U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 8/7/2020
ORM Number: SWG-2020-00253
Associated JDs: SWG-2017-00012, SWG-2012-00551
Review Area Location[1]: State/Territory: Texas City: Houston County/Parish/Borough: Harris
Center Coordinates of Review Area: Latitude 29.920193° Longitude -95.346277°

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☒ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
P138-00-00	3918.93	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	P138-00-00 is a naturally occurring surface water channel that contributes surface water flow to an (a)(1) water in a typical year, is perennial, and flows as such in a typical year.
P100-00-00 Greens Bayou	1233.23	linear feet	(a)(2) Intermittent tributary	P-100-00-00 Greens Bayou is a naturally occurring surface water channel contributes surface water flow

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
			contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	to an (a)(1) water in a typical year, is perennial, and flows as such in a typical year.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
PUB A	0.15	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	PUB A was constructed or excavated wholly in upland or in non-jurisdictional waters and it is not an impoundment that meets the conditions of (c)(6). Based on historical topographic maps there is no evidence that the water is an impoundment of a jurisdictional water meeting the conditions of paragraph (c) (6). Wet 1 is a wetland within the lateral limits of the excluded water
P138-03-00 North	973.29	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Based on the consultant's site visit and reference resource maps (USGS topo, aerials, etc.) P138-03-00 North is an ephemeral channel.
P138-03-00 South	2401.97	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Although there is evidence of some historical flow, there is no contemporary evidence of intermittent flow only remnant ephemeral flow can be assumed. P138-03-00 South is an ephemeral channel.

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
Wet 1	0.02	acre(s)	(b)(1) Non-adjacent wetland.	Wet 1 is within the lateral limits of the excluded water, PUB A.
Wet 2 (P139-00-00)	0.02	acre(s)	(b)(1) Non-adjacent wetland.	Wet 2 is within the lateral limits of P-139-00-00 an excluded (b)(3) channel and is not an adjacent wetland to P100-00-00 Greens Bayou.
Wet 3	0.09	acre(s)	(b)(1) Non-adjacent wetland.	Wet 3 is within lateral limits of P-138-03-00 South an excluded (b)(3) channel and is not an adjacent wetland to P100-00-00 Greens Bayou.
Wet 4	0.10	acre(s)	(b)(1) Non-adjacent wetland.	Wet 4 is within the lateral limits of the excluded (b)(3) channel P138-03-00 North and is not adjacent to P100-00-00 Greens Bayou.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: Wetland Delineation Report "P500-06-00-E006 Lauder Stormwater Detention Basin Phase II Project" January 2020. June 27, 2020 Report Addendum-new delineation maps.

This information is sufficient for purposes of this AJD.

Rationale: N/A or describe rationale for insufficiency (including partial insufficiency).

☐ Data sheets prepared by the Corps: Title(s) and/or date(s).

☒ Photographs: Aerial and Other: 1938 B&W,1944 B&W,1953 B&W,1958 B&W, 1969 B&W,1977 B&W, 1996 CIR, 2004 CIR, 2008 TC, 2014 TC, 2018 TC, Delineation report site photos Dec 12, 2019.

☐ Corps site visit(s) conducted on: Date(s).

☒ Previous Jurisdictional Determinations (AJDs or PJDs): SWG-2017-00012,SWG-2012-00551 see III.C.

☒ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☒ USDA NRCS Soil Survey: 2018 NRCS Soil Survey Data

☒ USFWS NWI maps: 2011 Humble, Tx NWI Data

☒ USGS topographic maps: See Below

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	Humble, Tx. USGS Topographic Maps: 1916, 1919, 1947, 1954, 1967, 1982, 1995, 2013, 2016, 2019. The topography is relatively flat within the subject tract and surrounding areas. The elevation ranges from 65 ft. to 72 ft. (AMSL) with a general down-gradient to the east. Three watercourses are present within the subject tract (P100-00-00, P138-00-00, and P138-03-00). A man altered watercourse enters the Subject Property (P138-00-00) from the southwest and takes on a more natural channel alignment within the subject tract. Greens Bayou enters the tract from the north and bends through the property exiting in the northeastern portion of the subject tract. A segment of Greens Bayou appears to have been channelized following the northeastern edge of the tract.

Data Source (select)	Name and/or date and other relevant information
	USGS National Hydrography Dataset (NHD) (2019 Aerial Photograph with 2017 NHD): P100-00-00 (Greens Bayou) to be a Stream/River Perennial, P138-00-00 to be a Stream/River Intermittent, and P139-00-00 to be Canal/Ditch.
USDA Sources	2018 NRCS Soil Survey Data. Mapped with 2 hydric soils, Hatliff-Pluck-Kian complex and Clodine-Urban land complex
NOAA Sources	N/A.
USACE Sources	See ORM background data
State/Local/Tribal Sources	HCFCD (see below)
Other Sources	• HCFCD 10 yr. FP map ARCGIS • HCFCD Light Detection and Ranging (LiDAR) data (2019 Aerial Photograph with 2012 HCFCD LiDAR Elevation Data) • HCFCD flow regime data (HEC-RAS) on P138-00-00 • HCFCD profile survey data on break in ephemeral flow between P138-03-00 north and P138-03-00 south

B. Typical year assessment(s): Water features where analyzed using APT calculating for base delineation map aerial photograph date of 04/30/2020. The APT is a tool that affords the user the capability to look at rainfall in the recent past, cumulative for the last 3 months as well and climatoligcal review for the past 30 years. The WETs score (last 3 mths) for that 30 April 20 totaled 13 on a scale of 6-18 with a score of 15-18 being wetter than normal precipitation for the previous 3 months, which indicates that the measurements or observations made are reflective of normal climatic conditions. It uses climatic data collected from numerous nearby weather stations and produces the most reliable source with a full 30 years of precipation data. The site coridnates are located at an appx 60.4 ft elevation. Below is the result of numerous dates run for this site.

Date	Rain prior 72 hours	WETS (3 mth) score:	APT	Season	PDSI
30 Apr 20	~1-2”	13 (N)	Above	Wet	Mild drought
20 Dec 19 (Agent site visit)	Less 1”	09 (D)	Below	Wet	Incipient drought
12 Dec 19 site photos	~1”	12 (N)	Below	Wet	Incipient drought
11 Feb 15	Less 1”	10 (N)	Below	Wet	Incipient drought
3 Nov 19	~ 2-3”	14 (N)	Normal	Wet	Normal

The results of the review of the APT analysis aiding in reaching the conclusion needed to determine if the subject feature have more than ephermal flow and/or are inundated by flooding froma (a)1-(a)3 water in a typical year.

Other Hydrological Regimes information reviewed included:
1. Previous determination of perennial stream (SWG-2012-00551): Greens Bayou and intermittent on P138-00-00.
2. 2020 NHD as viewed from the USGS National Map Viewer (https://viewer.nationalmap.gov/advanced-viewer/): Using this resource, P100-00-00 is displayed as perennial, P138-00-00 is displayed as intermittent, and P139-00-00 is displayed as a canal/ditch. Please note that P138-03-00 is not identified in this reference.

3. 2019 USGS Topographic Map: According to the most recent USGS topographic map available, P100-00-00 is displayed as perennial, P138-00-00 is displayed as intermittent, P139-00-00 is displayed as perennial. The designation for P139-00-00 conflicts with the NHD data and HCFCD data. Please note that P138-03-00 is not identified in this reference.

C. Additional comments to support AJD:

Based on ORM data:

SWG-2017-00012: JD NPR, issed 09 JAN 2017, for demolition of the structures located at 414 Dale Street and 2606 Juella Drive. Determined not to be a regulated activity subject to Section 404 of the CWA.

SWG-2012-00551: IP issued 05 SEP 2019, permit area includes sections of Greens Bayou (P100-00-00), and P138-00-00. The authorized detention facility is located immediate east of SWG-2020-00253. IP action includes a PJD determination issued 11 Jan 2017, which identifies portions of Greens Bayou (P100-00-00) which includes an outfall and P138-00-00 which had no permitted impacts.

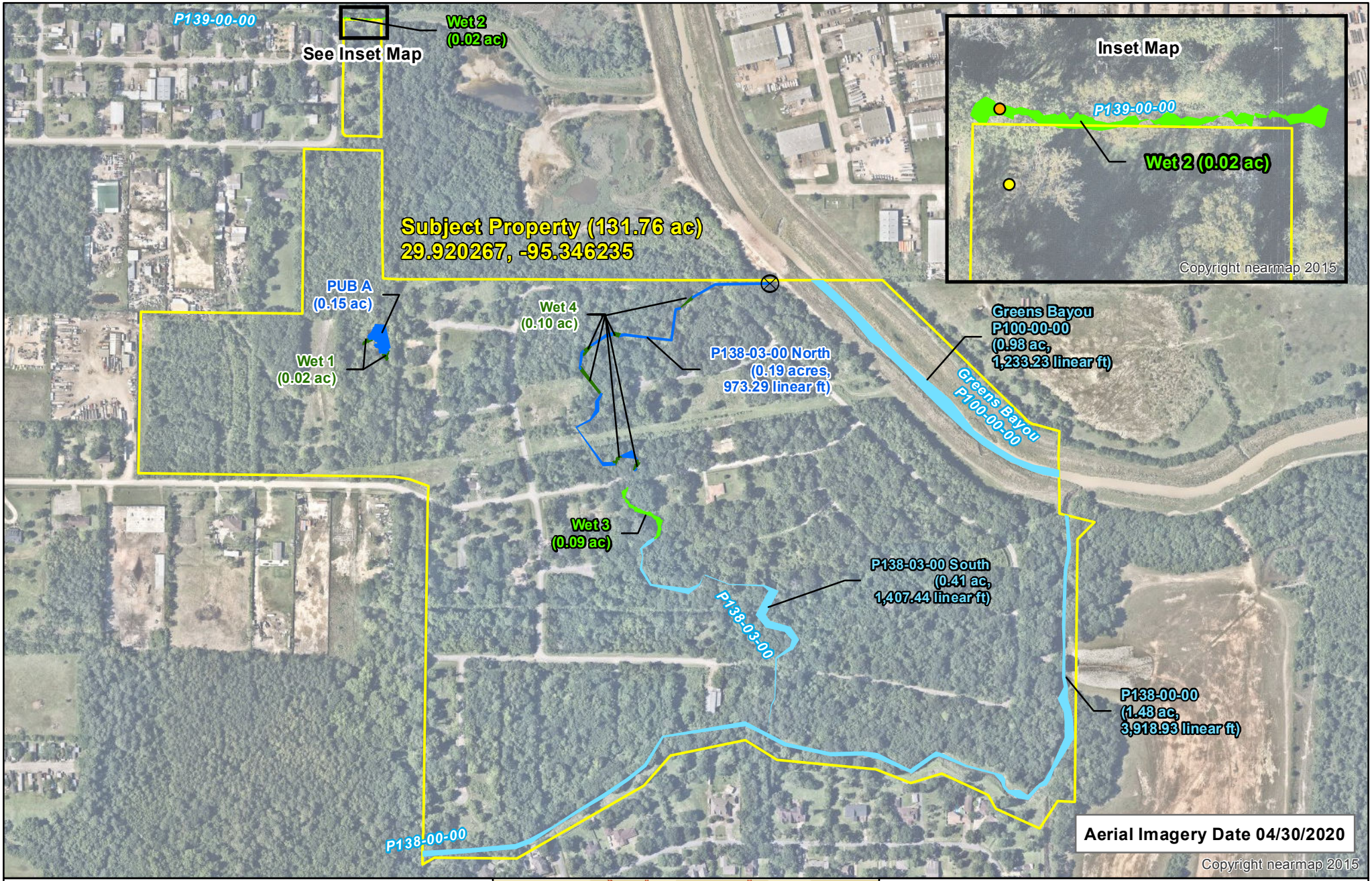

Exhibit 3: 2020 Aerial Photograph with Delineated Aquatic Features

P500-06-00-E006 Lauder Stormwater Detention Basin Phase II Project

Harris County, Texas

Created: 7/27/2020

HOLLAWAY
ENVIRONMENTAL + COMMUNICATIONS

N

0 270 540 Feet