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 JU	URISDICTIONAL	DETERMINATION ((JD)): June 29,	2022
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B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAO-2022-1156; Lee Murphy, Romanda/ proposed subdivision at 4357 Suffolk Street, Suffolk

C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: VA County/parish/borough: Pughsville City: Suffolk Center coordinates of site (lat/long in degree decimal format): Lat. 36.8408° N, Long76.4439° W.
	Universal Transverse Mercator:
	Name of nearest waterbody: Intermittent tributary to Drum Point Creek
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Bennett Creek, via Deanes Branch Name of watershed or Hydrologic Unit Code (HUC): 02080208 (Elizabeth 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: June 27, 2022 ☐ Field Determination. Date(s):
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
	Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Pick List "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S.
	a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas
	Wetlands adjacent to TNWs
	Relatively permanent waters 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
	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
	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: 5.36 acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual 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:

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: The closest TNW is Drum Point Creek but the most direct connection is to Deanes Branch, a tidal tributary to Bennett Creek.

Summarize rationale supporting determination: The study area wetlands are located in a large flat wetland area, and are abutting an historic railroad ditch that was excavated through wetlands. This ditch runs west to a point where it becomes an intermittent tributary within the ditch, and then flows into another intermittent tributary to flows north under Pughsville Road. This RPW turns west into the headwaters of Deanes Branch. Deanes Branch becomes tidal in its lower reaches, and flows into Bennett Creek, which is another TNW.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": This wetland is actually abutting, and is directly connected by an extensive wetland that flows into at least 4 different tributaries: Deanes Branch, Quaker Neck Creek, Drum Point Creek, and possibly into Knotts Creek. For the purposes of this jurisdictional determination, we consider the clearest connection to be in the abutting railroad ditch, west to where the ditch becomes a relatively permanent water, then north under Pughsville Road to Deanes Branch. These wetlands are not separated from other WOUS by man-made dikes or barriers, natural river berms, beach dunes, or the like, and the Corps considers these wetlands abutting because there is an unbroken surface connection to jurisdictional waters. The distance between the abutting railroad ditch (excavated through wetlands) to the RPW area of the ditch to the west is approximately 1,852 linear feet.

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

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

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

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

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

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

(i)	General Area Conditions:
,	Watershed size: > 5 square miles
	Drainage area: 1,018 acres
	Average annual rainfall: 48 inches

Average annual rainfall: 48 inches Average annual snowfall: 5 inches

(ii) Physical Characteristics:

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(a)	Relationship with TNW:
	☐ Tributary flows directly into TNW.

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

		Tributary flows through 2 tributaries before entering TNW.
		Project waters are Project water
		Identify flow route to TNW ⁵ : Project wetlands west in historic RR ditch (to the point where this ditch is mapped as an intermittent trib), north to intermittent trib of Deanes Branch, and then west in Deanes Branch. Tributary stream order, if known: unknown.
the RR dit located wi	ch tl thin	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: The tributary into Deanes Branch is natural. There is part of that is a straightened WOUS, excavated out of wetlands and with enough seasonal flow to be considered an RPW. This tributary the RR ditch then flows north, under Pughsville Road, into another straightened RPW (mapped as an intermittent trib) ately flows into the natural trib to Deanes Branch.
		Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 5 feet Average side slopes: Vertical (1:1 or less).
		Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: weeds and hydrophytes, 20% Other. Explain:
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Unstable, eroding (trib within RR ditch). Presence of run/riffle/pool complexes. Explain: none. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
	(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 6-10 Describe flow regime: This is an estimate. It is expected that in the winter and early spring this RPW has constant
flow.		Other information on duration and volume: See above.
		Surface flow is: Confined. Characteristics: Confined due to the confining banks of the RR ditch.
		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): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community

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. ⁷Ibid.

If factors other than the OHWM were used to determine	e lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by: ☐ M	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	
other (list):	
Chamical Characteristics	

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Watershed consists of surrounding forested wetlands but also residential subdivisions. Seasonal flow may be flashy in response to storm events and probably consists of sediment-laden water and runoff from roads. Identify specific pollutants, if known: Sediment, phosphorus, nitrogen, oil and grease (estimated).

(iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Forested wetlands along much of the historic ditch with a narrow paved trail within about 10 feet of the tributary Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Forested ditch with water provides foraging and resting areas for small mammals and avian species.
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: 370 acres Wetland type. Explain: PFO wetlands. Wetland quality. Explain: Large contiguous wetlands with some infill residential areas. Project wetlands cross or serve as state boundaries. Explain: N/A.
(b) <u>General Flow Relationship with Non-TNW</u> : Flow is: <u>Intermittent flow</u> . Explain: Project wetlands are directly connected to the historic RR ditch, and the ditch probably receives surface runoff and perhaps shallow subsurface flow from the connected wetlands.
Surface flow is: Overland sheetflow Characteristics:
Subsurface flow: Unknown. Explain findings: The consultant's data sheets noted groundwater at 7 inches on April 20, 2022 so some of this water may contribute to flow within the historical RR ditch. Dye (or other) test performed: N/A.
(c) Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are 1-2 river miles from TNW. Project waters are 1-2 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 20 - 50-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: Wetlands had groundwater within 12 inches of surface as of 4-20-2022. Watershed is generally healthy but Bennetts Creek and Nansemond River have general water quality issues that affect oyster harvest Identify specific pollutants, if known: Phosphorus, nitrogen, sediment.
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: 90% vegetative cover, multi-layered. Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Since these wetlands are mostly unfragmented, they provide habitat for deer, small mammals, and bird species.

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

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

Approximately (370) 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)
Ves	370		

Summarize overall biological, chemical and physical functions being performed: The project wetlands are considered a part of the larger wetlands that extends north and south of Pughsville Road in Suffolk. These wetlands are continuous and extend north to Route 17 and south to Portsmouth Boulevard. Since the headwaters of several drainages (Knotts Creek, Deanes Branch, Quaker Neck Creek, and Drum Point Creek) originate within these wetlands, they provide the following functions: nutrient removal, wildlife habitat, water quality buffer, and groundwater recharge.

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: The historic RR ditch becomes a straightened RPW with intermittent flow approximately 1,816 linear feet west of the project wetlands. According to Lidar and topo maps, there appears to be no berm or other break between the project wetlands and this RPW. This RPW then flows north into an intermittent trib which is directly connected to Deanes Branch which becomes tidal. The estimate of tributary waters directly below (6,283 lf) includes the RPW within the RR ditch, the RPW which runs underneath Pugshville Road, and the RPW trib of Deanes Branch to just beyond the point where it becomes tidal (as determined by measurements made with the VA Regulatory Viewer).

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 6,283 linear feet variable but 3 feet in historic RR ditchwidth (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. 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).

⁸See Footnote # 3

 $^{^{9}\,\}mathrm{To}$ complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

Е.	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):
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SEC	CTION 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: Figure 2: Site Conditions Map, Lincoln Street, Suffolk, VA. Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Figure 1: Topographic Vicinity Map scale 1":1000', and screenshots from 1952 and 1994 Bowers Hill topographic maps, taken from USGS Historical Topographic Map Explorer.

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*.

\boxtimes	USDA Natural Resources Conservation Service Soil Survey. Citation: Fig. 4: NRCS Soils Map, Wetland Delineation, Lincoln
Str	eet, Suffolk, VA.
\boxtimes	National wetlands inventory map(s). Cite name: Fig. 3: NWI Map, Wetland Delineation, Lincoln Street, Suffolk, VA.
	State/Local wetland inventory map(s): .
	FEMA/FIRM maps: .
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
\boxtimes	Photographs: Aerial (Name & Date): Google Earth Pro aerial photo (online) dated 6/2022.
	or ☐ Other (Name & Date): .
	Previous determination(s). File no. and date of response letter: .
	Applicable/supporting case law: .
\boxtimes	Applicable/supporting scientific literature: Rapanos guidance entitled "Clean Water Act Jurisdiction Followng the U.S. Supreme
Co	urt's Decision in Rapanos vs. U.S. & Carabell vs. U.S".
\boxtimes	Other information (please specify): Figure 5: Lidar Map, Suffolk GIS, National Hydrography Dataset from the Corps Data Viewer,
and	l Hillshade Lidar laver from Corps' Regulatory Viewer.

B. ADDITIONAL COMMENTS TO SUPPORT JD: The Corps PM, George Janek, considered three different jurisdictional connections from the project wetlands to other WOUS. The first goes to the east, in the historic railroad ditch and then into an RPW that drains into Drum Point Creek, a tidal water that flows into the Western Branch of the Elizabeth River. While this is the shortest route to an RPW and a TNW, it was difficult to confirm this flow path due to property access issues and lack of clear stormwater connections as seen on the Suffolk GIS.

The connection analyzed on this jurisdictional form is through the historic railroad ditch which is abutting the project wetlands. This ditch flows west for approx. 1,816 lf until that ditch exhibits the characteristics of an intermittent tributary (i.e. a RPW). From there, the flow turns north under Pughsville Road and then into an intermittent tributary of Deanes Branch, which becomes tidal and flows into Bennett Creek, a TNW.

These wetlands are also directly connected (abutting) the extensive wetlands that eventually flow into Quaker Neck Creek to the west. From the topo maps, aerial photos, and Lidar, there doesn't appear to be any berm, dike or other barrier that would interrupt the connection of these wetlands to the headwaters of Quaker Neck Creek.