# APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

City: Cayce

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): 14 May 2020

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 1 of 4; SAC-2019-00435 Sandy Run IP Site

# C. PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Lexington County

Center coordinates of site (lat/long in degree decimal format): Lat. 33.8663769947155°, Long. -81.0240942968125°.

Universal Transverse Mercator:

Name of nearest waterbody: Savanny Hunt Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Congaree River

Name of watershed or Hydrologic Unit Code (HUC): 03050110-03

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: May 6, 2020

Field Determination. Date(s): May 15, 2019

## **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.<sup>2</sup> (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: **8,145.89** linear feet: width (ft) and/or **1.87** acres.

JT-1 = 4,354.37 lf; JT-2 = 281.25 lf; JT-3 = 1,212.07 lf; JT-4 = 269.35 lf; JT-5 = 91.2 lf; JT-6 = 1,304.81 lf; JT-7 = 249.72 lf;

JT-8 = 383.12 lf

Wetlands: 47.65 acres.

JW-A = 9.35 acres JW-L = 0.57 acre JW-P = 1.67 acres JW-B = 21.4 acres JW-M = 0.29 acre JW-Q = 4.45 acres JW-J = 8.46 acres JW-N = 0.56 acre JW-R = 0.66 acre

JW-K = 0.05 acre JW-O = 0.19 acre

# c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM.

Elevation of established OHWM (if known):

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> 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).

# 2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> [Including potentially jurisdictional features that upon assessment are NOT waters or wetlands]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: The portion of the site documented on this form includes one upland excavated non-jurisdictional ditch labeled NJF-4. This ditch does not meet the definition of tributary or flow criteria to be a jurisdictional ditch, and also does not meet the three parameters described in the federal wetland definition. While not jurisdictional itself, NJF-4 serves as a direct, continuous surface hydrologic connection between wetland JW-L and the relatively permanent water tributary JT-6.

### 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. It 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.

Characteristics of non-TNWs that flow directly or indirectly into TNW
 Information in this section applies to tributaries JT-1 through JT-8 and their collectively adjacent wetlands.

# (i) General Area Conditions:

Watershed size: 232,276 acres
Drainage area: 1,689 acres
Average annual rainfall: 48 inches
Average annual snowfall: 0 inches

### (ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

<sup>&</sup>lt;sup>3</sup> Supporting documentation is presented in Section III.F.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

|     | ☐ Tributary flows through 2 tributaries before entering TNW.  |
|-----|---|
|     | Project waters are 1 (or less) river miles from TNW.  Project waters are 1 (or less) river miles from RPW.  Project waters are 1 (or less) 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: On-site pRPWs, including pRPW Savany Hunt Creek, flow directly to Savany Hunt Creek, which flows directly into the TNW Congaree River.  Tributary stream order, if known:   |
| (b) | General Tributary Characteristics (check all that apply):  Tributary is:  |
|     | Tributary properties with respect to top of bank (estimate): Average width: 10 feet Average depth: 2 feet Average side slopes: 4:1 (or greater).  |
|     | 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: Stable.  Presence of run/riffle/pool complexes. Explain: N/A.  Tributary geometry: Meandering.  Tributary gradient (approximate average slope): 0-2 %   |
| (c) | Flow: Tributary provides for: Perennial flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Perennial. Other information on duration and volume:   |
|     | Surface flow is: <b>Discrete and confined.</b> Characteristics:   |
|     | Subsurface flow: Unknown. Explain findings:  Dye (or other) test performed:   |
|     | Tributary has (check all that apply):  ☐ Bed and banks ☐ OHWM <sup>6</sup> (check all indicators that apply): ☐ clear, natural line impressed on the bank ☐ 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. Texplain: ☐ Discontinuous OHWM. Explain: ☐ Discontinuous OHWM. Texplain: ☐ Discontinuous OHWM. Te |
|     | If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):  High Tide Line indicated by:  oil or scum line along shore objects fine shell or debris deposits (foreshore)  Mean High Water Mark indicated by:  survey to available datum; physical markings;   |

<sup>&</sup>lt;sup>5</sup> 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. <sup>6</sup>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. <sup>7</sup>Ibid.

|              | <ul> <li>□ physical markings/characteristics</li> <li>□ tidal gauges</li> <li>□ other (list):</li> <li>□ vegetation lines/changes in vegetation type</li> </ul>   | es.                   |
|--------------|---|-----------------------|
| (iii)        | Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed ch. Explain: Water was clear with no oily film. Identify specific pollutants, if known:   | aracteristics, etc.). |
|              | Biological Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width): Mix of forested/non-forested riparian are Width varied from 50 - 200 feet.  | as, much of it        |
|              | <ul> <li>✓ Wetland fringe. Characteristics: Forested and some non-forested fringe wetlands.</li> <li>✓ Habitat for:</li> </ul>  |                       |
|              | ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other project the project of the projec |                       |
| dependent sp | ☐ Other environmentally-sensitive species. Explain findings:  ☐ Aquatic/wildlife diversity. Explain findings: Riparian wetlands provide shelter and forage for cies, including reptiles, amphibians, birds and small mammals.   | wetland               |
| 2. Cha       | racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW  |                       |
| <b>(i)</b>   | Physical Characteristics:  (a) General Wetland Characteristics: Properties: Wetland size: 47.65 acres Wetland type. Explain: Palustrine forested, seasonally flooded. Wetland quality. Explain: Moderate to high based on extent and duration of hydrology. Project wetlands cross or serve as state boundaries. Explain: .   |                       |
| pRPW S       | (b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Seasonally flooded wetlands with contiguous and direct sure avany Hunt Creek and the 7 other unnamed pRPWs in the review area.   |                       |
| but not o    | Surface flow is: Discrete and confined Note that wetlands JW-M, JW-N, JW-O, JW-Q and JW onfined surface connections to pRPW Savany Hunt Creek.  Characteristics:  | -K have discrete      |
|              | Subsurface flow: Unknown. Explain findings:  Dye (or other) test performed:   |                       |
|              | (c) Wetland Adjacency Determination with Non-TNW:  ☐ Directly abutting (Wetlands JW-A, JW-B, JW-J, JW-K, JW-P) ☐ Not directly abutting (Wetlands JW-L, JW-M, JW-N, JW-O, JW-Q, JW-R) ☐ Discrete wetland hydrologic connection. Explain: Wetland JW-L is connected to the relevacewated non-aquatic ditch feature. The remaining non-abutting adjacent wetlands are connected viscous description.   |                       |
| discrete     | ydrologic flow pathways that resemble shallow swales but are not confined to specific channels.     Ecological connection. Explain:   Separated by berm/barrier. Explain:   |                       |
|              | (d) Proximity (Relationship) to TNW  Project wetlands are 1 (or less) river miles from TNW.  Project waters are 1 (or less) 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 v characteristics; etc.). Explain: Identify specific pollutants, if known:  | vatershed             |
| (iii         | Biological Characteristics. Wetland supports (check all that apply):  Riparian buffer. Characteristics (type, average width):  Vegetation type/percent cover. Explain: Forested cover, 90%.  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:   |                       |

|                  | Other environmentally-sensitive species. Explain findings:   |
|------------------|--|
|                  | Aquatic/wildlife diversity. Explain findings: Habitat for small fish and amphibians, as well as foraging habitat |
| for birds and ma | mmals.   |

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

All wetland(s) being considered in the cumulative analysis: 15-20 Approximately (447.65) 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) |
|--|-----------------|-----------------------|-----------------|
| JW-A (Y)                                 | 9.35            | JW-B (Y)              | 21.4            |
| $\mathbf{JW}$ - $\mathbf{J}(\mathbf{Y})$ | 8.46            | JW-K (Y)              | 0.05            |
| JW-L (N)                                 | 0.57            | JW-M (N)              | 0.29            |
| JW-N (N)                                 | 0.56            | JW-O (N)              | 0.19            |
| JW-P (Y)                                 | 1.67            | JW-Q(N)               | 4.45            |
| JW-R (N)                                 | 0.66            | Off-site wetlands (Y) | ~300            |
| Off-site wetlands (N)                    | ~100            |                       |                 |

Summarize overall biological, chemical and physical functions being performed: The forested wetlands which are similarly situated and adjacent (both directly abutting and non-abutting) to the pRPW Savany Hunt Creek and 7 additional unnamed tributaries with similar characteristics are collectively performing functions consistent with the following: Biological – wetlands adjacent to the RPWs include riparian and otherwise bottomland hardwood swamp, as well as patches of emergent marsh. As such, a broad variety of biological functions are being performed which include providing breeding grounds and shelter for aquatic species, foraging areas for wetland dependent species, and in particular, floodplain wetlands provide important spawning areas for species that inhabit the main channel as adults. These wetlands are 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. Chemical – Wetlands in the review area are providing the important collective functions of removal of excess nutrients which are contributed by runoff from the surrounding uplands, reducing nitrogen and phosphorus loading downstream, and effectively preventing oxygen depletion that can result from eutrophication. Physical – Wetlands in the review area are collectively performing flow maintenance functions, including retaining runoff inflow and storing flood water temporarily. Flow maintenance results in the reduction of downstream peak flows (discharge and volume), helping to maintain seasonal flow volumes.

## 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 forested and emergent palustrine wetlands which are similarly situated and adjacent (both directly abutting and non-abutting) to the relevant reach pRPW Savany Hunt Creek and 7 additional unnamed tributaries with similar characteristics are collectively performing functions consistent with the following: Biological – wetlands adjacent to the pRPWs include riparian and bottomland hardwood swamp, as well as patches of emergent marsh wetlands. As such, a broad variety of biological functions are being performed which include providing breeding grounds and shelter for aquatic species, foraging areas for wetland dependent species, and in particular, floodplain wetlands provide important spawning areas for species that inhabit the main channel as adults. These wetlands are 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. Chemical – Wetlands in the review area are providing the important collective functions of removal of excess nutrients which are contributed by runoff from the surrounding uplands, reducing nitrogen and phosphorus loading downstream, and effectively preventing oxygen depletion that can result from eutrophication. Wetland JW-L in this review area has been ditched to drain to pRPW JT-6, which likely has reduced the effectiveness of this wetland's nutrient removal function. According to SCDHEC Bureau of Water, Savany Hunt Creek has one stormwater facility permitted under Clean Water Act Section 402, which drains to the stream system at I-26. Nutrient loads that affect established TMDLs in surrounding area streams where gauges are monitored show elevated levels of fecal coliform draining to the Congaree River, presumably arising from agricultural and urban uses. While there are no monitoring stations on Savany Hunt Creek, the relatively higher water quality (presumed based on less development and higher forested cover) highlights the importance of wetland water residence time in this watershed and drainage area. Physical – Wetlands in the review area are collectively performing flow maintenance functions, including retaining runoff inflow and storing flood water temporarily. Flow maintenance results in the reduction of downstream peak flows (discharge and volume), helping 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 Congaree River, this office has determined that there is a Significant Nexus between the review area Relevant Reaches and their adjacent wetlands and 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): TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres. 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: Subject tributaries are each mapped as blueline streams, exhibit year-round flow, and have been observed by the investigators in the field on numerous occasions, including successive years. 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: **8,145.89** linear feet width (ft). JT-1 = 4,354.37 lf; JT-2 = 281.25 lf; JT-3 = 1,212.07 lf; JT-4 = 269.35 lf; JT-5 = 91.2 lf; JT-6 = 1,304.81 lf; JT-7 = 249.72 lf; JT-8 = 383.12 lfOther non-wetland waters: acres. Identify type(s) of waters: Non-RPWs<sup>8</sup> 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.

width (ft).

Provide estimates for jurisdictional waters within the review area (check all that apply):

acres.

linear feet

Tributary waters:

Other non-wetland waters:

Identify type(s) of waters:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

| 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: Subject wetlands have boundaries which are contiguous with the OHWM of the tributaries to which they are adjacent.                              |
|-----|---|
|     | ■ 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: $40.93$ acres.<br>JW-A = 9.35 acres JW-J = 8.46 acres JW-P = 1.67 acres JW-K = 0.05 acre  |
| 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.  |
|     | Provide acreage estimates for jurisdictional wetlands in the review area: <b>35.43</b> acres.<br>JW-L = $0.57$ acre JW-N = $0.56$ acre JW-Q = $4.45$ acres JW-M = $0.29$ acre JW-O = $0.19$ acre JW-R = $0.66$ acre   |
| 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:  |
| SUC | DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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: |
| Ide | ntify water body and summarize rationale supporting determination:  |
|     | vide 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.   |
|     | N-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.  |

E.

F.

To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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.

|               | 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): The portion of the site documented on this form includes one upland excavated nonional ditch labeled NJF-4. This ditch does not meet the definition of tributary or flow criteria to be a jurisdictional ditch, does not meet the three parameters described in the federal wetland definition. While not jurisdictional itself, NJF-4 serves |
| as a dire     | ct, continuous surface hydrologic connection between wetland JW-L and the relatively permanent water tributary JT-6   |
| facto         | vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (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:                 |
| Prov          | vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such   |
|               | ding 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.  |
| <u>SECTIO</u> | N IV: DATA SOURCES.   |
|               | PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked  |
|               | requested, appropriately reference sources below):  Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: <b>S&amp;ME, Inc.</b> .   |
|               | Data sheets prepared/submitted by or on behalf of the applicant/consultant.  Office concurs with data sheets/delineation report. (Office concurs with report conclusions.)  |
|               | 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: Gaston and Southwest Columbia Quads (rev. 1982). USDA Natural Resources Conservation Service Soil Survey. Citation: SCDNR Soils data overlaid on World Imagery 2017. National wetlands inventory map(s). Cite name: NWI data (via SCDNR) overlaid on World Imagery 2017. State/Local wetland inventory map(s): FEMA/FIRM maps:   |
|               | 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929) Photographs: ☑ Aerial (Name & Date): World Imagery 2017.  or ☑ Other (Name & Date): Site photographs.  |
|               | Previous determination(s). File no. and date of response letter: SAC 2012-90-6JF.   |
|               | Applicable/supporting case law: Applicable/supporting scientific literature:  |
|               | Other information (please specify):   |

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of eight perennial RPW tributaries, including Savany Hunt Creek and seven unnamed pRPWs, and their collection of directly abutting and non-abutting wetlands.

This form also documents one upland excavated non-jurisdictional ditch: NJF-4. This ditch does not meet the definition of tributary or flow criteria to be a jurisdictional ditch, and also does not meet the three parameters described in the federal wetland definition. While not jurisdictional itself, NJF-4 serves as a direct, continuous surface hydrologic connection between wetland JW-L and the pRPW JT-6.

# APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

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

| SE(<br>A. | CTION I: BACKGROUND INFORMATION  REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14 May 2020   |
|-----------|---|
| B.        | DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 2 of 4; SAC-2019-00435 Sandy Run IP Site   |
| C.        | PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Lexington County City: Cayce Center coordinates of site (lat/long in degree decimal format): Lat. 33.8663769947155°, Long81.0240942968125°. Universal Transverse Mercator: Name of nearest waterbody: Congaree River  |
|           | Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Congaree River  Name of watershed or Hydrologic Unit Code (HUC): 03050110-03  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: May 6, 2020 ☐ Field Determination. Date(s): May 15, 2019   |
| SEC<br>A. | CTION II: SUMMARY OF FINDINGS<br>RHA SECTION 10 DETERMINATION OF JURISDICTION.  |
|           | Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew 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:   |
| В.        | CWA SECTION 404 DETERMINATION OF JURISDICTION.  |
| The       | ere 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):  TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters <sup>2</sup> (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: 14.96 acres.  JW-C = 0.83 acre  JW-D = 0.91 acre  JW-E = 10.26 acres  JW-F = 2.96   |
|           | c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual  |

2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> [Including potentially jurisdictional features that upon

Elevation of established OHWM (if known):

assessment are NOT waters or wetlands

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.
<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

establishing the non-abutting adjacency of Wetland JW-F to the TWW Congaree River via Wetland JW-E. serves as a direct, continuous surface hydrologic connection between wetland JW-F and Wetland JW-E, ultimately does not meet the three parameters described in the federal wetland definition. While not jurisdictional itself, UJF-1 labeled NJF-1. This ditch does not meet the definition of tributary or flow criteria to be a jurisdictional ditch, and also Explain: The portion of the site documented on this form includes one upland excavated non-jurisdictional ditch Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

SECTION III: CWA ANALYSIS

### A. TUWS AND WETLANDS ADJACENT TO TUWS

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

ı.

Identify TNW: Congaree River.

and Harbors Act, and thus is a TWW. Summarize rationale supporting determination: The Congaree River is a navigable water pursuant to Section 10 of the Rivers

Wetland adjacent to TNW

JW-D through culverts under Avenue K at the eastern property bounndary. wetland system of which Wetland JW-E is a part, via off-site non-jurisdictional ditch conveynaces which drain wetland JW-C and adjacent to, but not directly abutting, the TVW Congaree River. These two wetlands are each hydrologically connected to the larger adjacent to the TNW Congaree River as a non-abutting wetland. Wetlands JW-C (6.83 acre) and JW-D (6.91 acre) are each Wetland J.W-F (2.96 acres) is hydrologically connected to Wetland J.W-E via non-jurisdictional ditch feature NJF-I and is thus the TWW Congaree River. Wetland JW-E (10.26 acres) is part of a larger wetland system which directly abuts the Congaree River. Summarize rationale supporting conclusion that wetland is "adjacent": Wetland JW-C, JW-D, JW-E, and JW-F are adjacent to

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

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

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

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

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

Information in this section applies to tributaries JT-1 through JT-8 and their collectively adjacent wetlands. Characteristics of non-TNWs that flow directly or indirectly into TNW

Average annual rainfall: inches Drainage area: acres Watershed size: acres General Area Conditions:

Average annual snowfall: 0 inches

Page 2 of 8

| (ii) |     | sical Characteristics:  Relationship with TNW: Tributary flows directly into TNW. Tributary flows through 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:   |
|      |     | Identify flow route to TNW. <sup>5</sup> :  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 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  OHWM.6 (check all indicators that apply):  clear, natural line impressed on the bank 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:  |

<sup>7</sup>Ibid.

<sup>&</sup>lt;sup>5</sup> 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. <sup>6</sup>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.

|    |       |                   | ☐ oil or scum line along shore objects ☐ fine shell or debris deposits (foreshore) ☐ physical markings/characteristics ☐ tidal gauges ☐ other (list):   | ☐ survey to available datum; ☐ physical markings; ☐ vegetation lines/changes in vegetation types. |
|----|-------|-------------------|---|---|
|    | (iii) | Charact<br>Ex     | cal Characteristics: erize tributary (e.g., water color is clear, discolored plain: specific pollutants, if known:  | , oily film; water quality; general watershed characteristics, etc.)                              |
|    | (iv)  | Rij We            | cal Characteristics. Channel supports (check all parian corridor. Characteristics (type, average widt etland fringe. Characteristics: bitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain Aquatic/wildlife diversity. Explain findings:             | h): .   |
| 2. | Cha   | racteris          | tics of wetlands adjacent to non-TNW that flow  | directly or indirectly into TNW   |
|    | (i)   | (a) Ge<br>Pro     | neral Wetland Characteristics:  operties:  Wetland size:  Wetland type. Explain:  Wetland quality. Explain:  oject wetlands cross or serve as state boundaries. Explains  | plain: .  |
|    |       | Flo               | neral Flow Relationship with Non-TNW:  ow is: Pick List. Explain:  rface flow is: Pick List  Characteristics:   |   |
|    |       | Su                | bsurface flow: Pick List. Explain findings:   |   |
|    |       |                   | Directly abutting Not directly abutting Discrete wetland hydrologic connection. Expl Ecological connection. Explain: Separated by berm/barrier. Explain:  | ain:  |
|    |       | Pro<br>Pro<br>Flo | oximity (Relationship) to TNW oject wetlands are Pick List river miles from TNW. oject waters are Pick List aerial (straight) miles from is from: Pick List. timate approximate location of wetland as within the   | m TNW.  |
|    | (ii)  | Charact<br>cha    | cal Characteristics: erize wetland system (e.g., water color is clear, brown aracteristics; etc.). Explain: specific pollutants, if known:  | wn, oil film on surface; water quality; general watershed   |
|    | (iii) | Rij   Ve   Ha     | cal Characteristics. Wetland supports (check all parian buffer. Characteristics (type, average width) getation type/percent cover. Explain: . bitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: . Other environmentally-sensitive species. Explain Aquatic/wildlife diversity. Explain findings: . |   |

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



) acres in total are being considered in the cumulative analysis.

All wetland(s) being considered in the cumulative analysis: Pick List

Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

Approximately (

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 Ad   | ljacent Wetlands.  | Check all that app | ly and provide size estimates in | review area: |
|----|---------------|--------------------|--------------------|----------------------------------|--------------|
|    | TNWs:         | linear feet        | width (ft), Or,    | acres.                           |              |
|    | Wetlands a    | djacent to TNWs: 1 | 14.96 acres.       |                                  |              |
|    | JW-C = 0.83 a | cre JW-D = 0.91    | acre $JW-E = 10.2$ | 6  acres  JW-F = 2.96  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.  Identify type(s) of waters: .  |
| 3.     | Non-RPWs <sup>8</sup> 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: |
|        | 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:   |
| 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 jurisidictional. 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:                  |
| DE SUC | DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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.        |

E.

 <sup>8</sup>See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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.

|                 | 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.   |
| jurise<br>and a | 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): The portion of the site documented on this form includes one upland excavated non-dictional ditch labeled NJF-1. This ditch does not meet the definition of tributary or flow criteria to be a jurisdictional ditch, also does not meet the three parameters described in the federal wetland definition. While not jurisdictional itself, NJF-1 serves direct, continuous surface hydrologic connection between wetland JW-F and Wetland JW-E, ultimately establishing the non-ting adjacency of Wetland JW-F to the TNW Congaree River via Wetland JW-E. |
| 1               | 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:  |
|                 | 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.  |
| SEC'            | TION IV: DATA SOURCES.   |
| A. S            | UPPORTING 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: S&ME, Inc  Data sheets prepared/submitted by or on behalf of the applicant/consultant.  ☐ Office concurs with data sheets/delineation report. (Office concurs with report conclusions.)  ☐ 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 end 12 digit HUC maps   |
|                 | U.S. Geological Survey map(s). Cite scale & quad name: Gaston and Southwest Columbia Quads (rev. 1982).  U.S. Geological Survey map(s). Cite scale & quad name: Gaston and Southwest Columbia Quads (rev. 1982).  USDA Natural Resources Conservation Service Soil Survey. Citation: SCDNR Soils data overlaid on World Imagery 2017.  National wetlands inventory map(s). Cite name: NWI data (via SCDNR) overlaid on World Imagery 2017.  State/Local wetland inventory map(s):  FEMA/FIRM maps:  100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)  Photographs: Aerial (Name & Date): World Imagery 2017.   |
|                 | or ☑ Other (Name & Date): Site photographs.  Previous determination(s). File no. and date of response letter: SAC 2012-90-6JF.  Applicable/supporting case law:  Applicable/supporting scientific literature:  Other information (please specify):   |

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of four wetlands which are adjacent to the TNW Congaree River.

The portion of the site documented on this form also includes one upland excavated non-jurisdictional ditch labeled NJF-1. This ditch does not meet the definition of tributary or flow criteria to be a jurisdictional ditch, and also does not meet the three parameters described in the federal wetland definition. While not jurisdictional itself, NJF-1 serves as a direct, continuous surface hydrologic connection between wetland JW-F and Wetland JW-E, ultimately establishing the non-abutting adjacency of Wetland JW-F to the TNW Congaree River via Wetland JW-E.

# APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

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

| SEC<br>A. | CTION I: BACKGROUND INFORMATION  REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14 May 2020   |
|-----------|---|
| В.        | DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 3 of 4; SAC-2019-00435 Sandy Run IP Site   |
| C.        | PROJECT LOCATION AND BACKGROUND INFORMATION:  State: South Carolina County/parish/borough: Lexington County City: Cayce  Center coordinates of site (lat/long in degree decimal format): Lat. 33.8663769947155°, Long81.0240942968125°.  Universal Transverse Mercator:  Name of nearest waterbody: Congaree River  Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Congaree River  Name of watershed or Hydrologic Unit Code (HUC): 03050110-03  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 |
| D.        | different JD form.  REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  Office (Desk) Determination. Date: May 6, 2020 Field Determination. Date(s): May 15, 2019   |
| SEC       | CTION II: SUMMARY OF FINDINGS   |
| Α.        | RHA SECTION 10 DETERMINATION OF JURISDICTION.   |
|           | re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew 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:  |
| В.        | CWA SECTION 404 DETERMINATION OF JURISDICTION.  |
| The       | ere 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):  TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters <sup>2</sup> (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: 365.85 linear feet: width (ft) and/or 0.03 acres.  Wetlands: 21.02 acres.  JW-I = 10.46 acres  JW-S = 10.56 acres  |
|           |   |

2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> [Including potentially jurisdictional features that upon assessment are NOT waters or wetlands

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM

Elevation of established OHWM (if known):

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.
<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

|     |                                  | Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.  Explain:  |
|-----|----------------------------------|--|
| SEC | CTIO                             | N III: CWA ANALYSIS  |
| A.  | TN                               | Ws AND WETLANDS ADJACENT TO TNWs   |
|     | Sect                             | agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete ion 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 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.  | CH                               | ARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):   |
|     |                                  | section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps rmine whether or not the standards for jurisdiction established under <i>Rapanos</i> have been met.  |
|     | wat<br>mor<br>(per               | agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent ers" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 ths). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round ennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, to Section III.D.4.  |
|     | EPA<br>rela                      | etland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and a regions will include in the record any available information that documents the existence of a significant nexus between a tively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even ugh a significant nexus finding is not required as a matter of law.  |
|     | wat<br>cons<br>ana<br>the<br>the | the waterbody. It is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the erbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must be sider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for sytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite 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 Information in this section applies to tributaries JT-1 through JT-8 and their collectively adjacent wetlands.   |
|     |                                  | (i) General Area Conditions: Watershed size: acres Drainage area: acres Average annual rainfall: inches Average annual snowfall: 0 inches  |
|     |                                  | (ii) Physical Characteristics:  (a) Relationship with TNW:  Tributary flows directly into TNW.  Tributary flows through tributaries before entering TNW.   |
|     |                                  | Project waters are Project waters cross or serve as state boundaries. Explain:   |

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

|       |     | Identify flow route to TNW. <sup>5</sup> :  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 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  OHWM.6 (check all indicators that apply):  clear, natural line impressed on the bank 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:  |
| (iii) | Cha | emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain:  tify specific pollutants, if known:  |

<sup>&</sup>lt;sup>5</sup> 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. <sup>6</sup>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. <sup>7</sup>Ibid.

|    | (iv)  |       | Riparian corridor. Characteristics. Char | teristics (type, average ristics:  es. Explain findings: lain findings: -sensitive species. Ex-         | e width):                      |                                    |   |
|----|-------|-------|--|---|--------------------------------|------------------------------------|---|
| 2. | Cha   | ıract | eristics of wetlands adjac   | ent to non-TNW that   | flow directly or indirectly    | into TNW                           |   |
|    | (i)   |       | General Wetland Character<br>Properties: Wetland size: Wetland type. Explaited Wetland quality. Exp  | cres<br>n: .<br>lain: .   | ries. Explain:  .              |                                    |   |
|    |       | (b)   | General Flow Relationshi<br>Flow is: <b>Pick List</b> . Expla  |   |                                |                                    |   |
|    |       |       | Surface flow is: Pick List<br>Characteristics:   |   |                                |                                    |   |
|    |       |       | Subsurface flow: Pick List  Dye (or other) test  |   |                                |                                    |   |
|    |       | (c)   | Wetland Adjacency Deter Directly abutting Not directly abutting Discrete wetland Ecological connect Separated by bern  | nydrologic connection   |                                |                                    |   |
|    |       | (d)   | Proximity (Relationship) Project wetlands are Pick Project waters are Pick I Flow is from: Pick List. Estimate approximate local   | List river miles from ist aerial (straight) mi  |                                | n.                                 |   |
|    | (ii)  | Cha   | emical Characteristics:<br>racterize wetland system (or<br>characteristics; etc.). Exp<br>ntify specific pollutants, if l  | lain: .   | ar, brown, oil film on surface | e; water quality; general watershe | d |
|    | (iii) |       | Riparian buffer. Character Vegetation type/percent c Habitat for:  Federally Listed specion Fish/spawn areas. Exp Other environmentally Aquatic/wildlife diver   | ristics (type, average over. Explain: . es. Explain findings: . esensitive species. Explain findings: . | width): . xplain findings:     |                                    |   |
| 3. | Cha   | All   | eristics of all wetlands adwetland(s) being considere proximately ( ) acres  | d in the cumulative ar  |                                | alysis.                            |   |
|    | For   | each  | wetland, specify the follow  | ving:   |                                |                                    |   |
|    |       |       | Directly abuts? (Y/N)  | Size (in acres)   | Directly abuts? (Y/N)          | Size (in acres)                    |   |
|    |       |       |  | h .   |                                |                                    |   |

Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

THAT APPLY):

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

| 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.   |

| <br>Ws 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: Tributary JT-9 is mapped as a blueline stream, exhibits year-round flow, and has been observed by the investigators in the field on numerous occasions, including on successive years. |
|---|
| 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: 365.85 linear feet width (ft).  Other non-wetland waters: acres.  |

| 3.         | Non-RPWs <sup>8</sup> 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: The boundary of wetland JW-S is contiguous with the OHWM of pRPW tributary JT-9 Wetland JW-I was originally part of and continuous with Wetland JW-S; the two were formerly one wetland. A section of Old State Road now bisects the historically continuous wetland into the two wetland portions which are mapped the depiction as JW-S and JW-I. Specifically, Wetland JW-I is separated from Wetland JW-S by a road that was constructed through the wetland. Based on jurisdictional determination NWP 2007-428, USEPA and the Corps determined on February 25, 2008, that wetlands separated by an artificial barrier, which is a road in this instance, does not sever the areas from functioning as one wetland. On this basis, Wetland JW-I is a part of Wetland JW-S. |
|            | 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: $21.02$ acres. $JW-I = 10.46$ acres $JW-S = 10.56$ 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 jurisidictional. 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:   |
| DEC<br>SUC | DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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:   |

E.

Identify type(s) of waters:

 <sup>8</sup>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.

|    | 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:   |
|    | 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.   |
|    | <ul> <li>CTION IV: DATA SOURCES.</li> <li>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):</li> <li>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&amp;ME, Inc</li> </ul>  |
|    | Data sheets prepared/submitted by or on behalf of the applicant/consultant.  ☐ Office concurs with data sheets/delineation report. (Office concurs with report conclusions.)  ☐ 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: Gaston and Southwest Columbia Quads (rev. 1982).  ☑ USDA Natural Resources Conservation Service Soil Survey. Citation: SCDNR Soils data overlaid on World Imagery 2017.  National wetlands inventory map(s). Cite name: NWI data (via SCDNR) overlaid on World Imagery 2017. |
|    | State/Local wetland inventory map(s):  FEMA/FIRM maps:  100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)  Photographs:  Aerial (Name & Date): World Imagery 2017.  or  Other (Name & Date): Site photographs.  Previous determination(s). File no. and date of response letter: SAC 2012-90-6JF.  Applicable/supporting case law:   |
|    | Applicable/supporting scientific literature:  Other information (please specify):   |

B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the jurisdictional status of one perennial RPW tributary and two wetlands which exhibit directly abutting adjacency.

# APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

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

| SEC<br>A. | CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14 May 2020   |
|-----------|--|
| B.        | DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 4 of 4; SAC-2019-00435 Sandy Run IP Site  |
| C.        | PROJECT LOCATION AND BACKGROUND INFORMATION:  State: South Carolina County/parish/borough: Lexington County City: Cayce  Center coordinates of site (lat/long in degree decimal format): Lat. 33.8663769947155°, Long81.0240942968125°.  Universal Transverse Mercator:  Name of nearest waterbody: Congaree River   |
|           | Name of nearest Traditional Navigable Water (TNW) Into which the aquatic resource flows: Congaree River  Name of watershed or Hydrologic Unit Code (HUC): 03050110  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: May 6, 2020  Field Determination. Date(s): May 15, 2019   |
| SEC<br>A. | CTION II: SUMMARY OF FINDINGS<br>RHA SECTION 10 DETERMINATION OF JURISDICTION.   |
|           | waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew 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.   |
| The       | re 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 waters. <sup>2</sup> (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):   |
|           | 2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> [Including potentially jurisdictional features that upon  |
|           | assessment are NOT waters or wetlands  Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.   |
|           | Explain: The site includes two isolated non-jurisdictional freshwater wetlands (NIW C and NIW H). Wetland NIW  |

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.
<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

G is 0.99 acre in area and wetland NJW-H is 0.52 acre in area. These wetlands each are comprised of geographically distinct polygonal boundaries which are not contiguously abutting other jurisdictional waters, and exhibit no other adjacency factors that would support bordering or neighboring adjacency. Most conspicuously, these two wetlands have no type of hydrologic connectivity to jurisdictional waters. The two wetlands are connected to one another via an upland excavated non-jurisdictional ditch (NJF-2). The regulator who made the field visit walked around each wetland, verified that local topography precluded drainage to any water of the U.S. The depiction attached to this jurisdictional determination accurately includes a second upland excavated non-jurisdictional ditch (NJF-3) which brings some flow from the roadside of Carolina Eastman Entrance, Avenue K to wetland NJW-G; however, it is important to note that the drainage area involved is restricted and insufficient to overwhelm the storage volume capacity of wetlands NJW-G and NJW-H. On this basis, the 0.792 acre of these three freshwater wetlands are isolated and non-jurisdictional. Specifically, the ditch (NJF-3) which extends to NJW-G from the roadside is NOT connected to other roadside ditching, including no underdrain/crossdrain culverting beneath Avenue K.

# 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 <sup>4</sup> 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:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

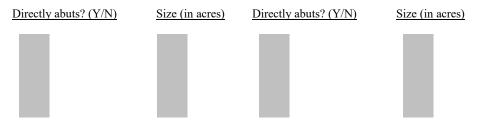
|     | ☐ Tributary flows directly into TNW. ☐ Tributary flows through Pick List tributaries before entering TNW.   |
|-----|---|
|     | Project waters are Pick List river miles from TNW.  Project waters are Project waters cross or serve as state boundaries. Explain:   |
|     | Identify flow route to TNW. <sup>5</sup> :  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 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: Tibutary 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 <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment deposition abrupt change in plant community  leaf litter disturbed or washed away sediment deposition abrupt change in plant community  other (list):  Discontinuous OHWM. 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:  oil or scum line along shore objects fine shell or debris deposits (foreshore)  Mean High Water Mark indicated by:  survey to available datum; physical markings;   |

<sup>7</sup>Ibid.

<sup>&</sup>lt;sup>5</sup> 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. <sup>6</sup>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.

|    |       | <ul> <li>□ physical markings/characteristics</li> <li>□ tidal gauges</li> <li>□ other (list):</li> <li>□ vegetation lines/changes in vegetation types.</li> </ul>   |
|----|-------|---|
|    | (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:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain findings:  Aquatic/wildlife diversity. Explain findings:      |
| 2. | Cha   | aracteristics 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. | Cha   | Aracteristics 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:



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:
- 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.  Identify type(s) of waters: .  |
| 3.       | Non-RPWs <sup>8</sup> 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:   |
|          | 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 jurisidictional. 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:   |
| SU<br>SU | OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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: |

E.

 <sup>8</sup>See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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.

|   | Ider   | tify water body and summarize rationale supporting determination:   |
|---|--|---|
|   |  | de estimates for jurisdictional waters in the review area (check all that apply): Cributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Vetlands: acres.   |
| geog<br>adja<br>hyd<br>juri<br>preo<br>upla<br>K to<br>stor<br>is N | V-H) graph cence rolog sdicti clude and e o wet age v OT c | Industrial 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): The site includes two isolated, non-jurisdictional freshwater wetlands (NJW-G and Wetland NJW-G is 0.99 acre in area and wetland NJW-H is 0.52 acre in area. These wetlands each are comprised of ically distinct polygonal boundaries which are not contiguously abutting other jurisdictional waters, and exhibit no other factors that would support bordering or neighboring adjacency. Most conspicuously, these two wetlands have no type of c connectivity to jurisdictional waters. The two wetlands are connected to one another via an upland excavated non-paral ditch (NJF-2). The regulator who made the field visit walked around each wetland, verified that local topography and drainage to any water of the U.S. The depiction attached to this jurisdictional determination accurately includes a second cavated non-jurisdictional ditch (NJF-3) which brings some flow from the roadside of Carolina Eastman Entrance, Avenue and NJW-G; however, it is important to note that the drainage area involved is restricted and insufficient to overwhelm the olume capacity of wetlands NJW-G and NJW-H. Specifically, the ditch (NJF-3) which extends to NJW-G from the roadside of these three freshwater wetlands are isolated and nonjurisdictional. |
| <b>0.</b> 77  | Prov<br>facto<br>judg                                      | de acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR rs (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional nent (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: NJW-G = 0.99 acre; NJW-H = 0.52 acre.  |
|   | Prov   | de acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ling 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.   |
| SEC   | <u>CTIO</u>  | NIV: DATA SOURCES.  |
| <b>A.</b> \$  | and  | ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked equested, appropriately reference sources below):  Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: S&ME, Inc  Data sheets prepared/submitted by or on behalf of the applicant/consultant.  Office concurs with data sheets/delineation report. (Office concurs with report conclusions.)  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.  |
|   |  | <ul> <li>USGS 8 and 12 digit HUC maps.</li> <li>U.S. Geological Survey map(s). Cite scale &amp; quad name: Gaston and Southwest Columbia Quads (rev. 1982).</li> <li>USDA Natural Resources Conservation Service Soil Survey. Citation: SCDNR Soils data overlaid on World Imagery 2017.</li> <li>National wetlands inventory map(s). Cite name: NWI data (via SCDNR) overlaid on World Imagery 2017.</li> <li>State/Local wetland inventory map(s):         <ul> <li>FEMA/FIRM maps:</li> <li>100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)</li> </ul> </li> <li>Photographs: Aerial (Name &amp; Date): World Imagery 2017.</li> <li>or</li></ul>   |

| $\boxtimes$ | Previous determination(s). File no. and date of response letter: | SAC 2012-90-6JF. |
|-------------|--|------------------|
|             | Applicable/supporting case law: .                                |                  |
|             | Applicable/supporting scientific literature: .                   |                  |
|             | Other information (please specify):                              |                  |

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The site includes two isolated, non-jurisdictional freshwater wetlands (NJW-G and NJW-H). Wetland NJW-G is 0.99 acre in area and wetland NJW-H is 0.52 acre in area. These wetlands each are comprised of geographically distinct polygonal boundaries which are not contiguously abutting other jurisdictional waters, and exhibit no other adjacency factors that would support bordering or neighboring adjacency. Most conspicuously, these two wetlands have no type of hydrologic connectivity to jurisdictional waters. The two wetlands are connected to one another via an upland excavated non-jurisdictional ditch (NJF-2). The regulator who made the field visit walked around each wetland, verified that local topography precluded drainage to any water of the U.S. The depiction attached to this jurisdictional determination accurately includes a second upland excavated non-jurisdictional ditch (NJF-3) which brings some flow from the roadside of Carolina Eastman Entrance, Avenue K to wetland NJW-G; however, it is important to note that the drainage area involved is restricted and insufficient to overwhelm the storage volume capacity of wetlands NJW-G and NJW-H. Specifically, the ditch (NJF-3) which extends to NJW-G from the roadside is NOT connected to other roadside ditching, including no underdrain/crossdrain culverting beneath Avenue K. On this basis, the 1.51 acres of these two freshwater wetlands are isolated and non-jurisdictional.