**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.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 23, 2023**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** JD Form 1 of 2; SAC-2022-00967 I-77 Exit 82 ABC Interchange Modification SCDOT ID# P029252, York County, S.C.

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: South Carolina County: York County City: Rock Hill
Center coordinates of site (lat/long in degree decimal format): Lat. 34.975518 °, Long. -80.986301 °.
Universal Transverse Mercator:
Name of nearest waterbody: Catawba River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Catawba River
Name of watershed or Hydrologic Unit Code (HUC): 030501030602 Burgis Creek-Catawba River

☒ 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: December 19, 2022
☒ Field Determination. Date(s): August 24, 2022

**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 and are not** "*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[2] (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: Total: 1060 linear feet. Tributary A 283 lf, Tributary B 471 lf, Tributary C 30 lf, Tributary G 165 lf, Tributary H 72 lf, Tributary I 39 linear feet: Variable width (ft) and/or Total 0.187 acres.
      Wetlands: Total: 0.117 acres. Wetland A 0.11 ac, Wetland D 0.045 ac, Wetland E 0.041 ac, Wetland F 0.11 ac and Wetland H 0.009 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM. and 1987 Delineation Manual**
      Elevation of established OHWM (if known): Unknown.

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

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

**Isolated Wetland B: During the field view of this delineated feature ("Isolated Wetland B") on August 24, 2022, the Corps determined that although the 0.125 acre feature does meet the criteria of the 1987 Corps of Engineers Wetland Delineation Manual and appropriate Regional Supplements for a wetland, it was located in a shallow depression adjacent to I-77 without any channel connection, shallow subsurface hydrologic connection or overland flow connection to any other waters of the U.S. This wetland is surrounded by uplands and appears to have formed as a result of earthwork associated with the construction of I-77 and accumulation of precipitation and shallow ground water from the roadway itself. As such, this wetland does not have any apparent ecological connection to waters of the U.S. and cannot significantly affect the chemical, physical, and biological integrity of other waters of the U.S. nor any TNW**.

**Isolated Wetland C: During the field view of this delineated feature ("Isolated Wetland C") on August 24, 2022, the Corps determined that although the 0.062 acre feature does meet the criteria of the 1987 Corps of Engineers Wetland Delineation Manual and appropriate Regional Supplements for a wetland, it was located in a shallow depression adjacent to I-77 without any channel connection, shallow subsurface hydrologic connection or overland flow connection to any other waters of the U.S. This wetland is surrounded by uplands and appears to have formed as a result of earthwork associated with the construction of I-77 and accumulation of precipitation and shallow ground water from the roadway itself. As such, this wetland does not have any apparent ecological connection to waters of the U.S. and cannot significantly affect the chemical, physical, and biological integrity of other waters of the U.S. nor any TNW**.

**Isolated Wetland G: During the field view of this delineated feature ("Isolated Wetland G") on August 24, 2022, the Corps determined that although the 0.031 acre feature does meet the criteria of the 1987 Corps of Engineers Wetland Delineation Manual and appropriate Regional Supplements for a wetland, it was located in a shallow depression in a forested area without any channel connection, shallow subsurface hydrologic connection or overland flow connection to any other waters of the U.S. This wetland is surrounded by uplands and appears to have formed as a result of earthwork associated with the construction of I-77 (related to excess spoil material and grading activities) and accumulation of precipitation and shallow ground water from adjacent area. As such, this wetland does not have any apparent ecological connection to waters of the U.S. and cannot significantly affect the chemical, physical, and biological integrity of other waters of the U.S. nor any TNW**.

## SECTION III: CWA ANALYSIS

### A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

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

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

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

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

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

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

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

**(i) General Area Conditions:**
Watershed size: Burgis Creek Watershed: 29,102.9 **acres**
Drainage area: Tributary A: 35 acres, Tributary C: 15 **acres**
Average annual rainfall: SC State Climatology Office 46.04 inches
Average annual snowfall: SC State Climatology Office approximately 2-4 inches

**(ii) Physical Characteristics:**
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ 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]: Seasonal Tributaries A and C flow into Perennial Tributary B (RPW) that flows into a TNW (Catawba River).
Tributary stream order, if known: Tributary A & C first order streams .

(b) General Tributary Characteristics (check all that apply):
**Tributary** is: ☐ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: These tributaries have experienced some type of manipulation due to their location adjacent to the existing Interstate 77 and commercial development (Home Depot).

**Tributary** properties with respect to top of bank (estimate):
Average width: Varies with tributaries: 2-5 feet
Average depth: Varies with tributaries: 1-2 feet
Average side slopes: **2:1.**

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: None observed.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): Unknown %

(c) Flow:
Tributary provides for: **Seasonal flow** **Tributaries A & C have seasonal flow regimes.**
Estimate average number of flow events in review area/year: **6-10** For Tributaries A & C. Due to location of Tributary C and the adjacent storm water basin adjacent to Home Depot, the flow events for Tributary C may be more frequent and/or occur for a longer duration.
Describe flow regime: Seasonal flow regime.
Other information on duration and volume: .

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

Surface flow is: **Discrete and confined** Characteristics: Flow is contained within established bed and banks.

Subsurface flow: **Unknown**. 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):
- ☐ the presence of litter and debris
- ☒ destruction of terrestrial vegetation
- ☒ the presence of wrack line
- ☒ sediment sorting
- ☐ scour
- ☐ multiple observed or predicted flow events
- ☐ abrupt change in plant community

☐ 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:
- ☐ oil or scum line along shore objects
- ☐ fine shell or debris deposits (foreshore)
- ☐ physical markings/characteristics
- ☐ tidal gauges
- ☐ other (list):

☐ Mean High Water Mark indicated by:
- ☐ survey to available datum;
- ☐ physical markings;
- ☐ vegetation lines/changes in vegetation types.

**(iii) Chemical Characteristics:**
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: During field view, waters observed in these tributaries was clear and free of discoloration or oily films.
Identify specific pollutants, if known: N/A.

**(iv) Biological Characteristics. Channel supports (check all that apply):**
☒ Riparian corridor. Characteristics (type, average width): Both Seasonal Tributaries A and C have a combination of herbaceous and scrub/shrub corridors adjacent to them..
☐ 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: This riparian corridor habitat is utilized by numerous aquatic and terrestrial vertebrate and invertebrate species for cover, forage and places to raise young..

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

**(i) Physical Characteristics:**
(a) General Wetland Characteristics:
Properties:
Wetland size: Total: Wetland A 0.11 acre directly abuts Tributary A, a seasonal relatively permanent water.
Wetland type. Explain: Predominantly emergent wetlands with some scrub/shrub components.
Wetland quality. Explain: Partially impaired due to location adjacent to I-77 roadways and other development.
Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:
Flow is: **Intermittent flow**. Explain: during times of heavy precipitation, intermittent flow occurs from Wetland A to seasonal relatively permanent water Tributary A. Tributary A flows to another tributary before flowing into Traditional Navigable Water (Catawba River) .

Surface flow is**: Overland sheetflow**
Characteristics: Flow occurs from wetland overland into abutting Tributary A.

Subsurface flow: **Unknown**. Explain findings: .

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

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:
☒ Directly abutting Wetland A, abuts Tributary A, a seasonal relatively permanent water
☐ Not directly abutting
☐ Discrete wetland hydrologic connection. Explain: .
☐ 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 **2-year or less** 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: at least 85 % herbaceous and scrub/shrub vegetative cover.
☒ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings:This wetland habitat is utilized by numberous vertebrate and invertebrate species for cover, forage and places to raise young..

**3. Characteristics of all wetlands adjacent to the tributary (if any)**
All wetland(s) being considered in the cumulative analysis: **5**
Approximately ( 0.117 ) 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) |
|---|---|---|---|
| Wetland A (Yes) | 0.11 | Wetland D (Yes) | 0.045 |
| Wetland E (Yes) | 0.041 | Wetland F (Yes) | 0.11 |
| Wetland H (Yes) | 0.009 | | |

Summarize overall biological, chemical and physical functions being performed: Wetlands D, E, F & H (all directly abutting RPWs) and Wetland A (directly abutting a Seasonal RPW) are evaluated in this form are similarly situated and adjacent are collectively performing biological, chemical, and physical functions. The wetlands in the review area vary in distance from TNW from approximately 1 mile or less river miles to approximately three river miles to the TNW (Catawba River). Water discharging from the wetland abutting RPWs flows directly into or into additional tributaries before entering the Catawba River. The wetlands abutting the seasonal RPW flows into a RPW (tributary B) then enters the Catawba River. All of these wetlands are mixed herbaceous/scrub shrub depressional wetlands that provide breeding grounds and shelter for aquatic species, foraging areas for wetland dependent species, and spawning areas for species that inhabit the main channel as adults. These wetlands also provide organic carbon to the downstream tributaries and the adjacent TNW (Catawba River), resulting in the nourishment of the downstream food web. The wetlands provide the important collective functions of removal of excess nutrients which are contributed by runoff from the surrounding urban areas. The wetlands reduce nitrogen and phosphorus loading downstream, and effectively prevent oxygen depletion that can result from eutrophication. The wetlands also collectively perform flow maintenance functions, including retaining runoff inflow and storing flood water temporarily.

## 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: **Seasonal RPW Tributary C has the ability to: carry pollutants and floodwaters to the downstream TNW (Catawba River); provide habitat for wildlife and aquatic species; transfer nutrients that support downstream foodwebs. Evidence of these factors were observed during field visit. This tributary flows from a stormwater basin constructed for the impervious surfaces associated with the Home Depot (building, storage area and parking lot), as such this tributary receives flow beyond precipitation events and transports litter, debris and sediments through the tributary which is evidence of the streams ability to transfer nutrients and other carbons to downstream foodwebs as well as the capacity to carry pollutants and reduce floodwaters to downstream TNW (Catawba River) which is less than one river mile downstream .**

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: **Seasonal RPW Tributary A and the directly abutting Wetland A have the ability to: carry pollutants and floodwaters to the downstream TNW (Catawba River); provide habitat for wildlife and aquatic species; transfer nutrients that support downstream foodwebs. Evidence of these factors were observed during field visit. This tributary and the abutting wetland provide not only transportation of hydrology, but also some attenuation of flood flows. In addition the tributary and wetland provides habitat for aquatic organisms, a source of carbon and transports litter, debris and sediments through the tributary which is evidence of the streams ability to transfer nutrients and other carbons to downstream foodwebs as well as the capacity to carry pollutants and reduce floodwaters to downstream TNW (Catawba River) which is less than one river mile downstream .**

3.

4. **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:

5. **Other documentation for the record**: All other waters identified on this form (Tributaries B, G, H & I and Wetlands D, E, F & H) are either Relatively Permanent Waters or are wetlands which directly abut these Relatively Permanent Waters.

**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 B, G, H & I are tributaries with geomorphic indicators of perennial flow as a channel within bed and banks which had a firm sandy/gravel bottom clear of vegetation and debris, sediment bars located adjacent to the channel which is evidence of perennial flow as well as hydrologic indicators observed within the channel such as leaves being continuously washed downstream and absence of terrestrial vegetation. In addition, other hydrologic indicators observed were an even distribution of substrates in the stream channel. A review of aerial photos, topographic maps, York County Soil Survey determined that Tributaries B, G, H & I are RPWs with perennial flow. Aerial photos depict a signature of a defined channels for these tributaries and Topographic maps depict Tributary B as a dotted blue line.

☒ 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: Tributary A and Tributary C are tributaries with geomorphic indicators of flow as a channel within bed and banks which had a firm sandy/gravel bottom clear of vegetation and debris, but flow was not observed during field view. The hydrologic indicators observed in the channels include movement of leaves/vegetation by being seasonally washed downstream and absence of terrestrial vegetation. In addition, other hydrologic indicators observed were an even distribution of substrates in the stream channel and shelving. A review of aerial photos, topographic maps, York County Soil Survey determined that Tributaries A & C would support that these tributaries would experience flow seasonally (three continuous months during the typical year).

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

☒ Tributary waters: **Total: 1060 linear feet. Tributary A 283 lf, Tributary B 471 lf, Tributary C 30 lf, Tributary G 165 lf, Tributary H 72 lf, Tributary I 39** linear feet **Variable** width (ft).

☐ Other non-wetland waters: acres.

Identify type(s) of waters: .

**3. Non-RPWs[8] that flow directly or indirectly into TNWs.**

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

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

☐ Tributary waters: linear feet width (ft).

☐ Other non-wetland waters: acres.

Identify type(s) of waters: **.**

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

☒ Wetlands directly 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: **Wetland D, E, F & H all directly abut tributaries identified as having relatively permanent flow. Specifically, Wetland D, E & F all abut Tributary B which has been identified as a Relatively Permanent Water on this form. Wetland H abuts Tributary G which has been identified as a Relatively Permanent Water on this form.**

☒ 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: Wetland A abuts Tributary A, a seasonal relatively permanent water as identified on this form.

**Provide acreage estimates for jurisdictional wetlands in the review area:** Total 0.187 acres. Wetlands: Total: 0.117 acres. Wetland A 0.11 ac, Wetland D 0.045 ac, Wetland E 0.041 ac, Wetland F 0.11 ac and Wetland H 0.009 **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.[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

[8]See Footnote # 3.

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

☐ 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).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]**

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

**Identify water body and summarize rationale supporting determination:** .

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

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

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). **Wetland B, Wetland C & Wetland G.**
☐ 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: Wetland B: 0.125 acre, Wetland C: 0.062 acre & Wetland G: 0.031 acres.

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

## SECTION IV: DATA SOURCES.

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

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report. The Corps agrees with the determination and data represented in the drawings based on the information provided.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☒ Corps navigable waters' study: Charleston District Navigability Study 1977.
☒ U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.
☐ USGS NHD data.

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**[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

☒ USGS 8 and 12 digit HUC maps. 030501030602 Burgis Creek-Catawba River, 03050103 Lower Catawba River
☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000, Rock Hill East quadrangle.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: As provided by the applicant in "I-77 Exit 82ABC Interchange Modification York County, SC SCDOT Project ID P029252, NRCS Soils Series Map" Pacolet, Wynott-Winnsboro, Wynott Brewback, Brewback, Urban land-Brewback complex and Cecil series.
☒ National wetlands inventory map(s). Cite name: As provided by the applicant in "I-77 Exit 82ABC Interchange Modification York County, SC SCDOT Project ID P029252, National Wetland Inventory Map" and Corps RegViewer: R4SBA & R4SBC.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): As provided by consultant.
or ☒ Other (Name & Date): As provided by consultant.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify):Field view August 24, 2022.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The waters documented on this form include perennial RPWs and a Seasonal RPW, all with directly abutting wetlands. Based on guidance in RGL 07-01, perennial RPW's and all directly abutting wetlands are subject to jurisdiction under the Clean Water Act. Therefore, this office has made the determination that the waters documented on this form are jurisdictional Waters of the U.S.

In addition, this office has determined that isolated wetlands (Wetland B, Wetland C & Wetland G) documented in Section III Part F of this form have no physical, chemical, or biological connection to waters of the U.S. , including any apparent surface or shallow subsurface hydrologic connection. There is no apparent connection to interstate or foreign commerce. In addition, there is no apparent evidence of ecological interconnectivity between the isolated wetlands and waters of the U.S. On this basis, this office has determined that these wetlands are isolated from waters of the U.S. and are not within the jurisdiction of the Clean Water Act.

**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.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 23, 2023**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** JD Form 2 of 2; SAC-2022-00967 I-77 Exit 82 ABC Interchange Modification SCDOT ID# P029252, York County, S.C.

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: South Carolina County/parish/borough: York County City: Rock Hill
Center coordinates of site (lat/long in degree decimal format): Lat. 34.975518 °, Long. -80.986301 °.
Universal Transverse Mercator:
Name of nearest waterbody: Catawba River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Catawba River
Name of watershed or Hydrologic Unit Code (HUC): 030501030602 Burgis Creek-Catawba River

☒ 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: December 19, 2022
☒ Field Determination. Date(s): August 24, 2022

**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 and are not** "*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[2] (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**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: Non-jurisdictional stormwater basin: **This site includes a roadside ditch, a 0.515acres storm water containment basin constructed for the adjacent Home Depot Building and parking area. This basin was created to capture storm water away from the impervious surface areas of the building and parking area and to discharge it to Tributary C (seasonal tributary to Tributary B, a perennial RPW (Tributary to Catawba River) in a controlled manner. This**

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

**structure was designed constructed and authorized for the purpose of handling storm water in accordance with state and local requirements. Since this basin receives flow from the adjacent developed area and retains it over a period of time, this basin experiences inundation and saturation conditions for the soils during a portion of the growing season. As such, the basin has developed areas of hydrophytic vegetation and would meet the 1987 criteria for wetlands. Although, this is the case, since this structure was designed and authorized as a storm water facility, it is not a feature that would be considered to be jurisdictional. The Corps determined this feature is not a water of the U.S. or under jurisdiction of Section 404 of the Clean Water Act**

**Non-jurisdictional roadside ditch: This site includes a roadside ditch, a 1314-foot-long feature with an established bed and bank directly east and adjacent to Interstate 77 (I-77). This drainage feature was created to move storm water away from the I-77 roadway and a portion of the I-77 Exit 82 Interchange to Tributary A, a seasonal RPW within the project area. This drainage feature receives flow from the drainage system for the Exit 82 interchange ramps and areas within the ramps and water from the I-77 roadway between Exit 82 and the Catawba River. Although this relatively is a small drainage area, a majority of the area is impervious surface and the flow within this drainage feature are directly driven by precipitation events collected from the roadway and interchange. This results in high velocity, high volume flows within this channel and as a result has cut a defined bed and bank channel. During the August 24, 2022 field view, the Corps observed no flow in this drainage feature and according to APT, the conditions in this location were expected to be normal conditions on that date. The Corps determined this feature is not a water of the U.S. or under jurisdiction of Section 404 of the Clean Water Act.**

**Non-jurisdictional concrete stormwater ditch (flume): This site includes a roadside ditch, a 784-foot-long constructed concrete trapezoidal drainage feature directly west and adjacent to Interstate 77 (I-77). This drainage feature was created to move storm water away from US 21 (Cherry Road) roadway and a portion of the I-77 Exit 82 Interchange Exit 82 B to Tributary B, a perennial RPW (Tributary to Catawba River) within the project area. This drainage feature receives flow from the culvert which is part of the drainage system for the US 21 (Cherry Road) Roadway and Exit 82 B interchange. Although this relatively is a small drainage area, a majority of the area is impervious surface and the flow within this drainage feature are directly driven by precipitation events collected from the roadway and interchange. This results in high velocity, high volume flows within this channel and may be the reason for constructing this concrete channel. During the August 24, 2022 field view, the Corps observed no flow in this drainage feature and according to APT, the conditions in this location were expected to be normal conditions on that date. The Corps determined this feature is not a water of the U.S. or under jurisdiction of Section 404 of the Clean Water Act.**

## SECTION III: CWA ANALYSIS

### A. TNWs AND WETLANDS ADJACENT TO TNWs

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

**1. TNW**
Identify TNW: .

Summarize rationale supporting determination: .

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

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

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

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

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

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

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

**(i) General Area Conditions:**

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

**(ii) Physical Characteristics:**

(a) Relationship with TNW:

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

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

Identify flow route to TNW[5]: .
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: .

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

Tributary 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):
  - ☐ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☐ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ 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:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☐ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

**(iii) Chemical Characteristics:**

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

Identify specific pollutants, if known: .

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

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

**(i) Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

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: .

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

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

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

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

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

For each wetland, specify the following:

| Directly abuts? (Y/N) | Size (in acres) | Directly abuts? (Y/N) | Size (in acres) |
|---|---|---|---|

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: .

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

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

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands directly 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.**

[8]See Footnote # 3.

☐ 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).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]**

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

**Identify water body and summarize rationale supporting determination:** .

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

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

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

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

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):
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: Wetland acres.

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

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

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[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.***

**SECTION IV: DATA SOURCES.**

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

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report. The Corps agrees with the determination and data represented in the drawings based on the information provided.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☒ Corps navigable waters' study: Charleston District Navigability Study 1977.
- ☒ U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990.
  - ☐ USGS NHD data.
  - ☒ USGS 8 and 12 digit HUC maps. 030501030602 Burgis Creek-Catawba River, 03050103 Lower Catawba River
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000, Rock Hill East quadrangle.
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: As provided by the applicant in "I-77 Exit 82ABC Interchange Modification York County, SC SCDOT Project ID P029252, NRCS Soils Series Map" Pacolet, Wynott-Winnsboro, Wynott Brewback, Brewback, Urban land-Brewback complex and Cecil series.
- ☒ National wetlands inventory map(s). Cite name: As provided by the applicant in "I-77 Exit 82ABC Interchange Modification York County, SC SCDOT Project ID P029252, National Wetland Inventory Map" and Corps RegViewer: R4SBA & R4SBC.
- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): As provided by consultant.
  or ☒ Other (Name & Date): As provided by consultant.
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☒ Other information (please specify): August 24, 2022.

**B. ADDITIONAL COMMENTS TO SUPPORT JD: This office has determined that the feature identified as Roadside Ditch and the concrete lined flume are both constructed channels to direct stormwater away from Interstate 77 and other state-owned roadways. These features would only contain flow as a result of and directly after a precipitation event. The feature identified as Stormwater Detention Basin was constructed a part of the site development permit for the Home Depot to directly serve as a collection and metered discharge of stormwater collected form the impervious surfaces associated with the building, storage areas and parking lot. These features were identified by the Corps as not being waters and were therefore not considered to be jurisdictional.**