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): 01/24/2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: SWG-2022-00028, HCFCD, P118-23-00-E001

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Texas County/parish/borough: Harris City: Houston
Center coordinates of site (lat/long in degree decimal format): Lat. 29.8994944 N Long. -95.375836 W
Universal Transverse Mercator: Zone 15R, 270558.90 m E, 3308407.42 m N
Name of nearest waterbody: Halls Bayou
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Greens Bayou
Name of watershed or Hydrologic Unit Code (HUC): Buffalo-San Jacinto Watershed HUC8: 12040104
☒ 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: 01/24/2022
☐ 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.
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: Halls Bayou (P118-00-00), 1,313.52 LF
      ☐ 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: 1,313.52 linear feet: 20 width (ft) and/or acres.
      Wetlands: 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: **P118-23-00 North, P118-23-00 South, and P118-23-02 are man-made drainage channels excavated in and draining only uplands. D1 through D3 are man-made drainage ditches excavated in and draining only uplands. Because these features are upland-cut drainage ditches, these features are non-jurisdictional.**

[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.

WET A through WET E and WET G through WET P are PEM wetlands located entirely within the P118-23-00 South and P118-23-02 upland drainage ditches. Because these wetlands are located entirely within non-jurisdictional channels, they are non-jurisdictional. WB 1 is a man-made stock pond excavated wholly in uplands with no hydrological connection to a jurisdictional feature. These features are non-jurisdictional.

WB 1 is a man-made pond excavated in 2016, based on reviewed aerial imagery, and which displays no direct surface hydrological connection or significant nexus with Halls Bayou.

WET F (0.05 Ac) is an isolated PFO wetland located outside of the 100-year floodplain and would not be considered impoundments of a jurisdictional water and has no hydrological connection to jurisdictional waters or wetlands in the area. Therefore, these features have been determined to be "ISOLATED" as defined in federal regulations (33 CFR 330.2(e)).

Wetland F was identified using the 1987 Manual Regional Supplement: Atlantic and Gulf Coastal Plain Region, which requires that all three wetland criteria be present under normal circumstances for an area to be determined a wetland. Wetland F is isolated, depressional area that experiences seasonal hydrology during and after rain events, providing the conditions necessary for a wetland to establish.

Impacts to Wet F would not affect interstate or foreign travelers for recreational or other purposes, would not affect fish or shellfish that could be taken and sold in interstate or foreign commerce, and would not affect the current use or potential use for industrial purposes by industries in interstate commerce. Therefore, Wet F is not considered a waters of the US.

"Adjacent" as per Federal regulations 33 CFR 328.3 is defined: "bordering, contiguous, or neighboring. Wetlands separated from other Waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are 'adjacent wetlands'." The nearest Waters of the U.S. to the features listed above is Greens Bayou. The wetlands are not expected to share surface hydrology with Greens Bayou, including during high flow (e.g., the 100-year floodplain), as they are isolated from the base floodplain elevation of Greens Bayou. The water features and wetland are also separated from other Waters of the U.S. by uplands that do not allow the exchange of waters via a confined surface hydrology connection during normal conditions and these wetlands are not inseparably bound with Greens Bayou.

"Isolated" waters as defined in 33 CFR 330.2 (e) is: "those non-tidal Waters of the U.S. that are: (1) not part of a surface tributary system to interstate or navigable Waters of the U.S.; and (2) not adjacent to such tributary waterbodies." These water features and wetland have been identified as an aquatic resource and has been determined to be isolated.

"Waters of the U.S." are defined in 33 CFR 328.3 (a) 1 through 7 which is addressed in the following. Due to the fact that these aquatic resources: (1) are not currently used, or were used in the past, nor susceptible to be used for interstate or foreign commerce nor subject to the ebb and flow of the daily tide; (2) do not cross interstate or tribal boundaries; (3) the destruction of these wetlands are not expected to affect (i) interstate or foreign travelers for recreational purposes or other purposes or (ii) fish or shellfish that could be taken and sold in interstate or foreign commerce or (iii) current use or potential use for industrial purposes by industries in interstate commerce; (4) are not impoundments of Waters of the U.S.; (5) are not part of a surface tributary system of (a) (1) through (4); (6) are not part of the territorial seas; and (7) are not adjacent to Waters of the U.S. identified in (a) (1) through (6). Therefore, it is SWG position that these aquatic resources are not Waters of the U.S. subject to 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: 45 **square miles**
Drainage area: 45 **square miles**
Average annual rainfall: 51.84 inches
Average annual snowfall: 0.0 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 **10-15** river miles from TNW.
Project waters are **1 (or less)** river miles from RPW.
Project waters are **10-15** 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]: Halls Bayou flows southeast directly to Greens Bayou, a TNW.
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: Halls Bayou is a naturally occurring stream that has been channelized, reinforced in some areas with concrete and/or riprap, and rerouted in some areas. Therefore, it is a manipulated tributary.

Tributary properties with respect to top of bank (estimate):
Average width: 40-60 feet
Average depth: 20 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: Clay with a layer of sand.

[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 condition/stability [e.g., highly eroding, sloughing banks]. Explain: Within Halls Bayou, some erosion is present. The banks are fairly stable and mostly covered by herbaceous vegetation.

Presence of run/riffle/pool complexes. Explain: Runs comprise 100% of Halls Bayou.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 10 %

(c) Flow:

Tributary provides for: **Intermittent but not seasonal flow**

Estimate average number of flow events in review area/year: **6-10**

Describe flow regime: Halls Bayou displays perennial flow as evidence by multiple observed flow events, consistent source of surface water flow, and stream gauge data from Harris County Flood Control District (HCFCD).

Other information on duration and volume: .

Surface flow is: **Discrete.** Characteristics: Surface flow for Halls Bayou is perennial and increases substantially during rain events. The floodway extends past the banks of Halls Bayou.

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: Water is cloudy brown, some areas were observed to have an oil film on the surface. Household garbage and debris, including tires, were observed within Halls Bayou.

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: Red-eared sliders (*Trachemys scripta elegans*) were observed within Halls Bayou.

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

[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.

Wetland size:
Wetland type. Explain:
Wetland quality. Explain:
Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:
Flow is: Explain:.

Surface flow is:
Characteristics: Surface flow occurs within P118-23-00 South.

Subsurface flow: . Explain findings: N/A.
☐ Dye (or other) test performed: .

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

(d) Proximity (Relationship) to TNW
Project wetlands are river miles from TNW.
Project waters are aerial (straight) miles from TNW.
Flow is from: .
Estimate approximate location of wetland as within the 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:
Approximately acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

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

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

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

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: Halls Bayou (P118-00-00) is a stream with a perennial flow regime, as evidence by the lack of vegetation within the channel, persistence on aerial imagery and topographic maps, and stream gauge data. Halls Bayou contributes flow directly to Greens Bayou, a Traditionally Navigable Water (TNW). Based on its hydrological connection to Greens Bayou and perennial flow regime, Halls Bayou is a Relatively Permanent Water (RPW).
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☒ Tributary waters: **1,313.52** linear feet **20** 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: .

[8] See 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: .

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).

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): .

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):

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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.*

☐ 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: 0 acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 0.05 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: Waters of the United States Report, January 2022.
☒ 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: Houston Heights, TX 7.5' quad: 1916, 1922, 1955, 1967, 1982, 1995, 2013; Aldine, TX 7.5' quad: 1915, 1919, 1954, 1967, 1982, 1995, 2013; Settegast, TX 7.5' quad: 1916, 1922, 1946, 1955, 1967, 1982, 2013; Humble, TX 7.5' quad: 1916, 1919, 1943, 1946, 1954, 1967, 1982, 1995, 2013.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: 2020 NRCS Soil Survey Data.
☒ National wetlands inventory map(s). Cite name: 2014 NWI Data.
☐ State/Local wetland inventory map(s): .
☒ FEMA/FIRM maps: 2007 FEMA Floodplain Data (FIRM panel 48201C0470L, effective 6/17/2007).
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): 1938, 1944, 1953, 1966, 1976, 1989, 1995, 2004, 2008, 2012, 2018.
  or ☒ Other (Name & Date): Site visit photographs taken September 30, October 19, and November 10 and 11, 2020; July 19, 2021.
☒ Previous determination(s). File no. and date of response letter: SWG-2012-00830.
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): USACE Antecedent Precipitation Tool (APT).

B. ADDITIONAL COMMENTS TO SUPPORT JD: The APT was used to determine conditions within the project site. This tool pulled data from three surrounding gauges and determined that the conditions within the project site were wetter than normal during the site visits on September 30, 2020 and July 19, 2021, and normal during the site visits on October 19 and November 10 and 11, 2020, relative to the rolling 30-year period of those dates

Based on USGS Topographic maps, aerial photographs, USFWS NWI data, FEMA Floodplain data, and the September 30, October 19, and November 10 and 11, 2020, and June 14 and July 19, 2021 site visits, the project site includes one RPW, one intermittent and ephemeral drainage canal, one ephemeral drainage canal, three upland-cut drainage ditches, one open water feature, 15 PEM wetlands, and one PFO wetland.

Table 1: Summary of Aquatic Features Delineated within the Subject Property

Feature Name	Feature Type	Latitude, Longitude	Potentially Jurisdictional	OHWM* Width feet (ft)	Size (ac)	Length (ft)
Halls Bayou (P118-00-00)	**Perennial stream**	**29.892447, -95.372818**	**Yes, RPW**	**20**	**-**	**1,313.52**
P118-23-00 North	Intermittent drainage canal	29.891244, -95.371879	No, upland-cut drainage ditch	17	-	1,251.09
P118-23-00 South	Ephemeral drainage canal	29.88172, -95.374620	No, upland-cut drainage ditch	5	-	4,010.90
P118-23-02	Ephemeral drainage canal	29.888997, -95.373724	No, man-made drainage canal	5	-	4,158.60

D1	Upland-cut drainage ditch	29.881910, -95.377725	No, upland-cut drainage ditch	-	-	866.22
D2	Upland-cut drainage ditch	29.882822, -95.377687	No, upland-cut drainage ditch	-	-	950.91
D3	Upland-cut drainage ditch	29.881571, -95.377144	No, upland-cut drainage ditch	-	-	874.96
WB 1	Man-made stock pond	29.880954, -95.377563	No, man-made stock pond	50	0.08	-
WET A	PEM wetland	29.889235, -95.373648	No, inside non-jurisdictional channel	-	0.11	-
WET B	PEM wetland	29.8858550, -95.3767151	No, inside non-jurisdictional channel	-	0.02	-
WET C	PEM wetland	29.8850026, -95.3774409	No, inside non-jurisdictional channel	-	0.01	-
WET D	PEM wetland	29.8833469, -95.3789251	No, inside non-jurisdictional channel	-	0.05	-
WET E	PEM wetland	29.8831201, -95.3791670	No, inside non-jurisdictional channel	-	0.25	-
WET F	PFO wetland	29.880837, -95.3767581	No, isolated	-	0.05	-
WET G	PEM wetland	29.8888702, -95.3738259	No, inside non-jurisdictional channel	-	0.03	-
WET H	PEM wetland	29.8865051, -95.3738186	No, inside non-jurisdictional channel	-	0.04	-
WET I	PEM wetland	29.8859558, -95.3733031	No, inside non-jurisdictional channel	-	0.02	-
WET J	PEM wetland	29.8857117, -95.370789	No, inside non-jurisdictional channel	-	0.03	-
WET K	PEM wetland	29.8851318, -95.3730653	No, inside non-jurisdictional channel	-	0.01	-
WET L	PEM wetland	29.8846436, -95.3730269	No, inside non-jurisdictional channel	-	0.01	-
WET M	PEM wetland	29.8842621, -95.3730282	No, inside non-jurisdictional channel	-	0.02	-
WET N	PEM wetland	29.8833923, -95.3730316	No, inside non-jurisdictional channel	-	0.04	-
WET O	PEM wetland	29.8810130, -95.372956	No, inside non-jurisdictional channel	-	0.48	-
WET P	PEM wetland	29.878991, -95.372954	No, inside non-jurisdictional channel	-	0.08	-
			TOTAL POTENTIALLY JURISDICTIONAL AQUATIC FEATURES		**-**	**1,313.52**
			TOTAL POTENTIALLY NON-JURISDICTIONAL AQUATIC FEATURES		**1.33**	**11,932.78**
				TOTAL	**1.33**	**13,426.20**