This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION
A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 2, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAC-RD-NE; JD Form 1 of 4; SAC 2003-34999 I-20 Industrial Park Site

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: South Carolina
County/parish/borough: Lee
City: Center coordinates of site (lat/long in degree decimal format): Lat. 34.204569° N, Long. -80.286022° W
Universal Transverse Mercator:

Name of nearest waterbody: Unnamed tributary of Gin Branch
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: The aquatic resource remains confined within the project boundary and does not flow into a TNW.
Name of watershed or Hydrologic Unit Code (HUC): 03040205-02

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
- Office (Desk) Determination. Date:
- Field Determination. Date(s): July 25, 2017

SECTION II: SUMMARY OF FINDINGS
A. RHA SECTION 10 DETERMINATION OF JURISDICTION.
There are no “navigable waters of the U.S.” within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.
Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.
There are no “waters of the U.S.” within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.
   a. Indicate presence of waters of U.S. in review area (check all that apply):  
      - TNWs, including territorial seas
      - Wetlands adjacent to TNWs
      - Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
      - Non-RPWs that flow directly or indirectly into TNWs
      - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - Impoundments of jurisdictional waters
      - Isolated (interstate or intrastate) waters, including isolated wetlands

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. Limits (boundaries) of jurisdiction based on: Pick List, Pick List, Pick List
      Elevation of established OHWM (if known): N/A.

2. Non-regulated waters/wetlands (check if applicable):3
   - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: One isolated wetland, approximately 0.40 acre, was assessed within the review area and determined to be non-

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1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.
jurisdictional. The topographic map depicts this wetland as forested uplands with no blue lines or other potential linear features depicted nearby. The aerials depict the wetland as forested. The NWIs depict the isolated wetland as uplands (U42P). The soil survey maps this isolated wetland as Dothan, which is not hydric, and Goldsboro, which is a partially hydric soil. The entire boundary of this wetland was viewed during the site visit and determined to be completely surrounded by uplands. This wetland, labeled "Non-jurisdictional Wetland C" on the drawing, is located completely on site, and no linear features were observed in or near this wetland. Because this wetland is surrounded by uplands, no surface or shallow subsurface connections from this wetland to any Waters of the US (WOUS) were viewed during the site visit.

This depressional wetland exhibited hydric soils, hydrophytic vegetation, and indicators of hydrology, which satisfied the criteria set forth in the 1987 Wetland Delineation Manual and the Atlantic and Gulf Coastal Plain Regional Supplement. All water located within or draining toward the wetland had no discernible or traceable outfall or connection to any WOUS. Additionally, this wetland was found to be completely surrounded by forested uplands and upland agricultural fields, which further disrupts possible connections to any WOUS. Chemically, this wetland does not affect any WOUS in the absorption/treatment of nutrients, runoff, or pollutants. Physically, the topographic location of this wetland is such that water is retained and eventually percolates through the soil to groundwater only, at an unknown depth, providing little if any stormwater attenuation. Biologically, this wetland is not essential in providing organic carbon in the form of their collective primary productivity to downstream waters, resulting in the nourishment of the downstream food web. Because of the lack of discernible outfall, topography grades and lack of evidence of chemical, physical, or biological connection, this wetland was determined to be isolated, non-jurisdictional.

Several additional potential waters were observed on site. These linear features and ponds were determined to have been excavated out of uplands and are man-made. Therefore, these linear features and ponds were determined to be non-jurisdictional.

**SECTION III: CWA ANALYSIS**

A. **TNWs AND WETLANDS ADJACENT TO TNWs**

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .
   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is “adjacent”: .

B. **CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is

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4 Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for
the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite
and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

   Watershed size: Pick List
   Drainage area: Pick List
   Average annual rainfall: inches
   Average annual snowfall: inches

(ii) Physical Characteristics:

   (a) Relationship with TNW:
      - Tributary flows directly into TNW.
      - Tributary flows through Pick List tributaries before entering TNW.
      - Project waters are Pick List river miles from TNW.
      - Project waters are Pick List river miles from RPW.
      - Project waters are Pick List aerial (straight) miles from TNW.
      - Project waters are Pick List aerial (straight) miles from RPW.
      - Project waters cross or serve as state boundaries. Explain: N/A.

      Identify flow route to TNW:
      - Tributary stream order, if known:

   (b) General Tributary Characteristics (check all that apply):
      - Tributary is: Natural
      - Artificial (man-made). Explain:
      - Manipulated (man-altered). Explain:

      Tributary properties with respect to top of bank (estimate):
      - Average width: feet
      - Average depth: feet
      - Average side slopes: Pick List

      Primary tributary substrate composition (check all that apply):
      - Silts
      - Sands
      - Cobble
      - Gravel
      - Bedrock
      - Vegetation. Type/% cover:
      - Other. Explain:

      Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:
      - Presence of run/riffle/pool complexes. Explain:
      - Tributary geometry: Pick List
      - Tributary gradient (approximate average slope): %

   (c) Flow:
      - Tributary provides for: Pick List
      - Estimate average number of flow events in review area/year: Pick List
      - Describe flow regime:
      - Other information on duration and volume:

      Surface flow is: Pick List. Characteristics:
      - Subsurface flow: Pick List. Explain findings:
      - Dye (or other) test performed:

      Tributary has (check all that apply):
      - Bed and banks
      - OHWM (check all indicators that apply):
      - clear, natural line impressed on the bank
      - the presence of litter and debris

5 Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
6A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where
the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody’s flow
regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
changes in the character of soil
shelving
vegetation matted down, bent, or absent
leaf litter disturbed or washed away
sediment deposition
water staining
other (list):  Discontinuous OHWM.7  Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
High Tide Line indicated by:
Mean High Water Mark indicated by:
ioil or scum line along shore objects
fine shell or debris deposits (foreshore)
physical markings/characteristics
vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:
Identify specific pollutants, if known:

(iv) Biological Characteristics.  Channel supports (check all that apply):
Riparian corridor.  Characteristics (type, average width):
Wetland fringe.  Characteristics:
Habitat for:
Federaally Listed species.  Explain findings:
Fish/spawn areas. Explain findings:
Other environmentally-sensitive species.  Explain findings:
Aquatic/wildlife diversity.  Explain findings:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Wetland size:  acres
Wetland type.  Explain: .

(b) General Flow Relationship with Non-TNW:
Flow is:  Pick List.  Explain: .
Surface flow is:  Pick List
Characteristics:

(c) Wetland Adjacency Determination with Non-TNW:
Directly abutting
Not directly abutting
Discrete wetland hydrologic connection.  Explain: .
Ecological connection.  Explain: .
Separated by berm/barrier.  Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are  Pick List  river miles from TNW.
Project waters are  Pick List  aerial (straight) miles from TNW.
Flow is from:  Pick List.
Estimate approximate location of wetland as within the  Pick List  floodplain.

(ii) Chemical Characteristics:

7Ibid.
Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):
- Riparian buffer. Characteristics (type, average width): .
- Vegetation type/percent cover. Explain: .
- Habitat for:
  - Federally Listed species. Explain findings: .
  - Fish/spawn areas. Explain findings: .
  - Other environmentally-sensitive species. Explain findings: .
- Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)
   All wetland(s) being considered in the cumulative analysis: Pick List
   Approximately (_______) acres in total are being considered in the cumulative analysis.

   For each wetland, specify the following:

<table>
<thead>
<tr>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW.

Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

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3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
   - TNWs: linear feet width (ft), Or, acres.
   - Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.
   - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .
     - Provide estimates for jurisdictional waters in the review area (check all that apply):
       - Tributary waters: linear feet width (ft).
       - Other non-wetland waters: acres.

3. Non-RPWs that flow directly or indirectly into TNWs.
   - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
     - Provide estimates for jurisdictional waters within the review area (check all that apply):
       - Tributary waters: linear feet width (ft).
       - Other non-wetland waters: acres.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
   - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
   - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
   - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
     - Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
   - Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
     - Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
   - Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
     - Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

8See Footnote # 3.
9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
Demonstrate that impoundment was created from “waters of the U.S.,” or
Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
Demonstrate that water is isolated with a nexus to commerce (see E below).

Explain:

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):10
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: 
☐ Other factors. Explain: 

Identify water body and summarize rationale supporting determination: 

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
☐ Identify type(s) of waters: 
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
☐ Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: 
☐ Other: (explain, if not covered above): Several upland excavated linear features and ponds were observed on site and determined to be non-jurisdictional.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: 
☐ Wetlands: 0.40 a. (Non-jurisdictional Wetland C) acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: 
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall 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: Report by S&ME, Inc.
☐ 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.
☐ 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.

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10 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.
U.S. Geological Survey map(s). Cite scale & quad name: Bishopville West; The topographic map depicts this wetland as forested.

USDA Natural Resources Conservation Service Soil Survey. Citation: Page 15; The soil survey maps wetland "C" as Dothan and Goldsboro.

National wetlands inventory map(s). Cite name: The NWIs map Wetland C as uplands (U42P).

State/Local wetland inventory map(s): .

FEMA/FIRM maps: .

100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

Photographs: Aerial (Name & Date): SCDNR 2006, 99:11201:3; The aerials depict this wetland as forested.

or Other (Name & Date): Site photos provided by S&ME, Inc.


Applicable/supporting case law: .

Applicable/supporting scientific literature: .

Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: One isolated wetland, approximately 0.40 acre, was assessed within the review area and determined to be non-jurisdictional. The topographic map depicts this wetland as forested uplands with no blue lines or other potential linear features depicted nearby. The aerials depict the wetland as forested. The NWIs depict the isolated wetland as uplands (U42P). The soil survey maps this isolated wetland as Dothan, which is not hydric, and Goldsboro, which is a partially hydric soil. The entire boundary of this wetland was viewed during the site visit and determined to be completely surrounded by uplands. This wetland, labeled "Non-jurisdictional Wetland C" on the drawing, is located completely on site, and no linear features were observed in or near this wetland. Because this wetland is surrounded by uplands, no surface or shallow subsurface connections from this wetland to any Waters of the US (WOUS) were viewed during the site visit.

Several additional potential waters were observed on site. These linear features and ponds were determined to have been excavated out of uplands and are man-made. Therefore, these linear features and ponds were determined to be non-jurisdictional.
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 2, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAC-RD-NE; JD Form 2 of 4; SAC 2003-34999 I-20 Industrial Park Site

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
   State: South Carolina   County/parish/borough: Lee  City:
   Center coordinates of site (lat/long in degree decimal format): Lat. 34.204569° N, Long. -80.286022° W.
   Universal Transverse Mercator:
   Name of nearest waterbody: Gin Branch
   Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Black River
   Name of watershed or Hydrologic Unit Code (HUC): 03040205-02
   Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
   Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
   - Office (Desk) Determination. Date:
   - Field Determination. Date(s): July 25, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.
   There are no “navigable waters of the U.S.” within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.
   There are “waters of the U.S.” within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

   1. Waters of the U.S.
      a. Indicate presence of waters of U.S. in review area (check all that apply): 1
         - TNWs, including territorial seas
         - Wetlands adjacent to TNWs
         - Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
         - Non-RPWs that flow directly or indirectly into TNWs
         - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
         - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
         - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
         - Impoundments of jurisdictional waters
         - Isolated (interstate or intrastate) waters, including isolated wetlands

      b. Identify (estimate) size of waters of the U.S. in the review area:
         Non-wetland waters: (Jurisdictional Tributary 1) 1,715 linear feet: 6 width (ft) and/or 0.24 acres.
         Wetlands: (Jurisdictional Wetland A) 3.79 acres.

         Elevation of established OHWM (if known): N/A.

   2. Non-regulated waters/wetlands (check if applicable):3
      - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
      Explain:

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1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1; only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: 
Summarize rationale supporting determination: 

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”: 

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under Rapanos have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offshore. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: Pick List ;
Drainage area: Pick List
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:

☐ Tributary flows directly into TNW.
☐ Tributary flows through Pick List tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW: .
Tributary stream order, if known: .

4 Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
5 Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
(b) General Tributary Characteristics (check all that apply):

Tributary is: □ Natural
□ Artificial (man-made). Explain:.
□ Manipulated (man-altered). Explain:.

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: Pick List.

Primary tributary substrate composition (check all that apply):
□ Silts
□ Sands
□ Concrete
□ Cobbles
□ Gravel
□ Muck
□ Bedrock
□ Vegetation. Type/% cover:
□ Other. Explain:.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:.
Presence of run/riffle/pool complexes. Explain:.
Tributary geometry: Pick List.
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: Pick List
Estimate average number of flow events in review area/year: Pick List
Describe flow regime:.
Other information on duration and volume:.

Surface flow is: Pick List. Characteristics:.
Subsurface flow: Pick List. Explain findings:.
□ Dye (or other) test performed:.

Tributary has (check all that apply):
□ Bed and banks
□ OHWM6 (check all indicators that apply):
□ clear, natural line impressed on the bank
□ changes in the character of soil
□ leaf litter matted down, bent, or absent
□ sediment deposition
□ water staining
□ other (list):
□ Discontinuous OHWM.7 Explain:.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
□ High Tide Line indicated by:
□ Mean High Water Mark indicated by:
□ oil or scum line along shore objects
□ fine shell or debris deposits (foreshore)
□ physical markings/characteristics
□ tidal gauges
□ other (list):

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:.
Identify specific pollutants, if known:.

(iv) Biological Characteristics. Channel supports (check all that apply):
□ Riparian corridor. Characteristics (type, average width):.
□ Wetland fringe. Characteristics:.

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6A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody’s flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

7Ibid.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
   (a) General Wetland Characteristics:
      Properties:
      - Wetland size: acres
      - Wetland type. Explain:
      - Wetland quality. Explain:
      Project wetlands cross or serve as state boundaries. Explain:

   (b) General Flow Relationship with Non-TNW:
      Flow is: Pick List. Explain:
      Surface flow is: Pick List
      Characteristics:
      Subsurface flow: Pick List. Explain findings:
      Dye (or other) test performed:

   (c) Wetland Adjacency Determination with Non-TNW:
      - Directly abutting
      - Not directly abutting
      Discrete wetland hydrologic connection. Explain:
      Ecological connection. Explain:
      Separated by berm/barrier. Explain:

   (d) Proximity (Relationship) to TNW
      Project wetlands are Pick List river miles from TNW.
      Project waters are Pick List aerial (straight) miles from TNW.
      Flow is from: Pick List.
      Estimate approximate location of wetland as within the Pick List floodplain.

(ii) Chemical Characteristics:
      Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
      Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):
      - Riparian buffer. Characteristics (type, average width):
      - Vegetation type/percent cover. Explain:
      - Habitat for:
        - Federally Listed species. Explain findings:
        - Fish/spawn areas. Explain findings:
        - Other environmentally-sensitive species. Explain findings:
        - Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)
   All wetland(s) being considered in the cumulative analysis: Pick List
   Approximately ( ) acres in total are being considered in the cumulative analysis.

   For each wetland, specify the following:
   - Directly abuts? (Y/N)
   - Size (in acres)
   - Directly abuts? (Y/N)
   - Size (in acres)
C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

• Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
• Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
• Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
• Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
   - TNWs: linear feet width (ft), Or, acres.
   - Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.
   - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: The tributary located along the western boundary of the site was determined to have perennial flow based on a review of the aerials, topographic map, soil survey, NWIs, and information submitted by the agent. The aerials and topographic map depict this tributary as a shaded linear feature and a solid blue line, respectively. The NWIs map this tributary as palustrine forested wetlands (PFO1B). The soil survey maps this tributary as Myatt-Paxville complex, which is a hydric soil. Information submitted by the agent shows that this tributary has flow indicators such as a sinuous channel within bed and banks, a firm sandy bottom, and wrack lines. This tributary, named Gin Branch, originates north of the tract and continues southeast where it flows into the Black River, a TNW.
   - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):
Tributary waters: Jurisdictional Tributary 1) 1,715 linear feet width (ft).
Other non-wetland waters: acres.
Identify type(s) of waters:

3. Non-RPWs\(^8\) that flow directly or indirectly into TNWs.
- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters:

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Jurisdictional Wetland A, located along the western boundary of the site, was determined to be jurisdictional based on a review of the aerials, topo map, soil survey, and NWIs. The topo map depicts this wetland as forested with a solid blue line intersecting this wetland. The aerials depict this wetland as forested. The soil survey maps this wetland as Myatt-Paxville, which is a hydric soil. The NWIs map this wetland and the abutting tributary as palustrine forested wetlands (PFO1B).
- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: (Jurisdictional Wetland A) 3.79 acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.\(^9\)
- As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
- Demonstrate that impoundment was created from “waters of the U.S.” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

Explain:

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):\(^10\)
- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

Identify water body and summarize rationale supporting determination:

\(^8\)See Footnote # 3.
\(^9\) To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
\(^10\) Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.
Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: ______ linear feet width (ft).
- Other non-wetland waters: ______ acres.
- Identify type(s) of waters: ______.
- Wetlands: ______ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
- Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: ______.
- Other: (explain, if not covered above): ______.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): ______ linear feet width (ft).
- Lakes/ponds: ______ acres.
- Other non-wetland waters: ______ acres. List type of aquatic resource: ______.
- Wetlands: ______ acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): ______ linear feet, ______ width (ft).
- Lakes/ponds: ______ acres.
- Other non-wetland waters: ______ acres. List type of aquatic resource: ______.
- Wetlands: ______ acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall 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: Report by S&ME, Inc.
- 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.
- Data sheets prepared by the Corps: ______.
- Corps navigable waters’ study: ______.
- USGS NHID data: ______.
- USGS 8 and 12 digit HUC maps: ______.
- U.S. Geological Survey map(s). Cite scale & quad name: Bishopville West; The topographic map depicts this wetland as forested. The tributary is depicted as a solid blue line.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Page 15; The soil survey maps Jurisdictional Wetland "A" and the abutting tributary as Myatt-Paxville, a hydric soil.
- National wetlands inventory map(s). Cite name: The NWIs map Jurisdictional Wetland A and the abutting tributary as palustrine forested wetlands (PFO1B).
- State/Local wetland inventory map(s): ______.
- FEMA/FIRM maps: ______.
- 100-year Floodplain Elevation is: ______ (National Geodetic Vertical Datum of 1929).
- Photographs: Aerial (Name & Date): SCDNR 2006, 99:11201:3; The aerials depict this wetland as forested. or Other (Name & Date): Site photos provided by S&ME, Inc.
- Applicable/supporting case law: ______.
- Applicable/supporting scientific literature: ______.
- Other information (please specify): ______.

B. ADDITIONAL COMMENTS TO SUPPORT JD: The tributary located along the western boundary of the site was determined to have perennial flow based on a review of the aerials, topographic map, soil survey, NWIs, and information submitted by the agent. The aerials and topographic map depict this tributary as a shaded linear feature and a solid blue
line, respectively. The NWIs map this tributary as palustrine forested wetlands (PFO1B). The soil survey maps this tributary as Myatt-Paxville complex, which is a hydric soil. Information submitted by the agent shows that this tributary has flow indicators such as a sinous channel within bed and banks, a firm sandy bottom, and wrack lines. This tributary, named Gin Branch, originates north of the tract and continues southeast where it flows into the Black River, a TNW.

Jurisdictional Wetland A, located along the western boundary of the site, was determined to be jurisdictional based on a review of the aerials, topo map, soil survey, and NWIs. The topo map depicts this wetland as forested with a solid blue line intersecting this wetland. The aerials depict this wetland as forested. The soil survey maps this wetland as Myatt-Paxville, which is a hydric soil. The NWIs map this wetland and the abutting tributary as palustrine forested wetlands (PFO1B).
This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 2, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAC-RD-NE; JD Form 3 of 4; SAC 2003-34999 I-20 Industrial Park Site

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
- State: South Carolina
- County/parish/borough: Lee
- City: 
- Center coordinates of site (lat/long in degree decimal format): Lat. 34.204569° N, Long. -80.286022° W
- Universal Transverse Mercator:
  - Name of nearest waterbody: Unnamed tributary of Gin Branch
  - Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Black River
  - Name of watershed or Hydrologic Unit Code (HUC): 03040205-02
  - Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
  - Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
- Office (Desk) Determination. Date:
- Field Determination. Date(s): July 25, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no “navigable waters of the U.S.” within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. 
  - Explain: 

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are “waters of the U.S.” within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.
   - a. Indicate presence of waters of U.S. in review area (check all that apply): ¹
      - TNWs, including territorial seas
      - Wetlands adjacent to TNWs
      - Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
      - Non-RPWs that flow directly or indirectly into TNWs
      - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - Impoundments of jurisdictional waters
      - Isolated (interstate or intrastate) waters, including isolated wetlands

   - b. Identify (estimate) size of waters of the U.S. in the review area:
      - Non-wetland waters: (Jurisdictional Tributary 2) 120 linear feet: 4 width (ft) and/or 0.01 acres.
      - Wetlands: acres.

   - c. Limits (boundaries) of jurisdiction based on: Established by OHWM., Pick List, Pick List
      - Elevation of established OHWM (if known): N/A.

2. Non-regulated waters/wetlands (check if applicable):³
   - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. 
     - Explain:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.
² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
³ Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1, only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1; otherwise, see Section III.B below.

1. TNW
   Identify TNW: 
   Summarize rationale supporting determination: 

2. Wetland adjacent to TNW
   Summarize rationale supporting conclusion that wetland is “adjacent”: 

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under Rapanos have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e., tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody4 is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

   (i) General Area Conditions:
       Watershed size: Pick List 
       Drainage area: Pick List 
       Average annual rainfall: inches
       Average annual snowfall: inches

   (ii) Physical Characteristics:
        (a) Relationship with TNW:
            ☐ Tributary flows directly into TNW.
            ☐ Tributary flows through Pick List tributaries before entering TNW.

            Project waters are Pick List river miles from TNW.
            Project waters are Pick List river miles from RPW.
            Project waters are Pick List aerial (straight) miles from TNW.
            Project waters are Pick List aerial (straight) miles from RPW.
            Project waters cross or serve as state boundaries. Explain: N/A.

            Identify flow route to TNW5: .
            Tributary stream order, if known: .

4 Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
5 Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
(b) General Tributary Characteristics (check all that apply):

Tributary is:
- [ ] Natural
- [ ] Artificial (man-made). Explain:  
- [ ] Manipulated (man-altered). Explain:  

Tributary properties with respect to top of bank (estimate):
- Average width: ___ feet
- Average depth: ___ feet
- Average side slopes: Pick List.

Primary tributary substrate composition (check all that apply):
- [ ] Silts
- [ ] Sands
- [ ] Concrete
- [ ] Cobbles
- [ ] Gravel
- [ ] Muck
- [ ] Bedrock
- [ ] Vegetation. Type/% cover: 
- [ ] Other. Explain: 

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: 

Presence of run/riffle/pool complexes. Explain: 

Tributary geometry: Pick List.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

(c) Flow:

Tributary provides for: Pick List

Estimate average number of flow events in review area/year: Pick List

Describe flow regime: 

Other information on duration and volume: 

Surface flow is: Pick List. Characteristics: 

Subsurface flow: Pick List. Explain findings: 

Tributary has (check all that apply):
- [ ] Bed and banks
- [ ] OHWM\(^6\) (check all indicators that apply):
  - [ ] clear, natural line impressed on the bank
  - [ ] changes in the character of soil
  - [ ] vegetation matted down, bent, or absent
  - [ ] leaf litter disturbed or washed away
  - [ ] sediment deposition
  - [ ] water staining
  - [ ] other (list): 
- [ ] Discontinuous OHWM.\(^7\) Explain: 

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- [ ] High Tide Line indicated by: 
- [ ] Mean High Water Mark indicated by:
  - [ ] oil or scum line along shore objects
  - [ ] fine shell or debris deposits (foreshore)
  - [ ] physical markings/characteristics
  - [ ] tidal gauges
  - [ ] other (list): 

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: 

Identify specific pollutants, if known: 

(iv) Biological Characteristics. Channel supports (check all that apply):
- [ ] Riparian corridor. Characteristics (type, average width): 
- [ ] Wetland fringe. Characteristics: 

\(^6\)A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody’s flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

\(^7\)Ibid.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:
   Properties:
   - Wetland size: acres
   - Wetland type. Explain:
   - Wetland quality. Explain:
   Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:
   Flow is: Pick List. Explain:
   Surface flow is: Pick List
   Characteristics:
   Subsurface flow: Pick List. Explain findings:
   - Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:
   - Directly abutting
   - Not directly abutting
     - Discrete wetland hydrologic connection. Explain:
     - Ecological connection. Explain:
     - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
   Project wetlands are Pick List river miles from TNW.
   Project waters are Pick List aerial (straight) miles from TNW.
   Flow is from: Pick List.
   Estimate approximate location of wetland as within the Pick List floodplain.

(ii) Chemical Characteristics:
   Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
   Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):
   - Riparian buffer. Characteristics (type, average width):
   - Vegetation type/percent cover. Explain:
   - Habitat for:
     - Federally Listed species. Explain findings:
     - Fish/spawn areas. Explain findings:
     - Other environmentally-sensitive species. Explain findings:
     - Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)
   All wetland(s) being considered in the cumulative analysis: Pick List
   Approximately ( ) acres in total are being considered in the cumulative analysis.

   For each wetland, specify the following:

<table>
<thead>
<tr>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
   - TNWs: linear feet width (ft), Or, acres.
   - Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.
   - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: The tributary located near the western boundary of the site was determined to have perennial flow based on a review of the aerials, soil survey, NWIs, and information submitted by the agent. The aerials depict this tributary as a shaded linear feature. This feature is not depicted on the topographic map. The NWIs map this tributary as palustrine forested wetlands (PFO1B). The soil survey maps this tributary as Myatt-Paxville complex, which is a hydric soil. Information submitted by the agent shows that this tributary has perennial flow based on indicators such as an OHWM, a channel within bed and banks and a firm, sandy bottom. This tributary originates within the project boundary and continues south where it flows into Gin Branch, a perennial RPW.
   - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

   Provide estimates for jurisdictional waters in the review area (check all that apply):
Tributary waters: **Jurisdictional Tributary** 2) **120** linear feet 4 width (ft).

Other non-wetland waters: **acres.**

Identify type(s) of waters: 

3. **Non-RPWs** that flow directly or indirectly into TNWs.
   - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - Tributary waters: **linear feet** width (ft).
   - Other non-wetland waters: **acres.**
   - Identify type(s) of waters: 

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: **acres.**

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   - Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: **acres.**

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   - Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: **acres.**

7. **Impoundments of jurisdictional waters.**
   - As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
     - Demonstrate that impoundment was created from “waters of the U.S.,” or
     - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
     - Demonstrate that water is isolated with a nexus to commerce (see E below).

   Explain:

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):**
   - which are or could be used by interstate or foreign travelers for recreational or other purposes.
   - from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
   - which are or could be used for industrial purposes by industries in interstate commerce.
   - Interstate isolated waters. Explain: .
   - Other factors. Explain: .

   Identify water body and summarize rationale supporting determination: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - Tributary waters: **linear feet** width (ft).
   - Other non-wetland waters: **acres.**

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8See Footnote # 3.
9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
10 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.
Identify type(s) of waters:  
- Wetlands:    acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
- Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain:  
- Other: (explain, if not covered above):  

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
- Non-wetland waters (i.e., rivers, streams):  linear feet width (ft).
- Lakes/ponds:   acres.
- Other non-wetland waters:   acres. List type of aquatic resource:  
- Wetlands:   acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):
- Non-wetland waters (i.e., rivers, streams):  linear feet width (ft).
- Lakes/ponds:   acres.
- Other non-wetland waters:   acres. List type of aquatic resource:  
- Wetlands:   acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall 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: Report by S&ME, Inc.
- 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.
- Data sheets prepared by the Corps:  
- Corps navigable waters' study:  
- U.S. Geological Survey Hydrologic Atlas:  
- USGS NH D data:  
- USGS 8 and 12 digit HUC maps:  
- U.S. Geological Survey map(s). Cite scale & quad name: Bishopville West; The topographic map does not depict this tributary.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Page 15; The soil survey maps the tributary as Myatt-Paxville, a hydric soil.
- National wetlands inventory map(s). Cite name: The NWIs map this tributary as palustrine forested wetlands (PFO1B).
- State/Local wetland inventory map(s):  
- FEMA/FIRM maps:  
- 100-year Floodplain Elevation is:  
- Photographs: Aerial (Name & Date): SCDNR 2006, 99:11201:3; The aerials depict this tributary as a shaded linear feature.
- Applicable/supporting case law:  
- Applicable/supporting scientific literature:  
- Other information (please specify):  

B. ADDITIONAL COMMENTS TO SUPPORT JD: The tributary located near the western boundary of the site was determined to have perennial flow based on a review of the aerials, soil survey, NWIs, and information submitted by the agent. The aerials depict this tributary as a shaded linear feature. This feature is not depicted on the topographic map. The NWIs map this tributary as palustrine forested wetlands (PFO1B). The soil survey maps this tributary as Myatt-Paxville complex, which is a hydric soil. Information submitted by the agent shows that this tributary has perennial flow based on indicators such as an OHWM, a channel within bed and banks and a firm, sandy bottom. This tributary originates within the project boundary and continues south where it flows into Gin Branch, a perennial RPW.
This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 2, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAC-RD-NE; JD Form 4 of 4; SAC 2003-34999 I-20 Industrial Park Site

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
   State: South Carolina   County/parish/borough: Lee   City: I-20 Industrial Park Site
   Center coordinates of site (lat/long in degree decimal format): Lat. 34.204569° N, Long. -80.286022° W.
   Universal Transverse Mercator:
   Name of nearest waterbody: Unnamed tributary of Gin Branch
   Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Black River
   Name of watershed or Hydrologic Unit Code (HUC): 03040205-02
   Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
   Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
   Office (Desk) Determination. Date:
   Field Determination. Date(s): July 25, 2017

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

   There are no “navigable waters of the U.S.” within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]
   Waters subject to the ebb and flow of the tide.
   Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

   There are “waters of the U.S.” within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

   1. Waters of the U.S.
      a. Indicate presence of waters of U.S. in review area (check all that apply): 1
         TNWs, including territorial seas
         Wetlands adjacent to TNWs
         Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs
         Non-RPWs that flow directly or indirectly into TNWs
         Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
         Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
         Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
         Impoundments of jurisdictional waters
         Isolated (interstate or intrastate) waters, including isolated wetlands

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: (Jurisdictional Wetland B) 1.54 acres.

   c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Pick List, Pick List
      Elevation of established OHWM (if known): .

   2. Non-regulated waters/wetlands (check if applicable): 3
      Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

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1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
   Identify TNW: .
   Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
   Summarize rationale supporting conclusion that wetland is “adjacent”: .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under Rapanos have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody 4 is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

   (i) General Area Conditions:
      Watershed size: 71,944 acres; HUC 03040205-02
      Drainage area: 170 acres
      Average annual rainfall: 45.33 inches
      Average annual snowfall: 1.7 inches

   (ii) Physical Characteristics:
      (a) Relationship with TNW:
         ☑ Tributary flows directly into TNW.
         ☑ Project waters are 2-5 river miles from TNW.
         ☑ Project waters are 1 (or less) river miles from RPW.
         ☑ Project waters are 2-5 aerial (straight) miles from TNW.
         ☑ Project waters are 1 (or less) aerial (straight) miles from RPW.
         ☑ Project waters cross or serve as state boundaries. Explain: N/A.
      Identify flow route to TNW 5: The unnamed tributary flows into Gin Branch south of the project site. Gin Branch continues flowing southeast where it enters the Black River, a TNW.

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4 Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
5 Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
Tributary stream order, if known: The off-site tributary is a 1st order stream.

(b) General Tributary Characteristics (check all that apply):

Tributary is:  
- [x] Natural
- [ ] Artificial (man-made). Explain: 
- [ ] Manipulated (man-altered). Explain: 

Tributary properties with respect to top of bank (estimate):
- Average width: 5 feet
- Average depth: 3 feet
- Average side slopes: Vertical (1:1 or less).

Primary tributary substrate composition (check all that apply):
- [x] Silts
- [x] Sands
- [ ] Concrete
- [ ] Cobble
- [ ] Gravel
- [ ] Muck
- [ ] Bedrock
- [ ] Vegetation. Type/% cover: 
- [ ] Other. Explain: 

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: According to aerial photography, this 1st order tributary is surrounded by forested wetlands, which indicates that this tributary is relatively stable.


Tributary geometry: Relatively straight. A review of the topographic map reveals that this tributary is relatively straight.

Tributary gradient (approximate average slope): 0-1 %

(c) Flow:
Tributary provides for: Perennial flow

Describe flow regime: The tributary provides year-round flow based on a review of the aerials and topographic map, which depict the tributary as a shaded linear feature and a solid blue line respectively. This tributary originates south of the project site and flows south into Gin Branch, a pRPW which was determined to have perennial flow in JD Form 2 of 4 associated with this JD.

Other information on duration and volume: In addition to being recharged by groundwater, the tributary receives overland sheetflow from the adjacent wetlands and discrete and confined flow from the upstream non-jurisdictional ditch.

Surface flow is: Discrete and confined. Characteristics: Under normal conditions, surface flow is restricted between the bed and banks of the tributary.

Subsurface flow: Unknown. Explain findings: 
- [ ] Dye (or other) test performed: 

Tributary has (check all that apply):
- [x] Bed and banks
- [ ] OHWM\(^6\) (check all indicators that apply):
  - [x] the presence of litter and debris
  - [ ] destruction of terrestrial vegetation
  - [ ] the presence of wrack line
  - [ ] sediment sorting
  - [ ] scour
  - [ ] multiple observed or predicted flow events
  - [ ] abrupt change in plant community
  - [ ] other (list):
- [ ] Discontinuous OHWM.\(^7\) Explain: 

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
- [ ] High Tide Line indicated by: 
- [ ] Mean High Water Mark indicated by: 
- [ ] oil or scum line along shore objects
- [ ] fine shell or debris deposits (foreshore)
- [ ] physical markings/characteristics
- [ ] tidal gauges
- [ ] other (list): 

\(^6\)A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody’s flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

\(^7\)Ibid.
(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The tributary is a blackwater system with clear water present. Land use in this watershed is comprised of approximately 59% agricultural land, 24% forested wetland, 9% forested land, 6% urban land, and 1% nonforested wetland. The remaining land uses consist of barren land and water. The SCDHEC Watershed Assessment states that there is a low to moderate potential for growth in this watershed, which contains the City of Bishopville and the Town of Maysville. The remainder of the watershed is rural with agricultural and timberland uses.

Identify specific pollutants, if known: Because a large portion of the watershed is comprised of agricultural land and forested land, the potential exists for herbicides and other pesticides, as well as runoff from land disturbing activities such as plowing and harvesting, to enter the tributary. Because this land use requires regular manipulation of the soils, agricultural activities can create an increase in suspended sediments in the downstream tributaries. According to the SCDHEC website, the downstream monitoring station on the Black River (PD-353) states that aquatic life uses are fully supported. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are only partially supported due to fecal coliform excursions, which are compounded by a significant increasing trend in fecal coliform bacteria. Additionally, a fish consumption advisory has been issued for this portion of the Black River due to the presence of mercury.

(iv) Biological Characteristics. Channel supports (check all that apply):

- Riparian corridor. Characteristics (type, average width): This tributary supports a riparian zone approximately 200 linear feet wide that contributes to the health of the aquatic system by filtering out pollutants and preventing erosion.
- Wetland fringe. Characteristics: The entire reach of this tributary is located within a wetland system.
- Habitat for:
  - Federally Listed species. Explain findings: .
  - Fish/spawn areas. Explain findings: .
  - Other environmentally-sensitive species. Explain findings: .
  - Aquatic/wildlife diversity. Explain findings: This tributary and the adjacent wetlands provide important aquatic habitat for wildlife and a travel corridor for aquatic fauna.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:
- Wetland size: (Jurisdictional Wetland B) 1.54 acres
- Wetland type. Explain: Palustrine emergent
- Wetland quality. Explain: Partially impaired; The project wetland is maintained in an herbaceous state and a non-jurisdictional ditch exits this wetland and provides a direct hydrological connection to the downstream tributary.
- Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent flow. Explain: Jurisdictional Wetland B flows into the downstream tributary during and after major storm events and during the wetter months of the year.

Surface flow is: Discrete and confined

Characteristics: Flow from Jurisdictional Wetland B continues south into several non-jurisdictional ditches and linear stormwater ponds (non-jurisdictional ponds) prior to entering the downstream tributary.

Subsurface flow: Unknown. Explain findings: .
- Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
  - Discrete wetland hydrologic connection. Explain: The Jurisdictional Wetland B has a direct hydrological connection to the downstream perennial RPW via non-jurisdictional ditches and linear stormwater ponds that are also non-jurisdictional.

- Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are 2-5 river miles from TNW.
Project waters are 2-5 aerial (straight) miles from TNW.
Flow is from: Wetland to navigable waters.
Estimate approximate location of wetland as within the 100 - 500-year floodplain.

(ii) Chemical Characteristics:
Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water observed on the surface of Jurisdictional Wetland B was clear with no oily film present. Land use in this watershed is comprised of approximately 59% agricultural land, 24% forested wetland, 9% forested land, 6% urban land, and 1% nonforested wetland. The remaining land uses consist of barren land and water. The SCDHEC Watershed Assessment states that there is a low to moderate potential for growth in this watershed, which contains the City of Bishopville and the Town of Maysville. The remainder of the watershed is rural with agricultural and timberland uses.

Identify specific pollutants, if known: Because a large portion of the watershed is comprised of agricultural land and forested land, the potential exists for herbicides and other pesticides, as well as runoff from land disturbing activities such as plowing and harvesting, to enter the tributary. Because this land use requires regular manipulation of the soils, agricultural activities can create an increase in suspended sediments in the downstream tributaries. According to the SCDHEC website, the downstream monitoring station on the Black River (PD-353) states that aquatic life uses are fully supported. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are only partially supported due to fecal coliform excursions, which are compounded by a significant increasing trend in fecal coliform bacteria. Additionally, a fish consumption advisory has been issued for this portion of the Black River due to the presence of mercury.

(iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: A data point taken by the agent within Jurisdictional Wetland B determined that the dominant vegetation is OBL and FACW.
- Habitat for:
- Federally Listed species. Explain findings:
- Fish/spawn areas. Explain findings:
- Other environmentally-sensitive species. Explain findings:
- Aquatic/wildlife diversity. Explain findings: The wetland is providing important aquatic habitat and diversity.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 4
Approximately (12.14) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<table>
<thead>
<tr>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>1.54</td>
<td>Y</td>
<td>3.6</td>
</tr>
<tr>
<td>Y</td>
<td>1.0</td>
<td>Y</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Summarize overall biological, chemical and physical functions being performed: The off-site perennial RPW, an unnamed tributary of Gin Branch, and its adjacent wetlands are providing important biological, chemical, and physical functions. According to the SCDHEC Watershed Assessment, this watershed is comprised of approximately 59% agricultural land, 24% forested wetland, 9% forested land, 6% urban land, and 1% nonforested wetland. The remaining land uses consist of barren land and water. Due to the predominance of agricultural land use and silvicultural land use in the watershed, herbicides and other pesticides as well as sediment from soil manipulation activities are likely to enter the tributary and downstream TNW. This tributary, together with its adjacent wetlands, act as a catch basin to help filter out pollutants from the neighboring uplands and to hold runoff prior to it flowing downstream into the TNW. Besides the obvious functions of stormwater attenuation, absorption, and overstory biomass input into the food web, the onsite wetland provides a uniquely important ecological connection to other adjacent wetlands and the perennial RPW. The normal movement of aquatic fauna, which is a criteria of the natural hydrologic condition, is expressively obvious in the current proximal location. Both the on-site wetland and the wetlands that directly abut the tributary support a diverse variety of animal species that utilize both the abutting and non-abutting wetlands. Also, it is well documented that wetland and riparian zones are utilized as travel corridors and foraging grounds by a host of game and non-game species. Therefore, the on-site wetland also has an important ecological connection to the adjacent tributary and wetland system. This wetland, in conjunction with the other adjacent wetlands and the perennial RPW, collectively have a significant nexus to the downstream Black River.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent
wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The tributary, which is an unnamed tributary of Gin Branch, and the adjacent wetlands are collectively performing important biological, chemical, and physical functions within a watershed largely comprised of agricultural land use. The biological functions being performed include providing breeding grounds and shelter for aquatic animals and diversifying the plant life within the watershed. As a result, these wetlands supply food sources for a variety of wetland dependent species, such as invertebrates, amphibians, reptiles, and mammals. These wetlands and tributary are essential in providing organic carbons in the form of their collective primary productivity to downstream waters, resulting in the nourishment of the downstream food web. The chemical functions being performed consist of the removal of excess pollutants, which are contributed by runoff from the surrounding uplands, from the downstream TNW. This reduces nitrogen and phosphorus loading downstream and effectively prevents oxygen depletion that can result from eutrophication. Physically, the adjacent wetlands help reduce stormwater flow, and the landscape position of these wetlands and their vegetation prevent soil from eroding and traveling downstream. Not only does this prevent the accumulation of sediment downstream, which can smother fish and other aquatic wildlife, but it also reduces the amount of pollutants downstream because these pollutants are usually transported by sediment particles. These wetlands temporarily store flood waters and reduce downstream peak flows by retaining large amounts of water within the soil and through evapo-transpiration. This helps to maintain seasonal flow volumes. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of the Black River, it has been determined that there is a significant nexus between the relevant reach of the tributary and adjacent wetlands to the downstream TNW.

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
- Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: The tributary located south of the site was determined to have perennial flow based on a review of the aerials, soil survey, and NWIs. The aerials depict this tributary as a shaded linear feature. This feature is depicted as a solid blue line on the topographic map. The NWIs map this tributary as palustrine forested wetlands. The soil survey maps this tributary as Coxville, which is a hydric soil, and Goldsboro, which is partially hydric. This tributary originates south of the project boundary and continues south where it flows into Gin Branch, a perennial RPW.
Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):
- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters:

3. Non-RPWs8 that flow directly or indirectly into TNWs.
- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters:

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: (Jurisdictional Wetland B) 1.54 acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.9
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

Explain:

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):10
- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

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8See Footnote # 3.
9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
10 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.
Identify water body and summarize rationale supporting determination:  

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters:  
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
☐ Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain:  
☐ Other: (explain, if not covered above):  

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:  
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:  
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall 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:  Report by S&ME, Inc.
☒ 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.
☐ 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: Bishopville West; The topographic map depicts Jurisdictional Wetland B as cleared uplands. The offsite tributary is depicted as a solid blue line.  
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Page 15; The soil survey maps Jurisdictional Wetland B as Coxville, a hydric soil.
☒ National wetlands inventory map(s). Cite name: The NWIs map this wetland as uplands (U21).  
☐ State/Local wetland inventory map(s):  
☐ FEMA/FIRM maps:  
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): SCDNR 2006, 99:11201:3; The aerials depict this wetland as cleared.  
or ☒ Other (Name & Date): Site photos provided by S&ME, Inc.
☐ Applicable/supporting case law:  
☐ Applicable/supporting scientific literature:  
☐ Other information (please specify):  

B. ADDITIONAL COMMENTS TO SUPPORT JD: The tributary located south of the site was determined to have perennial flow based on a review of the aerials, soil survey, and NWIs. The aerials depict this tributary as a shaded linear feature.
This feature is depicted as a solid blue line on the topographic map. The NWI maps this tributary as palustrine forested wetlands. The soil survey maps this tributary as Coxville, which is a hydric soil, and Goldsboro, which is partially hydric. This tributary originates south of the project boundary and continues south where it flows into Gin Branch, a perennial RPW. The nonabutting onsite wetland labeled Jurisdictional Wetland B on the plat was determined to have a significant nexus to the downstream TNW in Section IIIC above.