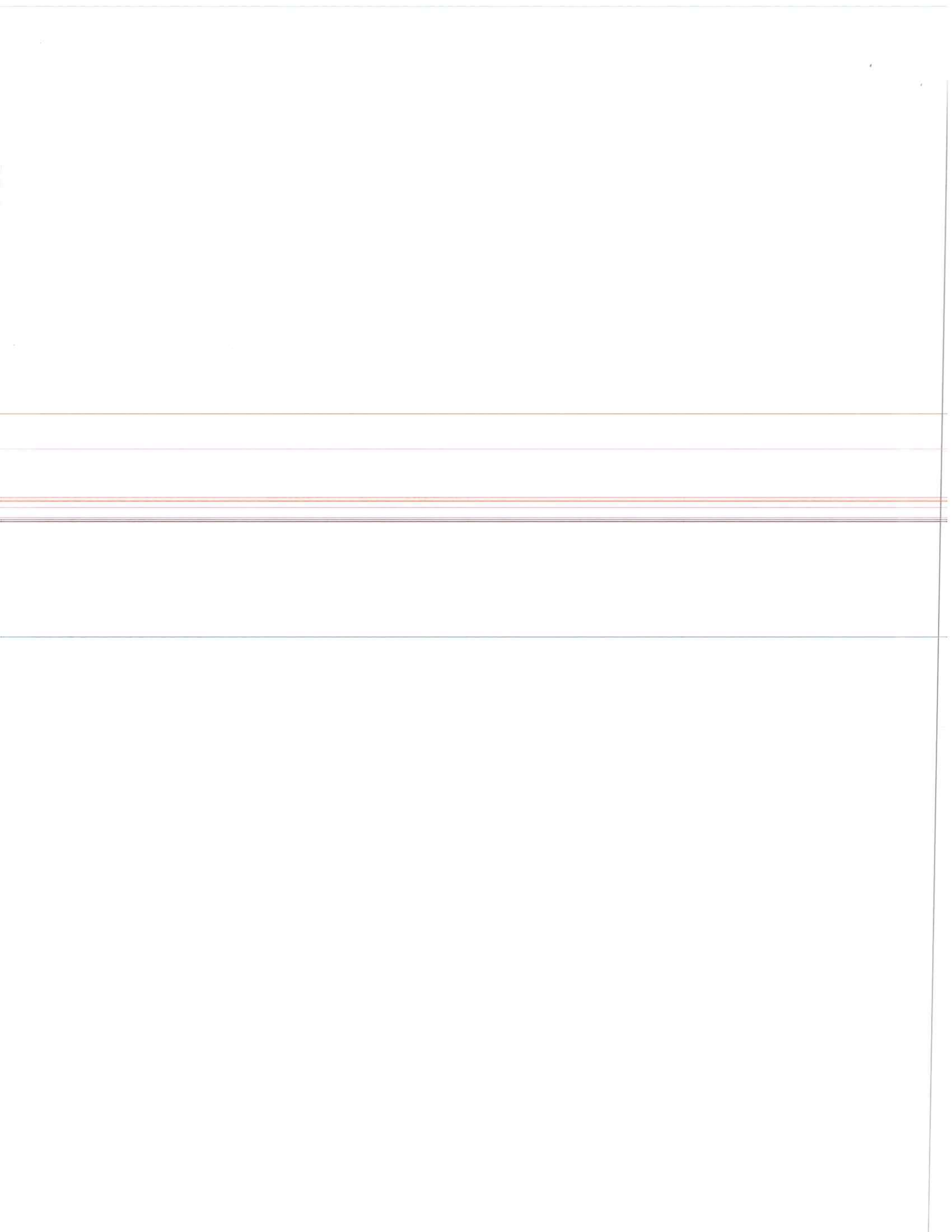
Wetland WPP	35.131751	-81.537981	0.3319-acre	Wetland	Section 404
Wetland WQQ	35.131485	-81.539074	0.2195-acre	Wetland	Section 404
Wetland WSS	35.138645	-81.511547	0.1400-acre	Wetland	Section 404
Wetland WTT	35.131396	-81.543422	0.7907-acre	Wetland	Section 404
Wetland WUU	35.132261	-81.540096	0.2340-acre	Wetland	Section 404
Wetland WVV	35.133259	-81.536145	1.7720-acres	Wetland	Section 404
Wetland WWW	35.134181	-81.531633	0.1436-acre	Wetland	Section 404
Wetland WXX	35.131058	-81.551618	0.1205-acre	Wetland	Section 404
Wetland WYY	35.140573	-81.511583	0.0400-acre	Wetland	Section 404
Wetland WZV	35.164365	-81.448311	0.0530-acre	Wetland	Section 404
Wetland WZW	35.139026	-81.514335	0.0111-acre	Wetland	Section 404
Wetland WZX	35.138938	-81.515459	0.0541-acre	Wetland	Section 404
Wetland WZY	35.141379	-81.512442	0.8037-acre	Wetland	Section 404
Wetland WZZ	35.124922	-81.552246	0.0785-acre	Wetland	Section 404
Wetland WAAA	35.144333	-81.502282	0.0061-acre	Wetland	Section 404
Wetland WBBB	35.143237	-81.512244	0.0445-acre	Wetland	Section 404
Perennial Stream BR (Broad River)	35.118250	-81.576194	1,568 linear feet (10.9574-acres)	Non-Wetland Waters	Section 404
Perennial Stream BC (Buffalo Creek)	35.126186	-81.553110	2,447 linear feet (4.0642-acres)	Non-Wetland Waters	Section 404



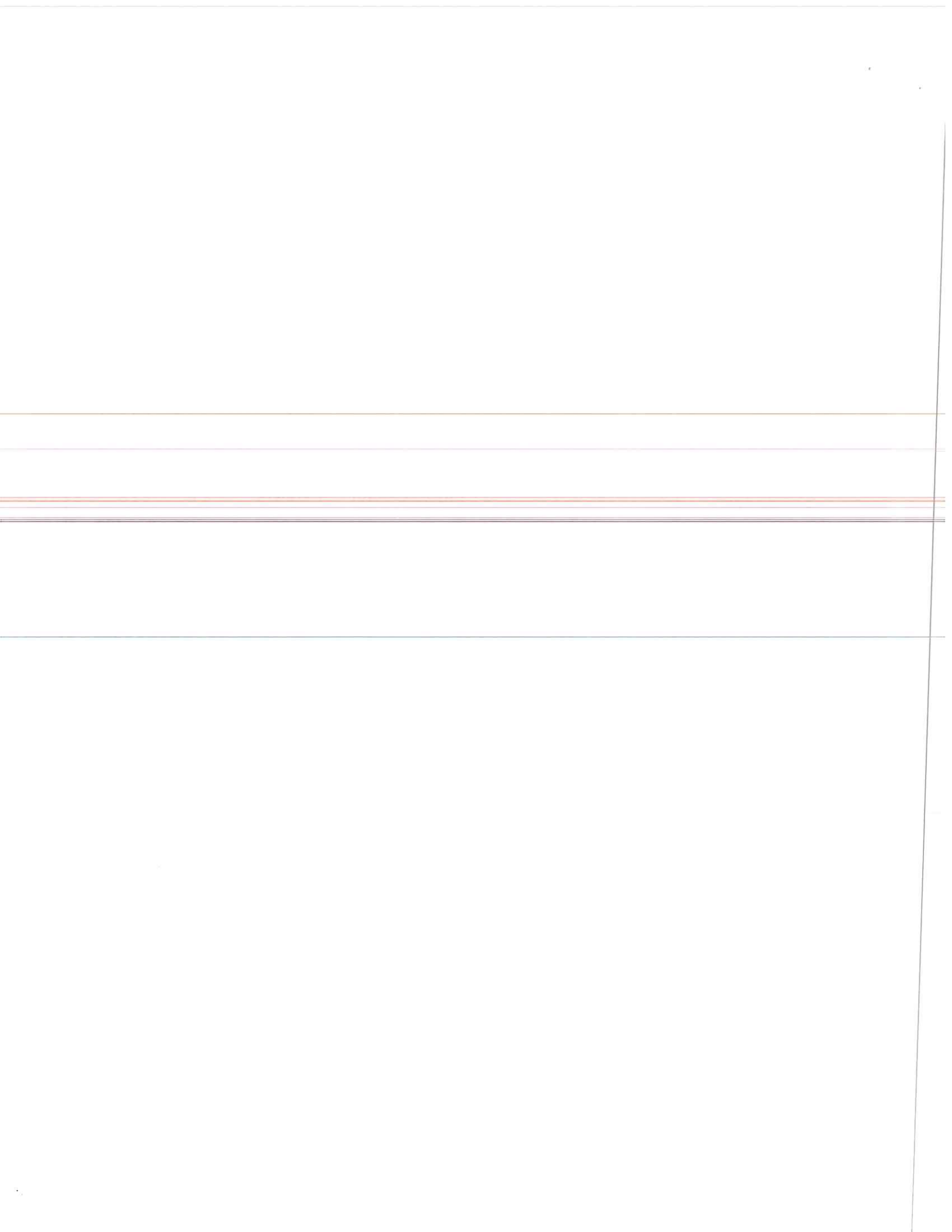
Perennial Stream SZL (Mill Creek)	35.164402	-81.447437	72 linear feet (0.0162-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SZL (Mill Creek)	35.164453	-81.447879	196 linear feet (0.0229-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SA	35.166975	-81.447384	64 linear feet (0.0117-acre)	Non-Wetland Waters	Section 404
Perennial Stream SB/SG	35.166149	-81.446407	454 linear feet (0.0727-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SF	35.167575	-81.441280	93 linear feet (0.0134-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SH	35.166454	-81.446216	137 linear feet (0.0236-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SJ	35.162131	-81.456149	31 linear feet (0.0018-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SK	35.161101	-81.458098	117 linear feet (0.0109-acre)	Non-Wetland Waters	Section 404
Perennial Stream SK	35.160217	-81.457248	166 linear feet (0.0227-acre)	Non-Wetland Waters	Section 404
Perennial Stream SM	35.159527	-81.462002	278 linear feet (0.0204-acre)	Non-Wetland Waters	Section 404
Intermittent Stream SN	35.163489	-81.453851	193 linear feet (0.0174-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SN	35.161728	-81.455282	1,137 linear feet (0.1286-acre)	Non-Wetland Waters	Section 404
Perennial Stream SN	35.160498	-81.456780	189 linear feet (0.0141-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SO	35.160883	-81.473543	41 linear feet (0.0025-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SP	35.160853	-81.472756	290 linear feet (0.0276-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SR	35.160360	-81.475078	198 linear feet (0.0297-acre)	Non-Wetland Waters	Section 404
Perennial Stream ST	35.158760	-81.482581	672 linear feet (0.0877-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SW	35.154615	-81.485258	287 linear feet (0.0249-acre)	Non-Wetland Waters	Section 404



Perennial Stream SW	35.154323	-81.486043	279 linear feet (0.0103-acre)	Non-Wetland Waters	Section 404
Perennial Stream SX/SRRR	35.151667	-81.488099	377 linear feet (0.0560-acre)	Non-Wetland Waters	Section 404
Perennial Stream SBB	35.120063	-81.572960	583 linear feet (0.0860-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SCC	35.120216	-81.572424	113 linear feet (0.0055-acre)	Non-Wetland Waters	Section 404
Perennial Stream SGG	35.123827	-81.564808	210 linear feet (0.0163-acre)	Non-Wetland Waters	Section 404
Perennial Stream SHH	35.124958	-81.561305	188 linear feet (0.0186-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SII	35.125972	-81.560904	105 linear feet (0.0101-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SKK	35.125817	-81.558404	100 linear feet (0.0047-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SLL	35.127371	-81.553500	225 linear feet (0.0317-acre)	Non-Wetland Waters	Section 404
Perennial Stream SMM	35.129388	-81.554486	1,962 linear feet (0.6080-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SNN	35.125756	-81.553779	187 linear feet (0.0119-acre)	Non-Wetland Waters	Section 404
Perennial Stream SOO	35.126334	-81.549447	247 linear feet (0.0344-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SPP	35.126136	-81.549478	153 linear feet (0.0106-acre)	Non-Wetland Waters	Section 404
Perennial Stream SQQ	35.130106	-81.553896	802 linear feet (0.1491-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SRR	35.129426	-81.557631	190 linear feet (0.0233-acre)	Non-Wetland Waters	Section 404
Perennial Stream SRR	35.129920	-81.556203	851 linear feet (0.1027-acre)	Non-Wetland Waters	Section 404
Perennial Stream SSS	35.132187	-81.539187	492 linear feet (0.0903-acre)	Non-Wetland Waters	Section 404
Seasonal Stream STT	35.130361	-81.543963	684 linear feet (0.0755-acre)	Non-Wetland Waters	Section 404



Seasonal Stream SUU	35.130214	-81.544091	115 linear feet (0.0084-acre)	Non-Wetland Waters	Section 404
Perennial Stream SWW	35.132118	-81.551540	1,295 linear feet (0.1681-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SY Y	35.130408	-81.547989	181 linear feet (0.0147-acre)	Non-Wetland Waters	Section 404
Perennial Stream SZB	35.144243	-81.502444	35 linear feet (0.0021-acre)	Non-Wetland Waters	Section 404
Perennial Stream SZC	35.144459	-81.502427	144 linear feet (0.0411-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SZD	35.125488	-81.552456	260 linear feet (0.0234-acre)	Non-Wetland Waters	Section 404
Perennial Stream SZN	35.143229	-81.511693	277 linear feet (0.2053-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SZZ	35.129178	-81.548181	175 linear feet (0.0180-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SCCC	35.137559	-81.515007	898 linear feet (0.0708-acre)	Non-Wetland Waters	Section 404
Perennial Stream SCCC	35.136113	-81.510317	195 linear feet (0.0158-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SDDD	35.138833	-81.512073	301 linear feet (0.0283-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SGGG	35.130896	-81.544943	243 linear feet (0.0227-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SHHH	35.134120	-81.531483	44 linear feet (0.0007-acre)	Non-Wetland Waters	Section 404
Perennial Stream SIII	35.135054	-81.530699	518 linear feet (0.1107-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SJJJ	35.135018	-81.530494	72 linear feet (0.0042-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SKKK	35.140571	-81.511131	805 linear feet (0.0293-acre)	Non-Wetland Waters	Section 404
Perennial Stream SLLL	35.139154	-81.514047	1,628 linear feet (0.1752-acre)	Non-Wetland Waters	Section 404
Perennial Stream SMMM	35.144293	-81.502433	291 linear feet (0.0170-acre)	Non-Wetland Waters	Section 404

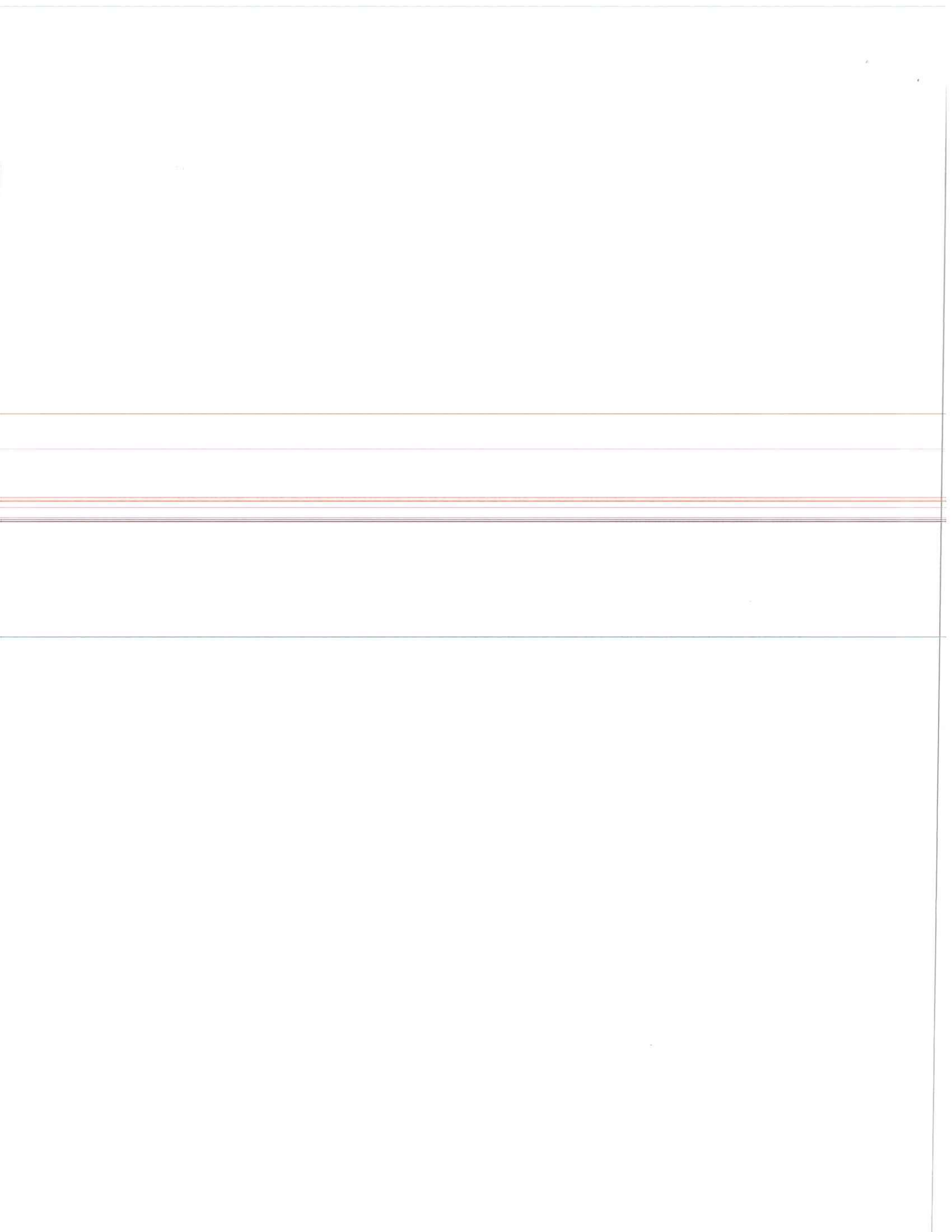




Perennial Stream SNNN	35.145519	-81.498651	376 linear feet (0.0314-acre)	Non-Wetland Waters	Section 404
Perennial Stream SOOO	35.146717	-81.498309	552 linear feet (0.0368-acre)	Non-Wetland Waters	Section 404
Perennial Stream SPPP	35.143255	-81.502477	258 linear feet (0.0111-acre)	Non-Wetland Waters	Section 404
Perennial Stream SQQQ	35.151324	-81.488535	302 linear feet (0.0205-acre)	Non-Wetland Waters	Section 404
Seasonal Stream SSSS	35.151652	-81.487685	66 linear feet (0.0021-acre)	Non-Wetland Waters	Section 404

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
  
- 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 AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) 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) 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) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (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 PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives 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 AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, 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. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

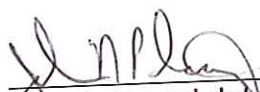
**SUPPORTING DATA. Data reviewed for PJD (check all that apply)**

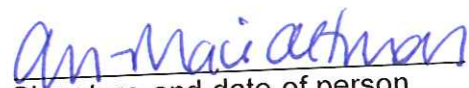


Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

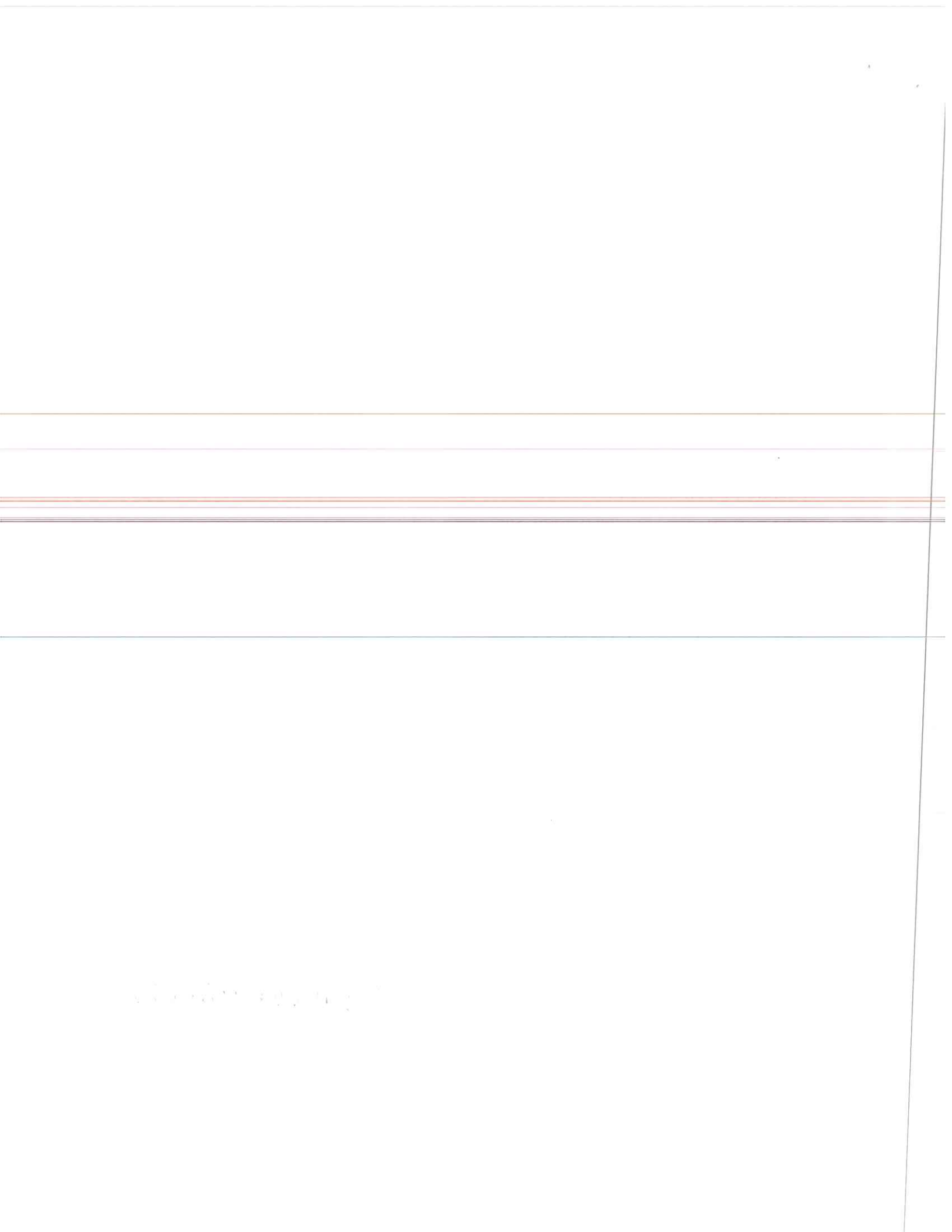
- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: "Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106), Surface Hydrology Connectivity, Data Forms, and Photo Points, Cherokee County, South Carolina", dated March 2017.
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report. Rationale:
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Blacksburg South, SC, Blacksburg North, SC/NC, & Grover, SC/NC quads (all at 1:24K)
- Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey
- National wetlands inventory map(s). Cite name: FWS online NWI mapper
- State/local wetland inventory map(s):
- FEMA/FIRM maps: FEMA Map Panels 45021C0180D, 45021C0065D, 45021C0070D, 3710254200J, & 3710255200J
- 100-year Floodplain Elevation is: Flood Zones X, A, & AE w/ BFEs at 553-feet to 580-feet (NGVD 1929)
- Photographs:  Aerial (Name & Date): Aerial Imagery submitted by applicant  
or  Other (Name & Date): Site photos submitted by applicant
- Previous determination(s). File no. and date of response letter:
- Other information (please specify): Site visit on March 6 & 7, 2017

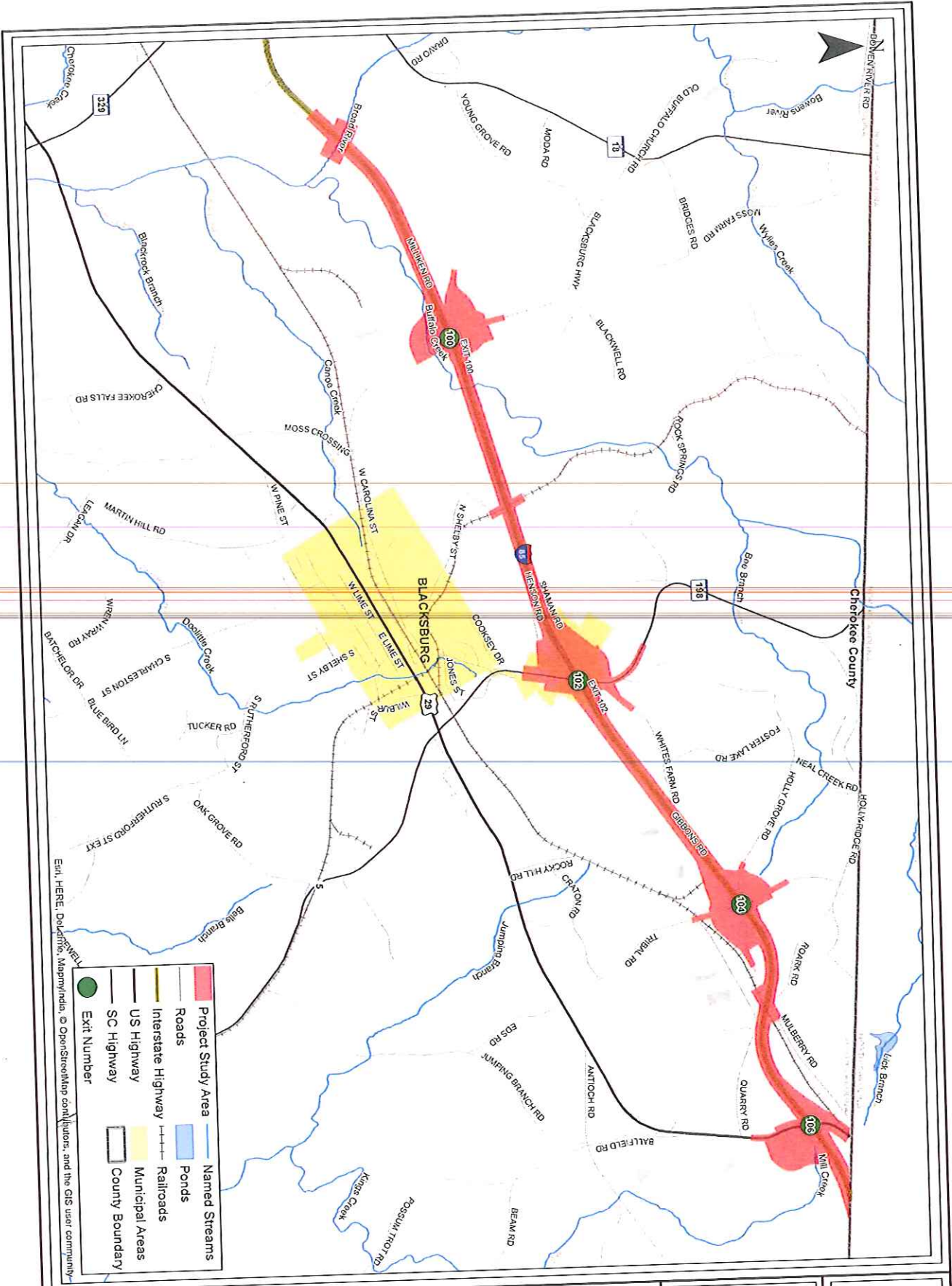
**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

 4/28/17  
Signature and date of  
Regulatory staff member  
completing PJD

  
Signature and date of person  
requesting PJD (REQUIRED,  
unless obtaining the signature is  
impracticable) <sup>1</sup>

<sup>1</sup> Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.





Date: November 2016  
 Scale: 0 0.25 0.5 Miles  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

**Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106) Site Location Map**

Cherokee County, South Carolina

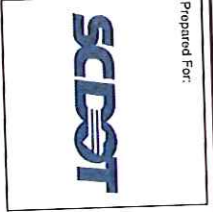
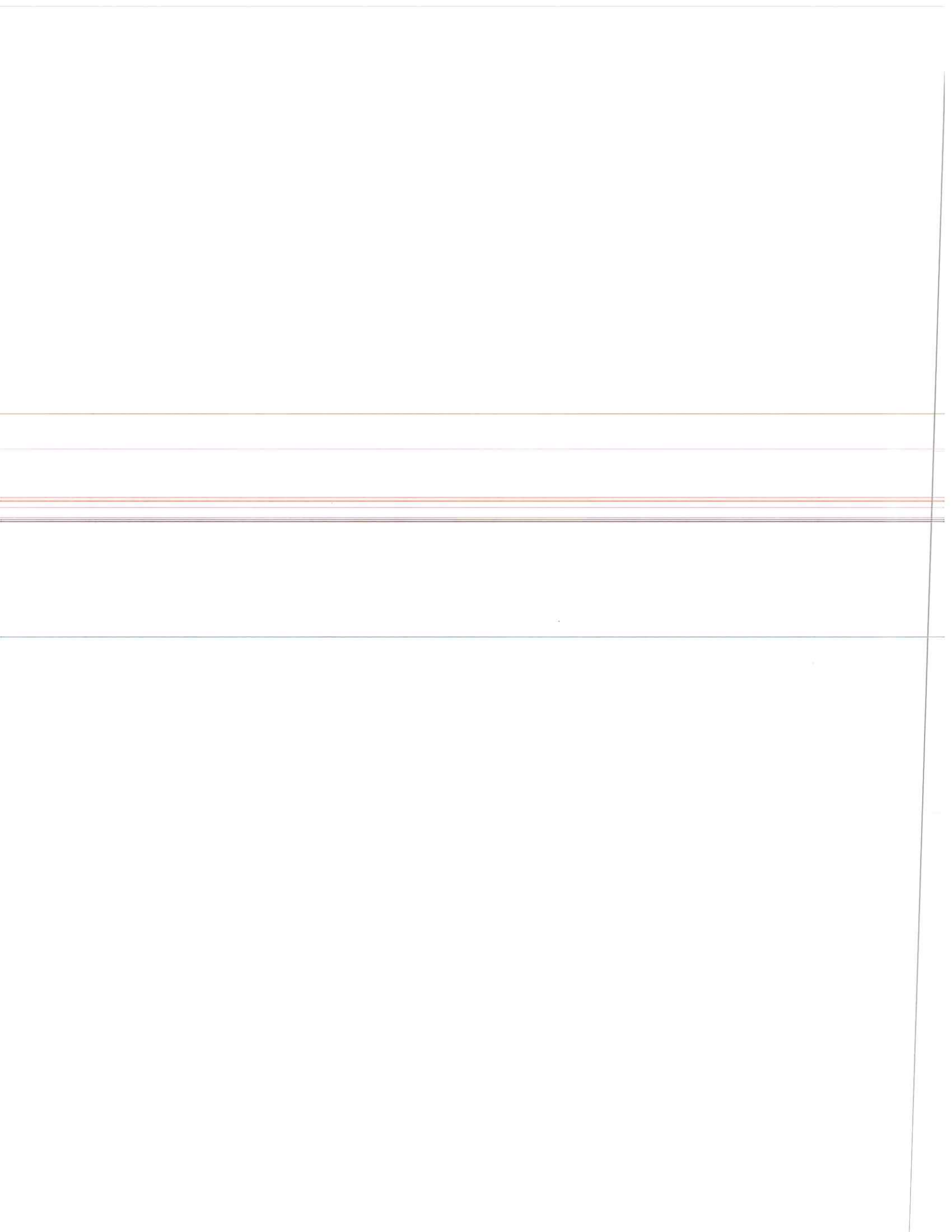
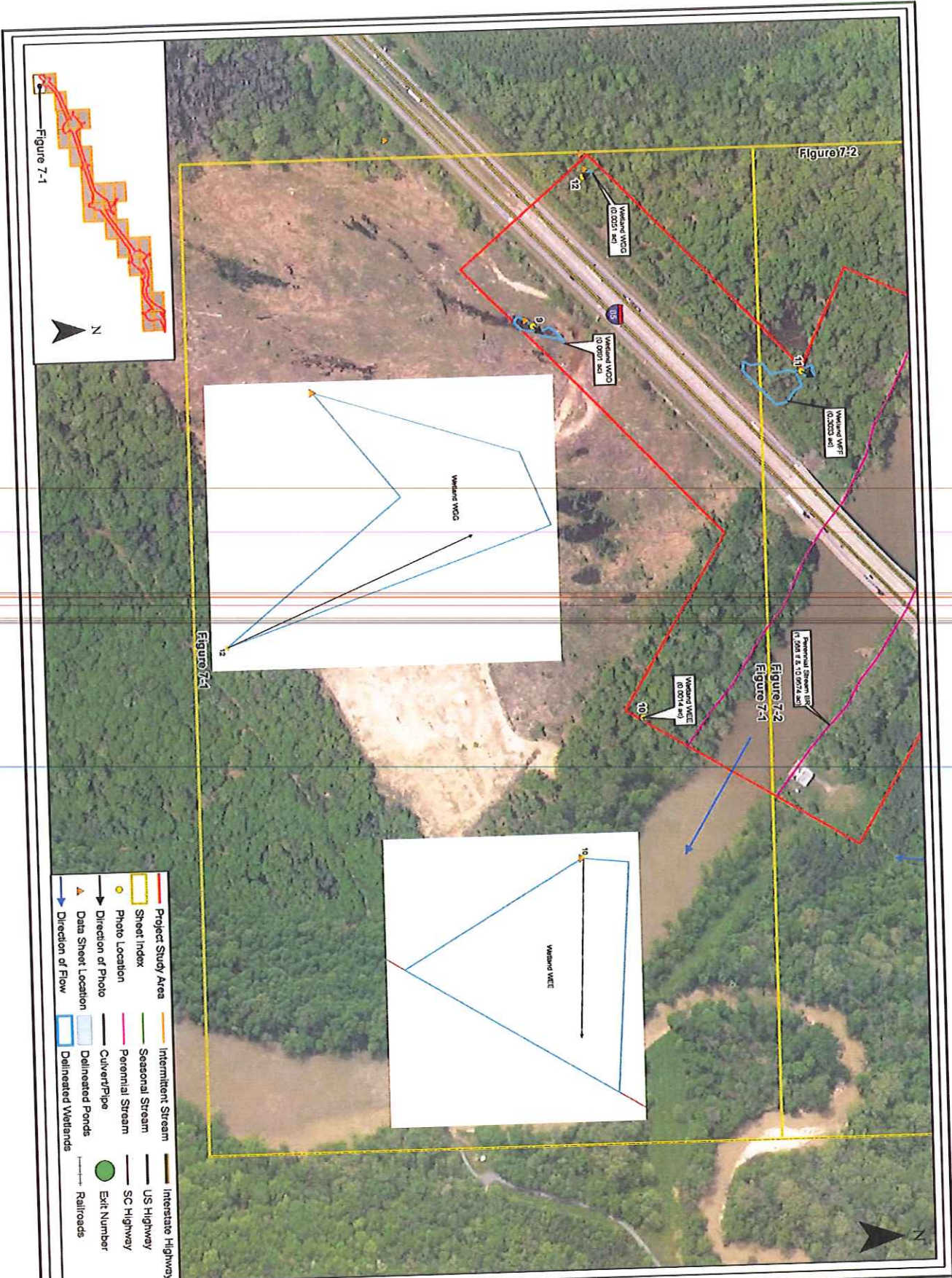


Figure 1





Prepared For:



**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**  
Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

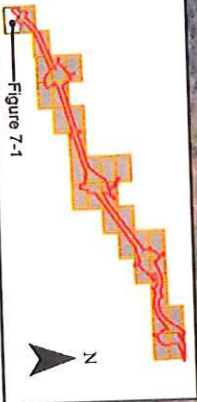
Date: Revised March 2017

Scale: 0 100 200 Feet

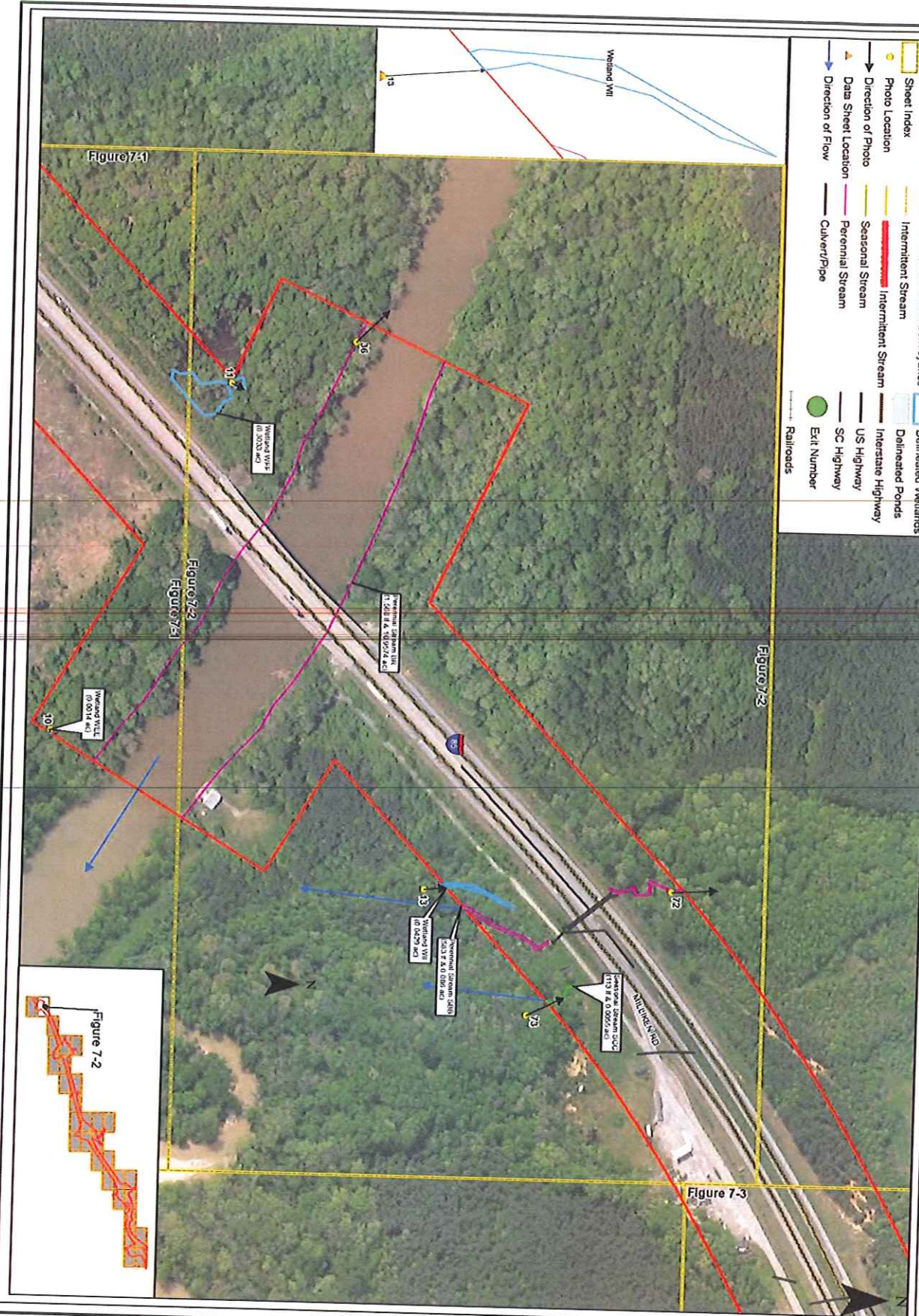
Job No.: 6214

Drawn By: KMS  
Checked By: CS

Figure  
**7-1**



- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Delineated Ponds
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads



Prepared For:  
**SCDOT**

**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

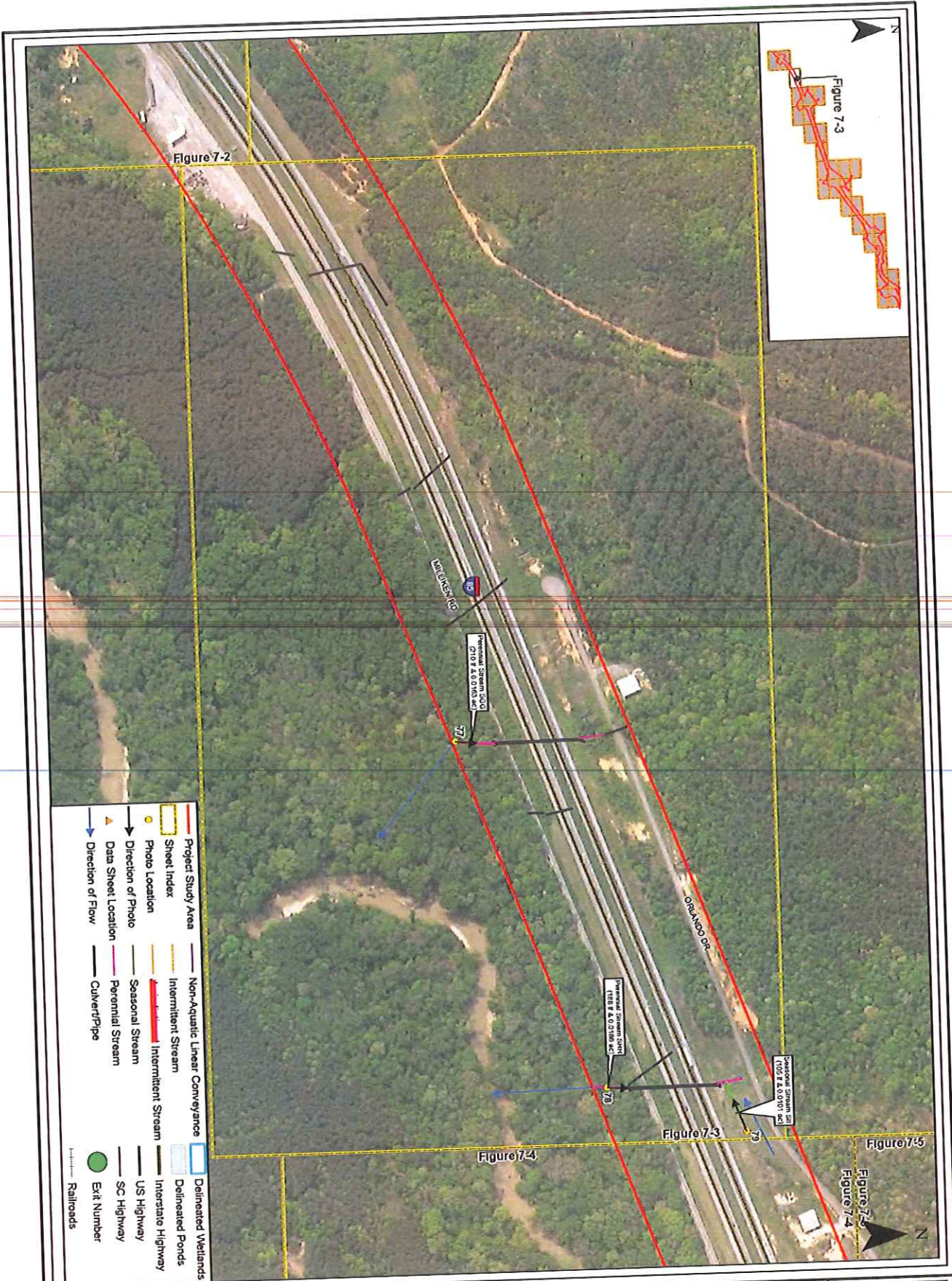
Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date: Revised March 2017  
Scale: 0 100 200 Feet  
Job No.: 6214  
Drawn By: KMS  
Checked By: CS

Figure  
**7-2**





Prepared For:



**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**  
Surface Hydrology  
Connectivity/ Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

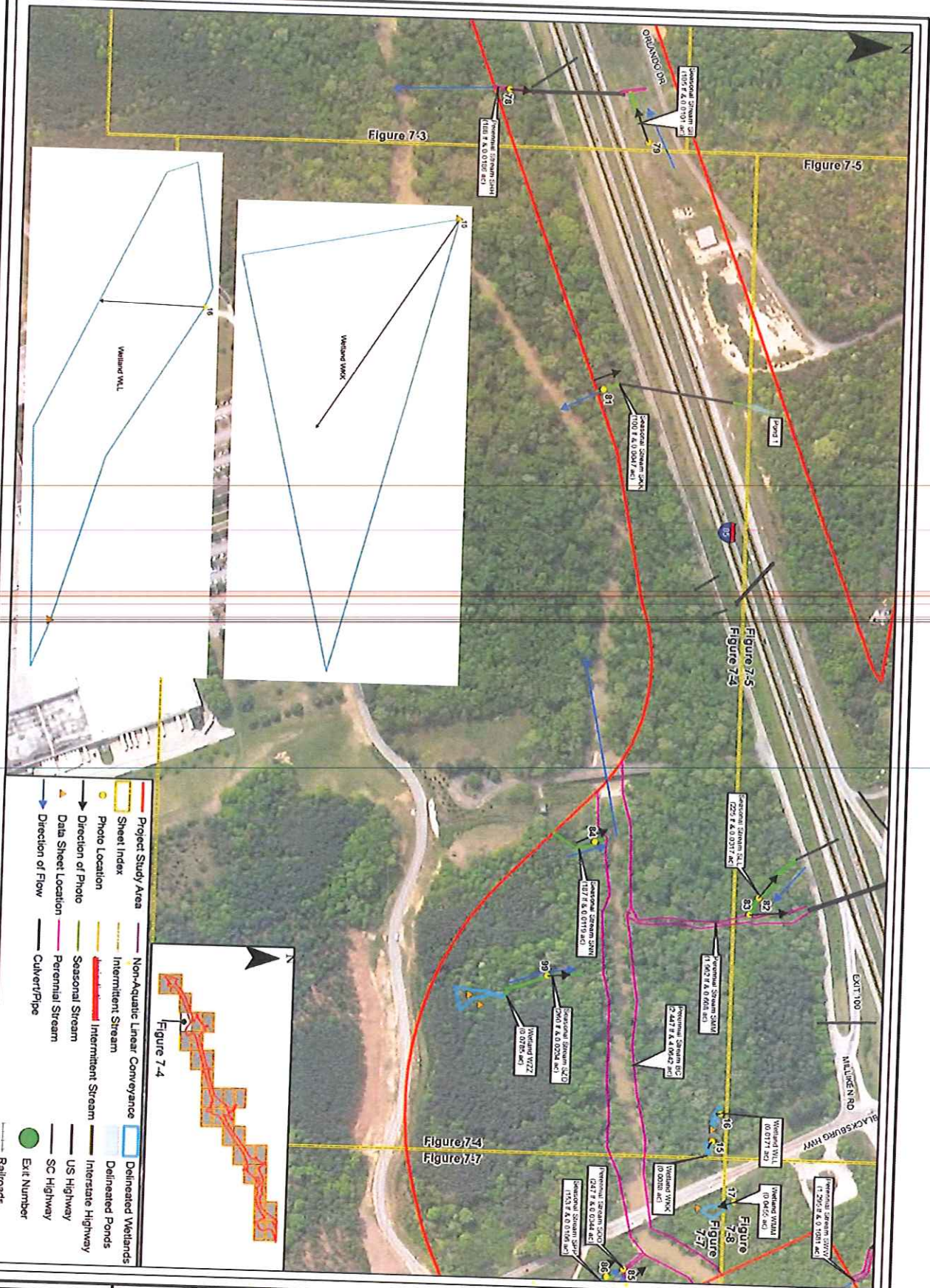
Date: Revised March 2017

Scale: 0 100 200 Feet

Job No.: 6214

Drawn By: KMS  
Checked By: CS

Figure  
**7-3**



Prepared For:



**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

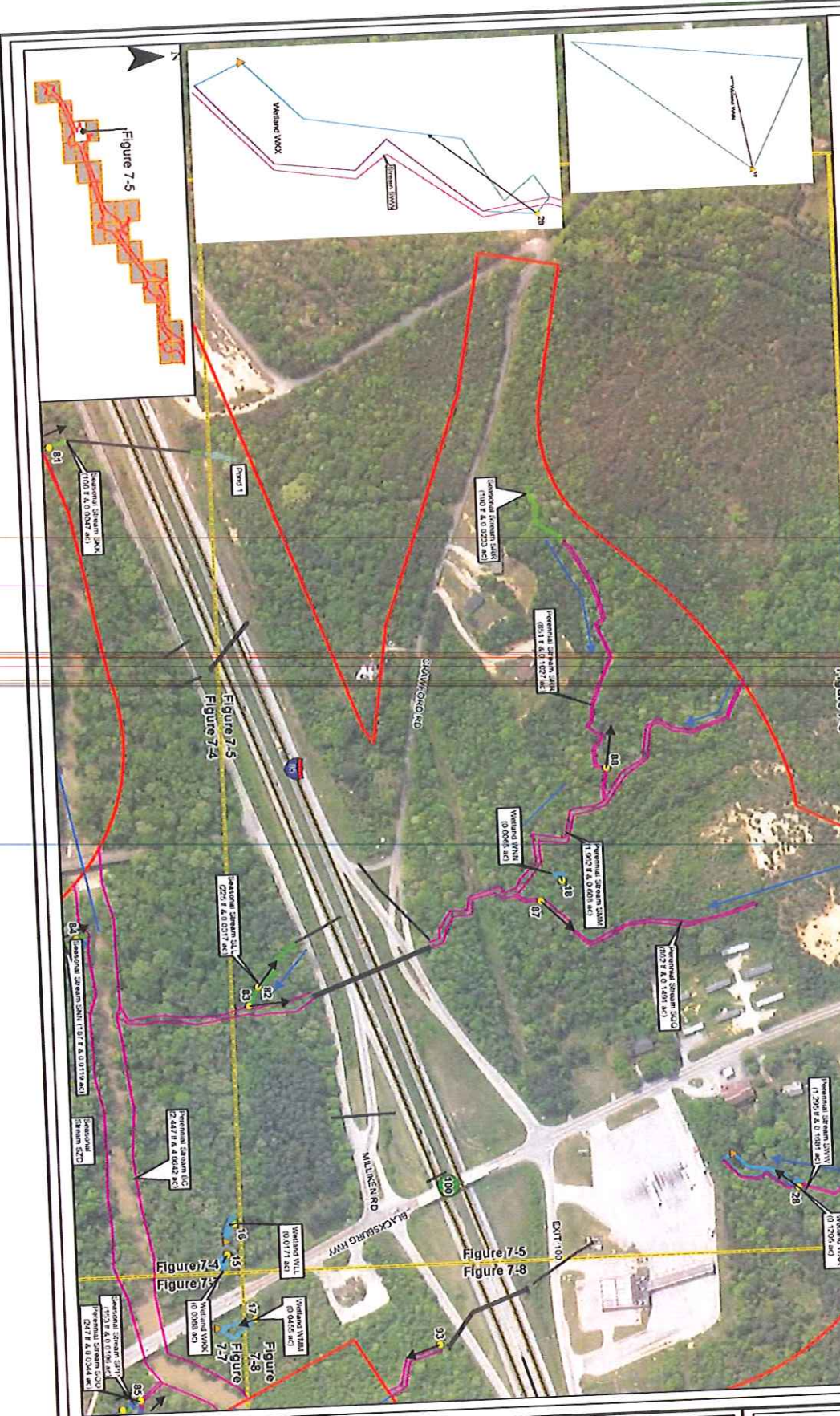
Surface Hydrology  
Connectivity Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date:	Revised March 2017
Scale:	0 100 200 Feet
Job No.:	6214
Drawn By:	KIMS
Checked By:	CS

Figure  
**7-4**

- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delimited Wetlands
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads



Prepared For:

**SCRIP**

**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date: Revised March 2017

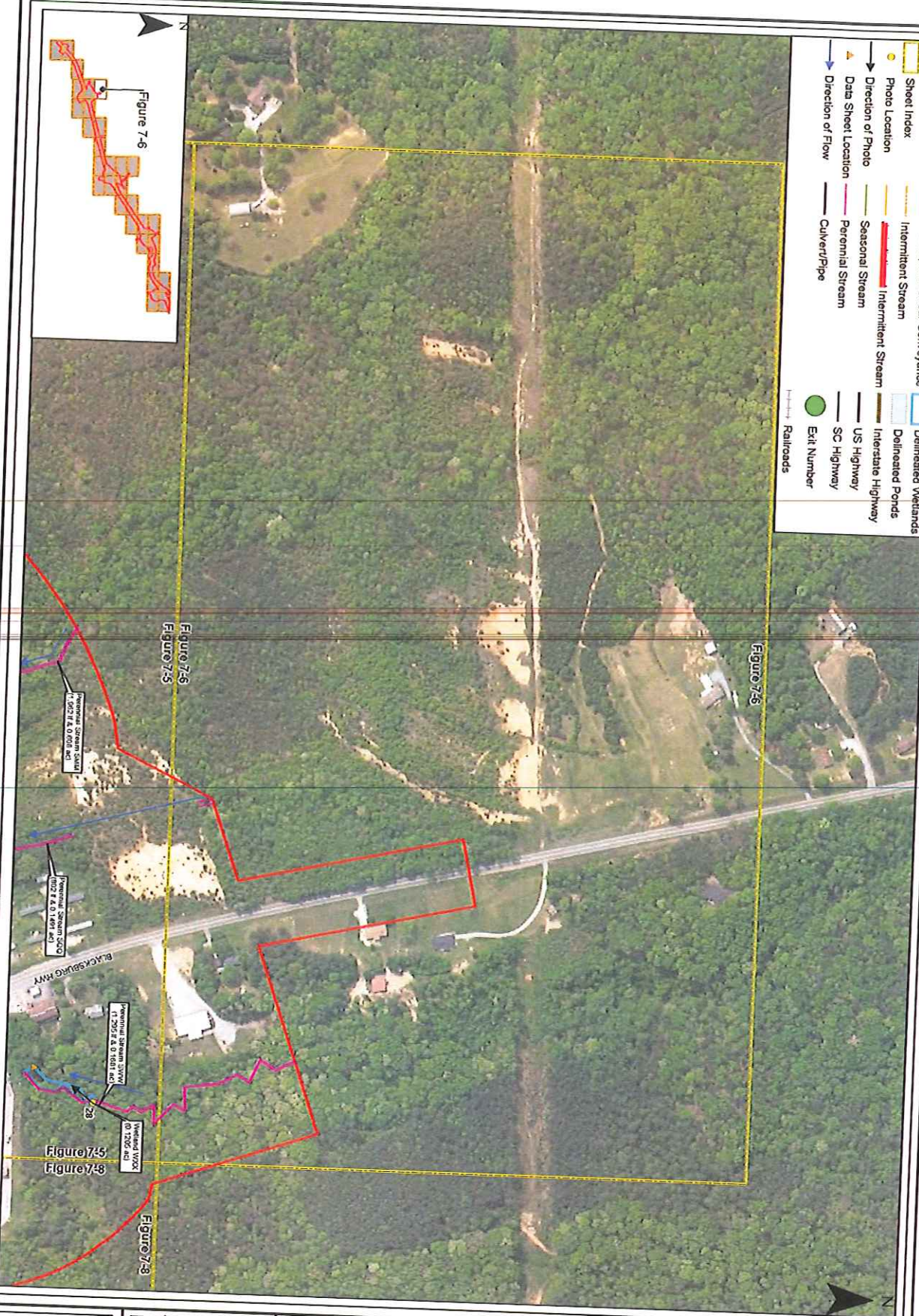
Scale: 0 100 200 Feet

Job No.: 6214

Drawn By: KMS  
Checked By: CS

**Figure  
7-5**

- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Delineated Ponds
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads



Prepared For:

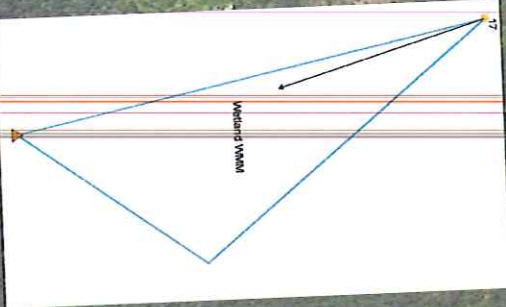
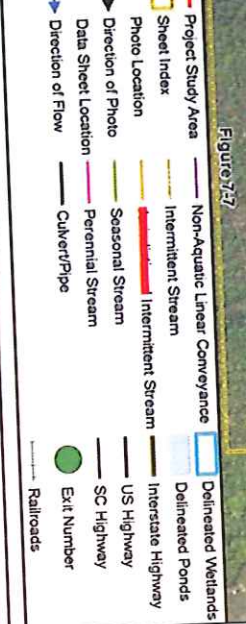
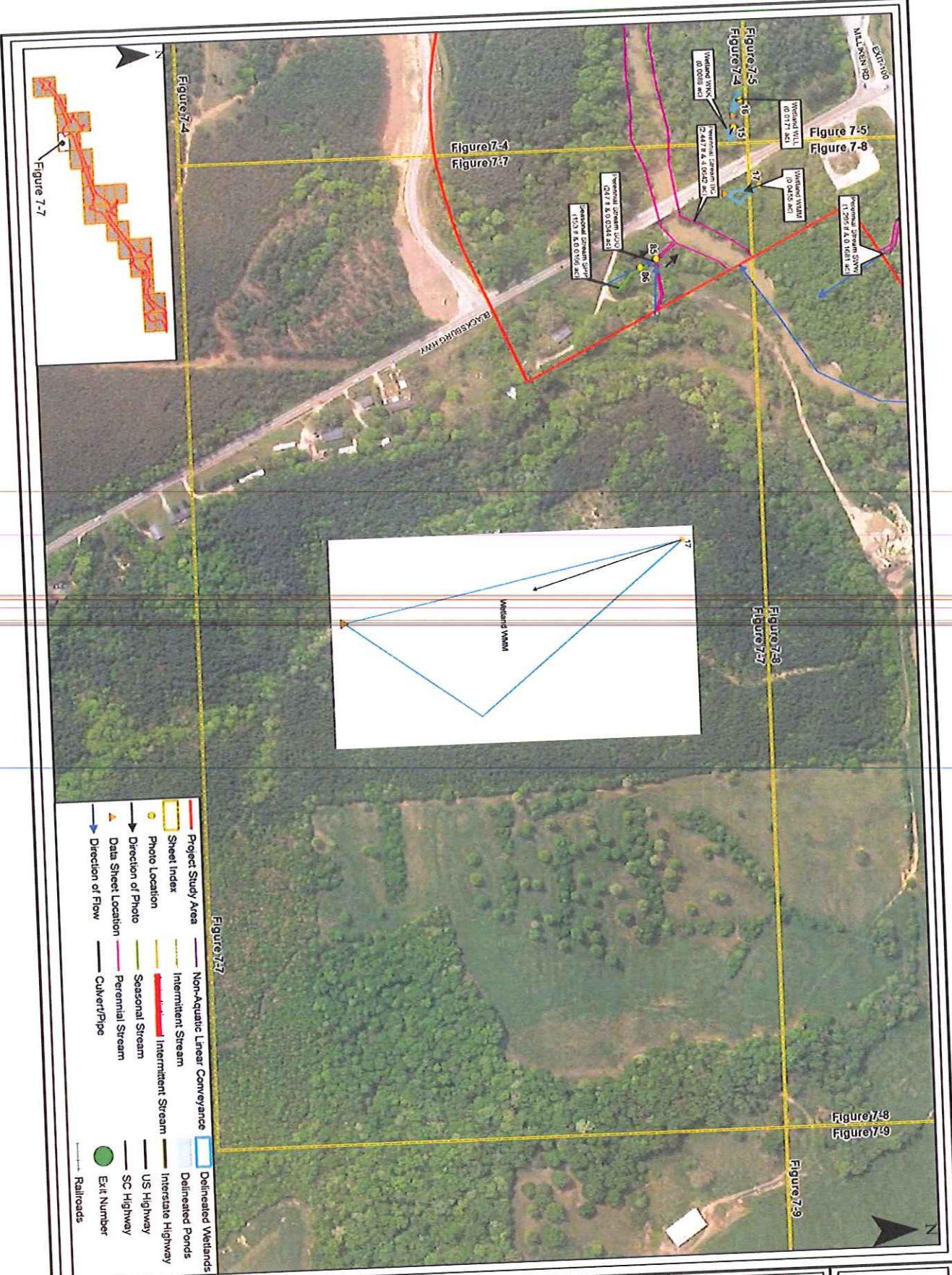
**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Figure  
**7-6**



Prepared For:  
**SCBAT**

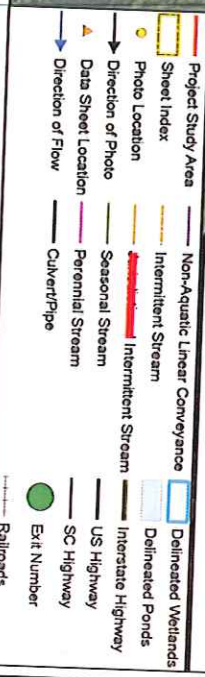
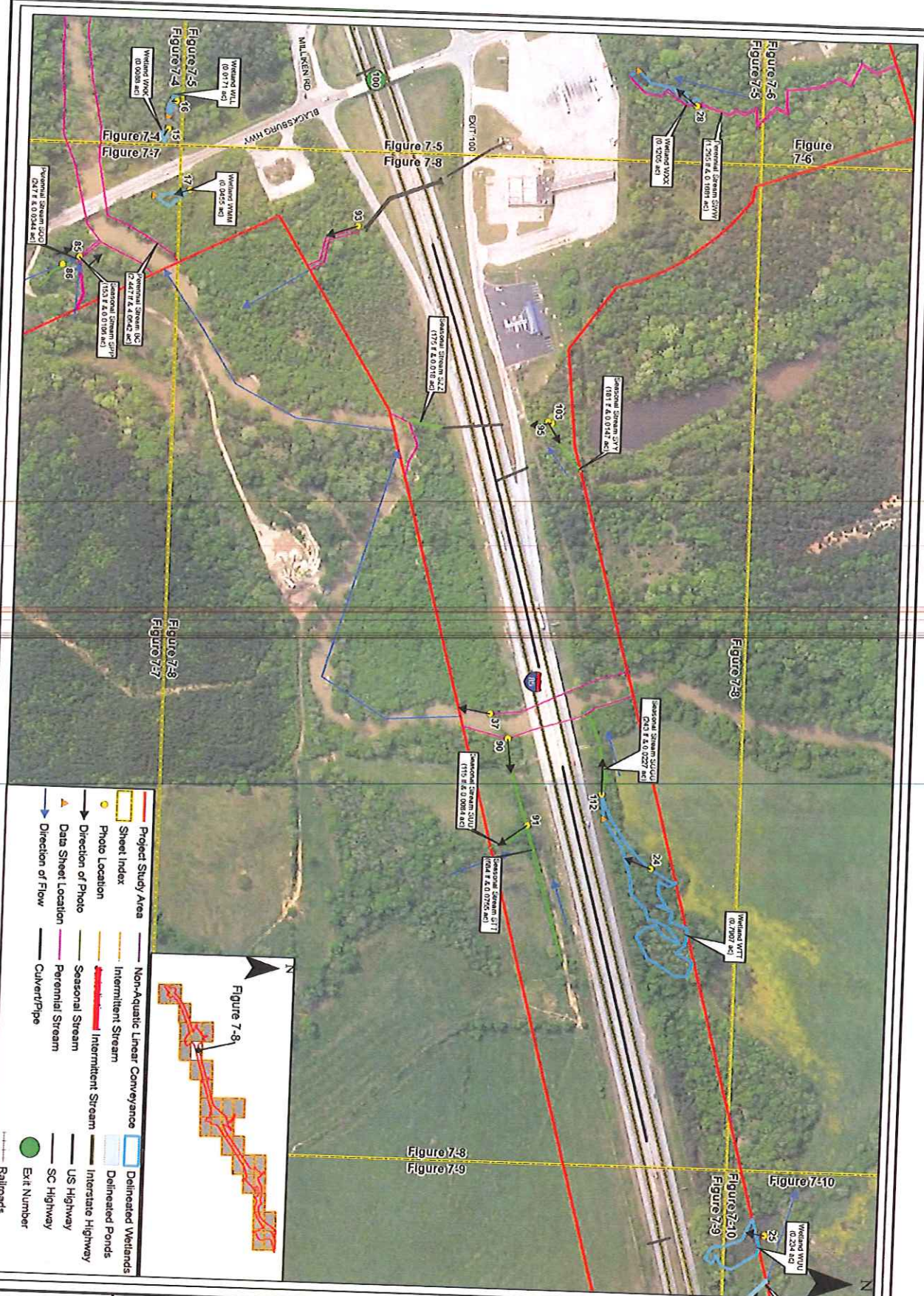
**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date: Revised March 2017  
Scale: 0 100 200 Feet  
Job No.: 6214  
Drawn By: KMS  
Checked By: CS

**Figure**  
**7-7**



**Figure 7-8**

Project Study Area  
 Sheet Index  
 Photo Location  
 Direction of Photo  
 Data Sheet Location  
 Direction of Flow

Non-Aquatic Linear Conveyance  
 Intermittent Stream  
 Intermittent Stream  
 Seasonal Stream  
 Perennial Stream  
 Culvert/Pipe

Delimited Wetlands  
 Interstate Highway  
 US Highway  
 SC Highway  
 Exit Number  
 Railroads

Date: Revised March 2017

Scale: 0 100 200 Feet

Job No.: 6214

Drawn By: KMS

Checked By: CS

Cherokee County,  
 South Carolina

Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)

Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points

Prepared For:

THREE OAKS ENGINEERING  
 THREE OAKS ENGINEERING

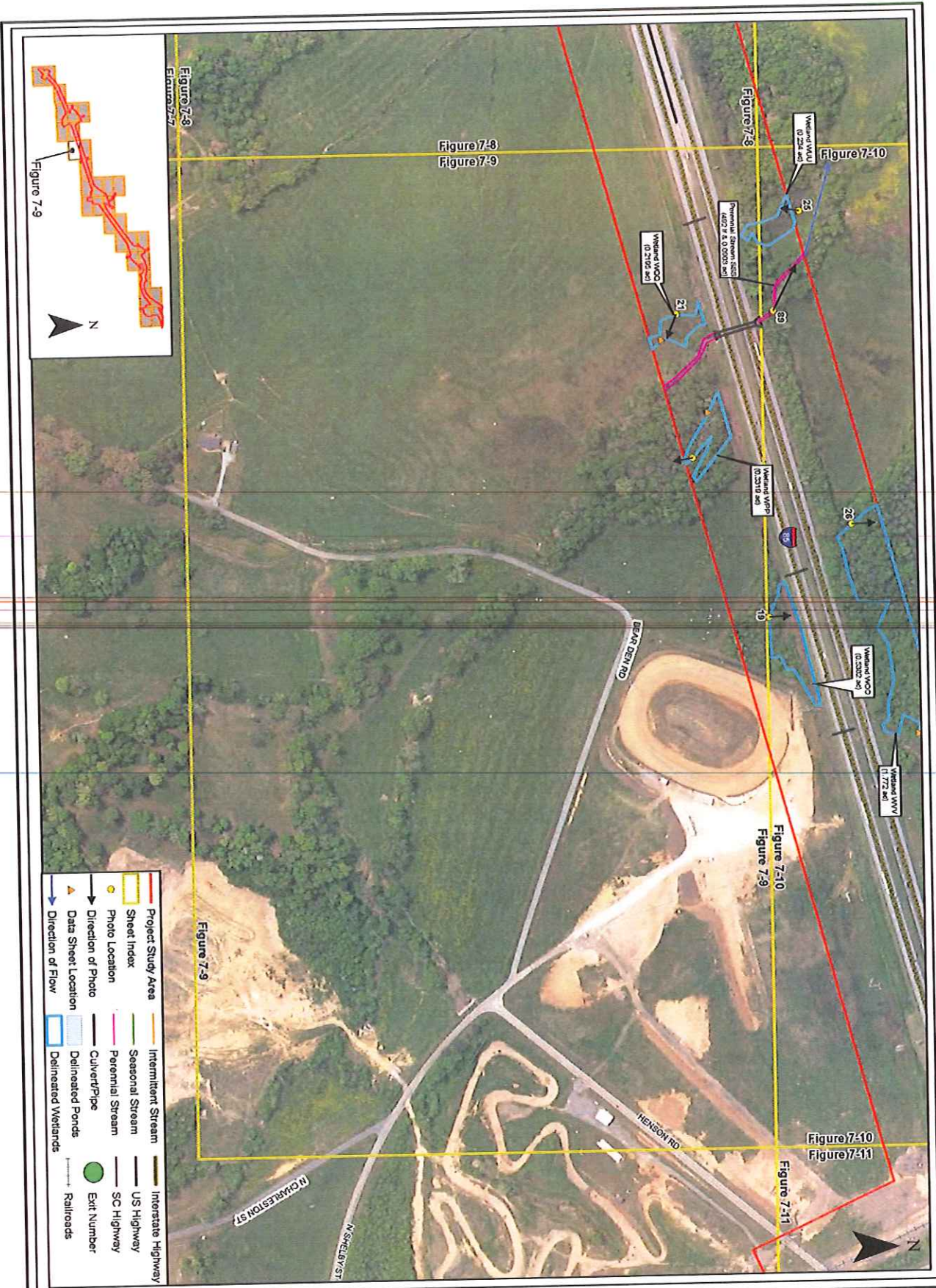


Figure 7-8  
Figure 7-9

Figure 7-9  
Figure 7-10  
Figure 7-11

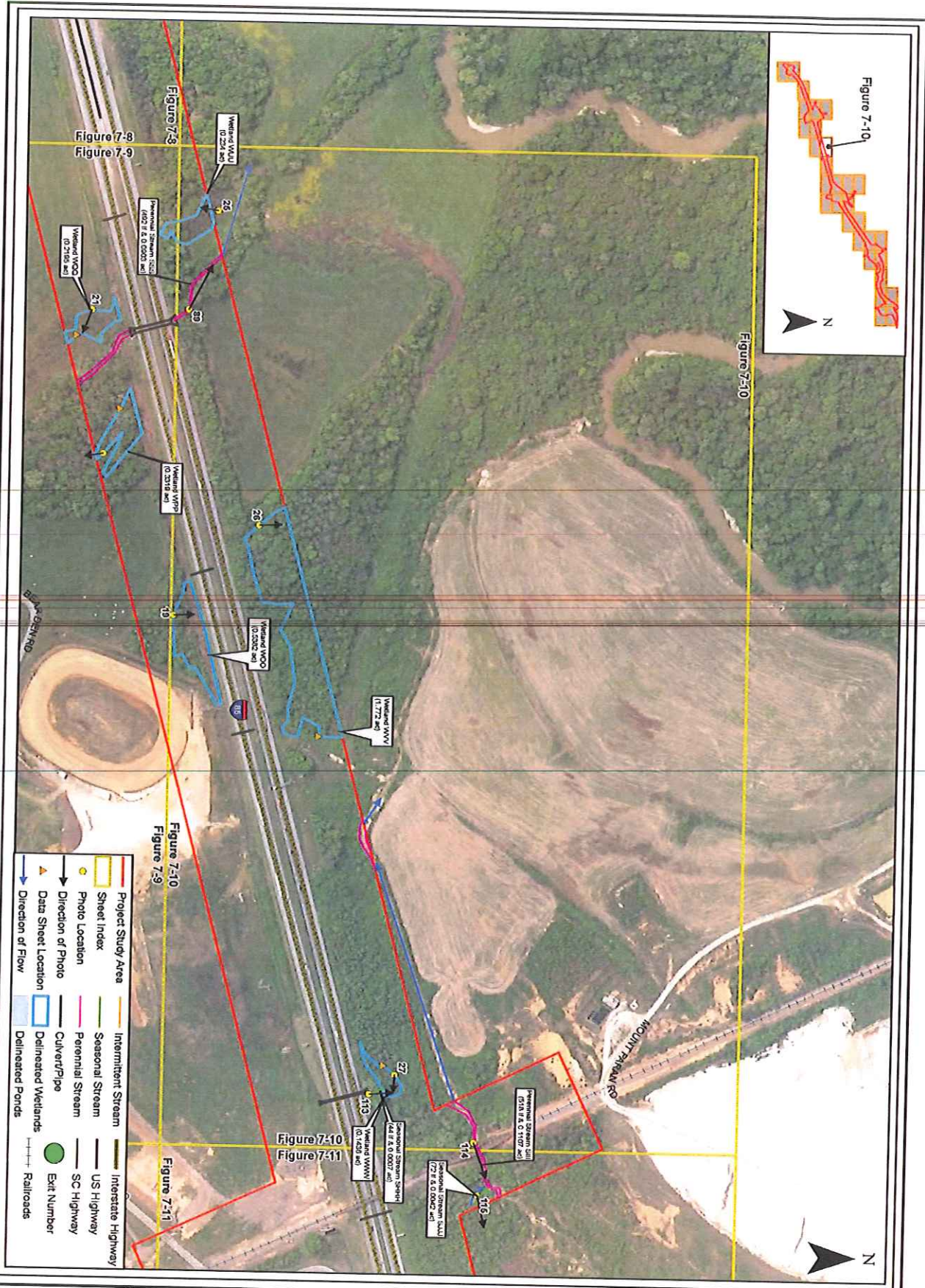
Figure  
7-9

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)  
 Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points  
 Cherokee County,  
 South Carolina



Prepared For:



**Figure 7-10**

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

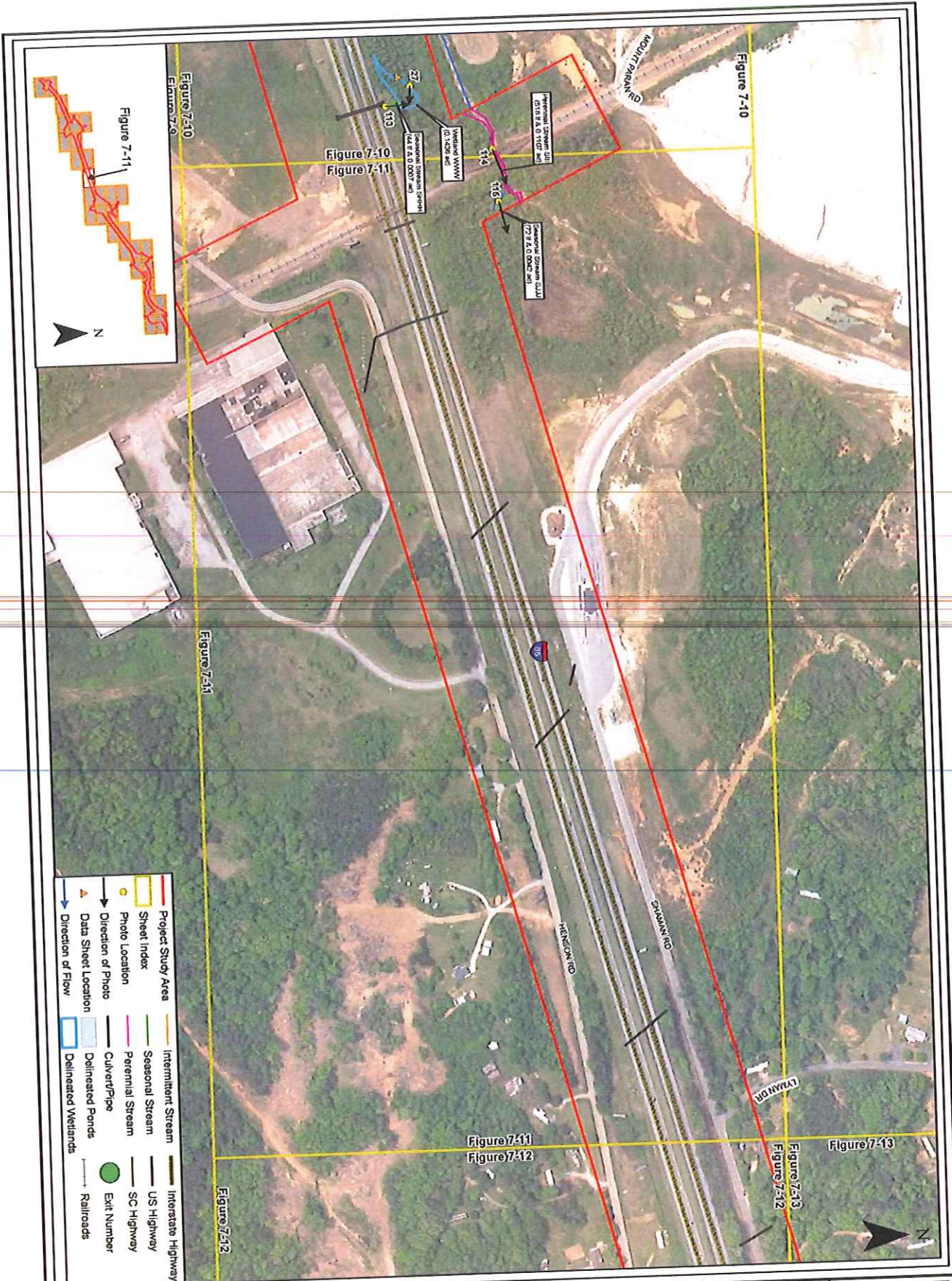
Surface Hydrology Connectivity, Data Forms, and Photo Points  
 Cherokee County, South Carolina

**SCDOT**

Prepared For:  
**Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)**







- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Ponds
- Delineated Wetlands
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads

**Figure**  
**7-11**

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Cherokee County,  
 South Carolina

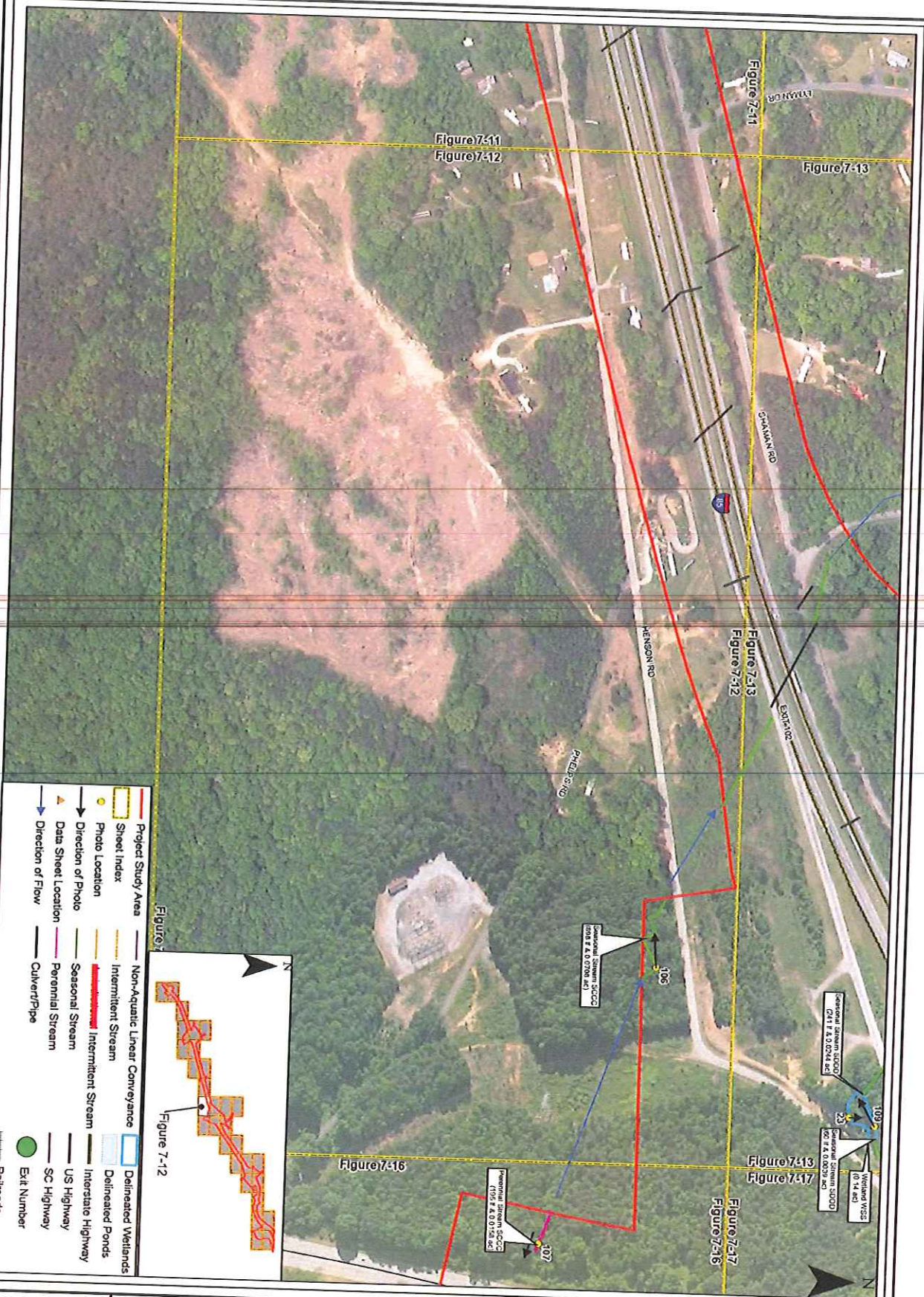
**Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)**

Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points


Prepared For:

**SCDOT**






- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- ▲ Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads



THREE OAKS ENGINEERING  
THREE OAKS ENGINEERING

Prepared For:



**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date: Revised March 2017

Scale: 0 100 200 Feet

Job No.: 6214

Drawn By: KIMS

Checked By: CS

**Figure  
7-12**

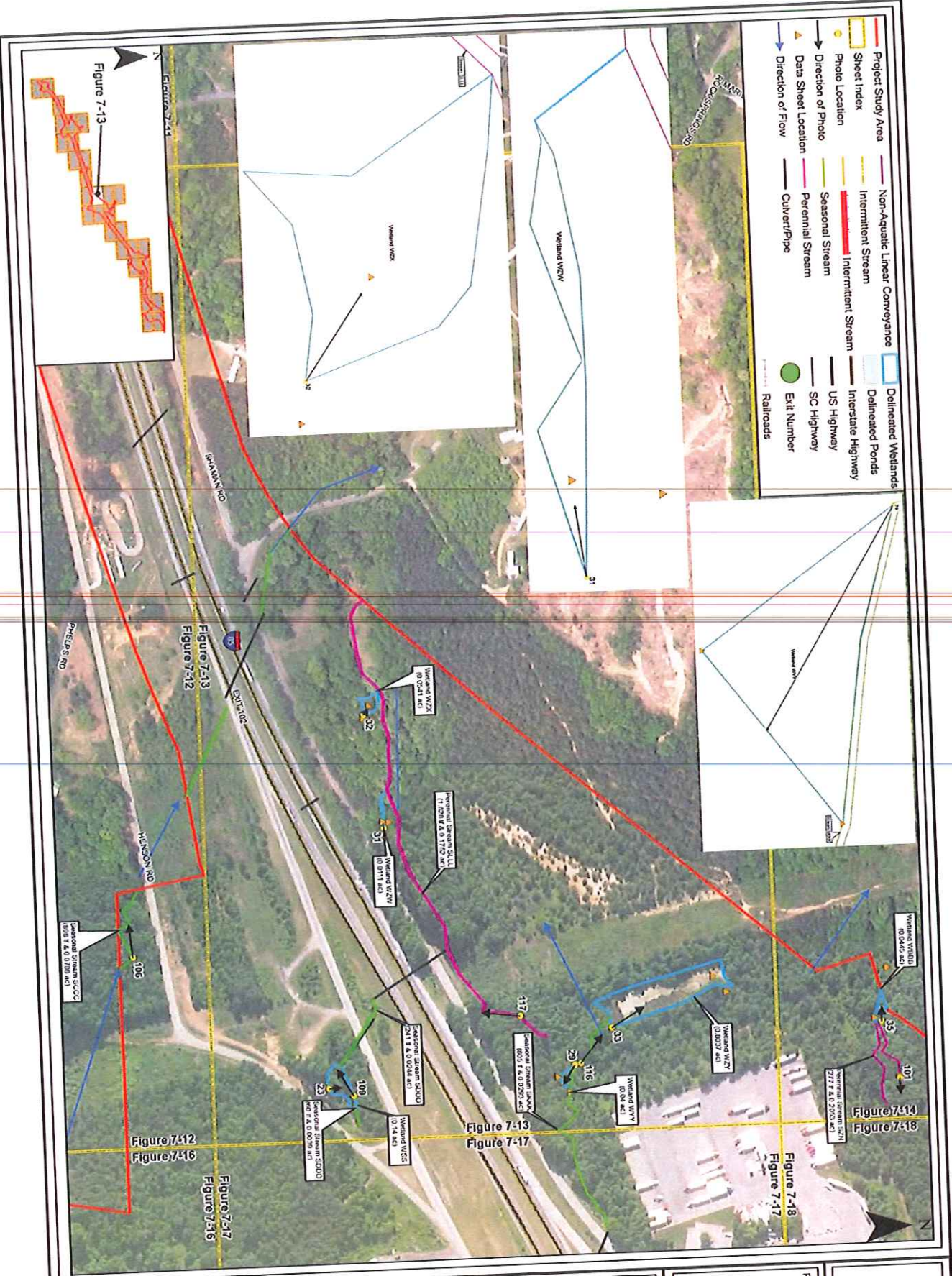


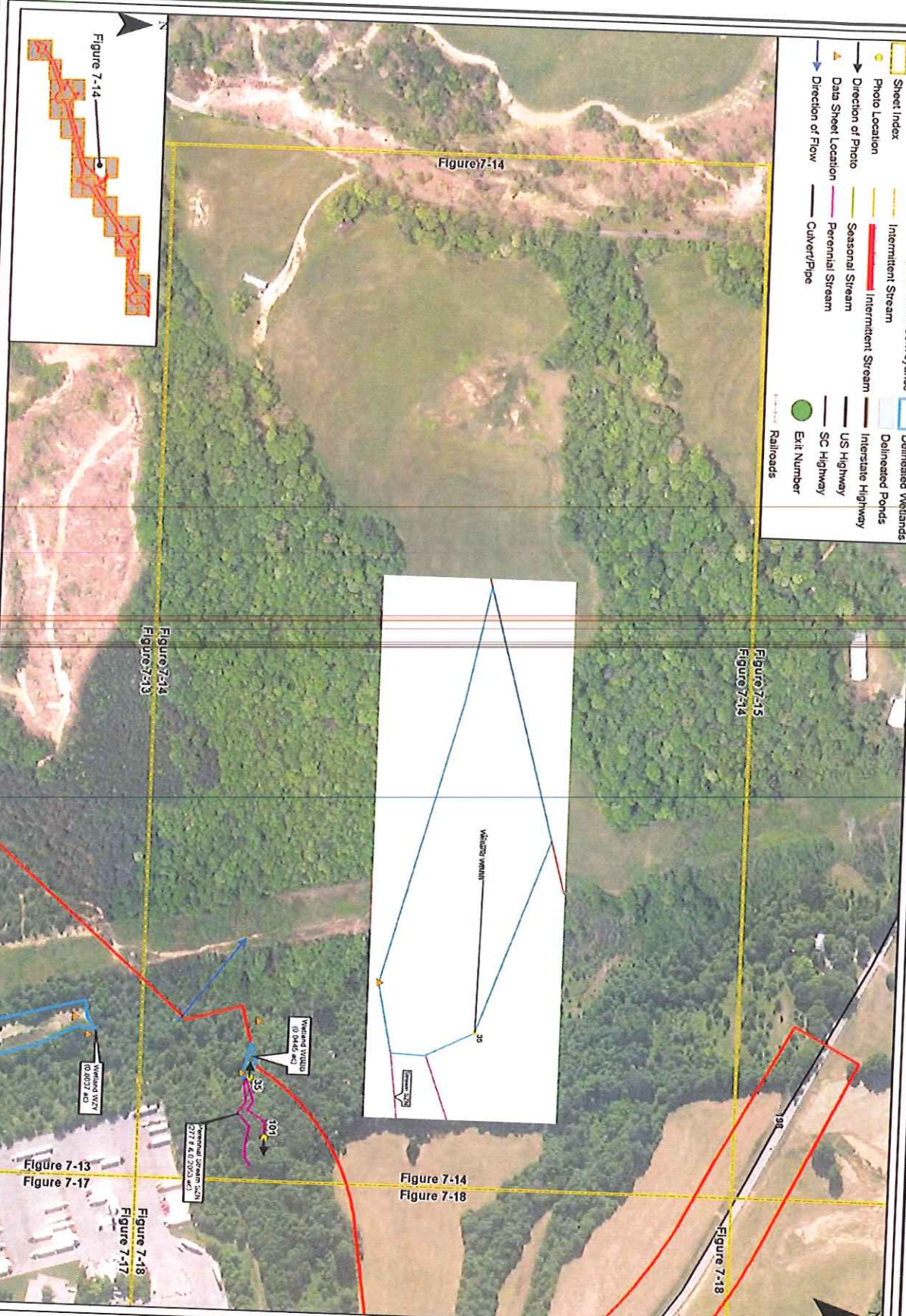
Figure  
7-13

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Prepared For:  
**SCBAT**  
 Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)  
 Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points  
 Cherokee County,  
 South Carolina

Prepared For:  
**SCBAT**  
 Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)  
 Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points  
 Cherokee County,  
 South Carolina

- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Delimited Ponds
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads



Prepared For:



**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

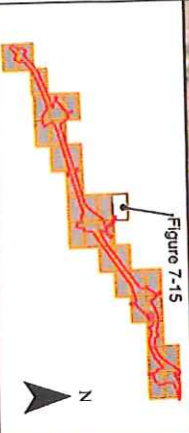
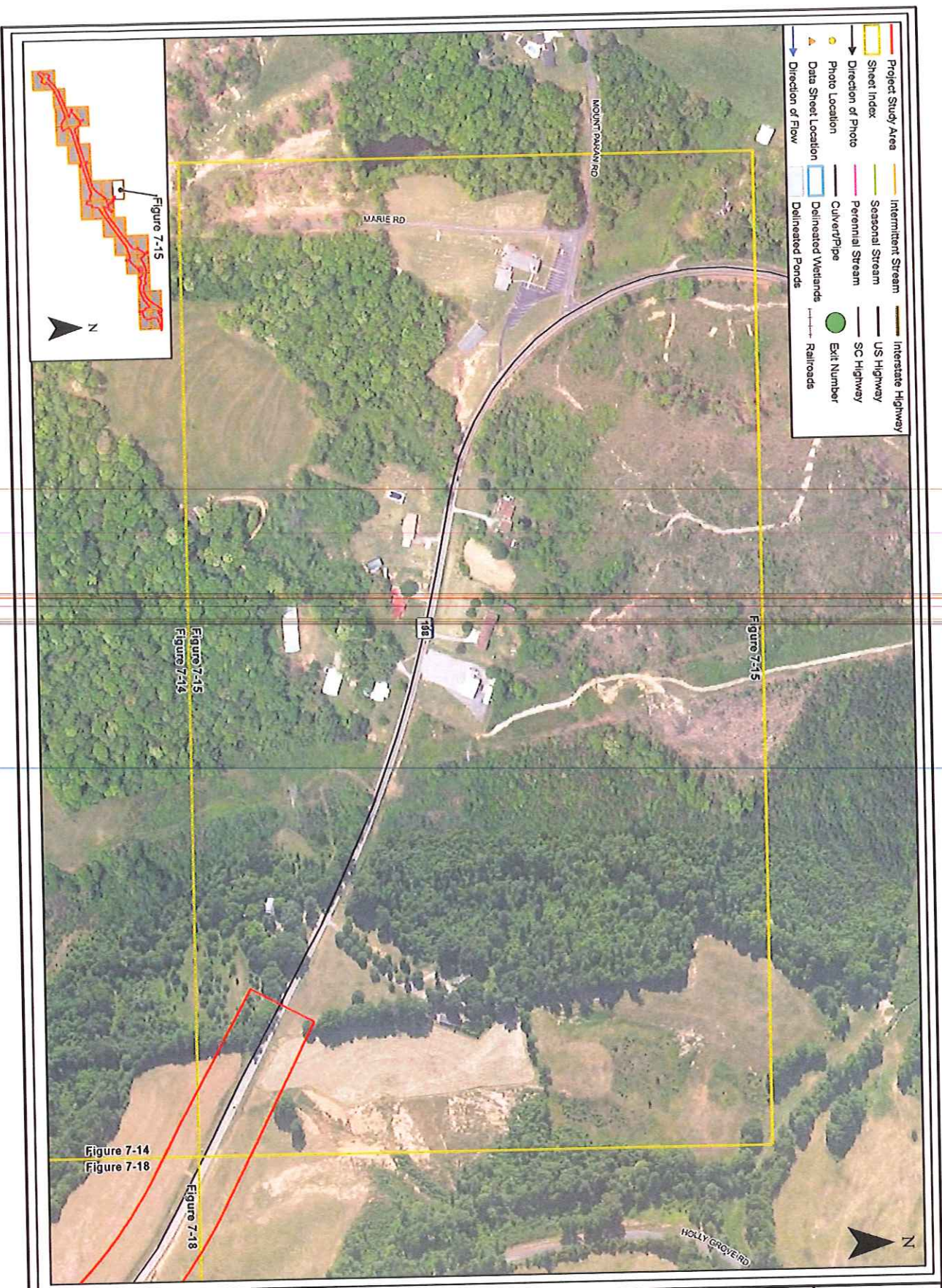
Date: Revised March 2017

Scale: 0 100 200 Feet

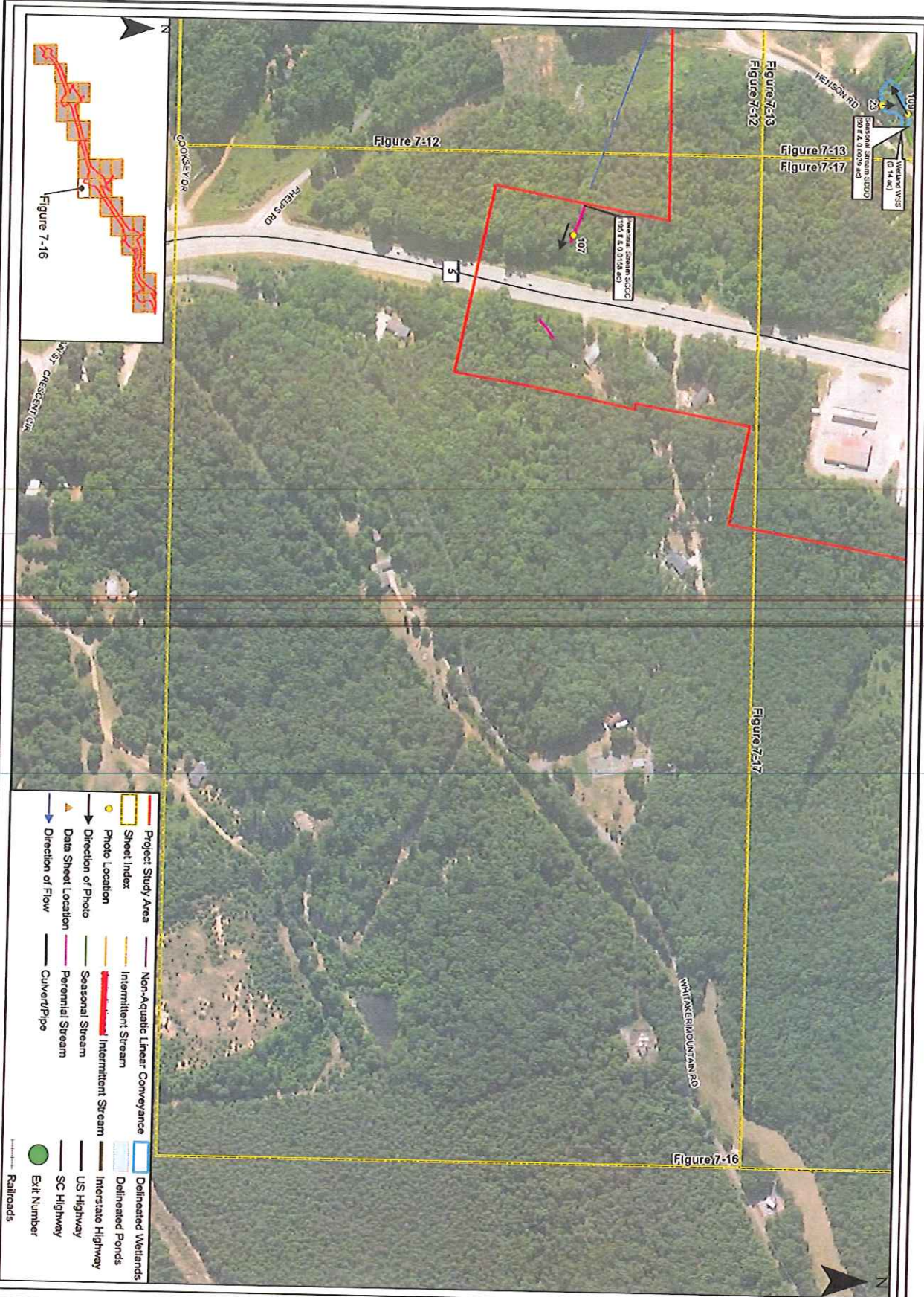
Job No.: 6214

Drawn By: KMS  
Checked By: CS

Figure  
**7-14**



	Prepared For:	
	<p><b>Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)</b></p> <p>Surface Hydrology, Connectivity, Data Forms, and Photo Points</p> <p>Cherokee County, South Carolina</p>	
<p>Date: Revised March 2017</p> <p>Scale: 0 100 200 Feet</p> <p>Job No.: 6214</p> <p>Drawn By: KMS</p> <p>Checked By: CS</p>		
<p>Figure 7-15</p>		



Prepared For:



**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Date: Revised March 2017

Scale: 0 100 200 Feet

Job No.: 6214

Drawn By: KMS

Checked By: CS

# Figure 7-16

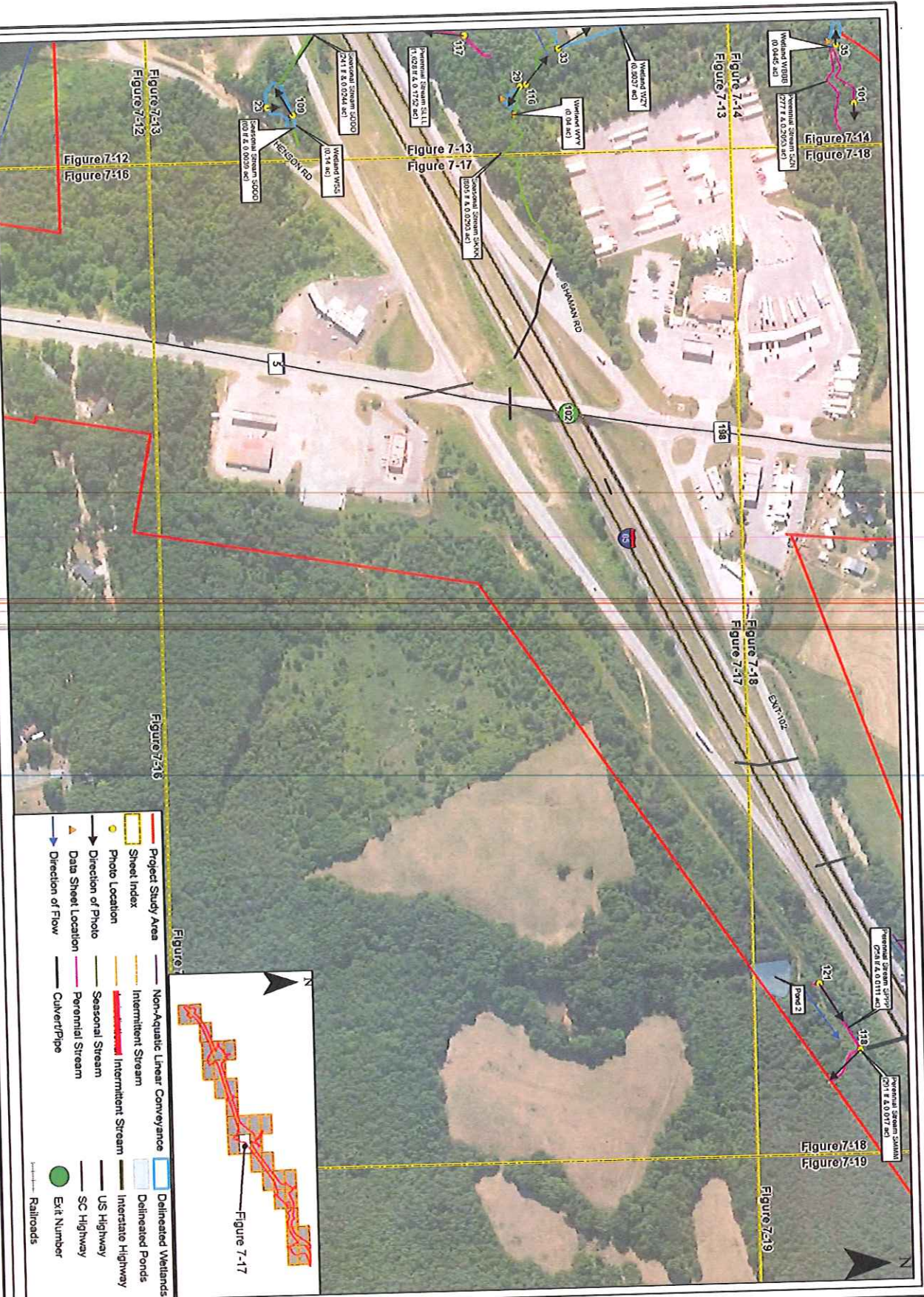


Figure 7-17

	Project Study Area		Delineated Wetlands
	Sheet Index		Delineated Ponds
	Photo Location		Interstate Highway
	Direction of Photo		US Highway
	Data Sheet Location		SC Highway
	Direction of Flow		Exit Number
	Non-aquatic Linear Conveyance		Railroads
	Intermittent Stream		
	Intermittent Stream		
	Seasonal Stream		
	Perennial Stream		
	Culvert/Pipe		

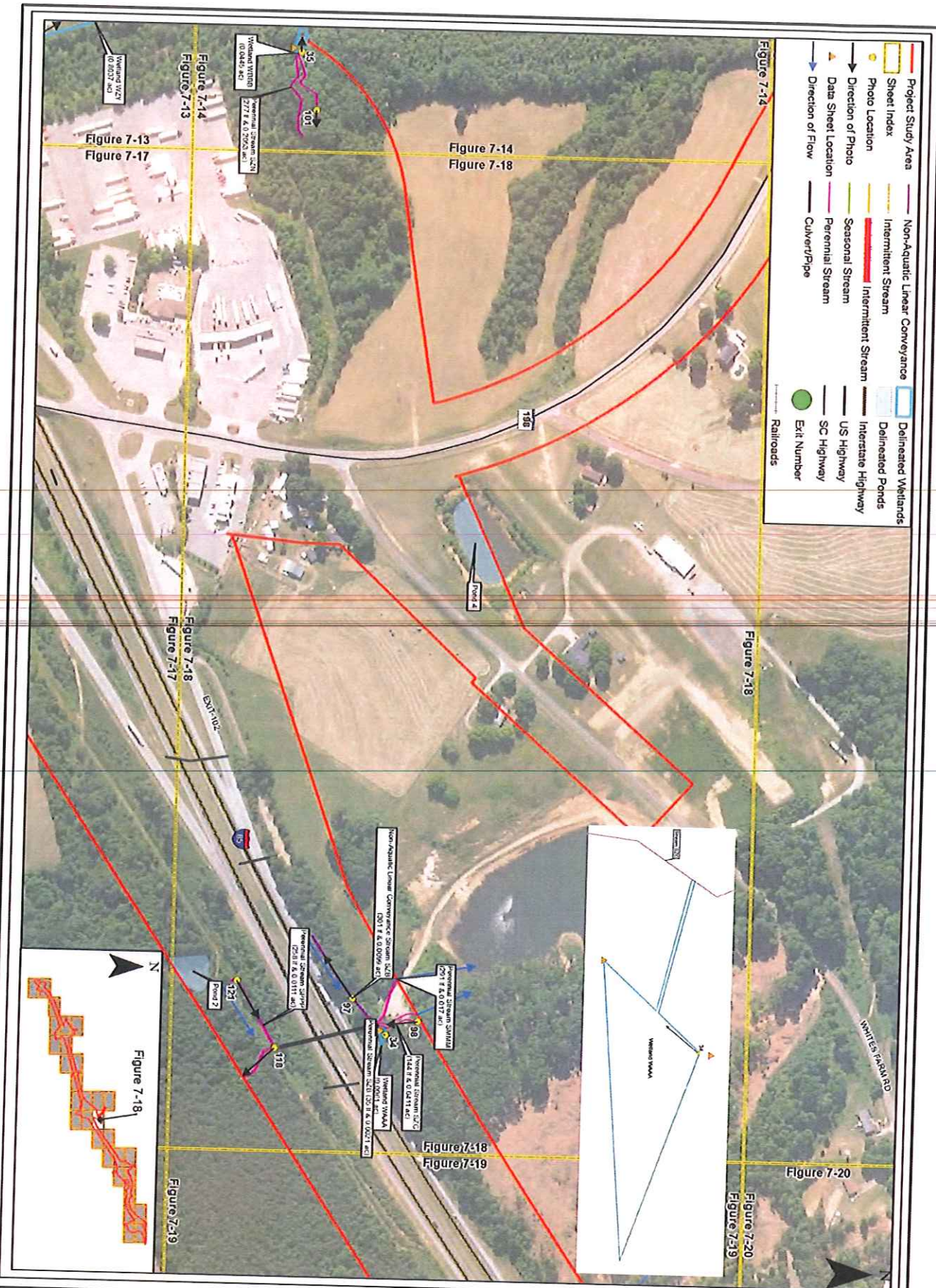
**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**  
Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Cherokee County,  
South Carolina

Prepared For:



Date:	Revised March 2017
Scale:	0 100 200 Feet
Job No.:	6214
Drawn By:	KMS
Checked By:	CS



Prepared For:  
**SCDOT**

**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**  
Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points  
Cherokee County,  
South Carolina

Date: Revised March 2017  
Scale: 0 100 200 Feet  
Job No.: 6214  
Drawn By: KMS  
Checked By: CS

Figure  
**7-18**



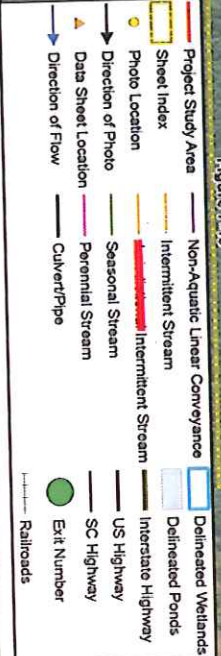
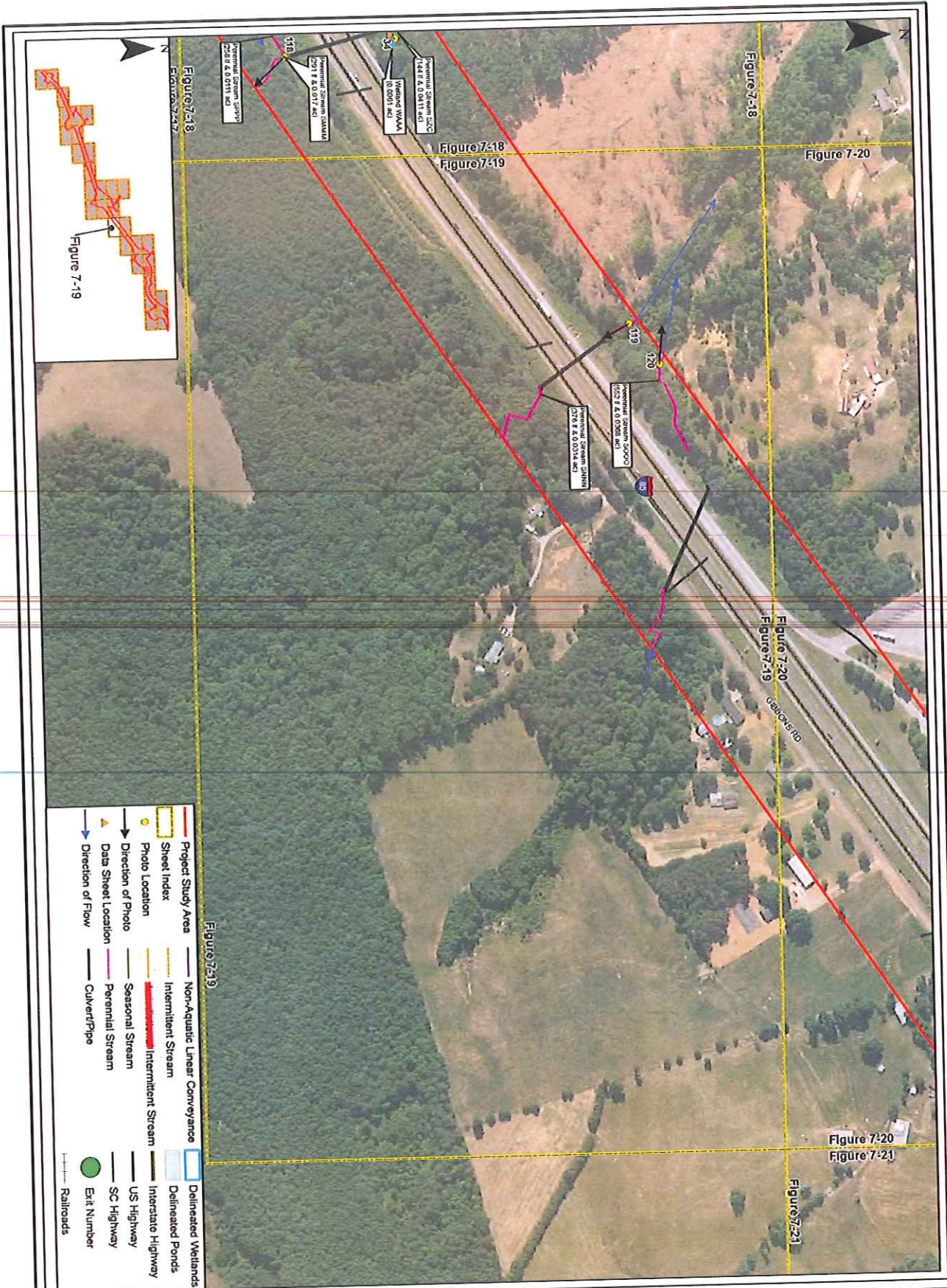


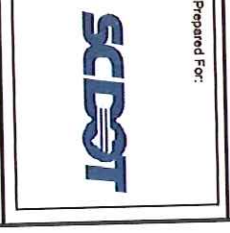
Figure  
**7-19**

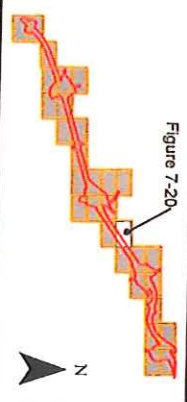
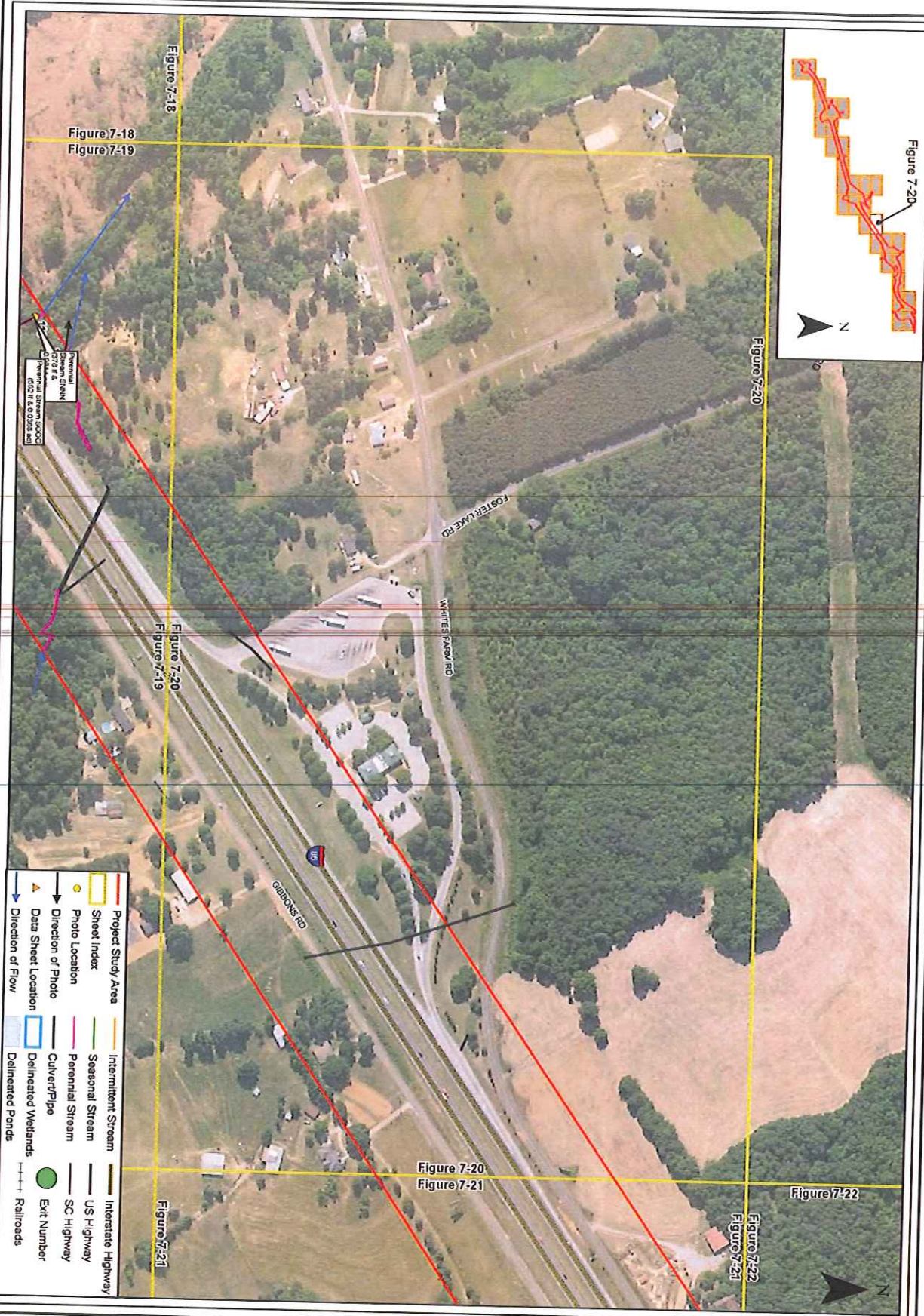
Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Cherokee County,  
 South Carolina

Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)

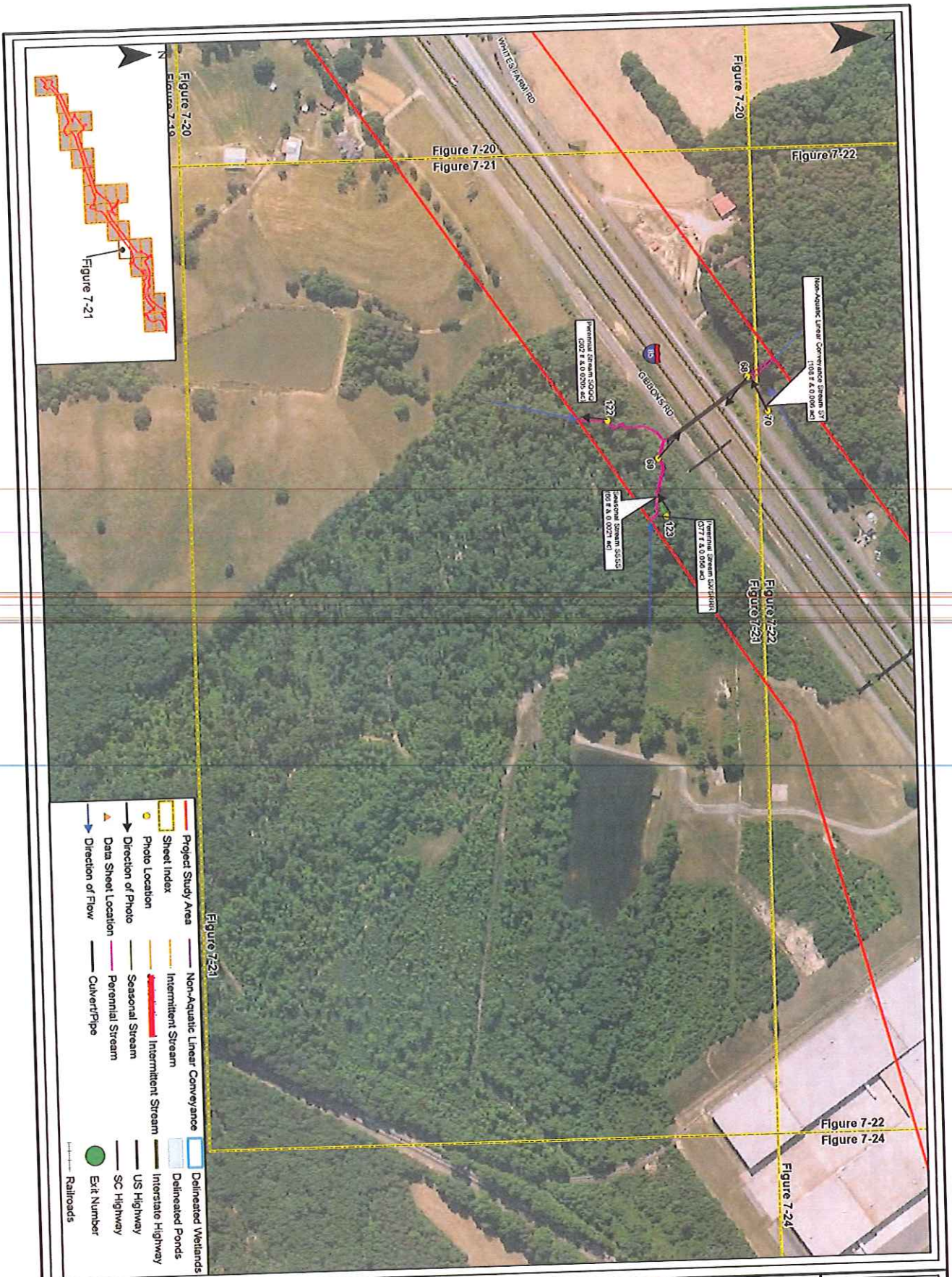
Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points





- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Delineated Ponds
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads

<h1 style="margin: 0;">7-20</h1> <p style="margin: 0;">Figure</p>	<p>Date: Revised March 2017</p> <p>Scale: 0 100 200 Feet</p> <p>Job No.: 6214</p> <p>Drawn By: KMS</p> <p>Checked By: CS</p>	<p style="text-align: center;"> <b>Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)</b> </p> <p style="text-align: center;"> <b>Surface Hydrology Connectivity, Data Forms, and Photo Points</b> </p> <p style="text-align: center;">           Cherokee County, South Carolina         </p>	<p style="text-align: center;"> </p> <p style="text-align: center;">Prepared For:</p>	<p style="text-align: center;"> </p>
---	--	---	---	--------------------------------------



- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- ▲ Data Sheet Location
- Direction of Flow
- Delineated Wetlands
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Exit Number
- Railroad
- Interstate Highway
- US Highway
- SC Highway

Figure  
**7-21**

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Cherokee County,  
South Carolina

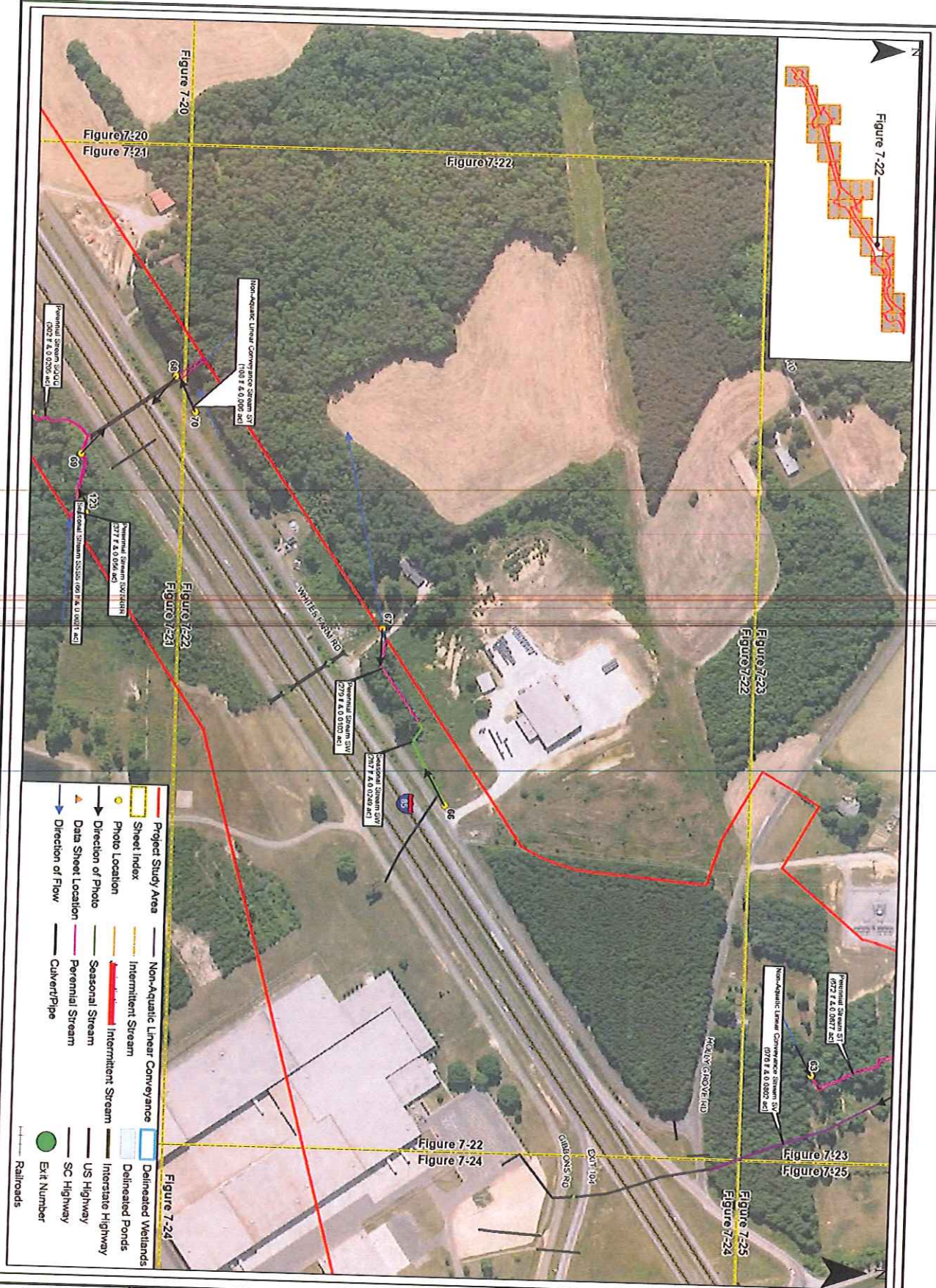
**Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)**

Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

Prepared For:

**SCDOT**





Prepared For:



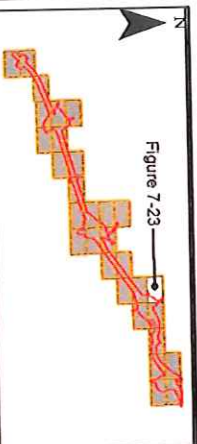
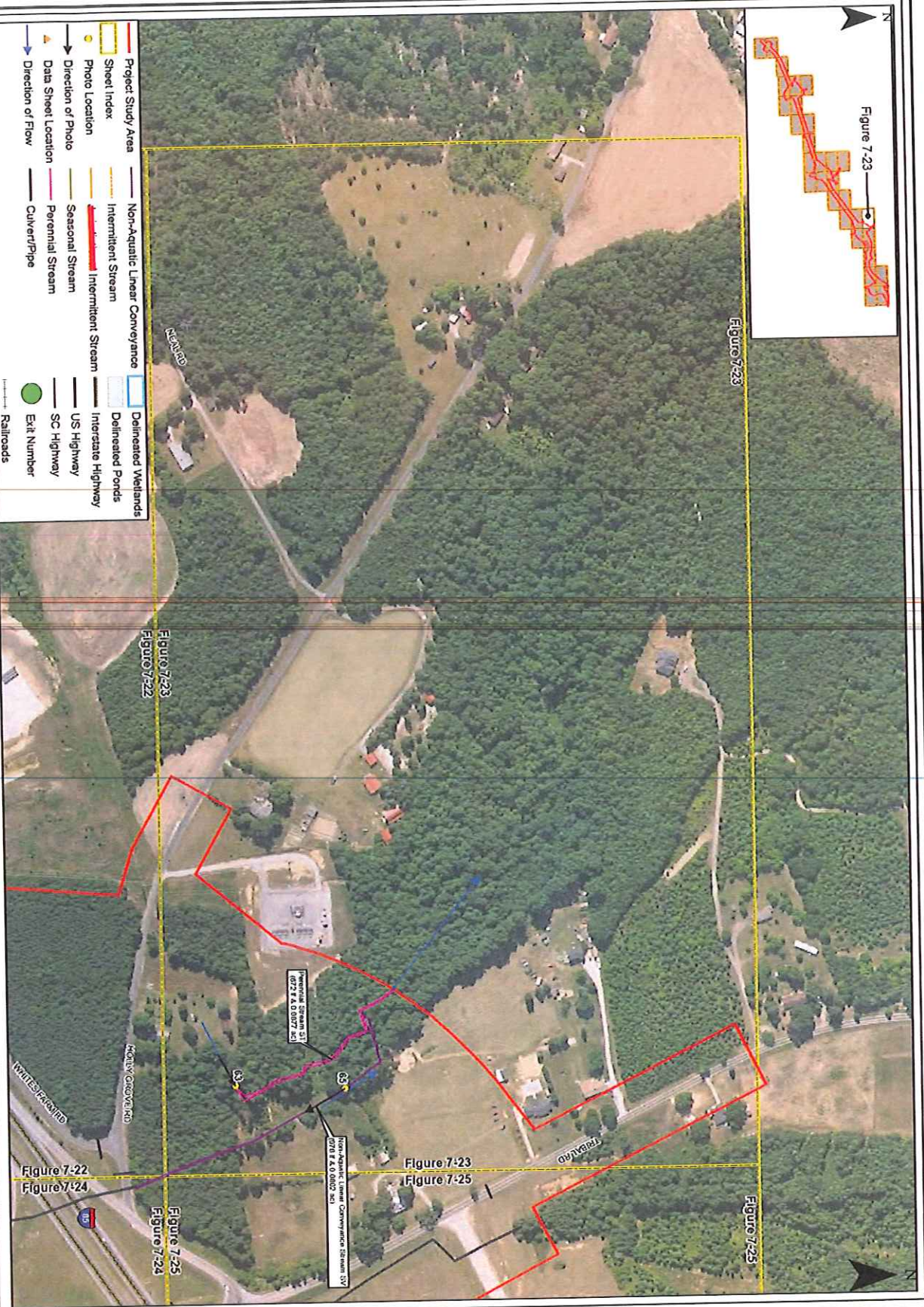
Proposed I-85  
Widening and  
Interchange  
Improvements  
Project  
(Mile Marker  
96 to 106)


Surface Hydrology  
Connectivity, Data  
Forms, and Photo  
Points

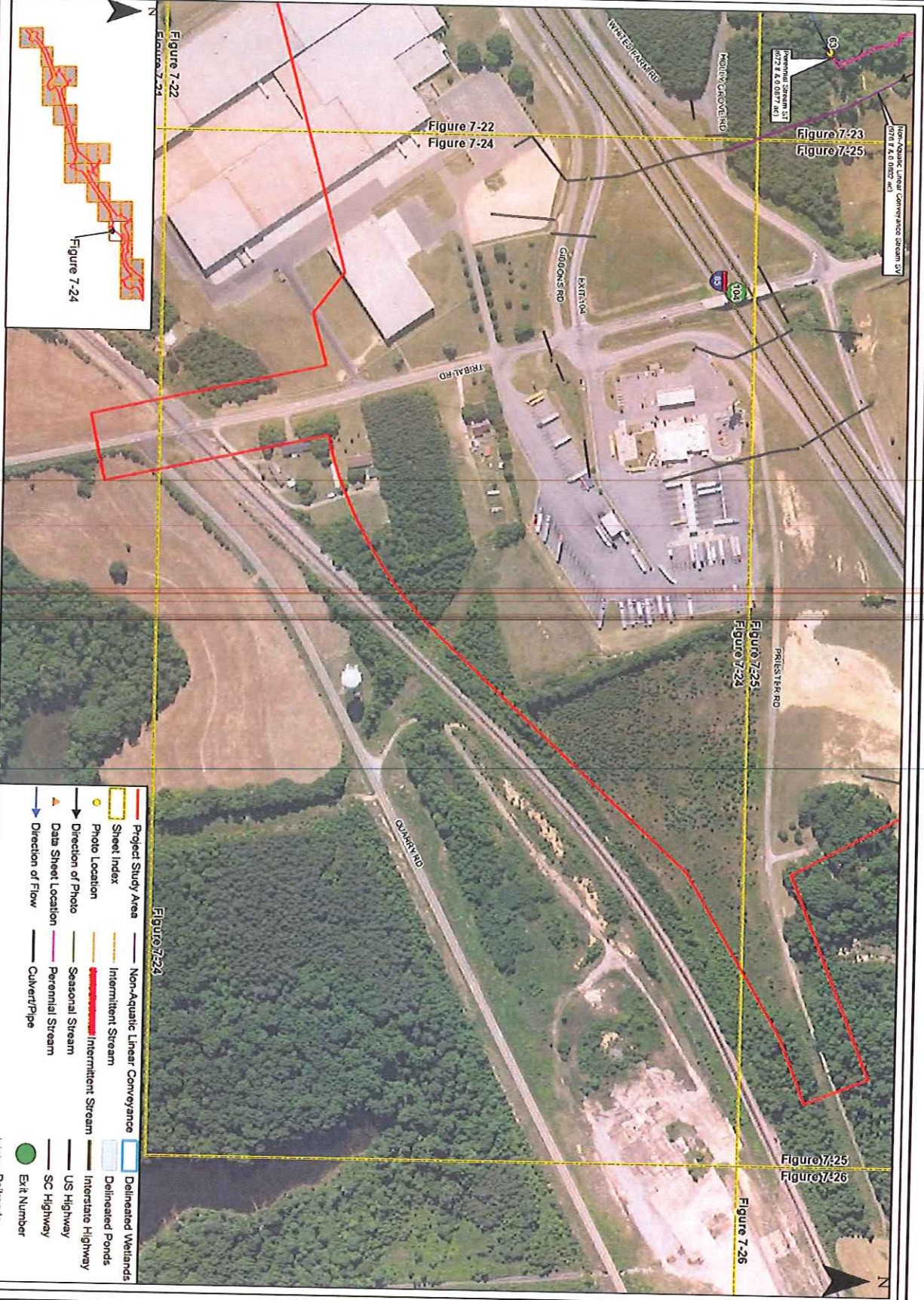
Cherokee County,  
South Carolina

Date: Revised March 2017  
Scale: 0 100 200 Feet  
Job No.: 6214  
Drawn By: KMS  
Checked By: CS

Figure  
7-22



	Prepared For:		<p><b>Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)</b></p> <p>Surface Hydrology Connectivity, Data Forms, and Photo Points</p> <p>Cherokee County, South Carolina</p>
<p>Date: Revised March 2017</p> <p>Scale: 0 100 200 Feet</p> <p>Job No.: 6214</p> <p>Drawn By: KMS</p> <p>Checked By: CS</p>		<p>Figure 7-23</p>	



- Figure 7-24**
- Project Study Area
  - Sheet Index
  - Photo Location
  - Direction of Photo
  - ▲ Data Sheet Location
  - Direction of Flow
  - Non-Aquatic Linear Conveyance
  - Intermittent Stream
  - Seasonal Stream
  - Intermittent Stream
  - Perennial Stream
  - Culvert/Pipe
  - Delineated Wetlands
  - Interstate Highway
  - US Highway
  - SC Highway
  - Exit Number
  - Railroads

**Figure 7-24**

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

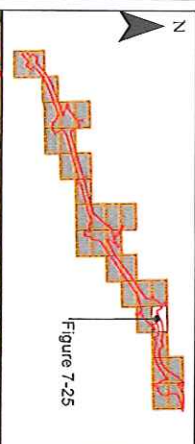
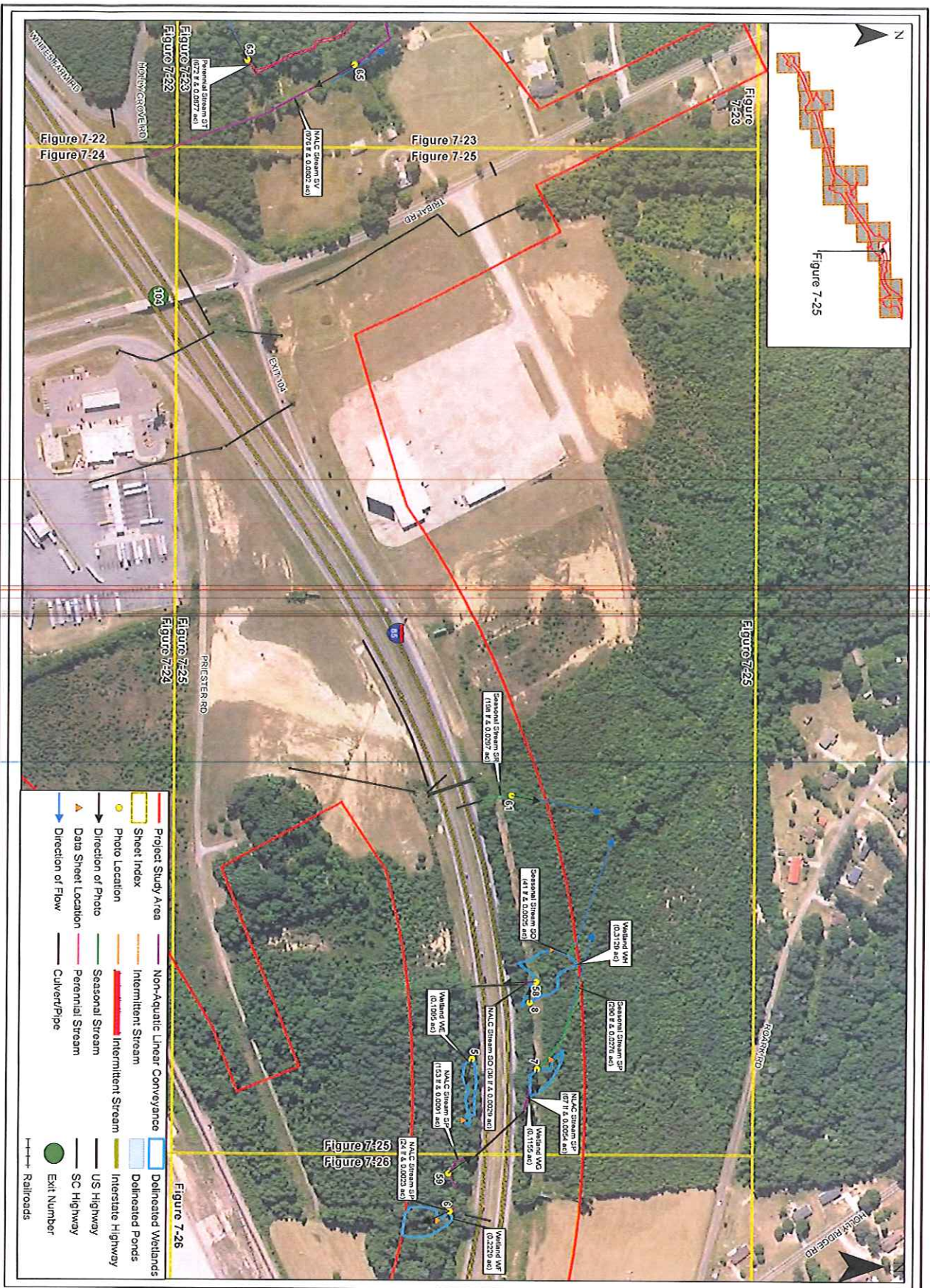
Cherokee County,  
 South Carolina

Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)

Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points



Prepared For:



- Project Study Area
- Sheet Index
- Photo Location
- ▲ Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Intermittent Stream
- Seasonal Stream
- Potential Stream
- Culvert/Pipe
- Delineated Wetlands
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads

**Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)**  
 Surface Hydrology Connectivity, Data Forms, and Photo Points  
 Cherokee County, South Carolina

Prepared For:  




Date: March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS  
**Figure 7-25**

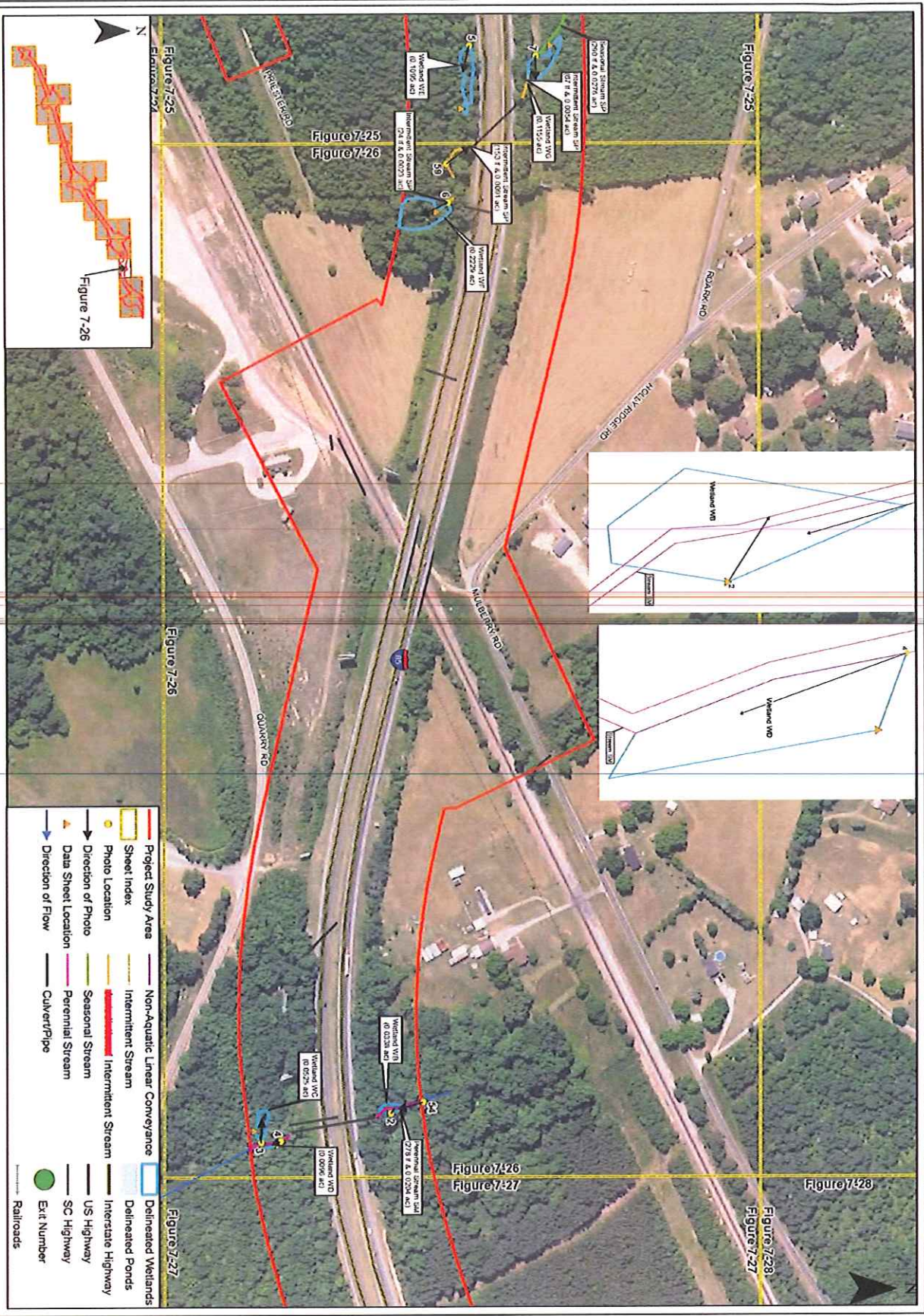


Figure  
**7-26**

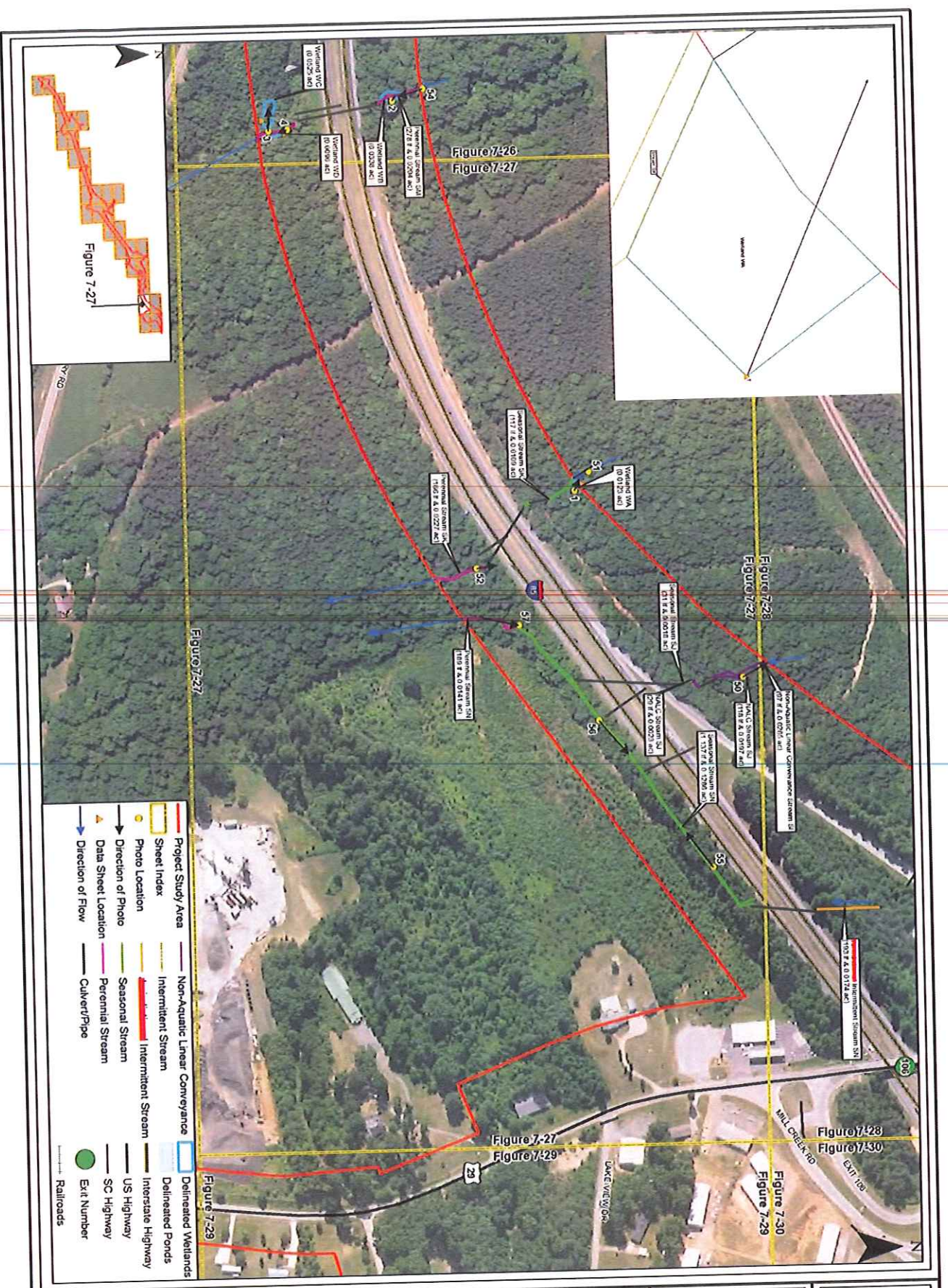
Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

**Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)**  
 Surface Hydrology Connectivity, Data Forms, and Photo Points  
 Cherokee County, South Carolina

Prepared For:

THREE OAKS ENGINEERING





**Figure 7-27**

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

**Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)**  
 Surface Hydrology Connectivity, Data Forms, and Photo Points  
 Cherokee County, South Carolina



Prepared For:



- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- ▲ Data Sheet Location
- Direction of Flow
- Non-Aquatic Linear Conveyance
- Intermittent Stream
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Delineated Ponds
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads

Figure 7-28

Seasonal Stream, SJ  
(1° N & 0.0018 Ad)

NASC Stream, SJ  
(07° N & 0.0005 Ad)

NASC Stream, SJ  
(11° N & 0.0019 Ad)

Seasonal Stream, SJ  
(1,13° N & 0.1296 Ad)

Figure 7-27

Figure 7-29

Figure 7-30

Figure 7-29

Figure 7-30

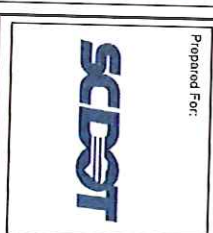
Figure 7-30

Date:	March 2017
Scale:	0 100 200 Feet
Job No.:	6214
Drawn By:	KMS
Checked By:	CS

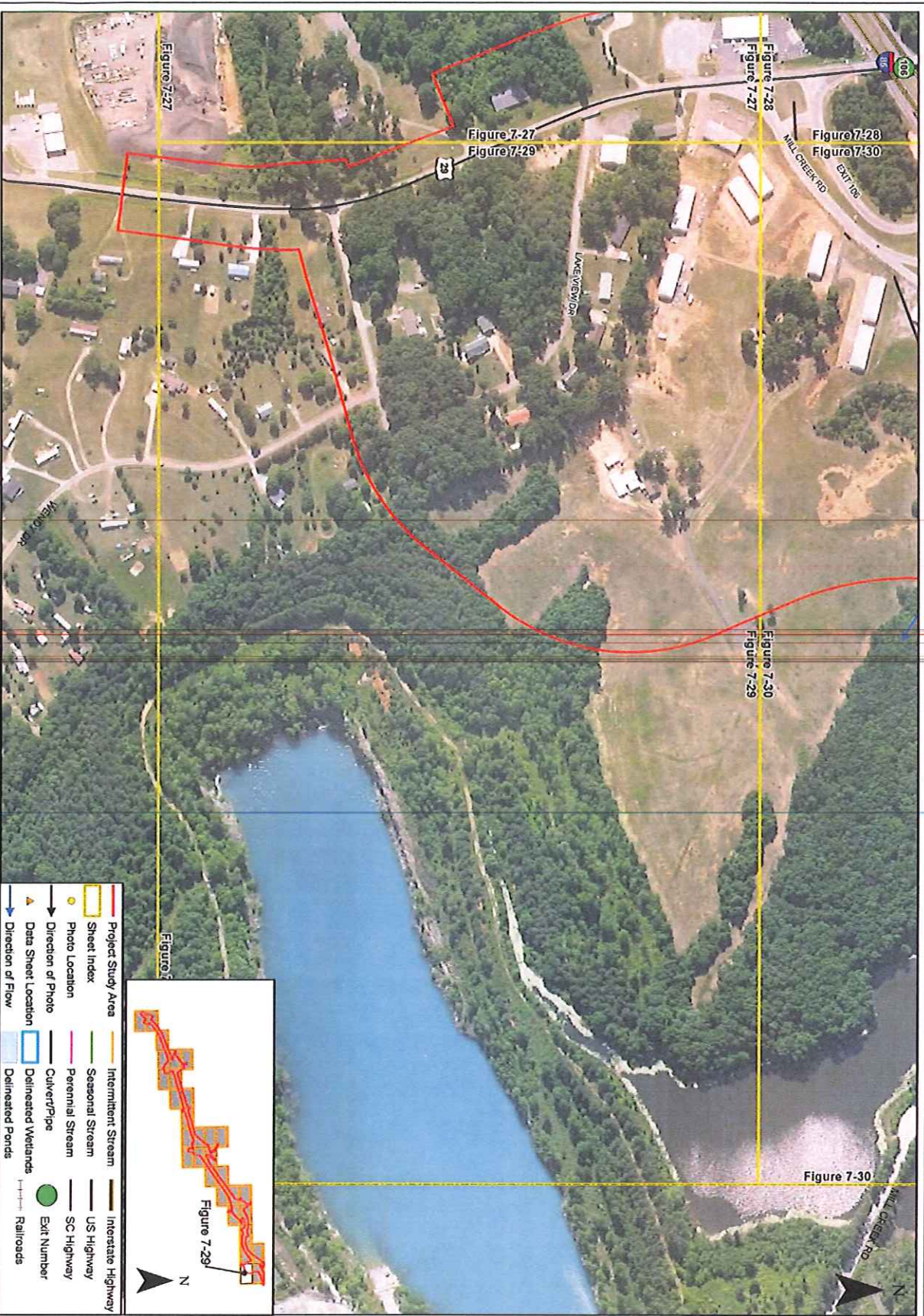
**Proposed I-85 Widening and Interchange Improvements Project (Mile Marker 96 to 106)**

Surface Hydrology Connectivity, Data Forms, and Photo Points

Cherokee County, South Carolina



Prepared For:



- Project Study Area
- Sheet Index
- Photo Location
- Direction of Photo
- Data Sheet Location
- Direction of Flow
- Intermittent Stream
- Seasonal Stream
- Perennial Stream
- Culvert/Pipe
- Delineated Wetlands
- Delineated Ponds
- Interstate Highway
- US Highway
- SC Highway
- Exit Number
- Railroads

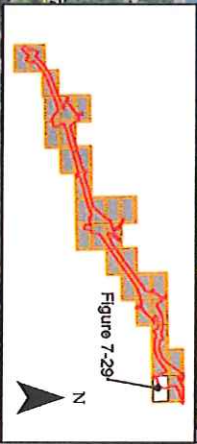


Figure  
7-29

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Job No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Charokee County,  
 South Carolina

Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)

Surface Hydrology,  
 Connectivity, Data  
 Forms, and Photo  
 Points



Prepared For:

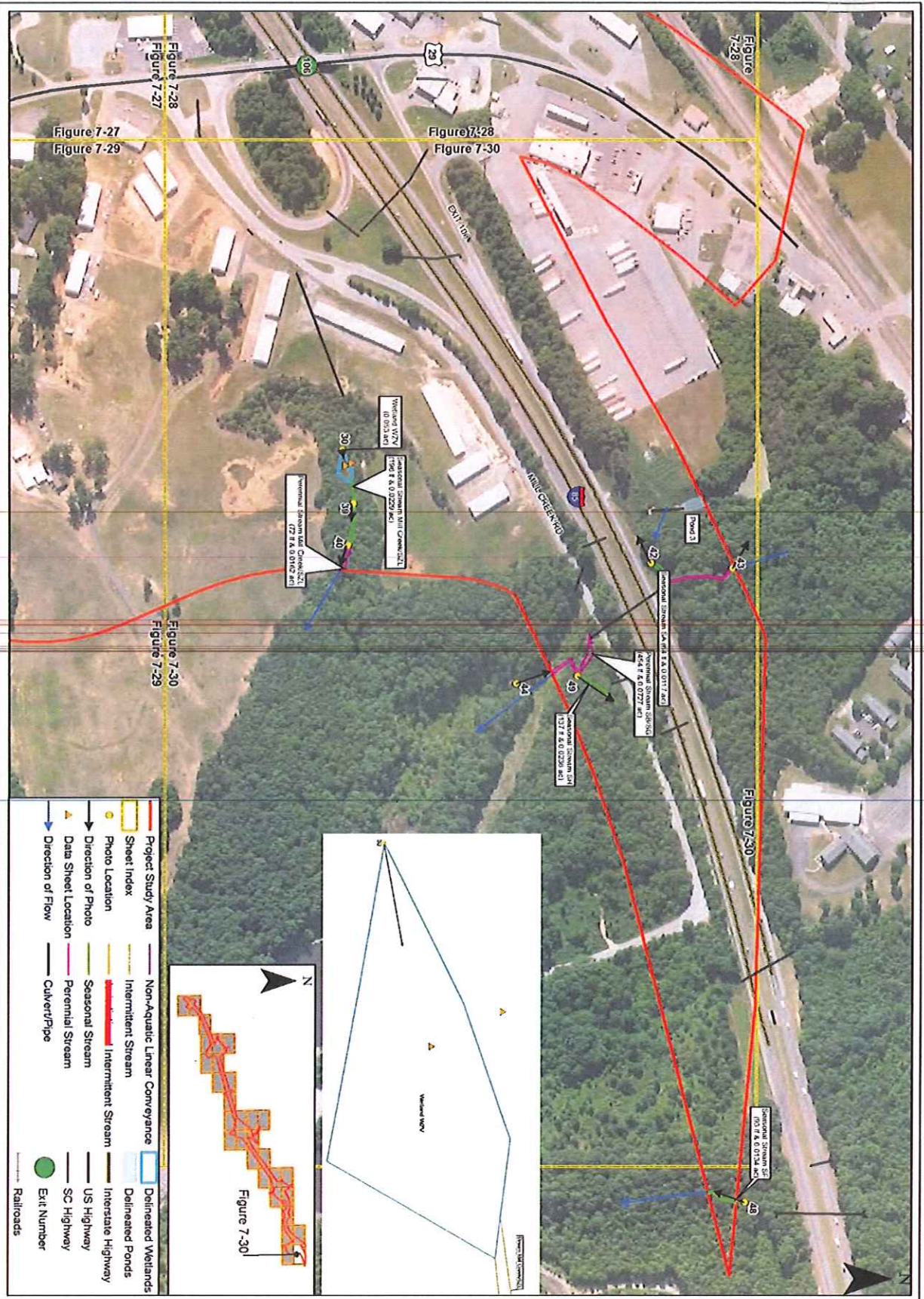


Figure  
7-30

Date: Revised March 2017  
 Scale: 0 100 200 Feet  
 Joe No.: 6214  
 Drawn By: KMS  
 Checked By: CS

Cherokee County,  
 South Carolina

Proposed I-85  
 Widening and  
 Interchange  
 Improvements  
 Project  
 (Mile Marker  
 96 to 106)

Surface Hydrology  
 Connectivity, Data  
 Forms, and Photo  
 Points

