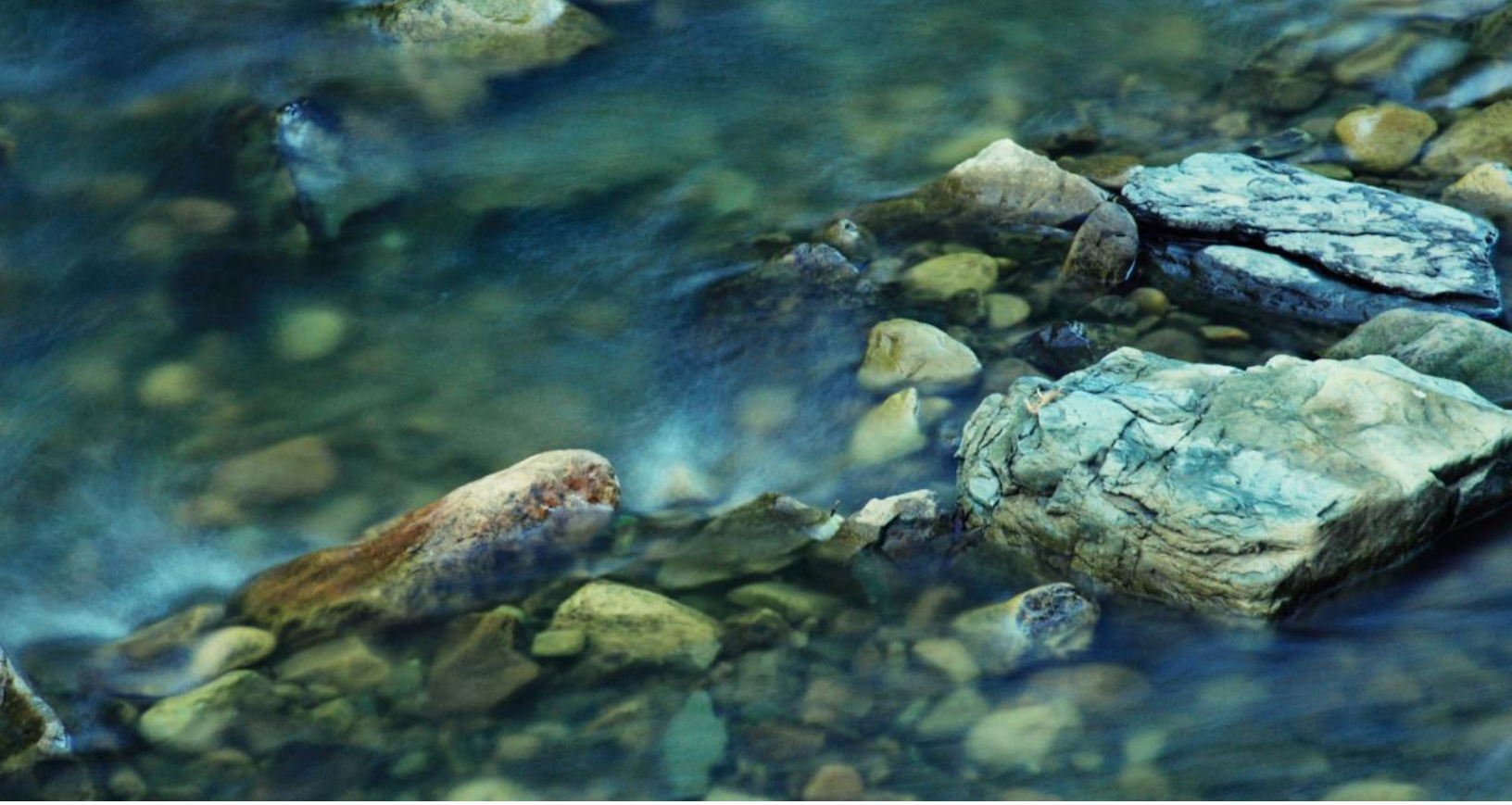
Appendix J
Wetlands and Waters Delineation Report



July 2024
Puerto Verde Global Trade Bridge Project

ANCHOR QEA

Wetlands and Waters Delineation Report

Prepared for Puerto Verde Holdings, LLC

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Puerto Verde Global Trade Bridge Project

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ABBREVIATIONS

1987 Manual	*Corps of Engineers Wetlands Delineation Manual*
APT	Antecedent Precipitation Tool
DF	drainage feature
EF	erosional feature
EIS	environmental impact statement
EPA	Environmental Protection Agency
FACU	facultative upland
FEMA	Federal Emergency Management Agency
GIS	geographic information system
IS	intermittent stream
LiDAR	Light Detection and Ranging
NEPA	National Environmental Policy Act
NHD	National Hydrography Dataset
NOAA	National Oceanic and Atmospheric Administration
NRCS	National Resources Conservation Service
NWI	National Wetlands Inventory
OEA	Office of Environmental Analysis
OHWM	ordinary high water mark
Project	Puerto Verde Global Trade Bridge Project
PVGTB	Puerto Verde Global Trade Bridge
PVH	Puerto Verde Holdings
PS	perennial stream
RTK-DGPS	real-time kinematic differential global positioning system
Regional Supplement	*Regional Supplement to the Corps of Engineers Wetland Delineation Manual; Great Plains Region* (Version 2.0)
STB	U.S. Surface Transportation Board
TNW	traditionally navigable water
UPL	upland
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the United States

1 Introduction

On December 14, 2023, Puerto Verde Holdings, LLC (PVH) filed a petition with the U.S. Surface Transportation Board (STB) for a license to construct and operate the Puerto Verde Global Trade Bridge (PVGTB) Project (project). The project involves the development of a new commercial vehicle and freight rail trade corridor between the cities of Eagle Pass, Texas, and Piedras Negras, Mexico, for the purpose of improving the cross-border movement of commercial goods and freight. The project would include the construction of two new bridges (road and rail) across the Rio Grande River; new road and rail approaches to those bridges and connections to existing road and rail infrastructure on both sides of the border; a central control tower; and various types of support and inspection facilities for both the roadway and rail line. The project would also include the construction of parking areas, security fencing, and other supporting infrastructure (e.g., utilities) for the new border crossings.

After review of the application, STB's Office of Environmental Analysis (OEA) determined that construction and operation of the project has the potential to result in significant environmental impacts, requiring the preparation of an environmental impact statement (EIS) pursuant to the National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321-4370m-11). STB issued a Notice of Intent to prepare an EIS for the PVGTB project on March 29, 2024 (Docket No. FD 36652). To support their analysis of potential project impacts on water resources under NEPA, OEA requested that PVH complete a delineation of all surface waterbodies within the project site, including wetlands, streams, rivers, ponds, lakes, and drainage ditches, regardless of jurisdictional status. To address this request, PVH contracted Anchor QEA to complete the work. Performance of the wetland and other waters delineation is intended to address this request and to support PVH's future application for a Department of the Army Permit from the U.S. Army Corps of Engineers (USACE) under Section 10 of the Rivers and Harbors Act and potentially Section 404 of the Clean Water Act. Authorization under Section 10 of the Rivers and Harbors Act is anticipated due to the nature of the project. However, the need for a permit pursuant to Section 404 of the Clean Water Act is yet to be determined due to unknowns related to the extent of fill activities and the geographic extent of federal jurisdiction across the survey area.

To address OEA's request, Anchor QEA completed a wetlands and other waters delineation at the approximate 217-acre survey area. The survey area is located along the Rio Grande River and Seco Creek in Eagle Pass, Maverick County, Texas (Figures 1 and 2 attached). Table 1 provides information relevant to the survey area. Work conducted as part of this assessment was completed in compliance with all relevant USACE and Environmental Protection Agency (EPA) regulations and guidance. While all aquatic features were mapped during the delineation effort, regardless of their jurisdictional status, Anchor QEA also conducted assessments to determine the likely jurisdictional status of each to help inform project development and future permitting efforts. Assessments related

to the wetland determinations and delineations and associated assessments of jurisdictional status for on-site features are based on Anchor QEA's best professional judgment and are provided to the applicant as an informational tool. The actual designation of jurisdictional status and establishment of all jurisdictional boundaries within the property boundary rests with the USACE Fort Worth District. Neither Anchor QEA, nor any other private consultant, holds the authority to establish legally binding wetland/non-wetland boundaries or jurisdictional status for features located within the property boundary. The methods and findings of Anchor QEA's wetlands and other waters delineation are detailed in subsequent report sections.

Table 1
Additional Survey Area Information

USGS Hydrologic Unit Code (HUC12)	130800011805 130800020702			
USGS Quadrangle	Eagle Pass East, TX Eagle Pass West, TX			
Survey Area Centroid (Decimal Degrees)	28.745432° -100.502281°			
Included Tax Parcels	3481 3499 3517 3520 3521 3526 3815 3817 3818 3819 3943 52457 52458	52459 53235 8712980 9154 9155 9156 9157 9158 9161 9162 9163 9173 9174	9175 9176 9188 9189 9190 9253 9254 9255 9256 9270 9271 9274 9275	9276 9277 9295 9296 9297 9298 9299 9300 9301 9320 9321 9322 9328

2 Methods

2.1 Background Review Methods

To prepare for the wetlands and other waters delineation, Anchor QEA examined background data including USACE's Antecedent Precipitation Tool (APT), National Oceanic and Atmospheric Administration (NOAA) rainfall data, U.S. Geological Survey (USGS) Quadrangle Topographic Maps and its National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) floodplain data, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data, U.S. Department of Agriculture (USDA) National Resources Conservation Service (NRCS) soil data, Light Detection and Ranging (LiDAR) data, and current and historical aerial photography depicting the property. The purpose of the background review was to support the development of a comprehensive field survey plan and to inform the project team of anticipated site conditions.

2.2 Field Investigation Methods

To perform the wetlands and other waters delineation, Anchor QEA used the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual; Great Plains* (Version 2.0) (USACE 2010), *Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual* (Wetland Training Institute [WTI] 1987), and "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States* and *Carabell v. United States*" (USACE and EPA 2008). While the *Rapanos v. United States* guidance is the currently implemented guidance, these guidelines are being implemented in conformance with the May 25, 2023, U.S. Supreme Court decision in *Sackett v. EPA*. Detailed regional standards and implementation methods for conformance with the decision have not been released by USACE Headquarters or the USACE Fort Worth District. However, Anchor QEA relied on the precedent set by recently issued USACE decisions and anecdotal information provided by USACE regulators to assess jurisdiction following *Sackett v. EPA*.

The routine method for sites greater than 5 acres was employed. The survey area is adjacent to both the Rio Grande and Seco Creek. Review of site topography indicates that the property appears to drain primarily to Seco Creek, rather than the Rio Grande. Therefore, a baseline parallel to Seco Creek was established and relied upon to develop survey transects. It should be noted that the location and orientation of the baseline and survey transects were previously coordinated with and approved by the USACE Fort Worth District. Consistent with the delineation manual, five transects were established to sufficiently survey the property. To confirm common names, scientific names, and the wetland indicator status of all plants identified within the survey area, Anchor QEA used the *National Wetland Plant List* (USACE 2020). To determine hydric soils and wetland hydrology, Anchor QEA used the 1987 Manual, the Regional Supplement, and *Field Indicators of Hydric Soils in the United States* (NRCS 2018). To make an upland or wetland determination, Anchor QEA recorded vegetation, soils,

and hydrology parameters at each sample point. To determine the lateral limits of stream features (e.g., Rio Grande and Seco Creek), Anchor QEA mapped the ordinary high water mark (OHWM) consistent with USACE's *Regulatory Guidance Letter No. 05-05,* which states that the OWHM is indicated by "physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means" (USACE 2005). Prior to conducting on-site surveys, Anchor QEA met with USACE's project manager on May 7, 2024, who provided additional anecdotal guidance. According to USACE personnel, the OHWM in this region is most closely associated with physical indicators of eroding banks. This recommendation was considered in combination with the regulatory guidance letter during OHWM mapping.

To determine the position of various points, Anchor QEA used both a sub-foot accuracy Trimble GEO 7X and a Trimble R10 dual-frequency real-time kinematic differential global positioning system (RTK-DGPS) working from the virtual reference station corrections network. The nominal accuracy of the typical dual-frequency RTK-DGPS is ±1 centimeter horizontal and ±2 centimeters vertical. Anchor QEA employed USACE's standard operating procedures for recording and submitting jurisdictional delineations with a GPS and geographic information system (GIS) data with GPS tools and technologies (USACE 2016). Position coordinates were recorded and then plotted in the office with ArcGIS 10.8.2.

2.3 Desktop Delineation Methods

Based on ownership status across the survey area, PVH was unable to obtain unobstructed access to the entire survey area. PVH coordinated right-of-entry requests with all private landowners, but responses were not received for multiple parcels. Further, detailed surveying of the Rio Grande River shoreline could not be safely conducted based on the extent of border security infrastructure (i.e., razor wire) present along the riverbank. Where access could not be obtained, Anchor QEA relied on field data recorded in the vicinity of inaccessible areas, visual observations made from public right-of-way or adjacent private property where right-of-entry was obtained, and review of desktop resources to determine the likely extent of wetlands or other water resources. Desktop resources used to analyze inaccessible areas include low-altitude, high-resolution aerial photography, USFWS's NWI data, USDA/NRCS soil data, and publicly available LiDAR data. Figure 1 (in-text) depicts areas where full access was obtained, areas where access was partially limited due to safety concerns, and areas where no access was obtained due to private ownership. In total, no access was achievable across approximately 5% of the survey area, a minimum of partial access was achievable across approximately 39% of the survey area, and full access was achievable across 56% of the survey area.

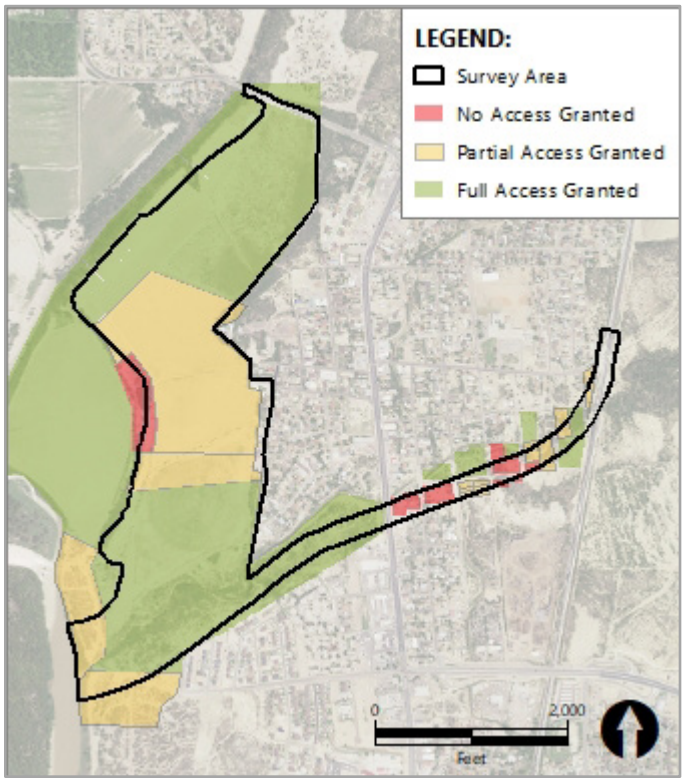

Figure 1 Right-of-Entry Across Survey Area

Specifically, the location of the OHWM along the Rio Grande River was determined based on an assessment of on-site visual observations, low-altitude aerial imagery, and publicly available LiDAR data. Site observations indicated that this stretch of shoreline contained relatively vertical banks that would likely be clearly depicted in LiDAR data. River shoreline access was possible at the convergence of Seco Creek and the Rio Grande River, and the horizontal position of OHWM was mapped. It is likely based on the overall topographic gradient of the area that the elevation of OWHM at the convergence of Seco Creek and Rio Grande River is nearly identical across the survey area. Therefore, Anchor QEA correlated LiDAR data to recorded field data and mapped the approximate location of OHWM along the Rio Grande River for areas where access could not be achieved.

3 Results

3.1 Background Information

Anchor QEA reviewed various sources of background information to support development of a detailed field survey plan and to better understand anticipated conditions at the property. Key information identified during the review of background information is provided in Table 2.

Table 2
Key Takeaways from Desktop Resources

Resource	Notes
USACE APT[1]/NOAA Rainfall Data[2]	USACE's APT indicates that climatic conditions for the property are considered "drier than normal." Approximately 0.22 inches of precipitation fell in the region in the 6 days leading up to the survey event (Maverick County Internal Airport Station).
USGS Topographic Maps[3] and NHD[4]	The Rio Grande River is located along the western survey area boundary, and Seco Creek meanders in and out of the southern portion of the survey area. Elm Creek is located outside of but adjacent to the area north of the survey area. According to the NHD, the Rio Grande River is identified as perennial/artificial path, Seco Creek is identified as intermittent, and Elm Creek is identified as perennial. No indications of wetlands, open water, or land subject to inundation is visible within the survey boundary. As early as 1958, the survey area is depicted as relatively flat, undeveloped lands with several maps annotating the area as "Seco Mines."
FEMA Floodplain Data[5]	Approximately half of the property is mapped within the 100-year floodplain (Zone A). Areas mapped as Zone A are associated with the Rio Grande River and Seco Creek and are located on the southern and western portion of the survey area. The remainder of the property is mapped outside of both the 100- and 500-year floodplains.
USFWS NWI[6]	No wetland features are depicted in the survey boundary. The only NWI features located within the survey boundary include multiple segments of Seco Creek, which is mapped as R4SBC (riverine, intermittent, streambed, seasonally flooded). Near the survey area, NWI features are limited to the Rio Grande River, which is mapped as R2UBH (riverine, lower perennial, unconsolidated bottom, permanently flooded); additional portions of Seco Creek; and Elm Creel, which is mapped as R2UBHx (riverine, lower perennial, unconsolidated bottom, permanently flooded, excavated).
USDA/NRCS Soil Data[7]	Soils mapped within the survey boundary include Catarina clay association, 0% to 5% slopes (CAB); Copita sandy clay loam, 1% to 3% slopes (CoB), Lagloria very fine sandy loam, 0% to 1% slopes (LgA); Lagloria very fine sandy loam, 1% to 3% slopes (LgB), Maverick association, undulating (MKC); and Pryor clay loam, 1% to 3% slopes (PrB). None of the mapped soil units are identified on the hydric soils list.
LiDAR Data[8]	The property appears to be relatively flat with a very slight topographic trend towards the south and Seco Creek. Several linear, depressional landforms that extend from Seco Creek are evident on the southern portion of the survey area. An additional linear depression is visible extending from Elm Creek and onto the northern portion of the property. This feature is much more linear in nature and

Resource	Notes
	may represent a maintained ditch. These areas require additional investigation to determine if they function as tributary features.
Past and Present Aerial Photography[9] (1959 to 2024)	Historically, the survey area persisted as primarily agricultural fields with the Rio Grande River located adjacent to the west and Seco Creek meandering along the southern portion of the survey area. The location and alignment of both the Rio Grande River and Seco Creek appear relatively unchanged over time. Site improvements appear limited to various unimproved roads associated with agricultural activities and minor residential development south of Seco Creek. Aerial signatures suggesting substantial inundation and/or saturation throughout the property are absent. Evidence of aquatic habitat appears to be limited to the Rio Grande River, Seco Creek, one concrete-lined drainage ditch east of Del Rio Boulevard, and a possible irrigation ditch bisecting an agricultural field on the northern portion of the survey area. Historical aerial imagery dating back to 1959 suggests that the concrete-lined ditch was constructed between 1974 and 1984. Prior to its construction, it appears that an ephemeral stream was located just west of the channel and was impacted by development. It is likely that concrete channel was constructed to convey ephemeral flow that was conveyed by a historical ephemeral tributary prior to 1972.

Sources:

1. USACE APT. https://erdc-library.erdc.dren.mil/jspui/bitstream/11681/47189/3/ERDC-TN%20WRAP-23-2.pdf.
2. NOAA Regional Climate Centers. https://agacis.rcc-acis.org/.
3. USGS Quadrangle Maps. https://ngmdb.usgs.gov/topoview/viewer/#4/40.00/-100.00.
4. USGS Hydrography Dataset. https://www.usgs.gov/national-hydrography/national-hydrography-datasethttps://www.usgs.gov/national-hydrography/national-hydrography-dataset.
5. FEMA Floodplain Viewer. https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd.
6. USFWS Wetland Mapper. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.
7. USDA/NRCS Web Soil Survey. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx; NRCS State Soil Data Access (SDA) Hydric Soil List. https://www.nrcs.usda.gov/publications/query-by-state.html.
8. USGS West Texas LiDAR. https://data.tnris.org/collection/?c=61869307-e095-4a75-9008-2537f07e1d07.
9. Google Earth Pro. https://earth.google.com/web/; Historic Aerials by NETR Online. https://www.historicaerials.com/

3.2 Delineation Results

Consistent with the 1987 Manual, Anchor QEA utilized five transects within the survey area, and sample points were recorded to characterize the different vegetation communities, habitat types, land cover types, and land features encountered. In Total, Anchor QEA recorded 20 sample points to characterize the different communities. Figure 3 (attached) provides an overview of the transect and sample point locations. Appendix A includes copies of wetland datasheets. It should be noted that right-of-entry could not be obtained for all portions of the survey area. Aquatic features that could not be comprehensively surveyed and mapped on site are designated with an asterisk (*) throughout this report and in accompanying maps.

No wetlands were identified during on-site survey efforts, and portions of the property where right-of-entry could not be obtained are expected to exhibit similar upland characteristics. The only aquatic features identified were two stream features. Other notable site features identified included two drainage features (DF) and eight erosional features (EF). Habitat communities identified across

the survey area included scrub-shrub upland and agricultural field. Each notable site feature and upland habitat community is detailed in subsequent report sections.

3.3 Aquatic Features

3.3.1 Stream Features

Two individual stream features were identified within the survey boundary. The Rio Grande River was identified along the western survey boundary and was classified as a perennial stream, PS-1*. At the time of the survey, PS-1* contained steep banks and flowing water toward the south. It should be noted that access to the shoreline of PS-1* was limited due to the presence of razor wire that is installed as part of border security measures. While the OHWM could not be mapped in detail due to limited accessibility, the location of the OHWM was estimated based on LiDAR data. It is anticipated that the elevation of OHWM mapped at the convergence of Seco Creek and the Rio Grande River accurately represent the elevation of OHWM along this stretch of the PS-1*. In total, approximately 0.37 acres of PS-1* are located within the survey area.

A second stream feature, Seco Creek (IS-1), was identified extending northeast from the Rio Grande River. At the time of the survey event, this feature lacked flowing water, but isolated pools were observed throughout, indicating that the feature is likely intermittent. IS-1 meanders to the northeast entering and exiting the survey boundary at multiple locations. In total, four discrete segments of Seco Creek (IS-1a, IS-1b, IS-1c, and IS-d) were mapped within the survey boundary and totaled approximately 2.04 acres. Consistent with relevant guidance and recommendations provided by USACE personnel, evidence of bank erosion was used as the primary indicator of OHWM. Within the survey area, IS-1 contained moderately sloping banks (i.e., approximately 2:1 side slopes) and generally lacked vegetation below the plane of OHWM.

3.4 Other Features

3.4.1 Ditch Features

DF-1 is located on the northern portion of the survey boundary between survey transects T3 and T4 and is approximately 1,087 feet in length. This feature appears to function as a drainage ditch situated partially along one of the unimproved road alignments. According to personnel familiar with operations at the property, this feature serves to capture and convey irrigation water runoff. DF-1 enters a culvert at its northern terminus and drains into EF-1*, which is discussed later. DF-1 appears to have been excavated entirely from uplands and drains only uplands.

DF-2 is located on the southern portion of the survey area and east of Del Rio Boulevard. Approximately 457 linear feet of DF-2 were located within the survey boundary. However, this feature continued both north and south of the property. Within the survey boundary, DF-2 persists as a

concrete-lined drainage feature that flows to the north. Off site to the north, this feature shares a connection with Seco Creek. Off site to the south, this feature transitions to an earthen ditch and continues to the south and east. Within the survey area, this feature appears to be a constructed stormwater facility. According to the review of aerial photography, it appears that this feature was constructed between 1974 and 1984. This feature appears to be a relocated portion of a tributary that is depicted on the 1959 USGS quadrangle map for Eagle Pass East, Texas. This feature may act as a relocated tributary. However, it does not appear to convey a relatively permanent flow of water.

3.4.2 Erosional Features

A total of eight EFs were identified throughout the survey area and included EF-1, EF-2, EF-3, EF-4, EF-5, EF-6, EF-7a, and EF-7b. All but one of these features were located on the southern portion of the survey area in the vicinity of Seco Creek (IS-1). EFs identified across the survey area lacked vegetation and appear to have formed due to stormwater runoff scouring areas that lacked dense herbaceous vegetation. A discussion of each feature is as follows.

EF-1* was the only feature not located in close proximity to Seco Creek (IS-1). This feature was located between survey transects T3 and T4 on the northern portion of the survey area. EF-1* shared a culvert connection with DF-1 and extended outside the survey area to the north. It should be noted that this feature could not be safely mapped due to extremely steep banks and extensive natural debris that further limited ingress/egress. However, drone imagery and LiDAR were used to determine the approximate alignment. EF-1* is approximately 418 feet long and is situated between off-site portions of Elm Creek and DF-1. As detailed previously, personnel familiar with current operations at the property indicate that the combination of DF-1 and EF-1* serve to collect and convey irrigation runoff associated with on-site agricultural activities. EF-1* appears to have formed due to scour of irrigation water runoff. This feature does not exhibit an OHWM and is characterized by low volume, infrequent, and short-duration flow received from DF-1.

The remaining EFs (EF-2, EF-3, EF-4, EF-5, EF-6, EF-7a, and EF-7b) are each located south of Seco Creek on the southern portion of the survey area. The approximate length of these features is 255, 246, 141, 238, 159, 143, and 119 feet, respectively. These EFs appear to be naturally occurring and have likely formed as a result of high-energy runoff following significant precipitation events. These features do not appear to act as tributaries to Seco Creek (IS-1), are characterized by low volume, infrequent, and short-duration flow, and lack indicators of OHWM.

EF-2 appears to collect runoff during precipitation events and flows to the north where it shares a direct connection with Seco Creek. This EF exhibits gentle slopes and poorly defined boundaries to the south but is more deeply incised to the north and at its connection to Seco Creek.

EF-3, EF-4, EF-5, and EF-6 are each located south of Seco Creek and east of EF-2. Each of these features are shallow in nature and exhibit poorly defined boundaries. At the northern terminus of each, these features transition to unconfined upland habitat where discernible boundaries are not present. Any flow exiting these features toward Seco Creek would be via sheetflow across unconfined upland habitat.

EF-7a and EF-7b are located east of EF-6 and appear to be remnant portions of a single past feature. However, due to the construction and maintenance of an unimproved road used by border patrol personnel, this feature has been separated into two distinct features. It should be noted that there is no culvert or other subsurface connection passing below the unimproved road that would provide a connection between EF-7a and EF-7b. EF-7a is located north of the unimproved road and connects directly to Seco Creek. EF-7b is located south of the unimproved and is separated from Seco Creek due to the lack of culverts or other subsurface connections.

3.5 Upland Habitat Communities

Two distinct upland habitat types were identified across the survey area. Generally, the scrub-shrub upland community is concentrated along the banks of Seco Creek, along survey area boundaries, and along the shoreline of the Rio Grande River. Areas categorized as agricultural field are located north of Seco Creek. Site improvements identified across the survey area were limited to unimproved roads typically associated with agricultural and border security operations. More noteworthy site improvements were limited to minor residential developments east of Del Rio Boulevard and one homesite situated along the western survey boundary. Table 3 provides a summary of the habitat communities identified and their acreages. A map showing the location and extent of each community is provided in Figure 4 (attached). Each habitat type is summarized as follows.

Table 3
Survey Area Habitat Communities

Habitat Community	Acreage
Agricultural field	105.5
Scrub-shrub upland	112.7
Total	**218.2**

3.5.1 Scrub-Shrub Upland—112.7 Acres

The scrub-shrub upland community was the most prevalent community identified and comprised approximately 113 acres of the survey area. This community was generally located along the perimeter of the survey area and along the Rio Grande River and Seco Creek. Sample points recorded within the scrub-shrub upland community include T1SP01, T1SP02, T2SP02, T2SP03,

T3SP01, T3SP02, T3SP03, T4SP02, T5SP01, ASP01, ASP02, ASP03, ASP04, ASP05, and ASP07. Vegetation was composed primarily of honey mesquite (*Prosopsis gladulosa*; facultative upland [FACU]) in the tree stratum; honey mesquite, blackbrush acacia (*Acacia rigidula*; upland [UPL]), Mexican palo-verde (*Parkinsonia aculeata*; facultative), and mealy false acacia (*Vachellia farnesiana*; FACU) in the sapling stratum; and blackbrush acacia, erect prickly-pear (*Opuntia stricta*; FACU), buffel grass (*Cenchrus ciliaris*; UPL), and upright prairie coneflower (*Ratibida columnifera*; UPL) in the herbaceous stratum. While surface soil cracks were identified sporadically throughout this community, wetland criteria for hydrology were not identified. Soil samples recorded within this community did not meet hydric soil criteria, had a matrix color of 2.5Y 5/3 or 2.5Y 6/3, and lacked redoximorphic features. Based on the lack of hydrophytic vegetation, indicators of wetland hydrology, and the presence of hydric soils, this community was determined to be an upland habitat.

3.5.2 Agriculture Field—105.5 Acres

Portions of the survey area appear to be presently used or used in the recent past for agricultural purposes. Evidence of sorghum production was observed. However, extensive growth was absent as fields appeared fallow at the time of the survey. Further evidence of agriculture use was observed in the form of a center-pivot irrigation system located on the southernmost field. These portions of the survey area likely persisted as scrub-shrub upland habitat that is consistent with other unaltered portions of the site. These areas were generally located on the central portion of the property north of Seco Creek and comprised approximately 106 acres of the survey area. Sample points recorded in the area included T2SP01, T3SP03, T4SP01, ASP06, and ASP08. Vegetation identified throughout this community consisted primarily of buffel grass, silverleaf nightshade (*Solanum elaeagnifolium*; UPL), and Bermuda grass (*Cynodon dactylon*; FACU) in the herbaceous stratum. Tree, sapling, and woody vine species were entirely absent through this community. Indicators of wetland hydrology were also absent with the exception of minor surface soil cracks that were identified sporadically throughout. While this secondary indicator was present, samples recorded throughout this community did not meet wetland criteria for hydrology. Soil samples recorded within this community did not meet hydric soil criteria, had a matrix color of 2.5Y 5/3, and lacked redoximorphic features. Based on the lack of hydrophytic vegetation, indicators of wetland hydrology, and the presence of hydric soils, this community was determined to be upland habitat.

3.6 Jurisdictional Determination

As discussed previously, USACE is currently implementing pre-2015 regulations in conformance with the *Sackett v. EPA* decision. While regional standards and implementation methods for *Sackett v. EPA* conformance are not yet publicly available, Anchor QEA relied on its best professional judgment and anecdotal information from regulatory entities to assess jurisdiction consistent with these guidelines and standards.

The pre-2015 regulations, as documented by 33 *Code of Federal Regulations* (CFR) 328, established by 51 Federal Registry (FR) 41250, November 13, 1986, unless otherwise noted), indicates that waters of the United States include the following:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide
2. All interstate waters including interstate wetlands
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes, or
    b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or
    c. Which are used or could be used for industrial purposes by industries in interstate commerce
4. All impoundments of waters otherwise defined as waters of the United States under this definition
5. Tributaries of waters identified in paragraphs (1) through (4) of this section
6. The territorial sea
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this section

As a result of the *Sackett v. EPA* decisions, multiple changes to how the pre-2015 regulations are implemented are anticipated. Several feature types are no longer expected to categorically meet the regulatory definition of WOTUS. These include interstate wetlands and tributaries that are not relatively permanent, standing, or continuously flowing. In order for non-relatively permanent streams (i.e., ephemeral streams) to be considered a WOTUS, they must have a continuous surface connection to a WOTUS. The *Sackett v. EPA* decision is also expected to affect the operative definition of 'adjacent' for wetland features. According to the Supreme Court decision, adjacent wetlands must have a continuous surface connection with another WOTUS.

The only aquatic features identified during this site assessment included one PS feature (PS-1*; Rio Grande River) and four distinct segments of an intermittent stream feature (IS-1a, IS-1b, IS-1c, IS-1d; Seco Creek).The stretch of PS-1* that is located within the survey area is likely considered a traditionally navigable water (TNW). Although shallow, "ankle deep" segments of the Rio Grande are being evaluated in various court proceedings to determine if they are in fact navigable, it is

Anchor QEA's best professional judgment that within the survey boundary, PS-1 would likely be considered navigable by USACE. As such, PS-1* could be considered a jurisdictional WOTUS, subject to both Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Seco Creek appears to function as a relatively permanent tributary to a TNW and, as such, could be considered a jurisdictional WOTUS subject to Section 404 of the Clean Water Act.

Other noteworthy features identified during the wetland delineation include two DFs (DF-1 and DF-2) and eight EFs (EF-1*, EF-2, EF-3, EF-4, EF-5, EF-6, EF-7a, and EF-7b). DF-1 appears to be man-made and constructed as stormwater facilities. This feature appears to have been constructed entirely within upland habitat, drains only upland habitat, does not appear to be a relocated tributary, and does not convey a relatively permanent flow of water. According to applicable guidance, the agencies generally will not assert jurisdiction over "Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water" (USACE and EPA 2008). As such, it is Anchor QEA's best professional judgment that the DF-1 not be considered jurisdictional WOTUS nor subject to Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act

DF-2 appears man-made, but aerial imagery and historical topographic maps suggest that it may have been constructed from uplands to reroute ephemeral flow from a historic tributary. While this feature does not appear to convey a relatively permanent flow of water, it shares a continuous surface connection with Seco Creek (IS-1) and appears to function as an ephemeral tributary. As such, it is Anchor QEA's best professional judgment that DF-2 likely be considered a jurisdictional WOTUS subject to Section 404 of the Clean Water Act.

The eight EFs identified within the survey boundary do not appear to function as tributaries to a TNW and lack discernable indicators of OHWM. These features have likely formed as a result of surface runoff following precipitation events. According to applicable guidance, the agencies generally will not assert jurisdiction over swales or EFs (e.g., gullies or small washes characterized by low volume, infrequent, or short-duration flow) (USACE and EPA 2008). As such, it is Anchor QEA's best professional judgment that the eight EFs not be considered jurisdictional WOTUS nor subject to Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

4 Conclusion

This Wetland and Waters Delineation report summarizes the findings of Anchor QEA's May 2024 survey at the approximate 217-acre survey area. Determinations of jurisdictional status and jurisdictional limits herein are based on Anchor QEA's best professional judgment and are provided as an informational tool to support EIS preparation for the PVGTB project. The actual designation will rest with the USACE Fort Worth District, the final authority on jurisdictional status for aquatic features within the survey area. As detailed previously, Anchor QEA identified two stream features, two ditch features, and eight EFs across the survey area. No areas meeting the regulatory definition of wetlands were encountered during this effort. Although all site features, regardless of their likely jurisdictional status, will be accounted for during EIS preparation, it is Anchor QEA's best professional judgment that the Rio Grande River (PS-1*), Seco Creek (IS-1a, IS-1b, IS-1c, and IS-1d), and DF-2 could be considered jurisdictional WOTUS. The Rio Grande River is anticipated to be subject to both Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, whereas Seco Creek and DF-2 are anticipated to be subject only to Section 404 of the Clean Water Act. It is Anchor QEA's opinion that USACE is unlikely to assert jurisdiction over the remaining on-site ditch or EFs.

Table 4 provides a summary of the site features identified during the survey effort and includes their likely jurisdictional status.

Table 4
Summary of On-Site Features

Feature Name[1]	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Acreage/Linear Feet[2]	Feature Type	Likely Jurisdictional Status[3]
PS-1*	28.738396	-100.506641	0.37 acre/ 803 linear feet	Perennial stream (Rio Grande River)	Jurisdictional (Section 10/Section 404)
IS-1 (includes segments a through d)	Segment a: 28.739557 Segment b: 28.744651 Segment c: 28.745364 Segment d: 28.745896	Segment a: -100.503935 Segment b: -100.491664 Segment c: -100.490838 Segment d: -100.490117	2.04 acre/ 3,203 linear feet	Intermittent stream (Seco Creek)	Jurisdictional (Section 404)
DF-1	28.750670	-100.501918	1,087 linear feet	Non-RPW, man-made ditch feature	N/A

Feature Name[1]	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Acreage/Linear Feet[2]	Feature Type	Likely Jurisdictional Status[3]
DF-2	28.743693	-100.494435	457 linear feet	Non-RPW, man-made ditch feature relocating a historic ephemeral tributary	Jurisdictional (Section 404)
EF-1*	28.752433	-100.503104	418 linear feet	Erosional feature directly connected to an RPW	N/A
EF-2	28.739073	-100.504293	255 linear feet	Erosional feature directly connected to an RPW	N/A
EF-3	28.740173	-100.502890	246 linear feet	Erosional feature not connected to an RPW	N/A
EF-4	28.740767	-100.500729	141 linear feet	Erosional feature not connected to an RPW	N/A
EF-5	28.741996	-100.497757	238 linear feet	Erosional feature not connected to an RPW	N/A
EF-6	28.743483	-100.493787	159 linear feet	Erosional feature not connected to an RPW	N/A
EF-7 (includes segments a and b)	Segment a: 28.744482 Segment b: 28.744104	Segment a: -100.493485 Segment b: -100.493375	263 linear feet	Segment a—erosional feature directly connected to an RPW; Segment b—erosional feature not connected to an RPW	N/A

Notes:

1. An asterisk (*) indicates that the feature could not be fully surveyed and mapped on site due to right-of-entry and/or safety concerns.
2. Stream features extend outside of the survey area boundary. Acreage and linear footage listed represents acreage positioned within the survey area. Erosional and ditch features did not exhibit an OHWM, and acreage was not determined. Only linear footage was established for these feature types.
3. Likely jurisdictional status is based on best professional judgment and currently implemented regulatory standards (namely the *Rapanos v. United States* regulations in conformance with *Sackett v. EPA*).
4. DF: drainage feature

ES: erosional feature
IS: intermittent stream
N/A: not applicable; non-jurisdictional
PS: perennial stream
RPW: relatively permanent water

5 References

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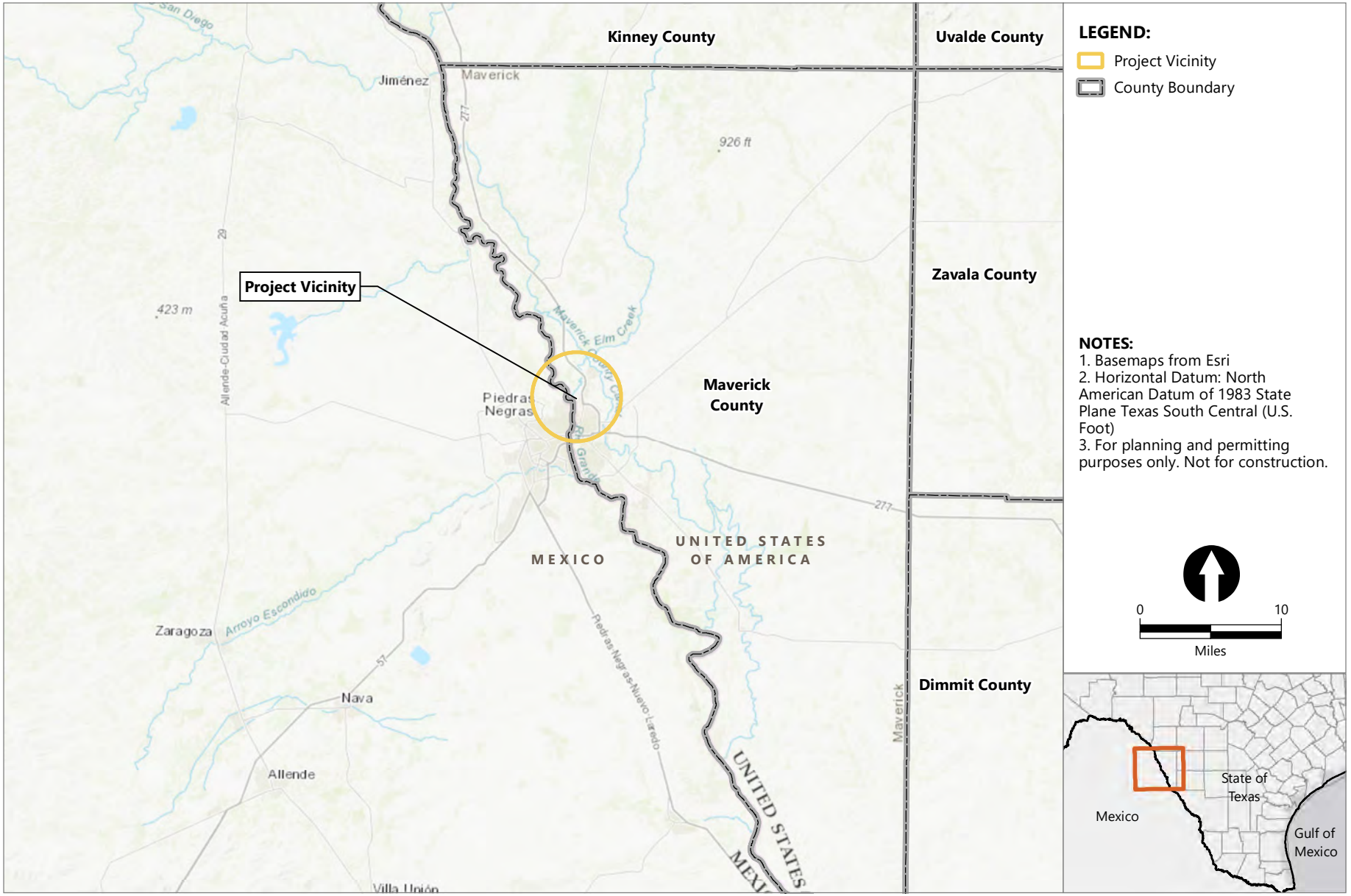
Figures



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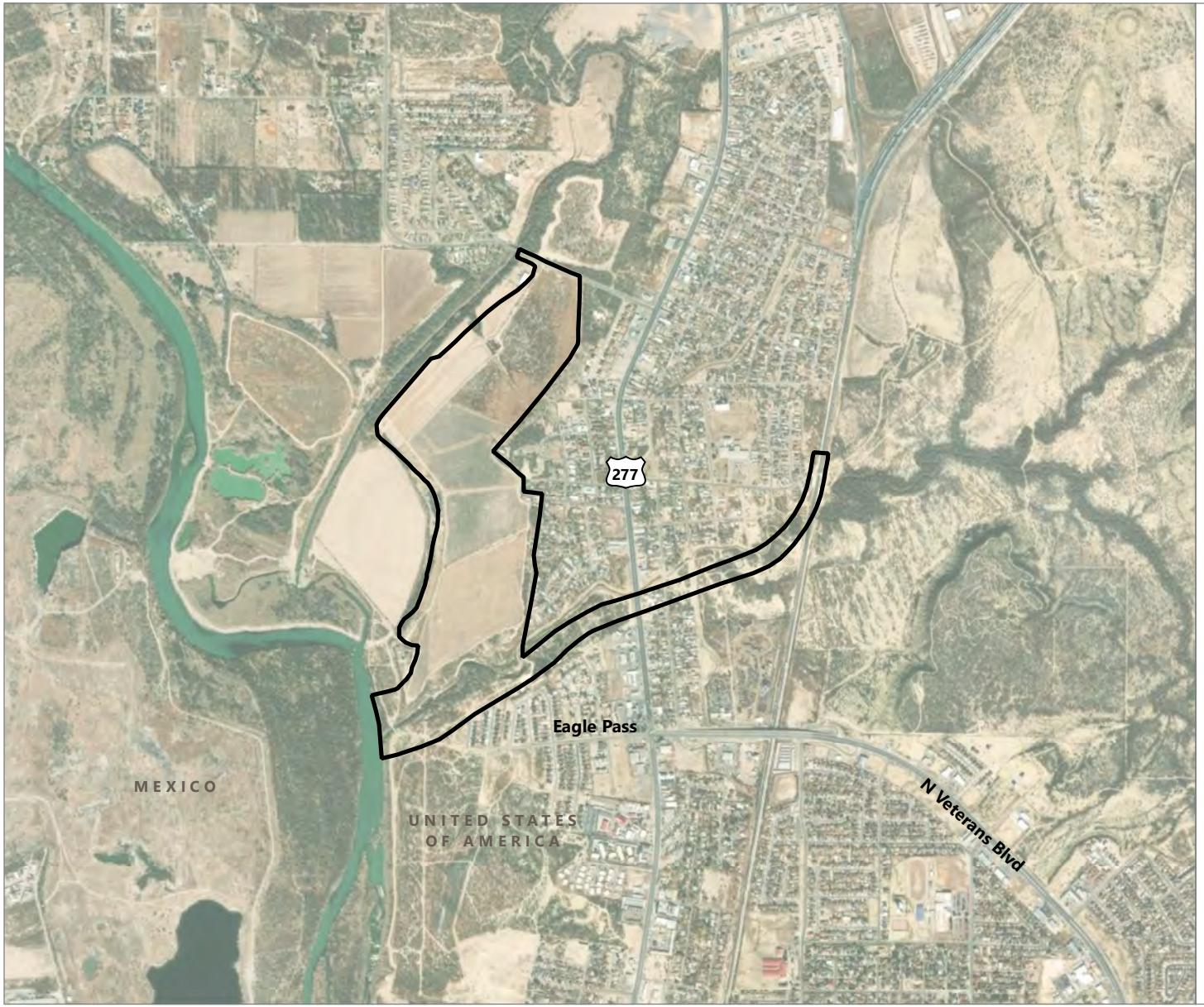
ANCHOR QEA

Figure 1
Vicinity Map
Wetlands and Waters Delineation Report
Puerto Verde Global Trade Bridge Project



LEGEND:

Survey Area

NOTES:

1. Basemaps from Esri
2. Horizontal Datum: North American Datum of 1983 State Plane Texas South Central (U.S. Foot)
3. For planning and permitting purposes only. Not for construction.

0 2,000

Feet

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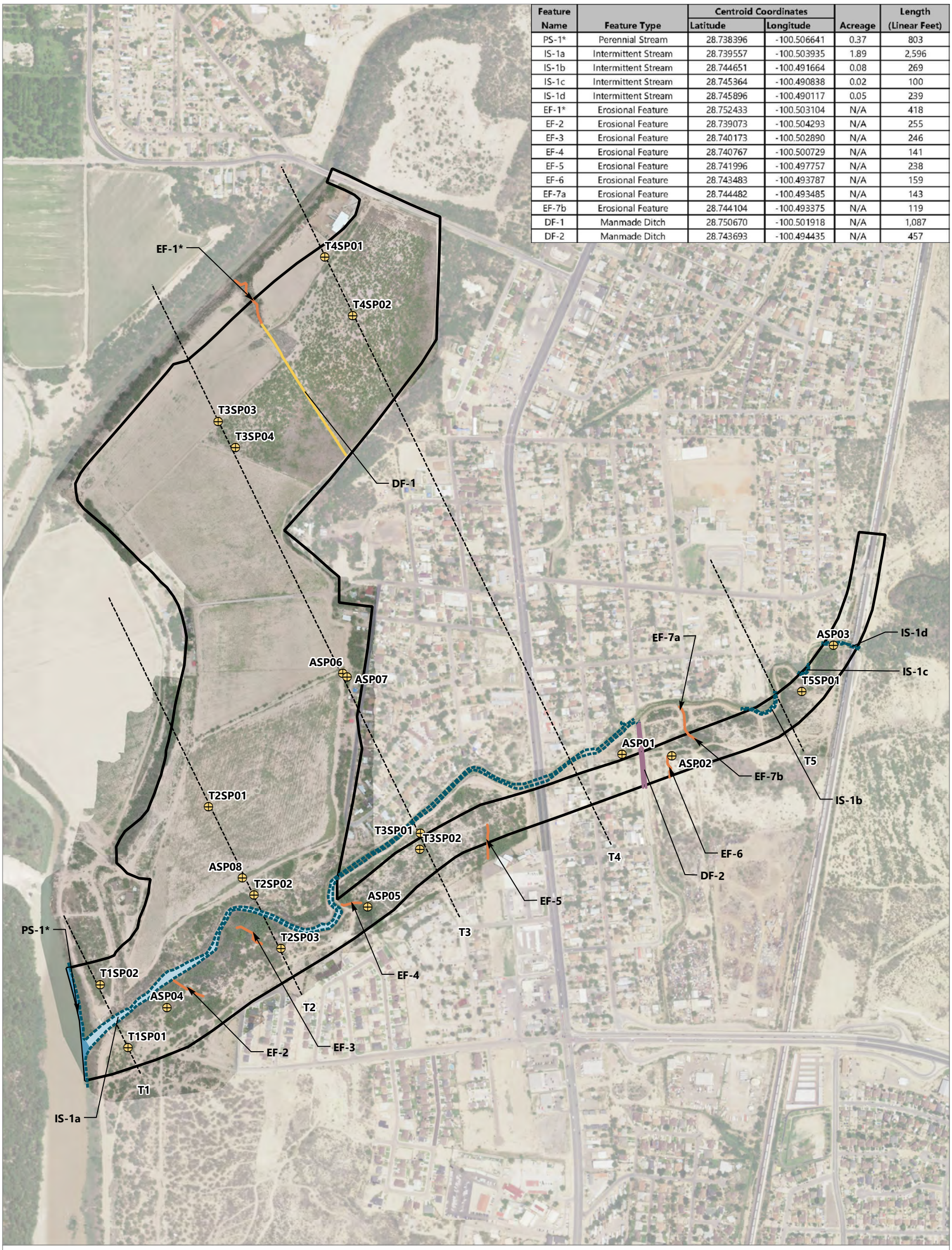
Figure 2
Project Location Map

Wetlands and Waters Delineation Report
Puerto Verde Global Trade Bridge Project

Feature Name	Feature Type	Centroid Coordinates		Acreage	Length (Linear Feet)
		Latitude	Longitude		
PS-1*	Perennial Stream	28.738396	-100.506641	0.37	803
IS-1a	Intermittent Stream	28.739557	-100.503935	1.89	2,596
IS-1b	Intermittent Stream	28.744651	-100.491664	0.08	269
IS-1c	Intermittent Stream	28.745364	-100.490838	0.02	100
IS-1d	Intermittent Stream	28.745896	-100.490117	0.05	239
EF-1*	Erosional Feature	28.752433	-100.503104	N/A	418
EF-2	Erosional Feature	28.739073	-100.504293	N/A	255
EF-3	Erosional Feature	28.740173	-100.502890	N/A	246
EF-4	Erosional Feature	28.740767	-100.500729	N/A	141
EF-5	Erosional Feature	28.741996	-100.497757	N/A	238
EF-6	Erosional Feature	28.743483	-100.493787	N/A	159
EF-7a	Erosional Feature	28.744482	-100.493485	N/A	143
EF-7b	Erosional Feature	28.744104	-100.493375	N/A	119
DF-1	Manmade Ditch	28.750670	-100.501918	N/A	1,087
DF-2	Manmade Ditch	28.743693	-100.494435	N/A	457



LEGEND:

- Survey Area
- Perennial Stream (Likely Jurisdictional)
- Intermittent Stream (Likely Jurisdictional)
- Erosional Feature (Likely Non-Jurisdictional)
- Ditch Feature (Likely Non-Jurisdictional)
- Ditch Feature (Likely Jurisdictional)
- Ordinary High Water Mark (Jurisdictional Limit)
- Survey Transect
- Sample Point

NOTES:

1. Basemap: Drone imagery recorded by Anchor QEA on May 22, 2024; National Agriculture Imagery Program (NAIP) 2022 60 centimeter imagery, Maverick County, Texas.
2. Horizontal Datum: North American Datum of 1983 State Plane South Central (U.S. Foot)
3. All delineation results are preliminary and based on best professional judgement. Survey results have not been verified by the U.S. Army Corps of Engineer.
4. An asterisk (*) in a feature name indicates that a feature could not be fully delineated onsite based on right-of-entry or safety concerns. The boundary of these features were determined based on a combination of field data and desktop resources.
5. For planning and permitting purposes only. Not for construction.

EF: erosional feature
DF: drainage feature
IS: intermittent stream
NAIP: National Agriculture Imagery Program
PS: perennial stream

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ANCHOR QEA

Figure 3
Survey Overview Map
Wetlands and Waters Delineation Report
Puerto Verde Global Trade Bridge Project

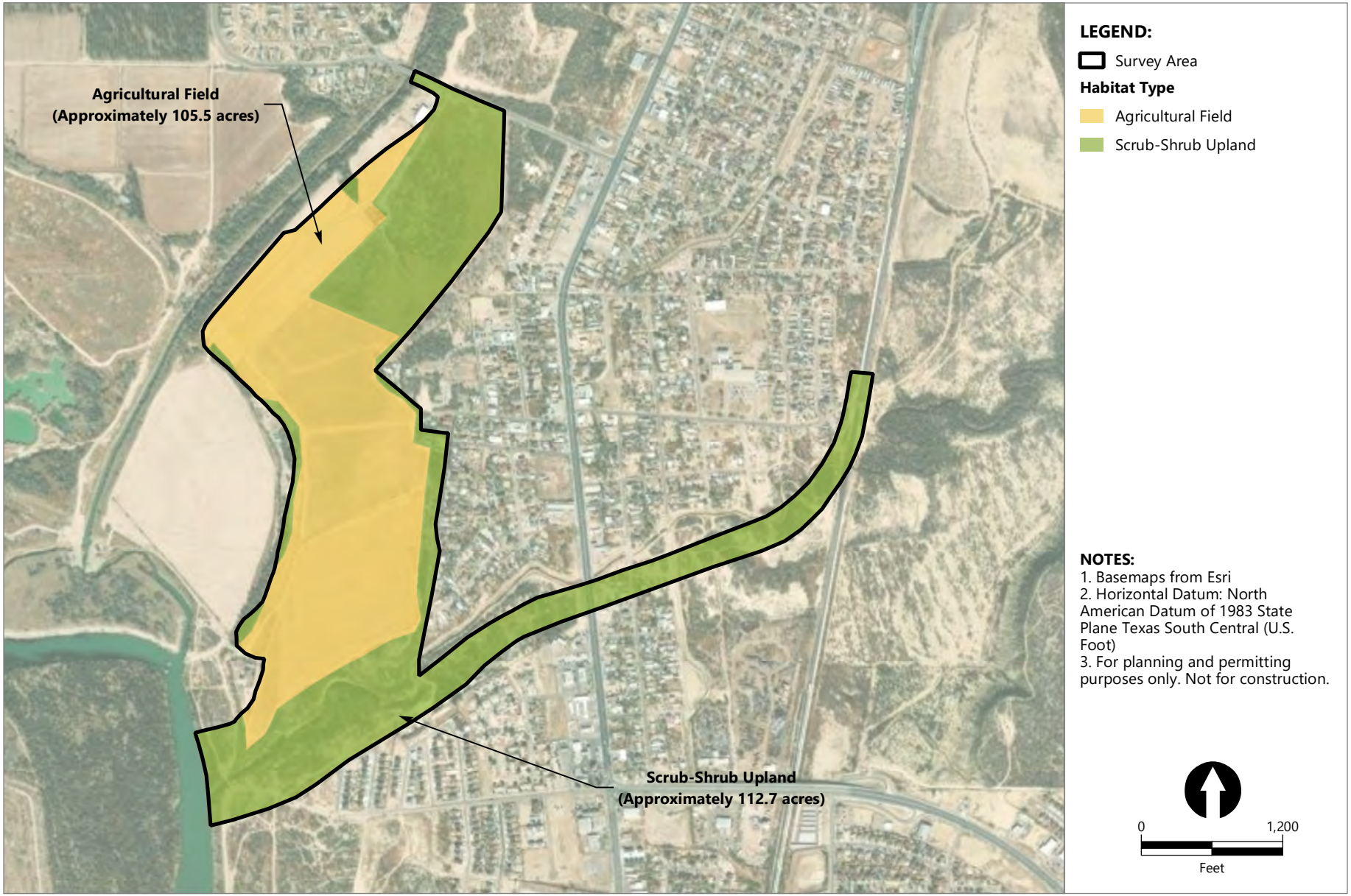

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Figure 4
Habitat Overview Map
Wetlands and Waters Delineation Report
Puerto Verde Global Trade Bridge Project

Appendix A
Wetland Data Sheets

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP01

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 3

Subregion (LRR): I 83B Lat: 28.743712 Long: -100.494834 Datum: NAD83_2011

Soil Map Unit Name: PrB - Pryor clay loam, 1 to 3 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

Sample point recorded slightly outside of the survey area to assess conditions that appear similar to portions of the property where right-of-entry could not be obtained. Sample point recorded at a higher elevation than the adjacent Seco Creek stream bed. Sample point determined to be located within scrub-shrub uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	20	✓	FACU
2.			
3.			
4.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	15	✓	FACU
2.			
3.			
4.			
5.			
	15 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	75	✓	UPL
2. Opuntia stricta	10		FACU
3. Prosopis glandulosa	10		FACU
4. Acacia rigidula	5		UPL
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	55	x 4 =	220
UPL species	80	x 5 =	400
Column Totals:	135 (A)		620 (B)

Prevalence Index = B/A = 4.59

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: ASP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 12	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 12

Hydric Soil Present? Yes ____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 12 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Surface Soil Cracks (B6) were observed at this sample point. Surface Soil Cracks (B6) are classified as a secondary wetland hydrology indicator and do not fulfill the wetland hydrology requirement at this sample point.

ASP01

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP02

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): Undulating Slope (%): 10

Subregion (LRR): I 83B Lat: 28.743697 Long: -100.493743 Datum: NAD83_2011

Soil Map Unit Name: PrB - Pryor clay loam, 1 to 3 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

Sample point recorded in scrub-shrub upland habitat adjacent to an unimproved road. Minor evidence of erosion was observed in the vicinity but area is otherwise comprised of upland habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	25	✓	FACU
2.			
3.			
4.			
	25 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acacia rigidula	10	✓	UPL
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Opuntia stricta	25	✓	FACU
2. Ratibida columnifera	20	✓	UPL
3. Cenchrus ciliaris	20	✓	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	65 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	50	x 5 =	250
Column Totals:	100 (A)		450 (B)

Prevalence Index = B/A = 4.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: ASP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 12	2.5Y 5/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 12

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil characteristics were not observed at this sample point. A hard clay layer was encounter at 12 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Surface Soil Cracks (B6) were observed at this sample point. Surface Soil Cracks (B6) are classified as a secondary wetland hydrology indicator and do not fulfill the wetland hydrology requirement at this sample point.

ASP02

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photographs taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP03

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 3

Subregion (LRR): I 83B Lat: 28.745869 Long: -100.490230 Datum: NAD83_2011

Soil Map Unit Name: CAB - Catarina clay, association, 0 to 5 percent slopes NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

This sample point was recorded to show an upland area atop the bank of Seco Creek. This area is characterized by flat ground and herbaceous vegetation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Parkinsonia aculeata	10	✓	FAC
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Xanthium strumarium	40	✓	FAC
2. Cynodon dactylon	40	✓	FACU
3. Sorghum halepense	10		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Hydrophytic vegetation was dominant at this sample point.

SOIL

Sampling Point: ASP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 14	2.5Y 6/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Hard clay

Depth (inches): 14

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

ASP03

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP04

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 15

Subregion (LRR): I 83B Lat: 28.738712 Long: -100.504737 Datum: NAD83_2011

Soil Map Unit Name: Rz - Rio Grande and Zalla soils, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent an upland area dominated by grasses within Mesquite dominated wooded uplands. Sample point located within a depressional landform but does not exhibit wetland conditions or any continuous surface connection to the surface tributary system. This sample point was recorded to verify this as an upland area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	15	✓	FACU
2. Vachellia farnesiana	5	✓	FACU
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Bothriochloa ischaemum	75	✓	UPL
2. Panicum virgatum	5		FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	50	x 4 =	200
UPL species	75	x 5 =	375
Column Totals:	130 (A)		590 (B)

Prevalence Index = B/A = 4.53

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: ASP04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil characteristics were not observed at this sample point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

ASP04

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP05

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 10

Subregion (LRR): I 83B Lat: 28.740704 Long: -100.500368 Datum: NAD83_2011

Soil Map Unit Name: MKC - Maverick association, undulating NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

This sample point was recorded to document a shallow depressional area with erosional features in the vicinity. An erosional feature was recorded exiting the shallow depressional area leading towards Seco Creek. This feature was severed by the unimproved road that travels along Seco Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Celtis occidentalis	40	✓	FACU
2. Fraxinus berlandieriana	40	✓	FAC
3.			
4.			
	80 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Diospyros texana	20	✓	UPL
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	40	x 4 =	160
UPL species	20	x 5 =	100
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.80

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

Hydrophytic vegetation was dominant at this sample point.

SOIL

Sampling Point: ASP05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Silty Clay	
0 - 6							Clay	
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Hard Clay

Depth (inches): 10

Hydric Soil Present? Yes ____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard layer of clay was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ✓ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): ____

Wetland Hydrology Present? Yes ✓ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology indicators were observed in the form of Drift Deposits (B3) and Drainage Patterns (B10).

ASP05

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP06

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.74521 Long: -100.500978 Datum: NAD83_2011

Soil Map Unit Name: ReA - Reynosa silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a herbaceous upland area near the transition from scrub-shrub upland to agricultural field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Bothriochloa ischaemum	40	✓	UPL
2. Cenchrus ciliaris	40	✓	UPL
3. Cynodon dactylon	15		FACU
4. Suaeda nigra	5		OBL
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	80	x 5 =	400
Column Totals:	100 (A)		465 (B)

Prevalence Index = B/A = 4.65

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: ASP06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was observed at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

ASP06

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP07

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.74514 Long: -100.500883 Datum: NAD83_2011

Soil Map Unit Name: ReA - Reynosa silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded within scrub-shrub upland habitat bordering agricultural fields.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	75	✓	FACU
2.			
3.			
4.			
	75 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	50	✓	UPL
2. Prosopis glandulosa	10		FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	115	x 4 =	460
UPL species	50	x 5 =	250
Column Totals:	165 (A)		710 (B)

Prevalence Index = B/A = 4.30

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: ASP07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 8	2.5Y 5/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 8 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

No indicators of wetland hydrology were observed in the sample plot.

ASP07

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: ASP08

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.741232 Long: -100.503121 Datum: NAD83_2011

Soil Map Unit Name: LgA - Lagloria very fine sandy loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a herbaceous upland area located north of Seco Creek and the abutting scrub-shrub habitat..

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cynodon dactylon	50	✓	FACU
2. Cenchrus ciliaris	20	✓	UPL
3. Prosopis glandulosa	5		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	55	x 4 =	220
UPL species	20	x 5 =	100
Column Totals:	75 (A)		320 (B)

Prevalence Index = B/A = 4.26

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: ASP08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 8	2.5Y 5/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 8

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 8 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

ASP08

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T1SP01

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 15

Subregion (LRR): I 83B Lat: 28.737926 Long: -100.50558 Datum: NAD83_2011

Soil Map Unit Name: Rz - Rio Grande and Zalla soils, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area situated south of Seco Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	30 (A)		120 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T1SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 12	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 12

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard layer of clay was encountered at 12 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and does not fulfill the requirements for wetland hydrology at this sample point.

T1SP01

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T1SP02

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.739138 Long: -100.50621 Datum: NAD83_2011

Soil Map Unit Name: Rz - Rio Grande and Zalla soils, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area situated north of Seco Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acacia farnesiana	15	✓	UPL
2.			
3.			
4.			
5.			
	15 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cynodon dactylon	70	✓	FACU
2. Cenchrus ciliaris	30	✓	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	45	x 5 =	225
Column Totals:	145 (A)		625 (B)

Prevalence Index = B/A = 4.31

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T1SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

T1SP02

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T2SP01

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.742602 Long: -100.503888 Datum: NAD83_2011

Soil Map Unit Name: LgA - Lagloria very fine sandy loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent an agricultural field located north of Seco Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cynodon dactylon	80	✓	FACU
2. Solanum elaeagnifolium	5		UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	5	x 5 =	25
Column Totals:	85 (A)		345 (B)

Prevalence Index = B/A = 4.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T2SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and do not fulfill the requirements for wetland hydrology at this sample point.

T2SP01

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T2SP02

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 3

Subregion (LRR): I 83B Lat: 28.740905 Long: -100.502864 Datum: NAD83_2011

Soil Map Unit Name: LgB - Lagloria very fine sandy loam, 1 to 3 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area located in between Seco Creek to the south and agricultural fields to the north.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	25	✓	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	25 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	25	x 5 =	125
Column Totals:	55 (A)		245 (B)

Prevalence Index = B/A = 4.45

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T2SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes ____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and do not fulfill the requirements for wetland hydrology at this sample point.

T2SP02

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T2SP03

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 10

Subregion (LRR): I 83B Lat: 28.739878 Long: -100.502255 Datum: NAD83_2011

Soil Map Unit Name: LgB - Lagloria very fine sandy loam, 1 to 3 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area located south of Seco Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	10	✓	FACU
2.			
3.			
4.			
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Vachellia farnesiana	25	✓	FACU
2. Acacia rigidula	15	✓	UPL
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	10	✓	UPL
2. Opuntia stricta	10	✓	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	45	x 4 =	180
UPL species	25	x 5 =	125
Column Totals:	70 (A)		305 (B)

Prevalence Index = B/A = 4.35

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T2SP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

T2SP03

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-21

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T3SP01

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Undulating Slope (%): 15

Subregion (LRR): I 83B Lat: 28.742145 Long: -100.499229 Datum: NAD83_2011

Soil Map Unit Name: LgB - Lagloria very fine sandy loam, 1 to 3 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded just outside of the survey area to demonstrate that the survey area is separated from Seco Creek by upland habitat. Conditions present within the sample plot appear consistent with those seen within the survey area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	15	✓	FACU
2.			
3.			
4.			
	15	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acacia rigidula	30	✓	UPL
2. Guaiacum angustifolium	20	✓	UPL
3.			
4.			
5.			
	50	= Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	45	✓	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	95	x 5 =	475
Column Totals:	110 (A)		535 (B)

Prevalence Index = B/A = 4.86

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T3SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 18	2.5Y 6/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

Hydric soil components were not observed at this sample point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

T3SP01

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T3SP02

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.741836 Long: -100.499242 Datum: NAD83_2011

Soil Map Unit Name: MKC - Maverick association, undulating NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded in an slight depression identified in LiDAR data that extends from Seco Creek. Sample point recorded to demonstrate that aquatic conditions are absent and to establish that this area is scrub-shrub upland habitat.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	50	✓	FACU
2.			
3.			
4.			
5.			
	50 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	25	✓	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	25 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	25	x 5 =	125
Column Totals:	75 (A)		325 (B)

Prevalence Index = B/A = 4.33

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not observed at this sample point.

SOIL

Sampling Point: T3SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 8	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 8

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and do not fulfill the requirements for wetland hydrology at this sample point.

T3SP02

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T3SP03

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.750044 Long: -100.503782 Datum: NAD83_2011

Soil Map Unit Name: LgA - Lagloria very fine sandy loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent an agricultural field located immediately adjacent to a scrub-shrub area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Sorghum bicolor	20	✓	FACU
2. Solanum elaeagnifolium	10	✓	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	10	x 5 =	50
Column Totals:	30 (A)		130 (B)

Prevalence Index = B/A = 4.33

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not observed at this sample point.

SOIL

Sampling Point: T3SP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes ____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard layer of clay was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ____ No ✓ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ✓ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and do not fulfill the requirements for wetland hydrology at this sample point.

T3SP03

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T3SP04

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 15

Subregion (LRR): I 83B Lat: 28.749544 Long: -100.503399 Datum: NAD83_2011

Soil Map Unit Name: ReA - Reynosa silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area. It appears that this area has been used as an agricultural field in the past. However, lack of recent production has allowed natural scrub-shrub habitat to develop.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	15	✓	FACU
2.			
3.			
4.			
	15	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	15	✓	FACU
2. Vachellia farnesiana	10	✓	FACU
3.			
4.			
5.			
	25	= Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	50	✓	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	50	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____	= Total Cover	

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	50	x 5 =	250
Column Totals:	90 (A)		410 (B)

Prevalence Index = B/A = 4.55

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T3SP04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 6/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard clay layer was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

T3SP04

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T4SP01

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.753243 Long: -100.501491 Datum: NAD83_2011

Soil Map Unit Name: ReA - Reynosa silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent an agricultural field located along the northern boundary of the survey area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Sorghum bicolor	25	✓	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	25 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	25 (A)		100 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T4SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 10	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard layer of clay was encountered at 10 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and do not fulfill the requirements for wetland hydrology at this sample point.

T4SP01

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T4SP02

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1

Subregion (LRR): I 83B Lat: 28.752121 Long: -100.500859 Datum: NAD83_2011

Soil Map Unit Name: ReA - Reynosa silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area. This area appears to have been used for agricultural purposes in the past. However, lack of recent production has allowed native scrub-shrub habitat to develop in the area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Suaeda nigra	5	✓	OBL
2. Vachellia farnesiana	5	✓	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	40 (A)		145 (B)

Prevalence Index = B/A = 3.62

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T4SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 8	2.5Y 6/3	100					Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 8

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard layer of clay was encountered at 8 inches below the soil surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ✓ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was observed in the form of surface Surface Soil Cracks (B6). Surface Soil Cracks (B6) are a secondary wetland hydrology indicator and do not fulfill the requirements for wetland hydrology at this sample point.

T4SP02

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: PVGTB - PVH City/County: Eagle Pass/Maverick County Sampling Date: 2024-05-22

Applicant/Owner: Purto Verde Holdings State: Texas Sampling Point: T5SP01

Investigator(s): AP, NA Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 3

Subregion (LRR): I 83B Lat: 28.744968 Long: -100.490914 Datum: NAD83_2011

Soil Map Unit Name: CAB - Catarina clay, association, 0 to 5 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

This sample point was recorded to represent a scrub-shrub upland area located south of Seco Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prosopis glandulosa	30	✓	FACU
2.			
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Acacia rigidula	10	✓	UPL
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Cenchrus ciliaris	50	✓	UPL
2. Acacia rigidula	10		UPL
3. Rumex salicifolius	5		FAC
4. Ratibida columnifera	5		UPL
5.			
6.			
7.			
8.			
9.			
10.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	30	x 4 =	120
UPL species	75	x 5 =	375
Column Totals:	110 (A)		510 (B)

Prevalence Index = B/A = 4.63

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

Hydrophytic vegetation was not dominant at this sample point.

SOIL

Sampling Point: T5SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 12	2.5Y 5/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR F**)
- ___ 1 cm Muck (A9) (**LRR F, G, H**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR I, J**)
- ___ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ___ Dark Surface (S7) (**LRR G**)
- ___ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay

Depth (inches): 12

Hydric Soil Present? Yes _____ No ✓

Remarks:

Hydric soil components were not observed at this sample point. A hard layer of clay was encountered at 12 inches below the soil surface. Gravel and river rock present within soil sample.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Vis ble on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Dry-Season Water Table (C2)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ___ Presence of Reduced Iron (C4)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)
- ___ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

According to the USACE's APT, the survey area is experiencing slightly drier than normal climatic conditions. Indicators of wetland hydrology were recorded with this condition in mind.

Remarks:

Wetland hydrology was not observed at this sample point.

T5PSP01

Photograph 1
Northern view from sample point

Photograph taken: May 22, 2023

Photograph 2
Eastern view from sample point

Photograph taken: May 22, 2023

Photograph 3
Southern view from sample point

Photograph taken: May 22, 2023

Photograph 4
Western view from sample point

Photograph taken: May 22, 2023