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 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): November 21, 2018 B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 1 of 1; SAC-2018-01156 Strickland Tract C. PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Lexington County City: Lexington Center coordinates of site (lat/long in degree decimal format): Lat. 34.0016° N, Long. 81.1510 ° W. Universal Transverse Mercator: NAD 83 Name of nearest waterbody: Senn Branch Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Saluda River Name of watershed or Hydrologic Unit Code (HUC): 030501091402 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: October 24, 2018 Field Determination. Date(s): **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. B. CWA SECTION 404 DETERMINATION OF JURISDICTION. There Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required] 1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): 1 TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: **2,456** linear feet: width (ft) and/or 0.06 acres. Wetlands: 6.79 acres. c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM., Pick List Elevation of established OHWM (if known): Non-regulated waters/wetlands (check if applicable): [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:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1.	TNW Identify TNW: .	
	Summarize rationale supporting determination: .	
2.	Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":	

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

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

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

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

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

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

General Area Conditions:

Watershed size: 75.74 square miles;

Drainage area: 142 acres Average annual rainfall: 47.22 inches Average annual snowfall: 1.5 inches (ii) Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. ☐ Tributary flows through 2 tributaries before entering TNW. Project waters are Project waters cross or serve as state boundaries. Explain:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Tributary stream order, if known: First. General Tributary Characteristics (check all that apply): Natural Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: **Tributary** properties with respect to top of bank (estimate): Average width: 3 feet Average depth: **0.5** feet Average side slopes: 2:1. Primary tributary substrate composition (check all that apply): Sands Sands ⊠ Silts ☐ Concrete ☐ Cobbles ☐ Gravel Muck Bedrock ☐ Vegetation. Type/% cover: Other. Explain: Tributaries are running in or near Johnston soils, which are classified as hydric, very deep, very poorly drained and flood frequently or occasionally for very brief to long periods of time. Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Fairly stable. Presence of run/riffle/pool complexes. Explain: None reported. Tributary geometry: Relatively straight. Both streams are relativly straight and small before discharging into wetlands. Tributary gradient (approximate average slope): 2-4 % (c) Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Tributary D and Tributary E both flow during wetter months and after heavy rains, they convey water from wetlands in the headwaters to where they discharge back into a different wetland Other information on duration and volume: Tributaries occur in narrow draws and formed in areas where water has been confined. Surface flow is: Discrete and confined. Characteristics: Tributary D and Tributary E flow in channels during normal conditions. Subsurface flow: **Unknown**. Explain findings: Dye (or other) test performed: Tributary has (check all that apply): Bed and banks OHWM⁶ (check all indicators that apply): ☐ clear, natural line impressed on the bank the presence of litter and debris A changes in the character of soil destruction of terrestrial vegetation \boxtimes the presence of wrack line shelving vegetation matted down, bent, or absent \boxtimes sediment sorting leaf litter disturbed or washed away ightharpoonup sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM.⁷ Explain: If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. ☐ tidal gauges

Identify flow route to TNW⁵: Tributary D and Tributary E both flow into Wetland B which flows off-site directly into an unnamed perennial tributary which flows into Twelevemile Creek which flows into the Saluda River, a

TNW

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

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

Tibid.

			other (list):
	(iii)		emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: According to the South Carolina Department of Health and Environmental Control's (SCDHEC) Watershed Water Quality Assessment (WWQA), There is a high potential for future residential and industrial development in this watershed, which contains the Town of Lexington and portions of the Cities of Columbia and West Columbia, and the Towns of Gilbert, Summit, and Irmo. The area surrounding the Town of Lexington has grown rapidly during the past several years and the trend should continue. Several important highways run through the area including: S.C. 6, which runs from the Lake Murray dam south through the Town of Lexington, and U.S. 1 and U.S. 378, which run west from the City of West Columbia and intersects with Highway 6 in Lexington; I-20 also serves the area. The watershed's industrial corridor is one of the most economically attractive in the Midlands Area for future development. Once sewer is readily available, residential development is expected to increase. The regional sewer line along Fourteenmile Creek is now in operation.
			The two small tributaries appear clear in color and in relativly good quality considering the development in the surounding area. This is likely due to the water being derived from two on-site wetlands which become narrow and formed the two tributaries.
		Ider	ntify specific pollutants, if known:
(iv)	Biol	logica	Al Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Forested/Cleared, 500 feet. Wetland fringe. Characteristics: Wetlands are above and below both tributaries. Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Both tributaries provide habitat for aquatic wildlife.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: Wetland A = 2.18 acres, Wetland C = 3.34 acres Wetland type. Explain: Forested. Wetland quality. Explain: Wetlands appear to be in decent quality. Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Overland sheetflow Characteristics: Wetland retains and allows water to flow after rain events.
			Subsurface flow: Unknown . Explain findings:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are 2-5 river miles from TNW. Project waters are 2-5 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 100 - 500-year floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: According to the South Carolina Department of Health and Environmental Control's (SCDHEC) Watershed Water Quality Assessment (WWQA), There is a high potential for future residential and industrial development in this watershed, which contains the Town of Lexington and portions of the Cities of

Columbia and West Columbia, and the Towns of Gilbert, Summit, and Irmo. The area surrounding the Town of Lexington has grown rapidly during the past several years and the trend should continue. Several important highways run through the area including: S.C. 6, which runs from the Lake Murray dam south through the Town of Lexington, and U.S. 1 and U.S. 378, which run west from the City of West Columbia and intersects with Highway 6 in Lexington; I-20 also serves the area. The watershed's industrial corridor is one of the most economically attractive in the Midlands Area for future development. Once sewer is readily available, residential development is expected to increase. The regional sewer line along Fourteenmile Creek is now in operation.

It is likely that these wetlands receive nutrient runoff from adjacent roads and development Identify specific pollutants, if known:

	☐ Vegetation type/percent c ☐ Habitat for: ☐ Federally Listed speci ☐ Fish/spawn areas. Exp ☐ Other environmentally	eristics (type, average over. Explain: es. Explain findings: lain findings:	width): Forested, >200 feet	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: 2 Approximately (5.52) acres in total are being considered in the cumulative analysis. For each wetland, specify the following:				ysis.
	Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
	Wetland A (Y) Wetland C (Y)	2.18 acres 3.34 acres		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide biodiversity support by offering habitat for various amphibian, avian, and mammal species. These wetlands als provide some level of biogeochemical soil functions valuable for maintaining water quality, such as sediment trapping and nutrient removal through processes such as denitrification. Additionally, wetlands experience slower soil organic matter decomposition rates than upland ecosystems, allowing for natural carbon storage through soil organic matter accumulation. These wetlands also collectively perform flow maintenance functions, including retaining runoff inflow and temporarily storing floodwater.

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: Wetland A and Wetland C flow directly into Tributary D and Tributary E respectively, which are both seasonal tributaries. Based on the channel size, composition of channel substrate and water observed during the site visit, it was determined that these tributaries were seasonal, they very likely flow for at least 3 months out of the year. Both wetlands run down a small draw and taper until each tributary is formed. Both tributaries flow into another wetlands which flows directly into an off-site tributary to Twelevemile Creek which flows directly into the Saluda River.

DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

TH	AT 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: Tributary E and Tributary D are both un-named seasonal tributaries which flow directly into a wetland which flows directly into an un-named tributary of Twelvemile Creek which flows into the Saluda River, a TNW. Both tributaries exhibit an OHWM as well as defined bed and bank. Both tributaries are approximately 5 feet wide and less than 1 foot deep. Flowing water was observed during the site visit in May, though the tributary did not reach from bank to bank. There is no blue line on the USGWS topography map or NWI Mapper but there is a draw depicted in the area. Additionally, the area is mapped as Johnston soil.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 2,456 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: Wetland B collects water from two tributaries (Tributary D and Tributary E). While the wetland is not depicted on the USFWS NWI map, it is mapped as Johnson Soil and is located in a draw on the USGS Topography map. The wetland continues down the draw which runs off-site and into a perennial tributary

to Twelvemile Creek which then flows into Twelvemile Creek.

⁸See Footnote # 3.

	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 and Wetland C flow directly into Tributary D and Tributary E respectively, which are both seasonal tributaries. Based on the channel size, composition of channel substrate and water observed during the site visit, it was determined that these tributaries were seasonal, they very likely flow for at least 3 months out of the year. Both wetlands run down a small draw and taper until each tributary is formed. Both tributaries flow into Wetland B which continues off-site and flows into an off-site tributary to Twelvemile Creek, then to Twelvemile Creek, which flows directly into the Saluda River.
	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.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. 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):

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.

factor judgr	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agricultidgment (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.	
Provi	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant I 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.	Nexus" standard, where such
SUPPe and residual states	U.S. Geological Survey Hydrologic Atlas: HA 730-G, 1990 □ USGS NHD data. □ USGS 8 and 12 digit HUC maps. HUC 12: 030501091402 U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 Irmo. USDA Natural Resources Conservation Service Soil Survey. Citation: SSURGO Data; Herndon, Blackion. National wetlands inventory map(s). Cite name: USFWS NWI Mapper; None State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ☐ Aerial (Name & Date): Google Earth 5/2/2018. or ☐ Other (Name & Date): Consultant photographs #1-5 of 5 dated May 16, 2018.	ands Survey Prepared for

B. ADDITIONAL COMMENTS TO SUPPORT JD: Aquatic resources on this form include Wetland A=2.18 acres, Wetland B=1.25 acres, Wetland C=3.34 acres, Tributary D=0.04 acres or 678 linear feet, and Tributary E=0.02 acres or 310 linear feet. Wetlands directly abutting relatively permanent waters (RPWs), RPWS, and are jurisdictional according to Regulatory Guidance Letter 16-01. The waters documented on this form are Waters of the United States and are within jurisdiction of the Clean Water Act.