

Waters of the U.S. Delineation Report-Draft

US 67 at Lake Ridge Parkway

(CSJ 0261-01-041)

Texas Department of Transportation, Dallas District

April 2020

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT.

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1.0 Introduction

The Texas Department of Transportation (TxDOT) conducted a waters of the U.S. (WOTUS) delineation for a proposed road project on United States Highway (US) 67 at Lake Ridge Parkway in Cedar Hill, Dallas and Ellis Counties, Texas (CSJ 0261-01-041). The delineation was completed on January 28 and May 1, 2019. Field evaluations occurred in discontinuous months as additional access became available.

The delineation was performed to evaluate the presence of jurisdictional WOTUS and identify their boundaries within the project area. It is anticipated that this waters of the U.S. delineation report (WOTUS DR) will be used in support of the jurisdictional determination process for on-site aquatic resources. If it is determined that jurisdictional resources will be impacted, this WOTUS DR will also support applications for regulatory permits that may be required from the United States Army Corps of Engineers (USACE) for proposed construction activities.

Waterbodies were delineated according to USACE Regulatory Guidance Letter (RGL) 05-05 Ordinary High Water Mark (OHWM) Identification for non-tidal waters and the Mean High Tide (MHT) line for tidal waters. As required under Section 404 of the Clean Water Act (CWA), wetlands were delineated using the routine method described in the USACE 1987 Wetlands Delineation Manual (1987 Manual) and the USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) – March 2010 (2010 Regional Supplement). Wetland types and boundaries were determined through initial map review, followed by fieldwork involving the examination of three (3) parameters: hydrology, vegetation, and soils. Delineation criteria and indicators for each of these parameters are outlined in the 1987 Manual and the 2010 Regional Supplement. The 2010 Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Great Plains Region, per the regional supplement. Wetlands were classified according to the Cowardin Classification System used for the United States Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI).

This document contains the following four (4) attachments:

- Attachment 1 Figures: contains maps of the project area
- Attachment 2 Wetland Determination Data Forms: documents the three (3) criteria for wetlands at all sample points
- Attachment 3 Historical Aerial Photographs: contains historical aerial imagery, starting with the oldest photographs first
- Attachment 4 Site Photographs: contains photographs taken during the site visit(s)

2.0 Project Overview

The proposed improvements would include reconstruction of US 67 mainlanes and frontage roads, from north of Shiloh Road to south of Mt. Lebanon Road. The proposed US 67 mainlanes would consist of four 12-foot lanes (two in each direction), 22-foot inside shoulder, and 10- foot outside shoulders. A 26-foot wide inside grassy median separates the northbound and southbound mainlanes. The 22-foot inside shoulder would be restriped in the future to add one additional travel lane in each direction. The proposed northbound and southbound frontage roads would consist of two 12-foot lanes and 8-foot inside and outside shoulders.

The proposed interchange at Lake Ridge Parkway would consist of a grade-separated interchange with an overpass of US 67. The proposed improvements of Lake Ridge Parkway would consist of six 12-foot lanes (three in each direction), 10-foot raised median, curb and gutter, and Texas U-turns.

The existing ramps within the project area would be converted to an X-ramp pattern design for Lake Ridge Parkway.

The proposed project would require approximately 60.38 acres of new ROW along US 67 from north of Shiloh Road to south of Mount Lebanon Road, to accommodate the proposed interchange improvements of ramps, bridge structures, and frontage roads within the project area. The proposed project would also acquire staging areas for construction, as well as the preservation of additional right-of-way for future construction of the ultimate interchange facility (final phase). Construction of the ultimate interchange facility would be based on projected traffic and funding and would require additional environmental analysis prior to construction. Total project distance is 1.9 miles. This phase (Phase I) of the project would not add roadway capacity.

The project area is approximately 150 acres, of which approximately 135.5 acres (90.3 percent) have been surveyed. The remainder of the project area could not be field surveyed due to lack of right-of-entry (ROE). Those areas have been desktop delineated using available resources. Resources used to conduct the desktop delineation are described in Section 4.0.

Attachment 1 - Figures contains the following eight (8) maps of the project area:

- Figure 1 Vicinity Map
- Figure 2 Aerial Overview Map
- Figure 3 USGS Topographic Map
- Figure 4 NWI Wetland Map
- Figure 5 NRCS Soils Map
- Figure 6 FEMA Floodplain Map
- Figure 7 LiDAR Map
- Figure 8 Waters of the U.S. Delineation Map

3.0 Ecological Site Description

The project area is located within the Southwestern Prairies Cotton and Forage Land Resource Region (LRR J) of the Great Plains and is more specifically located in Major Land Resource Area (MLRA) 86A (Texas Blackland Prairie, Northern part). Most of this MLRA is characterized by a nearly level to gently sloping, dissected plain. Dissected areas with steeper slopes occur along entrenched river and creek valleys. This area supports mixed tall and mid-grass prairies. Areas along the major rivers and streams support savanna vegetation. Nearly all of this area is improved pasture, cropland, or rangeland. Urban development is rapidly increasing adjacent to the major cities.

Currently, the project area consists of existing roadway, urban areas, disturbed land, regenerative areas, and pastures. Additionally, vegetation within existing ROW along US 67 within the project area consists primarily of well maintained, regularly mowed, herbaceous roadside vegetation.

4.0 Methods

4.1 Map and Database Review

The following information sources were considered and, if applicable, consulted prior to and during the field delineation to assist in the identification of potential WOTUS within the project area.

4.1.1 USGS Topographic Maps

The United States Geological Survey (USGS) topographic maps illustrate elevation contours, drainage patterns, and hydrography. The Cedar Hill, Texas, USGS Quadrangle (Quad) map was reviewed to determine the likelihood of the project area containing jurisdictional waterbodies.

4.1.2 USFWS NWI Data

NWI data were reviewed as a contributing resource to help identify potential wetland features located within the project area.

4.1.3 NRCS Soil Survey Data

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) maintains an online Web Soil Survey database. The data provided in the Web Soil Survey provides a good basis for the soil textures and types one can expect to find at a particular delineation area. NRCS-mapped soil types at the project area were reviewed to determine which of the soils exhibit hydric characteristics. NRCS-mapped soil types are assigned a hydric indicator status of "hydric" or "non-hydric" by the National Technical Committee for Hydric Soils.

4.1.4 Aerial Photography

Aerial photography provides good insight to the state and function of land resources. Signs of inundation and vegetative signatures on aerial images indicate whether land might be functioning as a wetland or supporting a stream system. Historic and current aerial photography was reviewed utilizing GeoSearch[™] database and Google Earth, prior to and during the field delineation, in order to further understand the nature of the project area.

4.1.5 FEMA FIRM

The Federal Emergency Management Agency (FEMA) maintains flood insurance rate maps (FIRMs). The FIRM including the project area was reviewed to determine if the 100-year floodplain is mapped. The USACE utilizes the 100-year floodplain to assist in determining jurisdiction of aquatic features. FEMA FIRM data was reviewed to evaluate the location of any mapped floodplain in relation to aquatic resources located within the project area.

4.1.6 LiDAR

Light detection and ranging (LiDAR) is a remote sensing technique that measures spatial and temporal data. LiDAR information is provided by the Texas Natural Resources Information System (TNRIS) online database for each USGS Quad. LiDAR data was obtained for the Cedar Hill, Texas, USGS Quad to evaluate elevation changes throughout the project area.

4.2 Waters of the U.S. Delineation

With respect to any non-tidal waterbodies located within the project area, biologists followed the methodology outlined in Regulatory Guidance Letter (RGL) 05-05. With respect to any tidal waterbodies located within the site, biologists identified the MHT line by observing changes in vegetation, drift deposits of shells and debris, and physical markings or characteristics along the shoreline that may indicate the general height reached by a rising tide.

Data collected for any waterbodies includes average water depth, average width per waterbody, length of linear segments within the project boundary, and water flow classification (i.e., tidal, non-tidal, ephemeral, intermittent, and/or perennial).

Any wetland delineation was conducted based on the 1987 Manual and the 2010 Regional Supplement, as well as the three (3) parameters described within. The three-parameter approach requires investigation of hydrological characteristics, hydrophytic vegetation, and hydric soils at selected sample points within a project area. Sample points are located to ascertain upland/wetland boundaries and to record significant spatial

changes in wetland plant communities. All three (3) indicator parameters must be met in order for the area to be classified as a wetland. See subsections on Hydrology, Vegetation, and Soils, below, for indicator-specific information.

Geospatial data was collected utilizing a Trimble GeoXH 6000 Series Global Positioning System (GPS) with submeter accuracy. All geospatial data was collected in accordance with the April 21, 2016 memorandum from the Galveston District of the USACE entitled, Standard Operating Procedure, Recording Jurisdictional Delineation using GPS.

4.2.1 Hydrology

Wetland hydrology is characterized when, under normal circumstances, the surface is either inundated or the upper horizon(s) of the soil are saturated at a sufficient frequency and duration to create anaerobic conditions. Seasonal and long-term rainfall patterns, local geology and topography, soil type, local water table conditions, and drainage are factors that influence hydrology.

Wetland hydrology indicators include: oxidized rhizospheres along living roots, saturated soils, standing surface water, algal mat, aquatic fauna, high water table, iron deposits, sparsely vegetated concave surface, geomorphic position, moss trim lines, water-stained leaves, crawfish burrows, watermarks, drainage patterns, and surface soil cracks.

During the field survey, these indicators were used to determine if an area exhibited wetland hydrology.

4.2.2 Vegetation

In accordance with the procedure set forth in the 1987 Manual and the 2010 Regional Supplement, the hydrophytic status of vegetation communities was determined by identifying dominant species and, if necessary, calculating a "Prevalence Index," as defined in the 1987 Manual.

Individual plant species were checked against the current National Wetland Plant List (NWPL), and their regional wetland indicator status was determined. Species are classified as follows:

- Obligate Wetland (OBL) if they almost always occur in wetlands (>99 percent of the time)
- Facultative Wetland (FACW) if they usually occur in wetlands (67-99 percent of the time)
- Facultative (FAC) if they are equally likely to occur in wetlands and non-wetlands (34-66 percent of the time)
- Facultative Upland (FACU) if they usually occur in non-wetlands (67-99 percent of the time)
- Obligate Upland (UPL) if they almost always occur in non-wetlands (>99 percent of the time)

A no indicator (NI) status is recorded for those species for which insufficient information is available to determine an indicator status.

Hydrophytic (wetland) vegetation is considered prevalent where more than 50% of the dominant species in a plant community have an indicator status of OBL, FACW, or FAC. However, in cases where the vegetation community does not meet this hydrophytic threshold, but indicators of hydric soils and wetlands hydrology are present, the prevalence index can be applied. Calculation of this index is based on consideration of both dominant and non-dominant plants in the vegetation community, whereby each indicator status category is given a numeric code and weighted by absolute percent cover. The prevalence index ranges from 1 to 5 and an index of 3.0 or less signifies that hydrophytic vegetation is present. In the current delineation, and as shown on the wetland determination data forms in Attachment 2, a prevalence index was calculated for each sample point's vegetation community.

4.2.3 Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons. Anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry. The changes in soil color are used to differentiate hydric from non-hydric soils.

At each sample point, in areas where the absence of inundation or heavy saturation allowed, a pit was excavated to a depth of at least 16 inches to reveal soil profiles and to determine whether or not positive indicators of hydric soils were present. Hydric soil indicators relate to color, structure, organic content, and the presence of reducing conditions. Color characteristics (Hue, Value, and Chroma) were recorded using Munsell® Charts.

5.0 Results

5.1 Map and Database Review

5.1.1 USGS Topographic Maps

The USGS Cedar Hill, Texas 7.5-minute topographic Quad map from 2019 was reviewed to assess the surface topography within the project area. A review of the topographic map indicates that elevation is relatively flat throughout the project area. The topography gradually slopes in a southeastern direction within the Waxahachie Creek drainage area. Refer to Figure 3 in Attachment 1 for an illustration of topography. One named waterbody, North Prong Creek is depicted on the topographic map as crossing the project area.

5.1.2 USFWS NWI Data

The table below summarizes the NWI features within the project area. Refer to Figure 4 in Attachment 1 for an illustration of the NWI features in and surrounding the project area.

Classification Code	Code Description	Wetland Type			
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded	Riverine			

Table 1: NWI Features

5.1.3 NRCS Soil Survey Data

The table below summarizes the soil units represented within the project area based on information collected from the Web Soil Survey database. Refer to Figure 5 in Attachment 1 for an illustration of the mapped soil units in and surrounding the project area.

Table 2: NRCS Soil Units

Soil Unit	Soil Unit Name	Name Description			
	Dallas County				
5	Austin silty clay, 1 to 3 percent slopes	Found in landform ridges, well drained and high runoff class, farmland of statewide importance	Non-hydric		

Table 2: NRCS Soil Units

Soil Unit	Soil Unit Name	Description	Hydric/Non-hydric		
	Dallas County (continued)				
6	Austin silty clay, 2 to 5 percent slopes, moderately eroded	Found in landform ridges, well drained and high runoff class, Not prime farmland	Non-hydric		
23	Dalco clay, 1 to 3 percent slopes	Found in landform ridges, moderately well drained, all areas are prime farmland	Non-hydric		
26	Eddy clay loam, 1 to 3 percent slopes	Found in landform ridges, well drained and low runoff class, not prime farmland	Non-hydric		
67	Stephen silty clay, 1 to 4 percent slopes	Found in landform ridges, well drained and a very high runoff class, not prime farmland	Non-hydric		
		Ellis County			
AuB	Austin silty clay, 1 to 3 percent slopes	Found in landform ridges, well drained and high runoff class, farmland of statewide importance	Non-hydric		
Br	Broken alluvial land, rarely flooded	Found in landform drainageways, well drained, not prime farmland	Non-hydric		
EcB	Eddy gravelly clay loam, 1 to 3 percent slopes	Found in landform ridges, well drained, not prime farmland	Non-hydric		
EdD2	Eddy soils, 3 to 8 percent slopes, eroded	Found in landform ridges, well drained, not prime farmland	Non-hydric		
StB	Stephen silty clay, 1 to 4 percent slopes	Found in landform ridges, well drained and a very high runoff class, not prime farmland	Non-hydric		

5.1.4 Aerial Photography

Historic aerial imagery for the project and surrounding areas was evaluated using images provided by GeoSearch[™] and Google Earth. The table below summarizes observations for the project area for each year reviewed. Attachment 3 contains copies of the historic aerial photographs reviewed for the project area.

Table 3: Historic Aerial Photography Observations

Year	Observations
1942	US 67 is visible on the 1942 aerial photograph. Commercial or residential buildings are located along US 67 within the project area. The majority of the surrounding area as predominantly rural and agricultural land use.
1958	Residential development began between 1953 and 1958 along Skyline Drive adjacent to the southern portion of the project area and along Kingswood Drive north of the project area.
1968	Residential development began east of US 67, along unnamed tributaries of Red Oak Creek, between 1958 and 1968.
1972	Commercial development began between 1968 and 1972 along US 67 within the project area.
1984	US 67 expanded between 1972 and 1984 to a divided highway system. Commercial development increased between 1972 and 1984 along US 67.
1995	Commercial and Industrial development began between 1984 and 1995 south of the project area along US 67. Additionally, construction of Lakeridge Parkway began and US 67 expanded between 1984 and 1995.
2005	Industrial development continued between 1995 and 2005, including the construction of a mining facility southeast of the project area.
2016	Development has increased steadily from 1958 to present in the areas surrounding the project area. Rural, agricultural, residential, commercial, and industrial use properties are currently located along US 67 surrounding the project area.

5.1.5 FEMA FIRM

A review of FEMA FIRMs indicated the project area is located outside of the floodplain. Refer to Figure 6 in Attachment 1 for an illustration of the FEMA FIRM data surrounding the project area.

5.1.6 LiDAR

A review of LiDAR data indicated that the site is gradually sloping in a southeastern direction within the Waxahachie Creek drainage area. Refer to Figure 7 in Attachment 1 for an illustration of LiDAR data within the project area.

5.2 Waters of the U.S. Delineation

The table below summarizes the waterbodies/wetlands identified within the project area. Refer to Figure 8 in Attachment 1 for a depiction of the boundaries of each waterbody/wetland feature, as well as the location within the project area where sample point data were collected. Refer to Attachment 2, Wetland Determination Data Forms, for the completed wetland determination data forms for the project. Refer to Attachment 4, Site Photos, for one or more photographs of each waterbody/wetland feature observed within the project area.

Waterbody or Wetland Number	Name	Туре	Latitude, Longitude	Acres within project area (all waterbodies and wetlands)	Linear feet within project area (waterbodies only)	Potentially Jurisdictional (Section 404)?	Potentially Navigable (Section 10)?
Wetland 1	Wetland	PSS	32.54791, -96.97316	0.20	NA	Yes	No
Wetland 2	Wetland	PEM	32.54777, -96.97308	0.25	NA	Yes	No
Wetland 3	Wetland	PEM	32.54744, -96.97214	0.07	NA	Yes	No
Wetland 4*	Wetland	PEM	32.54641, -96.97113	0.03	NA	Yes	No
Stream 1	North Prong Creek	Ephemeral	32.54774, -96.97269	0.05	722	Yes	No
Subtotal Wetlands			0.55	NA			
Subtotal Streams				0.05	722		
Total				0.60	722		
PEM = Palustrine Emergent, PSS = Palustrine Scrub-Shru				nrub			

Table 4: Summary of Waterbody/Wetland Features

* Portions of the feature were desktop delineated based on field access at the time of the site visit

5.2.1 Hydrology

Normal hydrologic circumstances were present within the project area. The table below summarizes wetland hydrological indicators identified within the project area. Refer to the wetland determination data forms in Attachment 2 to see the specific hydrology recorded at each sample point.

Table 5: Wetland Hydrological Indicators				
Wetland Type	Sample Point Name(s)	Primary Wetland Hydrological Indicators	Secondary Wetland Hydrological Indicators	
N/A	DPA014	Algal Mat or Crust	N/A	
N/A	DPA022	Drift Deposits	N/A	
PEM	DPA024	Surface Water, Algal Mat or Crust	FAC-Neutral Test	

Wetland Type	Sample Point Name(s)	Primary Wetland Hydrological Indicators	Secondary Wetland Hydrological Indicators
PEM	DPA027	Saturation, Algal Mat or Crust	FAC-Neutral Test
PSS	DPB050	Surface Water, Saturation	Saturation Visible on Aerial Imagery, Geomorphic Position, FAC-Neutral Test

5.2.2 Vegetation

Normal circumstances were present within the project area. Representative dominant taxa for each distinct habitat type encountered within the project area are listed in the tables below. Indicator status for each species was obtained from the 2016 NWPL.

Table 6: Disturbed Prairie Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
Sapling/Shrub	Baccharis neglecta	Rooseveltweed	FAC
Sapling/Shrub	Rhus aromatica	Fragrant sumac	UPL
Sapling/Shrub	Populus deltoides	Eastern cottonwood	FAC
Herb	Setaria parviflora	Bristlegrass	FAC
Herb	Aristida purpurea	Purple three-awn	UPL
Herb	Helianthus angustifolius	Swamp sunflower	FAC
Herb	Bothriochloa ischaemum	Yellow bluestem	UPL
Herb	Lolium perenne	Perennial ryegrass	FACU
Herb	Schizachyrium scoparium	Little bluestem	FACU

Table 7: Edwards Plateau Savannah, Woodland, and Shrubland Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
Sapling/Shrub	Juniperus virginiana	Eastern redcedar	UPL
Herb	Bothriochloa ischaemum	Yellow bluestem	UPL
Herb	Schizachyrium scoparium	Little bluestem	FACU

5.2.3 Soils

Common soils found within the project area include loam, clay loam, dark matrix color with a chroma of 2, 3, or 4 and low value of 1 or 2. Normal circumstances were present throughout the project area. There were three locations of naturally problematic soils where soils were assumed to by hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary. The table below summarizes hydric soil data identified within the project area. Refer to the wetland determination data forms in Attachment 2 to see the specific soil data recorded at each sample point.

Wetland Type	Sample Point Name(s)	Hydric Soil Indicator(s)
N/A	DPA014	Redox Dark Surface
PEM	DPA024, DPA027	Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary.
PSS	DPB050	Soils were assumed to be hydric due to the presence of inundation, FACW and OBL vegetation species, and a definitive wetland boundary.

Table 8: Hydric Soil Data Identified within the Project Area

6.0 Conclusion

A WOTUS delineation was conducted for the US 67 project at Lake Ridge Parkway in Cedar Hill, Dallas and Ellis Counties, Texas (CSJ 0261-01-041). The field delineation was completed on January 28 and May 1, 2019 as additional property access became available. Refer to Section 5.2, above, for a table summarizing the aquatic resources (i.e., waterbodies/wetlands) identified within the project area.

Wetland 1 is a scrub shrub wetland in a recently cleared shrubland pasture along the fringe of North Prong Creek (Stream 1). Wetlands 2, 3 and 4 are depressional wetlands located in the same open pasture on the fringe of North Prong Creek (Stream 1). North Prong Creek flows out of the Wetlands 1 and 2 and through the recently cleared field and drains into Wetland 4. Wetlands 1-4 are in line with or adjacent to North Prong Creek and are considered potentially jurisdictional.

One stream feature (Stream 1) was delineated within the project area. Stream 1 is a segment of North Prong Creek, a named waterbody on the topographic maps which flows into Waxahachie Creek. Waxahachie Creek flows through Bardwell Reservoir to Chambers Creek, then to Richland-Chambers Reservoir and is, therefore considered potentially jurisdictional.

The professional opinion offered in this report is based on best professional judgement. It should be noted that the USACE makes the final determination on the location of waterbody and wetland boundaries and their jurisdictional status. To obtain an official jurisdictional determination (JD) from the USACE, this report must be submitted to the USACE Fort Worth District Office, along with a JD request form and, if appropriate, a preconstruction notification / permit application.

7.0 References

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8.0 Attachments

- 1. Figures
- 2. Wetland Determination Data Forms
- 3. Historical Aerial Photographs
- 4. Site Photographs

Attachment 1 - Figures











×®

Texas Department of Transportation

300

Feet

150

DATE: April 2020



Pecan Trails Golf Course

300

Feet

150



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Riverine Project Area





Pecan Trails Golf Course

Texas Department of Transportation

FIGURE 4 SHEET 6

DATE: April 2020

DALLAS & ELLIS COUNTIES, TEXAS

Ν

150

300

Feet







SRI











FLOOD HAZARD ZONE A/AE - 1.0 PCT ANNUAL CHANCE OF FLOOD HAZARD FLOODWAY X - 0.2 PCT ANNUAL CHANCE OF FLOOD HAZARD X - 0.2 PCT ANNUAL CHANCE OF FLOOD HAZARD A/AE - 1.0 PCT ANNUAL CHANCE OF FLOOD HAZARD FOR Worth Dallas CSJ: 0261-01-041 FEMA FLOODPLAIN MAP DALLAS & ELLIS COUNTIES, TEXAS N COUNTIES, TEXAS N COUNTIES, TEXAS COUNTIES, TEXAS COUNTIES, TEXAS COUNTIES, TEXAS COUNTIES, TEXAS

DATE: April 2020

FIGURE 6



GER




Lorch Park

Data PointsProject Area











PEM WETLAND (DESKTOP DELINEATION) PEM WETLAND (FIELD DELINEATION) PROJECT AREA



WATERS OF THE U.S. DELINEATION MAP









cts/HOU0162 TxDOT-DAL US67/GIS/Maps/Wetland Delineation MXDs/Fig8 delineatio

Attachment 2 - Wetland Determination Data Forms

Project/Site:		US 67						E	lis	Sampling Date:	Ja	nuary 28,	2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA004	4
Investigator(s):	John Williams and Grahme Borchardt					lt	Section, Township, Range:				N/A		
Landform (hillslope,	, terrace, et	tc.):		Ditc	ı		Local re	ief (concave	convex, none):	Convex	Slope (%):		01-03
Subregion (LRR):	LRR J					Lat:	-96.97562 Long:		32.54040	Datum:	NAD 19	83 CONUS	
Soil Map Unit Name	e:			Austin si	Ity clay, 1 to 3	percent	t slopes		N	WI Classification:		Upland	
Are climatic / hydrol	logic condit	tions on	the site	typical for this	time of year?		Yes >	<u>(</u> No	(if no, e	explain in Remarks	.)		
Are Vegetation	No	,Soil	Yes	,or Hydrology	No sig	nificantl	ly disturbe	ed?	Are "Normal (Circumstances" pre	sent? Yes	X	No
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally p	roblemati	c?	(If needed, ex	plain any answers i	in Remarks.)		_

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No _ No _ No _	x x x	Is the Sampled Area within a Wetland?	Yes	No	_ <u>x</u>				
Remarks: This point was determined not to be within a wetland due to the lack of all three wetland criteria.											
The soil profile is disturbed from gravel present along the roadway.											

Tree Stratum (Plot size: 30 ft. % cover Species? Status 1. Nane Observed		Absolute	Dominant	Indicator	Dominance Test worl	ksheet:			
1. None Observed	Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
2.	1. None Observed		<u> </u>		That Are OBL, FACW,	or FAC:		0	(A)
3.	2.								
4.	3.				Total Number of Domi	nant			
Sapiling/Shrub Stratum (Plot size: 15 ft.) 1. None Observed	4.				Species Across All Str	ata:		1	(B)
Sapind/Shrub Stratum (Plot size: 15 ft) 1. None Observed 2.		= T	otal Cover						
1. None Observed	Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
2.	1. None Observed				That Are OBL, FACW,	or FAC:		0	(A/B)
3.	2.								_ ` ´
4.	3.				Prevalence Index Wo	rksheet:			
5.	4.				Total % Cov	er of:	Mu	Itiply by:	
Herb Stratum (Plot size:5 ft)	5.				OBL species	0	x 1 =	0	_
Herb Stratum (Plot size:5 ft) 75 Yes UPL 1. Nassella leucotricha 75 Yes UPL 2. Geranium carolinianum 15 No UPL 3. Cynodon dactylon 3 No FACU 4.		= 1	otal Cover		FACW species	0	x 2 =	0	_
1. Nassella leucotricha 75 Yes UPL 2. Geranium carolinianum 15 No UPL 3. Cynodon dactylon 3 No FACU 4.	Herb Stratum (Plot size: 5 ft.)				FAC species	0	x 3 =	0	_
2. Geranium carolinianum 15 No UPL 3. Cynodon dactylon 3 No FACU 4.	1. Nassella leucotricha	75	Yes	UPL	FACU species	3	x 4 =	12	_
3. Cynodon dactylon 3 No FACU Column Totals: 93 (A) 462 4.	2. Geranium carolinianum	15	No	UPL	UPL species	90	x 5 =	450	_
4.	3. Cynodon dactylon	3	No	FACU	Column Totals:	93	(A)	462	(B)
5.	4.				Prevalence Index = B/	A =	4.97		_ ` `
6.	5.								
7.	6.				Hydrophytic Vegetati	on Indicato	rs:		
8.	7.				1 - Rapid Test for	Hydrophytic	Vegetation	ı	
9.	8.				2 - Dominance Te	est is >50%	0		
10.	9.				3 - Prevalence Inc	dex is $\leq 3.0^1$			
93 = Total Cover 93 = Total Cover 93 = Total Cover Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 2.	10.				4 - Morphological	Adaptations	¹ (Explain)		
Woody Vine Stratum (Plot size: 30 ft.) 1. None Observed		93 = 1	otal Cover		Problematic Hydro	ophytic Vege	etation ¹ (Ex	plain)	
1. None Observed	Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlar	nd hvdrolog	v must	
2 = Total Cover Hydrophytic % Bare Ground in Herb Stratum 7 Yes No X	1. None Observed	/			be present, unless dist	urbed or pro	blematic.	,	
mining = Total Cover Hydrophytic % Bare Ground in Herb Stratum 7 7 Vegetation Present? Yes No X	2.		·						
% Bare Ground in Herb Stratum 7 Yes No X		= 1	otal Cover		Hydrophytic				
	% Bare Ground in Herb Stratum 7				Vegetation Present?	Y	′es	No	x
Remarks:	Remarks:								

Frost-Heave Hummocks (D7) (LRR F)

epth	Matrix			Redox	Features						
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-12	10YR 3/2	60	None				Clay Loam				
0-12	None	40	None				Gravel				
					·						
						2.					
vpe: C=C vdric Soils	s Indicators: (Application)	able to all	LRRs. unless oth	erwise note	or Coated Sand Grain	is. ⁻ Lo	Indicators for Proble	g, M=Matrix. ematic Hydric Soils ³ :			
Histoso) (A1)		Sandy	Gleved Matr	ix (S4)	1 cm Muck (A9) (LRR L J)					
Histic F	Pipedon (A2)		Candy Sandy	Redox (S5)	IX (0+)						
Black H	Histic (A3)		Strippe	d Matrix (S6)	Dark Surface (S7) (LRR G)					
Hvdroa	en Sulfide (A4)		Loamv	Mucky Mine	, ral (F1)		High Plains Dep	pressions (F16)			
Stratifie	ed Layers (A5) (LRR F))	Loamy	Gleyed Mat	ix (F2)		(LRR H ou	tside of MLRA 72 & 73)			
1 cm M	luck (A9) (LRR F, G, H)	Deplete	ed Matrix (F3	3)		Reduced Vertic	(F18)			
Deplete	ed Below Dark Surface	(A11)	Redox	Dark Surfac	e (F6)	Red Parent Material (TF2)					
Thick D	Dark Surface (A12)		Deplete	ed Dark Surf	ace (F7)	Very Shallow Dark Surface (TF12)					
Sandy I	Mucky Mineral (S1)		Redox	Depressions	s (F8)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)					
2.5 cm	Mucky Peat or Peat (S	32) (LRR C	6, H) High P	lains Depres	sions (F16)		³ Indicators of hydroph	nytic vegetation and			
_5 cm M	lucky Peat or Peat (S3) (LRR F)	(N	ILRA 72 & 7	3 of LRR H)		wetland hydrolog	gy must be present,			
							unless disturbed	l or problematic.			
estrictive	Layer (if observed):										
Type:											
Depth ((inches):					Hydric	Soil Present?	Yes <u>No X</u>			
narks [.]		s was obs	erved								
narks: positive i	indication of hydric soil	0	0.104.								
narks: o positive i	indication of hydric soil										
narks: positive i	indication of hydric soil										
narks:) positive i	indication of hydric soil										
narks: o positive i	indication of hydric soil										
narks: positive i ROLOC	indication of hydric soil										
narks: o positive i ROLOC etland hyd	indication of hydric soil										
narks: positive i ROLOC etland hyd	indication of hydric soil GY drology Indicators: cators (minimum of on	e is require	ed; check all that ap	oply)			Secondary Indicators	(minimum of two required)			
narks: positive i ROLOC etland hyd imary India Surface	Area indication of hydric soil area indicators: area indicators: a mathematicators (minimum of on a Water (A1)	e is require	ed; check all that anSalt Cr	oply) ust (B11)			Surface Soil Cra	: (minimum of two required) acks (B6)			
narks: positive i ROLOC etland hyr imary India _Surface _High W	indication of hydric soil GY drology Indicators: cators (minimum of on e Water (A1) /ater Table (A2)	e is require	ed; check all that ap Salt Cr Aquatio	oply) ust (B11) c Invertebrat	es (B13)		Secondary Indicators	: (minimum of two required) acks (B6) ated Concave Surface (B8)			
narks: p positive i ROLOC etland hyd imary India Surface High W Saturat	GY drology Indicators: cators (minimum of on e Water (A1) /ater Table (A2) .ion (A3)	e is require	ed; check all that ap Salt Cr Aquatio Hydrog	pply) ust (B11) ≿ Invertebrati en Sulfide C	es (B13) 9dor (C1)		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patteri	: <u>(minimum of two required)</u> acks (B6) ated Concave Surface (B8) ns (B10)			
ROLOC etland hyd Surface High W Saturat Water N	GY drology Indicators: cators (minimum of on a Water (A1) /ater Table (A2) ion (A3) Marks (B1)	<u>e is require</u>	ed; check all that ap Salt Cr Aquatio Hydrog Dry-Se	oply) ust (B11) b Invertebrat en Sulfide C ason Water	es (B13) bdor (C1) Table (C2)		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3)			
narks: p positive i positive i ROLOC etland hyd imary India Surface High W Saturat Water N Sedime	GY drology Indicators: cators (minimum of on e Water (A1) 4 ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	<u>e is requir</u>	ed; check all that an Salt Cr Aquatio Hydrog Dry-Se Oxidize	oply) ust (B11) c Invertebrat ien Sulfide C ason Water ad Rhizospho	es (B13))dor (C1) Table (C2) eres on Living Roots	(C3)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled)	a (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3)			
ROLOC etland hyd imary India Surface High W Saturat Water M Sedime Drift De	GY drology Indicators: cators (minimum of on e Water (A1) dater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	<u>e is requir</u>	ed; check all that ap Salt Cr Aquatic Hydrog Dry-Se Oxidize (where	oply) ust (B11) c Invertebrat ren Sulfide C ason Water ad Rhizospho not tilled)	es (B13))dor (C1) Table (C2) eres on Living Roots	(C3)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow	: (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) s (C8)			
marks: p positive i ROLOC etland hyd imary India Surface High W Saturat Water N Sedime Drift De Algal M	GY drology Indicators: cators (minimum of on e Water (A1) (ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)	<u>e is requir</u>	ed; check all that ap Salt Cr Aquatio Hydrog Dry-Se Oxidize (where Presen	oply) ust (B11) c Invertebrat en Sulfide C ason Water ed Rhizosphe e not tilled) ce of Reduc	es (B13) bdor (C1) Table (C2) eres on Living Roots ed Iron (C4)	(C3)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib	a (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9)			
marks: p positive i ROLOC etland hyd imary India Surface High W Saturat Water M Sedime Drift De Algal M Iron De	GY drology Indicators: cators (minimum of on e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5)	e is requir	ed; check all that ap Salt Cr Aquatic Hydrog Dry-Se Oxidize (where Preser Thin M	oply) ust (B11) c Invertebrat en Sulfide C ason Water ed Rhizosphe e not tilled) ice of Reduc uck Surface	es (B13) Ddor (C1) Table (C2) eres on Living Roots ed Iron (C4) (C7)	(C3)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Pos	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) opheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2)			

Water-Stained Leaves (B9)

Field Observations:									
Surface Water Present?	Yes	No	Х	Depth (inches):	N/A				
Water Table Present?	Yes	No	х	Depth (inches):	N/A				
Saturation Present?	Yes	No	х	Depth (inches):	N/A	Wetland Hydrology Present?	Yes	No	Х
(includes capillary fringe)									
Describe Recorded Data (s	stream gauge, r	nonitorir	ng well, a	erial photos, previous	s inspections), if av	/ailable:			
Remarks:									
No positive indication of v	vetland hydrolo	gy was o	bserved	l.					

Project/Site:		US 67					unty:		Ellis		Sampling Date:	Ja	inuary 28, 2	2019
Applicant/Owner:				TxDOT-Dallas	District			Sta	te:	Texas	Sampling Point:		DPA005	
Investigator(s):	John Williams and Grahme Borchardt				rdt	Section, Township, Range:					N/A			
Landform (hillslope,	, terrace, et	c.):		Flat			Local	relief (con	cave, c	convex, none):	Concave	Slope (%):		01-03
Subregion (LRR):	LRR J				Lat:		-96.97590 Long:		32.54041	Datum:	NAD 198	3 CONUS		
Soil Map Unit Name	e:			Austin si	lty clay, 1 to	3 percen	nt slopes	6		NV	VI Classification:		Upland	
Are climatic / hydrol	logic condit	ions on	the site	typical for this	time of year	?	Yes	<u>x</u> 1	√o	(if no, e	xplain in Remarks.	.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No si	gnificant	ly distur	bed?		Are "Normal C	ircumstances" pre	sent? Yes	X	No
Are Vegetation	No	,Soil	No	,or Hydrology	No na	aturally p	oroblema	atic?		(If needed, exp	olain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>X</u> No <u>X</u> No <u>X</u>	Is the Sampled Area	Yes	NoX	
Remarks:	a within a watlan	d due te the leal	· of all three watland aritaria			
I his point was determined not to b	be within a wetland	d due to the lack	c of all three wetland criteria.			

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		2	(B)
	= .	Total Cover						_ ` ´
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A/B)
2.			<u> </u>	, ,				_ ` ` `
3.			·	Prevalence Index Wo	rksheet:			
4.			·	Total % Cov	er of:	Mu	ltiply by:	
5.				OBL species	0	x 1 =	0	
	=	Total Cover	·	FACW species	0	x2=	0	_
Herb Stratum (Plot size: 5 ft.)				FAC species	0	x 3 =	0	_
1. Cvnodon dactvlon	35	Yes	FACU	FACU species	35	x 4 =	140	_
2. Geranium carolinianum	25	Yes	UPL	UPL species	33	x 5 =	165	_
3. Nassella leucotricha	5	No	UPL	Column Totals:	68	(A)	305	(B)
4. Hilaria belangeri	3	No	UPL	Prevalence Index = B/	A =	4.49		_ ` '
5.			·					
6.				Hydrophytic Vegetati	on Indicato	rs:		
7.			<u> </u>	1 - Rapid Test for	Hydrophytic	: Vegetatio	n	
8.			<u> </u>	2 - Dominance Te	est is >50%	0		
9.			<u> </u>	3 - Prevalence Ind	dex is $\leq 3.0^1$			
10.			<u> </u>	4 - Morphological	Adaptations	¹ (Explain)		
	68 =	Total Cover	. <u> </u>	Problematic Hydr	ophytic Veqe	etation ¹ (Ex	(plain)	
Woody Vine Stratum (Plot size: 30 ft)			¹ Indicators of hydric so	il and wetlar	nd hydroloc	iv must	
1 None Observed	/			be present, unless dist	urbed or pro	blematic.	,	
2								
	=	Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 32				Vegetation Present?	Y	'es	No	x
Remarks:								
No positive indication of hydrophytic vegetation w	as observed (≥	50% of dominan	t species indexed as	FACU or drier).				

Profile Description: (Describe to the depth r	leeded to document the			or malcators.)	
Depth Matrix	Redo	ox Features			
(inches) Color (moist) %	Color (moist) %	Type ¹	Loc ²	Texture	Remarks
0-12 10YR 2/1 90	None —			Clay Loam	
0-12 None 10	None			Gravel	· · · · · · · · · · · · · · · · · · ·
				Glaver	
<u> </u>					
			·		
		<u> </u>			
		<u> </u>			
<u> </u>					
'Type: C=Concentration, D=Depletion, RM=Re	duced Matrix, CS=Covere	d or Coated Sand G	rains. ² L	ocation: PL=Pore Lining	g, M=Matrix.
Hydric Solis Indicators: (Applicable to all LF	kks, unless otherwise no	oted.)		Indicators for Proble	ematic Hydric Soils [°] :
Histosol (A1)	Sandy Gleyed M	latrix (S4)		1 cm Muck (A9)	(LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S	5)		Coast Prairie Re	edox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped Matrix (S6)		Dark Surface (S	7) (LRR G)
Hydrogen Sulfide (A4)	Loamy Mucky M	ineral (F1)		High Plains Dep	ressions (F16)
Stratified Layers (A5) (LRR F)	Loamy Gleyed N	latrix (F2)		(LRR H ou	tside of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)	Depleted Matrix	(F3)		Reduced Vertic	(F18)
Depleted Below Dark Surface (A11)	Redox Dark Surf	face (F6)		Red Parent Mate	erial (TF2)
Thick Dark Surface (A12)	Depleted Dark S	Surface (F7)		Very Shallow Da	ark Surface (TF12)
Sandy Mucky Mineral (S1)	Redox Depression	ons (F8)		Other (Explain ir	n Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G, I	High Plains Dep	ressions (F16)		³ Indicators of hydroph	nytic vegetation and
5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 8	& 73 of LRR H)		wetland hydrolog	gy must be present,
	,	,		unless disturbed	or problematic.
Restrictive Layer (if observed):					
Type [.]					
Depth (inches):			Hydric	: Soil Present?	Yes No X
			injune		
Remarks:					
No positive indication of hydric soils was observ	ved.				
HYDROLOGY					
HYDROLOGY Wetland hydrology Indicators:					
HYDROLOGY Wetland hydrology Indicators:					
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required;	check all that apply)			Secondary Indicators	(minimum of two required)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; Surface Water (A1)	check all that apply)			Secondary Indicators	(minimum of two required) icks (B6)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; Surface Water (A1) High Water Table (A2)	check all that apply) Salt Crust (B11) Aquatic Inverteb	rates (B13)		Secondary Indicators	(minimum of two required) icks (B6) ited Concave Surface (B8)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; Surface Water (A1) High Water Table (A2) Saturation (A3)	check all that apply) Salt Crust (B11) Aquatic Invertebi Hydrogen Sulfide	rates (B13) e Odor (C1)		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter	(minimum of two required) licks (B6) lted Concave Surface (B8) ns (B10)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	check all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfide Dry-Season Wat	rates (B13) e Odor (C1) ter Table (C2)		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Oxidized Rhizos	<u>(minimum of two required)</u> icks (B6) ited Concave Surface (B8) ns (B10) pheres on Living Roots (C3)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required;	check all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfide Dry-Season Wat Oxidized Rhizos	rates (B13) e Odor (C1) ter Table (C2) pheres on Living Ro		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Oxidized Rhizos (where tilled)	(minimum of two required) licks (B6) lted Concave Surface (B8) ns (B10) pheres on Living Roots (C3)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	check all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfide Dry-Season Wat Oxidized Rhizos (where not tilled	rates (B13) e Odor (C1) ter Table (C2) pheres on Living Ro d)		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Oxidized Rhizos (where tilled) Crayfish Burrow	(minimum of two required) licks (B6) lted Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required;	check all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfide Dry-Season Wat Oxidized Rhizos (where not tilled Presence of Red	rates (B13) e Odor (C1) ter Table (C2) pheres on Living Ro d) duced Iron (C4)	ots (C3)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visibl	(minimum of two required) licks (B6) lted Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8) e on Aerial Imagery (C9)
HYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required;	check all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfide Dry-Season Wat Oxidized Rhizos (where not tilled Presence of Red	rates (B13) e Odor (C1) ter Table (C2) pheres on Living Ro d) duced Iron (C4) ice (C7)	ots (C3)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visibl Geomorphic Pos	(minimum of two required) licks (B6) lted Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2)
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Project/Site:		US 67					unty:		Ellis		Sampling Date:		January 2	8, 2019	
Applicant/Owner:				TxDOT-Dallas	District			State	:	Texas	Sampling Point:		DPA	006	
Investigator(s):	John Williams and Grahme Borchardt				ardt	Section, Township, Range:					N/A				
Landform (hillslope,	, terrace, e	tc.):		Fla	t		Local	relief (conca	ave, co	onvex, none):	Convex	Slope (%)	:	01-03	
Subregion (LRR):	LRR J					Lat:		-96.97573 Long:			32.54319	Datum:	NAD	1983 CONUS	
Soil Map Unit Name	e:			Stephen	silty clay, 1 to	o 4 perce	ent slope	S		N	VI Classification:		Upla	nd	
Are climatic / hydrol	logic condi	tions on	the site	e typical for this	time of year	?	Yes	X No)	(if no, e	xplain in Remarks.	.)			
Are Vegetation	No	,Soil	No	or Hydrology	No s	ignificant	tly distur	bed?		Are "Normal C	circumstances" pre	sent? Y	es X	No	
Are Vegetation	No	,Soil	No	or Hydrology,	No n	aturally p	problema	atic?		(If needed, ex	plain any answers i	in Remarks.)			

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

Remarks:					
This point was determined not to be within a wettand due to the lack of all three wettand chiena.	vas determined not to be within a w	retland due to the lack of all t	hree wetland criteria.		

	Absolute	Dominant	Indicator	Dominance Test worl	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		1	(B)
	= -	Total Cover						_ ()
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A/B)
2.								_ ` `
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mu	Itiply by:	
5.				OBL species	0	x 1 =	0	_
	= -	Total Cover		FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft.)				FAC species	0	x 3 =	0	_
1. Cynodon dactylon	65	Yes	FACU	FACU species	65	x 4 =	260	_
2. Nassella leucotricha	15	No	UPL	UPL species	30	x 5 =	150	_
3. Cirsium texanum	10	No	UPL	Column Totals:	95	(A)	410	(B)
4. Geranium carolinianum	5	No	UPL	Prevalence Index = B/	A =	4.32		/
5.								
6.				Hydrophytic Vegetati	on Indicato	rs:		
7.				1 - Rapid Test for	Hydrophytic	Vegetation	ı	
8.				2 - Dominance Te	est is >50%	0		
9.				3 - Prevalence Inc	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations	¹ (Explain)		
	95 =	Total Cover		Problematic Hydro	ophytic Veg	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetla	nd hvdrolog	v must	
1. None Observed	/			be present, unless dist	urbed or pro	blematic.	,	
2.								
	= .	Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 5				Vegetation Present?	۱	'es	No	х
				i resent i				
Remarks:				•				
No positive indication of hydrophytic vegetation w	/as observed (≥	50% of dominan	t species indexed as	FACU or drier).				

DPA006

Profile Desc	ription: (Describe t	o the depth	needed to docu	ment the in	dicator or confirm	the absence	of indicators.)						
Depth	Matrix			Redox	Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks					
0-12	10YR 2/1	90	None	_		_	Clay Loam						
0-12	None	10	None				Gravel						
¹ Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, C	S=Covered	or Coated Sand Gra	ins. ² L	ocation: PL=Pore Lining	, M=Matrix.					
Hydric Soils	Indicators: (Applic	able to all	LRRs, unless oth	erwise not	ed.)		Indicators for Proble	matic Hydric Soils ³ :					
Histoso	(A1)		Sandy	Gleyed Mat	trix (S4)		1 cm Muck (A9) (LRR I, J)					
Histic E	pipedon (A2)		Sandy	Redox (S5))		Coast Prairie Rec	dox (A16) (LRR F, G, H)					
Black H	istic (A3)		Strippe	ed Matrix (S	6)		Dark Surface (S7	(LRR G)					
Hydroge	en Sulfide (A4)		Loamy	/ Mucky Min	eral (F1)		High Plains Depr	essions (F16)					
Stratifie	d Layers (A5) (LRR F)	Loamy	Gleyed Ma	trix (F2)		(LRR H outs	side of MLRA 72 & 73)					
1 cm Mi	uck (A9) (LRR F, G, I	H)	Deplet	ed Matrix (F	3)		Reduced Vertic (F18)						
Deplete	d Below Dark Surface	e (A11)	Redox		Red Parent Material (TF2)								
Thick D	ark Surface (A12)		Deplet		Very Shallow Dar	rk Surface (TF12)							
Sandy N	/lucky Mineral (S1)		Redox		Other (Explain in	Remarks)							
2.5 cm l	Mucky Peat or Peat (52) (LRR G	, H) High F		³ Indicators of hydrophy	ytic vegetation and							
5 cm Mi	ucky Peat or Peat (S3	8) (LRR F)	()	MLRA 72 &	73 of LRR H)		wetland hydrolog	y must be present,					
Postriativa I	over (if cheerved);						uniess disturbed	or problematic.					
-	ayer (il observeu).												
Туре:			<u></u>										
Depth (i	nches):					Hydri	c Soil Present?	YesNo <u>X</u>					
Pomarks:													
HYDROLOG	SY												
Wetland hyd	Irology Indicators:												
Primary Indic	ators (minimum of or	ne is require	d; check all that a	pply)			Secondary Indicators	(minimum of two required)					
Surface	Water (A1)		Salt C	rust (B11)			Surface Soil Crac	cks (B6)					
High W	ater Table (A2)		Aquati	c Invertebra	ites (B13)		ed Concave Surface (B8)						
Saturati	on (A3)		Hydro	gen Sulfide	Odor (C1)		s (B10)						
Water N	larks (B1)		Dry-Se	eason Wate	r Table (C2)	(00)	Oxidized Rhizosp	oheres on Living Roots (C3)					
Sedime	nt Deposits (B2)			ea Rnizospr	ieres on Living Root	s (C3)	(00)						
Dritt De	posits (B3)		(wner	e not tillea)	and Iran (C4)		Crayfish Burrows	(C8)					
Aigai Ma	al of Crust (D4)		Preser				ition (D2)						
	on Visible on Aerial In	ageny (B7)	Thirt iv	Evoloin in E	= (C7)		t (D5)						
Water-9	Stained Leaves (BQ)	agery (D7)			(Cillars)		Frost-Heave Hum	(D3)					
Field Obser	vations:												
Surface Wat	er Present? Yes	No	X De	pth (inches)	: N/A								
Water Table	Present? Yes	No	X De	pth (inches)	• <u>N/A</u>								
Saturation P	resent? Yes	No	X De	pth (inches)	: N/A	Wetla	nd Hydrology Present?	Yes No X					
(includes cap	pillary fringe)		D0										
Describe Reco	orded Data (stream g	auge, monit	oring well, aerial p	hotos, previ	ous inspections), if a	vailable:							
Remarks:													
No positive i	ndication of wetland h	ydrology wa	as observed.										

Project/Site:			US	67		Cou	inty:	E	lis	Sampling Date:	Jar	nuary 28, 2019
Applicant/Owner:		TxDOT-Dallas District						State:	Texas	Sampling Point:		DPA007
Investigator(s):	John	William	s	and <u>Gra</u>	hme Borcha	rdt	Section,	Township, R	ange:		N/A	
Landform (hillslope,	terrace, et	tc.):		Ditch	ı		Local re	lief (concave	convex, none):	Concave	Slope (%):	03-05
Subregion (LRR):			L	RR J		Lat:	-9	6.97577	Long:	32.54826	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Stephen s	ilty clay, 1 to	4 percei	nt slopes		N\	VI Classification:		Upland
Are climatic / hydrol	ogic condit	tions on	the site	typical for this	time of year	?	Yes)	<u>(</u> No	(if no, e	xplain in Remarks.	.)	
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	gnificantl	ly disturbe	ed?	Are "Normal C	Circumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No na	aturally p	roblemati	c?	(If needed, ex	plain any answers i	n Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute Do	minant Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Sp	ecies? Status	Number of Dominant S	pecies			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A)
2.							_
3.			Total Number of Domir	nant			
4.			Species Across All Stra	ata:		2	(B)
	= Total (Cover					
Sapling/Shrub Stratum (Plot size: 15 ft.)		Percent of Dominant S	pecies			
1. None Observed	/		That Are OBL, FACW,	or FAC:		0	(A/B)
2.							_ ` `
3	·		Prevalence Index Wo	rksheet:			
4	·		Total % Cove	er of:	Mu	Itiply by:	
5.			OBL species	0	x 1 =	0	_
·	= Total (Cover	FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft.)			FAC species	0	x 3 =	0	_
1. Nassella leucotricha	60	Yes UPL	FACU species	0	x 4 =	0	_
2. Geranium carolinianum	40	Yes UPL	UPL species	100	x 5 =	500	_
3			Column Totals:	100	(A)	500	(B)
4			Prevalence Index = B/A	\ =	5.00		_ (=)
5							
6.	<u> </u>		Hvdrophytic Vegetatio	on Indicato	rs:		
7.	·		1 - Rapid Test for	Hvdrophytic	Vegetation	ı	
8.	·		2 - Dominance Te	st is >50%	5		
9			3 - Prevalence Ind	ex is $\leq 3.0^1$			
10			4 - Morphological	Adaptations	¹ (Explain)		
	100 = Total (Cover	Problematic Hydro	phytic Vege	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft)		¹ Indicators of hydric soi	l and wetlar		v must	
1 None Observed)		be present, unless dist	urbed or pro	blematic.	ymusi	
			· · ·				
Z	= Total (Hydrophytic				
% Bare Ground in Herb Stratum0		Jover	Vegetation Present?	Y	'es	No	x
Remarks:							
No positive indication of hydrophytic vocatation w	use observed (>50%	f dominant spacios indovad	as EACLL or driver)				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

epth	Matrix			Redox Fe	atures				
iches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	arks
0-12	10YR 3/1	80	None				Clay Loam		
0-12	None	20	None				Gravel		
ma: C=C	anoantration D-Daplati	ion BM-B	aduand Matrix CS		Control Sand Crain	2	agation: DI-Doro Lining	M-Motrix	
dric Soils	s Indicators: (Applical	ble to all L	RRs, unless oth	erwise noted.)		15. L	Indicators for Proble	natic Hydric Soils	³ :
Histoso	ol (A1)		Sandy	Gleyed Matrix	(S4)		1 cm Muck (A9) (_RR I, J)	
Histic E	pipedon (A2)		Sandy	Redox (S5)			Coast Prairie Red	ox (A16) (LRR F, (G, H)
Black H	listic (A3)		Strippe	d Matrix (S6)			Dark Surface (S7	(LRR G)	
Hydrog	en Sulfide (A4)		Loamy	Mucky Minera	l (F1)		High Plains Depre	essions (F16)	
Stratifie	ed Layers (A5) (LRR F)		Loamy	Gleyed Matrix	(F2)		(LRR H outs	ide of MLRA 72 &	73)
1 cm M	luck (A9) (LRR F, G, H)		Deplete	ed Matrix (F3)			Reduced Vertic (F	18)	
 Deplete	ed Below Dark Surface ((A11)	Redox	Dark Surface ((F6)		Red Parent Mater	ial (TF2)	
Thick Dark Surface (A12) Depleted Dark Surface (F7)							Very Shallow Dar	k Surface (TF12)	
 Sandy I	Mucky Mineral (S1)		Redox	Depressions (I	F8)		Other (Explain in	Remarks)	
2.5 cm	Mucky Peat or Peat (S2	2) (LRR G,	H) High P	lains Depressio	ons (F16)		³ Indicators of hydrophy	tic vegetation and	
5 cm M	lucky Peat or Peat (S3)	(LRR F)	(N	ILRA 72 & 73	of LRR H)		wetland hydrology	must be present,	
strictiva	l aver (if observed):						unless disturbed of	or problematic.	
Type	Layer (il observeu).								
Depth (inches):					Hvdrid	c Soil Present?	Yes	No X
Doba: (
arks:									
positive i	indication of hydric soils	was obser	ved.						
	GY								
ROLOG									
etland hyd	drology Indicators:		l: chock all that a	(vlac			Secondary Indicators (minimum of two re	quired)
tland hyd	drology Indicators: cators (minimum of one	is required	i, check all that ap	piy)					
tland hyd mary India Surface	drology Indicators: cators (minimum of one Water (A1)	is required	salt Cr	ust (B11)			Surface Soil Crac	ks (B6)	
etland hyd mary India Surface High W	drology Indicators: cators (minimum of one ∋ Water (A1) /ater Table (A2)	is required	<u>, check an triat ap</u> Salt Cr Aquatio	ust (B11) c Invertebrates	(B13)		Surface Soil Crac	ks (B6) ed Concave Surfac	e (B8)
etland hyd mary India _ Surface _ High W _ Saturati	drology Indicators: cators (minimum of one a Water (A1) 'ater Table (A2) ion (A3)	is required	n <u>, check an that ap</u> Salt Cr Aquatio Hydrog	ust (B11) c Invertebrates en Sulfide Odo	(B13) pr (C1)		Surface Soil Crac Sparsely Vegetate Drainage Patterns	ks (B6) ed Concave Surfac s (B10)	e (B8)
etland hyd mary India Surface High W Saturati Water N	drology Indicators: cators (minimum of one e Water (A1) 'ater Table (A2) ion (A3) Marks (B1)	is required	<u>, check an triat a</u> Salt Cr Aquatio Hydrog Dry-Se	ust (B11) c Invertebrates en Sulfide Odo ason Water Ta	(B13) or (C1) able (C2)		Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp	ks (B6) ed Concave Surfac s (B10) heres on Living Ro	e (B8) ots (C3)
xOLOG mary India Surface High W Saturati Water N Sedime	drology Indicators: cators (minimum of one e Water (A1) later Table (A2) ion (A3) Warks (B1) ent Deposits (B2)	is required	<u>, check an that ap</u> Salt Cr Aquatio Hydrog Dry-Se Oxidize	ust (B11) c Invertebrates en Sulfide Odd ason Water Ta ed Rhizosphere	(B13) or (C1) able (C2) as on Living Roots	(C3)	Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled)	ks (B6) ed Concave Surfac s (B10) heres on Living Ro	e (B8) ots (C3)
High W Saturati Surface High W Saturati Water M Sedime Drift De	drology Indicators: cators (minimum of one e Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	is required	, check an that ap Salt Cr Aquatic Hydrog Dry-Se Oxidize (where	ust (B11) c Invertebrates en Sulfide Odd ason Water Ta ed Rhizosphere e not tilled)	(B13) or (C1) able (C2) as on Living Roots	(C3)	Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled)	ks (B6) ed Concave Surfac s (B10) heres on Living Ro (C8)	e (B8) ots (C3)

Primary Indicators (minimum of one is	s required;	check a	Il that apply)	Secondary Indicators (minimum of two required)					
Surface Water (A1)			Salt Crust (B11)		Surface Soil Cracks (B6)				
High Water Table (A2)			Aquatic Invertebrates	s (B13)	Sparsely Vegetated Concave Surface (B8)				
Saturation (A3)			Hydrogen Sulfide Od	lor (C1)	Drainage Patterns (B10)				
Water Marks (B1)			Dry-Season Water Ta	able (C2)	Oxidized Rhizospheres on Living Roots (C3)				
Sediment Deposits (B2)			Oxidized Rhizospher	es on Living Root	ots (C3) (where tilled)				
Drift Deposits (B3)			(where not tilled)		Crayfish Burrows (C8)				
Algal Mat or Crust (B4)			Presence of Reduced	d Iron (C4)	Saturation Visible on Aerial Imagery (C9)				
Iron Deposits (B5)			Geomorphic Position (D2)						
Inundation Visible on Aerial Imag	ery (B7)		FAC-Neutral Test (D5)						
Water-Stained Leaves (B9)			Frost-Heave Hummocks (D7) (LRR F)						
Field Observations:									
Surface Water Present? Yes	No	х	Depth (inches):	N/A					
Water Table Present? Yes	No	Х	Depth (inches):	N/A					
Saturation Present? Yes (includes capillary fringe)	No	X	Depth (inches):	Wetland Hydrology Present? Yes <u>No X</u>					
Describe Recorded Data (stream gaug	e, monitorii	ng well,	aerial photos, previous	is inspections), if a	f available:				
Remarks:									
No positive indication of wetland hydr	ology was	observe	d.						

Project/Site:	US 67					Cou	unty:	Dallas		Sampling Date:	January 28, 2019		
Applicant/Owner:	TxDOT-Dallas District							State:	Texas	Sampling Point:		DPA008	
Investigator(s):	John	William	s	and <u>Gra</u>	hme Borchar	dt	Sectio	n, Township,	Range:		N/A		
Landform (hillslope,	, terrace, et	tc.):		Flat			Local r	elief (concav	e, convex, none)	: Convex	Slope (%):	01-03	
Subregion (LRR):			L	RR J		Lat:	-	96.97421	Long:	32.55268	Datum:	NAD 1983 CONUS	
Soil Map Unit Name	e:			Stephen s	ilty clay, 1 to	4 perce	ent slope	s	I	NWI Classification:		Upland	
Are climatic / hydrol	logic condit	tions on	the site	typical for this	time of year?		Yes	X No	(if no	, explain in Remarks	.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	nificant	ly distur	ped?	Are "Normal	l Circumstances" pre	sent? Yes	X No	
Are Vegetation	No	,Soil	No	,or Hydrology	No na	turally p	oroblema	tic?	(If needed, e	explain any answers i	in Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								
3.				Total Number of Domin	nant			
4.				Species Across All Stra	ata:		3	(B)
	=	Total Cover						_ ()
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A/B)
2.	·			, ,				_ ` `
3.	·			Prevalence Index Wo	rksheet:			
4.	·			Total % Cov	er of:	Mu	Itiply by:	
5.	·			OBL species	0	x 1 =	0	_
	=	Total Cover		FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft.)	·			FAC species	3	x 3 =	9	
1. Nassella leucotricha	30	Yes	UPL	FACU species	0	x 4 =	0	_
2. Torilis arvensis	20	Yes	UPL	UPL species	70	x 5 =	350	_
3. Geranium carolinianum	20	Yes	UPL	Column Totals:	73	(A)	359	(B)
4. Paspalum notatum	3	No	FAC	Prevalence Index = B//	4 =	4.92		_ ` ´
5.	·							
6.	<u> </u>			Hydrophytic Vegetati	on Indicato	rs:		
7.				1 - Rapid Test for	Hydrophytic	Vegetation	ı	
8.				2 - Dominance Te	st is >50%	0		
9.				3 - Prevalence Inc	lex is $\leq 3.0^1$			
10.	·			4 - Morphological	Adaptations	¹ (Explain)		
	73 =	Total Cover		Problematic Hydro	ophytic Vege	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlar	nd hvdrolog	v must	
1 None Observed	/			be present, unless dist	urbed or pro	blematic.	,	
2.	·							
		Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 27	<u> </u>			Vegetation Procent2	Y	'es	No	х
				Flesent	-			
Remarks:				u				
No positive indication of hydrophytic vegetation w	/as observed (≥	50% of dominan	t species indexed as	FACU or drier).				

SOIL

DPA008

		Redox	Features			
ches) Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
-12 <u>10YR 3/2</u> <u>100</u>	None				Loam	
				. <u> </u>		
	·					
pe: C=Concentration, D=Depletion, RM=F	Reduced Matrix, CS	S=Covered	or Coated Sand Grain	IS. ²	Location: PL=Pore Lin	ng, M=Matrix.
and Solis Indicators. (Applicable to all	LKKS, unless oule	i wise note	eu.)		Indicators for Pro	blematic Hydric Soils":
Histosol (A1)	Sandy (Gleyed Mat	trix (S4)		1 cm Muck (A	9) (LRR I, J)
Histic Epipedon (A2)	Sandy F	Redox (S5))		Coast Prairie	Redox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped	d Matrix (S	6)		Dark Surface	(S7) (LRR G)
Hydrogen Sulfide (A4)	Loamy	Mucky Min	eral (F1)		High Plains D	epressions (F16)
Stratified Layers (A5) (LRR F)	Loamy	Gleyed Ma	trix (F2)		(LRR H d	outside of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)	Deplete	ed Matrix (F	-3)		Reduced Vert	c (F18)
Depleted Below Dark Surface (A11)	Redox I	Dark Surfa	ce (F6)		Red Parent M	aterial (TF2)
Thick Dark Surface (A12)	Deplete	d Dark Su	rface (F7)		Very Shallow	Dark Surface (TF12)
Sandy Mucky Mineral (S1)	Redox I	Depression	ns (F8)		Other (Explain	in Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G	. H) High Pla	' ains Depre	ssions (F16)		³ Indicators of hydro	phytic vegetation and
5 cm Mucky Peat or Peat (S3) (LRR F)	, , <u> </u>	I RA 72 &	73 of LRR H)		wetland hvdro	ogy must be present.
_ • • • • • • • • • • • • • • • • • • •	(unless disturb	ed or problematic.
strictive Laver (if observed):						
Turney						
Type.						
Depth (Inches):				Hyar	ic Soll Present?	res <u>NO X</u>
arks: positive indication of hydric soils was obse	erved.					
arks: positive indication of hydric soils was obse	erved.					
arks: positive indication of hydric soils was obse ROLOGY	erved.					
arks: positive indication of hydric soils was obse ROLOGY tland hydrology Indicators:	erved.					
arks: positive indication of hydric soils was obse ROLOGY tland hydrology Indicators: nary Indicators (minimum of one is require	erved. d; check all that ap	ply)			Secondary Indicato	rs (minimum of two required)
arks: positive indication of hydric soils was obse ROLOGY tland hydrology Indicators: nary Indicators (minimum of one is require _ Surface Water (A1)	erved. ed; check all that ap Salt Cru	ply) ust (B11)			<u>Secondary Indicato</u> Surface Soil C	rs (minimum of two required) iracks (B6)
arks: positive indication of hydric soils was obse ROLOGY Iland hydrology Indicators: nary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	erved. ed; check all that ap Salt Cru Salt Cru	ply) ust (B11) i Invertebra	ites (B13)		<u>Secondary Indicato</u> Surface Soil C Sparsely Vege	rs (minimum of two required) racks (B6) etated Concave Surface (B8)
Arks: positive indication of hydric soils was observed ROLOGY Itand hydrology Indicators: nary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3)	erved. ed; check all that ap Salt Cru Aquatic Hydroge	ply) ust (B11) i Invertebra en Sulfide (ites (B13) Odor (C1)		Secondary Indicato Surface Soil C Sparsely Vege Drainage Patt	rs (minimum of two required) tracks (B6) etated Concave Surface (B8) erns (B10)
Arks: positive indication of hydric soils was observed ROLOGY Itand hydrology Indicators: nary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	erved. ed; check all that ap Salt Cru Aquatic Hydroge Drv-Sea	ply) ust (B11) Invertebra en Sulfide (ason Wate)	ites (B13) Odor (C1) r Table (C2)		Secondary Indicato Surface Soil C Sparsely Vege Drainage Patt Oxidized Rhiz	rs (minimum of two required) tracks (B6) etated Concave Surface (B8) erns (B10) papheres on Living Roots (C3)
Arks: positive indication of hydric soils was observed COLOGY Cland hydrology Indicators: nary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	erved. ed; check all that ap Salt Cru Aquatic Hydroge Dry-See Oxidize	ply) ust (B11) Invertebra en Sulfide (ason Water d Rhizosph	ites (B13) Odor (C1) r Table (C2) neres on Living Roots	(C3)	Secondary Indicato Surface Soil C Sparsely Vege Drainage Patt Oxidized Rhiz	rs (minimum of two required) iracks (B6) etated Concave Surface (B8) erns (B10) ospheres on Living Roots (C3)
Arks: positive indication of hydric soils was observed COLOGY Itand hydrology Indicators: mary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	erved. ed; check all that ap Salt Cru Aquatic Hydroge Dry-Sea Oxidize	ply) ust (B11) Invertebra en Sulfide (ason Water d Rhizosph	ites (B13) Odor (C1) r Table (C2) heres on Living Roots	(C3)	Secondary Indicato Surface Soil C Sparsely Vege Drainage Patt Oxidized Rhiz (where tilled) Cravfish Burro	rs (minimum of two required) iracks (B6) etated Concave Surface (B8) erns (B10) ospheres on Living Roots (C3)
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Project/Site:			US	67		Cou	nty:	Dal	las	Sampling Date:	Jar	nuary 28, 2019
Applicant/Owner:				TxDOT-Dallas I	District			State:	Texas	Sampling Point:		DPA009
Investigator(s):	John	n William	s	and Grah	nme Borchard	lt	Section, T	ownship, R	ange:		N/A	
Landform (hillslope,	terrace, e	tc.):		Flat			Local relie	f (concave,	convex, none):	Concave	Slope (%):	01-03
Subregion (LRR):			L	.RR J		_Lat:	-96.9	97342	Long:	32.55455	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Dalco d	clay, 1 to 3 pe	rcent sl	lopes		NV	VI Classification:		Upland
Are climatic / hydrol	ogic condi	tions on	the site	e typical for this t	ime of year?		Yes X	No	(if no, e	xplain in Remarks.	.)	
Are Vegetation	No	,Soil	No	or Hydrology	No sig	nificantl	y disturbed'	?	Are "Normal C	Circumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally pr	roblematic?		(If needed, exp	plain any answers i	in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:	Aumber of Dominant Spi That Are OBL, FACW, o Total Number of Domina Species Across All Strata Percent of Dominant Spi That Are OBL, FACW, o Prevalence Index Work Total % Cover DBL species ACW species CACU species JPL species JPL species	cies FAC: 	Mul x 1 = x 2 = x 3 =	0 1 0 tiply by: 0 0	_ (A) _ (B) _ (A/B) _
1. None Observed	That Are OBL, FACW, o Total Number of Dominal Species Across All Strata Percent of Dominant Speci- That Are OBL, FACW, o Prevalence Index Work Total % Cover DBL species ACW species ACU species JPL species JPL species	FAC: tt ciess FAC: sheet: of: 0 0 15 0	 	0 1 0 tiply by: 0 0	(A) (B) (A/B)
2.	Total Number of Dominal Percent of Dominant Species Prevalence Index Work Total % Cover DBL species ACW species ACU species DPL species DPL species DPL species DPL species	nt : FAC: sheet: of: 0 0 15	Mul x 1 = x 2 = x 3 =	1 0 tiply by: 0 0	(B) (A/B)
3.	otal Number of Domina Species Across All Strat Percent of Dominant Species That Are OBL, FACW, o Prevalence Index Work Total % Cover DBL species CACW species CACU species DPL species	nt :: FAC: sheet: of: 0 0 15	<u>Mul</u> 	1 0 tiply by: 0 0	_ (B) _ (A/B) _
4.	Percent of Dominant Spe Percent of Dominant Spe That Are OBL, FACW, o Prevalence Index Work Total % Cover OBL species ACW species ACS species ACU species JPL species	: FAC: sheet: of: 0 0 15	Mul x 1 = x 2 = x 3 =	1 0 tiply by: 0 0	(B) (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft.) 1. None Observed 2.	Percent of Dominant Spe That Are OBL, FACW, o Prevalence Index Work Total % Cover DBL species ACW species ACU species JPL species JPL species	cies FAC: sheet: of: 0 15	Mul x1= x2= x3=	0 tiply by: 0 0	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft.) 1. None Observed 2.	Percent of Dominant Spe That Are OBL, FACW, o Prevalence Index Work Total % Cover DBL species ACW species AC species ACU species JPL species	cies FAC: sheet: of: 0 15 0	Mul x 1 = x 2 = x 3 =	0 tiply by: 0 0	_ (A/B)
1. None Observed	hat Are OBL, FACW, o Prevalence Index Work Total % Cover DBL species ACW species AC species ACU species JPL species JPL species	FAC: sheet: of: 0 15 0	Mul x 1 = x 2 = x 3 =	0 tiply by: 0 0	(A/B)
2.	Prevalence Index Work Total % Cover DBL species ACW species AC species ACU species JPL species	sheet: of: 0 0 15 0	Mul x 1 = x 2 = x 3 =	tiply by: 0 0	
3.	Prevalence Index Work Total % Cover DBL species ACW species AC species CACU species DPL species JPL species	sheet: of: 0 15 0	Mul x 1 = x 2 = x 3 =	tiply by: 0 0	_
4.	Total % Cover DBL species ACW species AC species CAC species DPL species JPL species	of: 0 0 15	Mul x 1 = x 2 = x 3 =	tiply by: 0 0	_
5.	DBL species ACW species AC species ACU species JPL species	0 0 15	x 1 = x 2 = x 3 =	0	
Herb Stratum (Plot size:5 ft) = Total Cover 1. Nassella leucotricha 70 Yes UPL 2. Paspalum notatum 15 No FAC 3	ACW species AC species ACU species JPL species	0 15	x 2 = x 3 =	0	
Herb Stratum (Plot size: 5 ft.) 1. Nassella leucotricha 70 Yes UPL 2. Paspalum notatum 15 No FAC 3.	AC species ACU species JPL species	15	x 3 =		-
1. Nassella leucotricha 70 Yes UPL 2. Paspalum notatum 15 No FAC 3.	ACU species	0		45	-
2. Paspalum notatum 15 No FAC 3.	JPL species		x 4 =	0	_
3.		70	x 5 =	350	-
4	Column Totals:	85	(A)	395	(B)
5.	Prevalence Index = B/A		4.65		_ ` `
6 7 8 9 10 85_ = Total Cover					
7.	lvdrophytic Vegetation	Indicator	s:		
8.	1 - Rapid Test for H	drophytic	Vegetation	1	
9 10 = Total Cover	2 - Dominance Test	is >50%	U		
10 = Total Cover	3 - Prevalence Inde	is ≤ 3.0 ¹			
85 = Total Cover	4 - Morphological A	aptations	(Explain)		
	Problematic Hydrop	nytic Vege	tation ¹ (Ex	olain)	
Woody Vine Stratum (Plot size: 30 ft)	Indicators of hydric soil	nd wetlan	d hydrolog	v must	
1 None Observed		ed or pro	olematic.	,	
2	e present, unless distur				
= Total Cover	e present, unless distur				
% Bare Ground in Herb Stratum 15	e present, unless distur				v
	e present, unless distur lydrophytic /egetation	Y	es	No	~
Remarks:	e present, unless distur lydrophytic /egetation Present?	Y	es	No	<u>^</u>

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

SOIL

DPA009

epth Matrix Redox Features			
nches) Color (moist) % Color (moist) % Type ¹	Loc ²	Texture	Remarks
0-12 10YR 3/1 100 None — —		Loam	
<u> </u>			
		· · · · · · · · · · · · · · · · · · ·	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand C	Grains.	Location: PL=Pore Lining,	M=Matrix.
yuric Solis indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Proble	matic Hydric Soils":
Histosol (A1)Sandy Gleyed Matrix (S4)		1 cm Muck (A9) (LRR I, J)
Histic Epipedon (A2)Sandy Redox (S5)		Coast Prairie Red	lox (A16) (LRR F, G, H)
Black Histic (A3) Stripped Matrix (S6)		Dark Surface (S7) (LRR G)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)		High Plains Depre	essions (F16)
Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2)		(LRR H outs	ide of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3)		Reduced Vertic (F	-18)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)		Red Parent Mater	ial (TF2)
Thick Dark Surface (A12) Depleted Dark Surface (F7)		Very Shallow Dar	k Surface (TF12)
Sandy Mucky Mineral (S1) Redox Depressions (F8)		Other (Explain in	Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G. H) High Plains Depressions (F16)		³ Indicators of hydrophy	/ tic vegetation and
5 cm Mucky Peat or Peat (S3) (I RR F) (MI RA 72 & 73 of I RR H)		wetland hydrology	/ must be present.
		unless disturbed	problematic.
estrictive Laver (if observed):			•
Туре:			
			Ves No X
Depth (inches): narks: o positive indication of hydric soils was observed.	Hyd	ric Soil Present?	
Depth (inches): narks: o positive indication of hydric soils was observed.	Hyd	ric Soil Present?	
Depth (inches): narks: positive indication of hydric soils was observed. ROLOGY	Hyd	ric Soil Present?	
Depth (inches): narks: p positive indication of hydric soils was observed. ROLOGY etland hydrology Indicators:	Hyd	ric Soil Present?	
Depth (inches): marks: b positive indication of hydric soils was observed. ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; check all that apply)	Hyd	Secondary Indicators (minimum of two required)
Depth (inches): marks: b positive indication of hydric soils was observed. ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Salt Crust (B11)	Hyd	<u>Secondary Indicators (</u> Surface Soil Crac	minimum of two required)
Depth (inches):	Hyd	<u>Secondary Indicators (</u> Surface Soil Crac Sparsely Vegetat	minimum of two required) ks (B6) ed Concave Surface (B8)
Depth (inches):	Hyd	Secondary Indicators (Secondary Indicators (Surface Soil Crac Sparsely Vegetatu Drainace Patterns	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10)
Depth (inches):		Secondary Indicators (Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Bhizeen	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3)
Depth (inches):	Hyd	Secondary Indicators (Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3)
Depth (inches):	bots (C3)	Secondary Indicators (minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3)
Depth (inches):	bots (C3)	Secondary Indicators (Surface Soil Crac Surface Soil Crac Sparsely Vegetatu Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8)
Depth (inches):	hyd	Secondary Indicators (Surface Soil Crac Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9)
Depth (inches):	bots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2)
Depth (inches): marks: o positive indication of hydric soils was observed. ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Aquatic Invertebrates (B13) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro Drift Deposits (B3) (where not tilled) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	bots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5)
Depth (inches): marks: o positive indication of hydric soils was observed. ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; check all that apply) _Surface Water (A1) _Salt Crust (B11) High Water Table (A2) _Aquatic Invertebrates (B13) _Saturation (A3) _Hydrogen Sulfide Odor (C1) Water Marks (B1) _Dry-Season Water Table (C2) _Sediment Deposits (B2) _Oxidized Rhizospheres on Living Ro _Drift Deposits (B3) (where not tilled) _Algal Mat or Crust (B4) _Presence of Reduced Iron (C4) Iron Deposits (B5) _Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) _Other (Explain in Remarks) _Water-Stained Leaves (B9)	hyd	Secondary Indicators (Surface Soil Crac Surface Soil Crac Sparsely Vegetatu Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)
Depth (inches): marks: o positive indication of hydric soils was observed. ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; check all that apply)	hyd	Secondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) imocks (D7) (LRR F)
Depth (inches): marks: o positive indication of hydric soils was observed. PROLOGY retland hydrology Indicators: imary Indicators (minimum of one is required; check all that apply)	oots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)
Depth (inches):	oots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) imocks (D7) (LRR F)
Depth (inches):	oots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) imocks (D7) (LRR F)
Depth (inches):	oots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) imocks (D7) (LRR F)
Depth (inches):	oots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) imocks (D7) (LRR F)
Depth (inches):	bots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)
Depth (inches):	hyd hots (C3) Wet	Secondary Indicators (minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)
Depth (inches):	bots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)
Depth (inches):	bots (C3)	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)
Depth (inches):	Hyd	Secondary Indicators (Surface Soil Crac Sparsely Vegetate Drainage Patterns Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Test Frost-Heave Hum	minimum of two required) ks (B6) ed Concave Surface (B8) s (B10) heres on Living Roots (C3) (C8) on Aerial Imagery (C9) tion (D2) (D5) mocks (D7) (LRR F)

Project/Site:			US	67		Cour	nty:	Dal	las	Sampling Date:	Jar	nuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA010
Investigator(s):	John	William	S	and <u>Gra</u>	hme Borchard	t	Section, To	wnship, R	ange:		N/A	
Landform (hillslope,	, terrace, et	tc.):		Flat			Local relief	(concave,	convex, none):	Convex	Slope (%):	01-03
Subregion (LRR):			L	RR J		Lat:	-96.9	7172	Long:	32.55720	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Austin sil	ty clay, 2 to 5	percent	slopes		NV	VI Classification:		Upland
Are climatic / hydrol	logic condit	tions on	the site	typical for this	time of year?		Yes <u>X</u>	No	(if no, e	xplain in Remarks.	.)	
Are Vegetation	No	,Soil	Yes	,or Hydrology	No sigr	ificantly	v disturbed?		Are "Normal C	ircumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No nati	arally pr	oblematic?		(If needed, exp	olain any answers i	in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No _ No _ No _	x x x	Is the Sampled Area within a Wetland?	Yes	No	X
Remarks: This point was determined not to b	be within a wetland d	ue to the	e lack of all thr	ee wetland criteria.			
The soil profile is disturbed from g	jravel present along t	he road	way.				

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								_
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		1	(B)
	= '	Total Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	species			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A/B)
2.								_ · ·
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mu	Itiply by:	
5.				OBL species	0	x 1 =	0	_
	= -	Total Cover		FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft.)				FAC species	0	x 3 =	0	_
1. Bothriochloa ischaemum	65	Yes	UPL	FACU species	20	x 4 =	80	_
2. Lolium perenne	15	No	FACU	UPL species	65	x 5 =	325	_
3. Oxalis corniculata	5	No	FACU	Column Totals:	85	(A)	405	(B)
4.				Prevalence Index = B/	A =	4.76		/
5.								
6.				Hydrophytic Vegetati	on Indicato	rs:		
7.				1 - Rapid Test for	Hydrophytic	· Vegetatior	ı	
8.				2 - Dominance Te	est is >50%	0		
9.				3 - Prevalence Inc	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations	¹ (Explain)		
	85 =	Total Cover		Problematic Hydr	ophytic Vege	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlar	nd hvdroloa	v must	
1. None Observed	/			be present, unless dist	urbed or pro	blematic.	,	
2.								
	= `	Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum <u>15</u>				Vegetation Present?	Y	'es	No	x
Remarks:								
No positive indication of hydrophytic vegetation w	ion observed (>	50% of dominan	t anaging indexed as	EACL or driver)				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

S	ο	II	

enth	Motrix	-		Pode	- Easturaa						
nches)	Color (moint)	0/	Color (moint)	0/		1.002	Toxturo	Pomorko			
0.12		50	Nono	-70	Туре	LUC	Clavel com	Remarks			
0.12	Nono	50	None				Gravel				
0-12	None		none				Glaver				
			·				· _				
pe: C=Conce	entration, D=Deple	etion, RM=	Reduced Matrix, C	S=Covered	or Coated Sand G	ains. ² L	ocation: PL=Pore Lining, I	//=Matrix.			
dric Soils Ind	licators: (Applic	able to all	LRRs, unless oth	erwise not	ed.)		Indicators for Problem	atic Hydric Soils ³ :			
Histosol (A1	1)		Sandy	Gleyed Ma	trix (S4)		1 cm Muck (A9) (L	RR I, J)			
Histic Epipedon (A2)Sandy Redox (S5)		Coast Prairie Redo	x (A16) (LRR F, G, H)			
Black Histic (A3) Stripped Matrix (S6)							Dark Surface (S7)	(LRR G)			
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)							High Plains Depres	ssions (F16)			
_Stratified La	ayers (A5) (LRR F)	Loamy	Gleyed Ma	atrix (F2)		(LRR H outsi	de of MLRA 72 & 73)			
1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3)							Reduced Vertic (F18)				
_ Depleted Be	elow Dark Surface	e (A11)	Redox	Dark Surfa	ice (F6)		Red Parent Materia	al (TF2)			
Thick Dark	Surface (A12)		Deplet	ed Dark Su	Irface (F7)		Very Shallow Dark	Surface (TF12)			
_Sandy Muck	ky Mineral (S1)		Redox	Depression	ns (F8)		Other (Explain in F	emarks)			
2.5 cm Muc	ky Peat or Peat (S	52) (LRR (5, H)High P	lains Depre	essions (F16)		Indicators of hydrophyt	c vegetation and			
5 cm Mucky	Peat or Peat (53) (LRR F)	(1	/ILRA /2 &	73 OF LRR H)		unless disturbed or problematic.				
strictive Laye	er (if observed):										
Type:											
Depth (inch	es):					Hydri	c Soil Present?	Yes No X			
	·					-					
arks:											
positive indic	ation of hydric soil	s was obs	erved.								
ROLOGY											
tland hydrol	ogy Indicators:										
mary Indicato	rs (minimum of on	e is requir	ed; check all that a	(ylac			Secondary Indicators (n	ninimum of two required)			
Surface Wa	iter (A1)		Salt Ci	ust (B11)			Surface Soil Crack	s (B6)			
High Water	Table (A2)		Aquati	c Invertebra	ates (B13)		Sparsely Vegetate	d Concave Surface (B8)			
Saturation (A3)		Hydrog	en Sulfide	Odor (C1)		Drainage Patterns	(B10)			
Water Mark	s (B1)		Dry-Se	ason Wate	r Table (C2)		Oxidized Rhizosph	eres on Living Roots (C3)			
	eposits (B2)		Oxidiz	ed Rhizosp	heres on Living Ro	s (C3) (where tilled)					
00000000000					Incred on Living Roy		(
Drift Deposi	its (B3)		(where	e not tilled)		(00)	Crayfish Burrows (C8)			
Drift Deposi Algal Mat or	r Crust (B4)		(where Preser	e not tilled)) Iced Iron (C4)	(00)	Crayfish Burrows (Saturation Visible of	C8) on Aerial Imagery (C9)			

 Inundation Visible on Aerial Imagery (B7)
 Water-Stained Leaves (B9)

Field	Observations:
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Surface Water Present?	Yes	No	x	Depth (inches):
Water Table Present?	Yes	No	х	Depth (inches):

Water Table Present?	Yes	N	No _	X	Depth (inches):	N/A	
Saturation Present?	Yes	N	No _	Х	Depth (inches):	N/A	
(includes capillary fringe)							

Other (Explain in Remarks)

N/A

Wetland Hydrology Present?	Yes	No	Х	

FAC-Neutral Test (D5)

Frost-Heave Hummocks (D7) (LRR F)

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

Remarks:

No positive indication of wetland hydrology was observed.

Project/Site:	US 67				Cou	nty:	Dallas		Sampling Date:	Jai	nuary 28, 2019	
Applicant/Owner:	TxDOT-Dallas District						State:	Texas	Sampling Point:		DPA011	
Investigator(s):	John	Williams	5	and <u>Gra</u>	hme Borchard	lt	Section,	Township, R	ange:		N/A	
Landform (hillslope,	, terrace, et	c.):		Flat			Local re	lief (concave,	convex, none):	Concave	Slope (%):	01-03
Subregion (LRR):			L	RR J		Lat:	-9	6.97004	Long:	32.56008	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Austin si	ty clay, 1 to 3	percent	t slopes		N	NI Classification:		Upland
Are climatic / hydrol	logic conditi	ions on t	he site	typical for this	time of year?		Yes >	<u>(</u> No	(if no, e	explain in Remarks.	.)	
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	nificantl	y disturbe	ed?	Are "Normal C	Circumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally pr	roblemati	c?	(If needed, ex	plain any answers i	in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		1	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		3	(B)
		Total Cover						_ ()
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		33%	(A/B)
2.				, ,				_ ()
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mu	ltiply by:	
5.				OBL species	0	x 1 =	0	
·	= -	Total Cover		FACW species	0	x 2 =	0	
Herb Stratum (Plot size: 5 ft.)				FAC species	10	x 3 =	30	_
1. Bothriochloa ischaemum	20	Yes	UPL	FACU species	7	x 4 =	28	_
2. Dichondra carolinensis	10	Yes	FAC	UPL species	30	x 5 =	150	
3. Geranium caroliniamum	10	Yes	UPL	Column Totals:	47	(A)	208	(B)
4. Taraxacum officinale	7	No	FACU	Prevalence Index = B/	A =	4.43		_ ` `
5.								
6.				Hydrophytic Vegetati	on Indicato	rs:		
7.				1 - Rapid Test for	Hydrophytic	Vegetation	n	
8.				2 - Dominance Te	est is >50%			
9.				3 - Prevalence Ind	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations	¹ (Explain)		
	47 =	Total Cover		Problematic Hydr	ophytic Vege	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlar	nd hvdroloc	v must	
1. None Observed	/			be present, unless dist	turbed or pro	blematic.	,,	
2.				-				
	= `	Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 53		-		Vegetation Present?	Y	'es	No	x
Remarks:								
No positive indication of hydrophytic vegetation w	vas observed (≥	50% of dominan	t species indexed as	FACU or drier).				

S	0	IL

Depth Matrix			Redox Featu	ures						
nches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-12 10YR 3/1	100	None				Clay Loam				
			<u> </u>							
					2					
ype: C=Concentration, D=D /dric Soils Indicators: (Apr	blicable to all l	LRRs. unless othe	erwise noted.)	ated Sand Grain	1S. [–] L	ocation: PL=Pore Lining	, M=Matrix. matic Hydric Soils ³ :			
Histosol (A1)	Histosol (A1) Sandy Gleyed Matrix (S4)					1 cm Muck (A9) (LRR I. J)			
Histic Epipedon (A2) Sandy Cleyed Matrix (04)						Coast Prairie Rec	dox (A16) (LRR F. G. H)			
Black Histic (A3)		Strippe	d Matrix (S6)			Dark Surface (S7	(LRR G)			
Hydrogen Sulfide (A4)		Loamy	Mucky Mineral (F	-1)		High Plains Depr	essions (F16)			
Stratified Layers (A5) (LR	RF)	Loamy	Gleyed Matrix (F:	2)	(LRR H outside of MLRA 72 & 73)					
1 cm Muck (A9) (LRR F, 0	Э, H)	Deplete	ed Matrix (F3)		Reduced Vertic (F18)					
Depleted Below Dark Sur	ace (A11)	Redox	Dark Surface (F6	i)	Red Parent Material (TF2)					
Thick Dark Surface (A12) Depleted Dark Surface (F7)						Very Shallow Dark Surface (TF12)				
Sandy Mucky Mineral (S1	1	Redox	Depressions (F8))	Other (Explain in Remarks)					
2.5 cm Mucky Peat or Pea	t (S2) (LRR G	, H) High Pl	ains Depressions	s (F16)	³ Indicators of hydrophytic vegetation and					
5 cm Mucky Peat or Peat	(S3) (LRR F)	(N	LRA 72 & 73 of	LRR H)		wetland hydrolog	y must be present,			
					1	unless disturbed	or problematic.			
estrictive Layer (if observed	I):									
Туре:		<u></u>								
Depth (inches):					Hydrid	c Soil Present?	Yes No <u>X</u>			
narks:										
o positive indication of hydric	soils was obse	erved.								
							· · · · · · · · · · · · · · · · · · ·			
Surface Water (A1)	one is require	u; спеск ан that ap	ipiy) ist (R11)			Surface Soil Creat	minimum or two required)			
Ligh Water Table (A2)			usi (DII)	13)			ad Cancava Surface (B8)			
Seturation (A2)			niveriebiales (B	13)	Sparsery vegetated Concave Surface (B8)					
Oaturation (AS)							S (DIV)			
		Dry-Se			(00)		There's on Living Roots (U3)			
Codimont Dour Ho (DO)		· · · · · ·	a							

Wetland hydrology Indicators:									
Primary Indicators (minimum of one is r	equired;	check a	ll that apply)			Secondary Indicators (mi	inimum of two	o required)	
Surface Water (A1)			Salt Crust (B11)			Surface Soil Cracks	; (B6)		
High Water Table (A2)			Aquatic Invertebrates	(B13)		Sparsely Vegetated	Concave Su	rface (B8)	
Saturation (A3)			Hydrogen Sulfide Ode	or (C1)		Drainage Patterns (B10)		
Water Marks (B1)			Dry-Season Water Ta	able (C2)		Oxidized Rhizosphe	eres on Living	Roots (C3)	
Sediment Deposits (B2)			Oxidized Rhizosphere	es on Living Ro	oots (C3)	(where tilled)			
Drift Deposits (B3)			(where not tilled)			Crayfish Burrows (C	(8)		
Algal Mat or Crust (B4)			Presence of Reduced	l Iron (C4)		Saturation Visible of	n Aerial Imag	ery (C9)	
Iron Deposits (B5)			- Thin Muck Surface (C	27)		Geomorphic Positio	n (D2)		
Inundation Visible on Aerial Imager		Other (Explain in Ren	narks)		FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)						Frost-Heave Hummocks (D7) (LRR F)			
Field Observations:									
Surface Water Present? Yes	No	Х	Depth (inches):	N/A					
Water Table Present? Yes	No	Х	Depth (inches):	N/A					
Saturation Present? Yes	No	Х	Depth (inches):	N/A	Wetlan	d Hydrology Present?	Yes	No	X
(includes capillary fringe)			_						
Describe Recorded Data (stream gauge,	monitori	ng well,	aerial photos, previous	s inspections),	if available:				
Remarks:									
No positive indication of wetland hydrol	ogy was	observe	d.						

Project/Site:			US	67		Cou	inty:	D	allas	Sampling Date:	Ja	nuary 28, 2019	
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA014	
Investigator(s):	John	William	s	and <u>Gra</u>	hme Borcha	rdt	Section	n, Township,	Range:		N/A		
Landform (hillslope,	, terrace, et	c.):		Ditch	า		Local r	elief (concave	e, convex, none):	Concave	Slope (%):	03-05	
Subregion (LRR):			L	RR J		Lat:	-	96.97232	Long:	32.55827	Datum:	NAD 1983 CONUS	
Soil Map Unit Name	e:			Austin si	ty clay, 1 to 3	3 percen	it slopes		N	WI Classification:		Upland	
Are climatic / hydrol	logic conditi	ions on t	the site	typical for this	time of year	?	Yes	X No	(if no,	explain in Remarks	.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	gnificantl	ly distur	ped?	Are "Normal	Circumstances" pre	sent? Yes	X No	
Are Vegetation	No	,Soil	No	,or Hydrology	No na	aturally p	roblema	tic?	(If needed, e	xplain any answers i	in Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks: This point was determined not to t	be within a wetland	due to the lack of hydro	phytic vegetation.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								
3.				Total Number of Domir	nant			
4.				Species Across All Stra	ata:		2	(B)
	= To	tal Cover						_ ` '
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. None Observed	,			That Are OBL, FACW,	or FAC:		0	(A/B)
2				- , - ,				_ ()
3				Prevalence Index Wo	rksheet:			
4				Total % Cov	er of [.]	Mu	ltiply by:	
5				OBL species	0	x 1 =	0	_
	= Tc	tal Cover		FACW species	0	x2=	0	_
Herb Stratum (Plot size: 5 ft)				FAC species	0	x 3 =	0	_
1 Lolium perenne	25	Yes	FACU	FACU species	50	x 4 =	200	_
2 Plantago rhodosperma	25	Yes	FACU		5	x 5 =	25	_
3 Bothriochloa ischaemum	5	No	UPI	Column Totals:	55	(A)	225	(B)
4				Prevalence Index = B/A	A =	4.09		_ (2)
5					·			
6.				Hydrophytic Vegetati	on Indicato	rs:		
7				1 - Rapid Test for	Hydrophytic	. Venetation	h	
8				2 - Dominance Te	st is >50%	, rogotatio		
9				3 - Prevalence Inc	lex is $\leq 3.0^1$			
10				4 - Morphological	Adaptations	¹ (Explain)		
10		tal Cover		Problematic Hydro	onhytic Veg	etation ¹ (Ex	nlain)	
Weady Vine Stratum (Plat size: 20 ft	<u> </u>			¹ Indicators of hydric as	il and watla		v muot	
<u>Woody Ville Stratum</u> (Flot size. <u>50 ft.</u>)			be present, unless dist	urbed or pro	blematic.	ymusi	
				,	1			
Z		tal Covor		Hydrophytic				
% Baro Ground in Horb Stratum 45	= 10			Vegetation		' 06	No	Y
				Present?	I			
Remarks:								
No positive indication of hydrophytic vegetation	as observed (>50)% of dominan	t snecies indexed as	EACLL or drier)				

vegetation was observed (≥50% of dominant species indexed as FACU or drier). ositive indication of hydr

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epth	Matrix			Redox	Features						
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-18	10YR 2/2	95	10YR 5/6	5	С	Μ	Clay Loam				
							·				
							·				
<u> </u>	·		·	<u> </u>		<u> </u>	·				
							·				
Type: C=C	oncentration D=Deple	etion RM=R	educed Matrix CS	=Covered	or Coated Sand G	rains ² I	ocation: PI =Pore Lining	M=Matrix			
ydric Soils	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	ed.)		Indicators for Problem	natic Hydric Soils ³ :			
Histoso	l (A1)		Sandy	Gleyed Mat	rix (S4)		1 cm Muck (A9) (L	RR I, J)			
Histic E	pipedon (A2)		Sandy	- Redox (S5)			Coast Prairie Red	ox (A16) (LRR F, G, H)			
Black Histic (A3)Stripped Matrix (S6)							Dark Surface (S7)	(LRR G)			
Hydroge	en Sulfide (A4)		Loamy	Mucky Mine	eral (F1)		High Plains Depre	ssions (F16)			
Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2)						(LRR H outside of MLRA 72 & 73)					
1 cm M	uck (A9) (LRR F, G, H	H)	Deplete	ed Matrix (F	3)		Reduced Vertic (F	18)			
Deplete	ed Below Dark Surface	e (A11)	X Redox	Dark Surfac	ce (F6)		Red Parent Materi	ial (TF2)			
Thick D	ark Surface (A12)		Deplete	ed Dark Sur	face (F7)	Very Shallow Dark Surface (TF12)					
Sandy I	Mucky Mineral (S1)		Redox	Depression	s (F8)		Other (Explain in F	Remarks)			
2.5 cm	Mucky Peat or Peat (82) (LRR G ,	H) High Pl	ains Depre	ssions (F16)		³ Indicators of hydrophy	tic vegetation and			
5 cm M	ucky Peat or Peat (S3	8) (LRR F)	(N	LRA 72 & 1	73 of LRR H)		wetland hydrology	must be present,			
Postrictivo	aver (if observed):						uniess disturbed o	r problematic.			
Tumor	Layer (il observeu).										
Type:	inchoo):					Liver	a Sail Bracant?	Vac V No			
Deptin	incries).					пушп	c Son Fresent?				
emarks:											
A positive in	dication of hydric soil	was observe	ed.								
	ay .										
Netland hyd	drology Indicators:										
Primary India	cators (minimum of or	ne is require	d; check all that ap	ply)			Secondary Indicators (r	minimum of two required)			
Surface	Water (A1)		Salt Cr	ust (B11)			Surface Soil Crack	(s (B6)			
High W	ater Table (A2)		Aquatio	Invertebra	tes (B13)	Sparsely Vegetated Concave Surface (B8)					
Saturati	ion (A3)		Hydrog	en Sulfide (Jdor (C1)	Drainage Patterns (B10)					
Water N	Marks (B1)		Dry-Se	ason Water	I able (C2)		Oxidized Rhizosph	neres on Living Roots (C3)			
Sedime	ent Deposits (B2)		Oxidize	d Rhizosph	eres on Living Ro	ots (C3)	(where tilled)				

Wetland hydrology Indicators:		
Primary Indicators (minimum of one is required; che	ck all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Salt Crust (B11)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Invertebrates (B13)	Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Water Marks (B1)	Dry-Season Water Table (C2)	Oxidized Rhizospheres on Living Roots (C3)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
Drift Deposits (B3)	(where not tilled)	Crayfish Burrows (C8)
X Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)	Thin Muck Surface (C7)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Frost-Heave Hummocks (D7) (LRR F)
Field Observations:		
Surface Water Present? Yes NoX	C Depth (inches): N/A	
Water Table Present? Yes NoX	C Depth (inches): N/A	
Saturation Present? Yes NoX	C Depth (inches): N/A We	etland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspections), if available:	
Remarks:		
A positive indication of wetland hydrology was obser	ved (at least one primary indicator).	

Project/Site:			US	67		Cou	unty:		Dalla	as	Sampling Date:	Ja	anuary 28,	2019	
Applicant/Owner:				TxDOT-Dallas	District				State:	Texas	Sampling Point:		DPA01	5	
Investigator(s):	John	William	s	and Gra	hme Borcha	ardt	Secti	on, Tow	/nship, Ra	inge:		N/A			
Landform (hillslope,	, terrace, et	ic.):		Flat			Loca	l relief (d	concave,	convex, none):	Concave	Slope (%):		00-01	
Subregion (LRR):			L	RR J		Lat:		-96.974	451	Long:	32.55417	Datum:	NAD 19	983 CONUS	
Soil Map Unit Name	e:			Stephen s	ilty clay, 1 to	o 4 perce	ent slop	es		N\	VI Classification:		Upland	ł	
Are climatic / hydrol	logic condit	tions on	the site	typical for this	time of year	r?	Yes	Х	No	(if no, e	xplain in Remarks.	.)			
Are Vegetation	No	,Soil	No	,or Hydrology	No s	ignificant	tly distu	irbed?		Are "Normal C	Circumstances" pre	sent? Yes	s X	No	
Are Vegetation	No	,Soil	No	,or Hydrology	No n	aturally p	oroblem	natic?		(If needed, ex	plain any answers i	n Remarks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute Dominant	t Indicator	Dominance Test work	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	' Status	Number of Dominant S	Species			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A)
2.							
3.			Total Number of Domin	nant			
4.			Species Across All Stra	ata:		1	(B)
	= Total Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)		Percent of Dominant S	pecies			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A/B)
2.							
3.			Prevalence Index Wo	rksheet:			
4.			Total % Cov	er of:	Mul	tiply by:	
5.			OBL species	0	x 1 =	0	
	= Total Cover		FACW species	0	x 2 =	0	
Herb Stratum (Plot size: 5 ft.)			FAC species	0	x 3 =	0	
1. Nassella leucotricha	90 Yes	UPL	FACU species	0	x 4 =	0	
2. Geranium carolinianum	5No	UPL	UPL species	95	x 5 =	475	
3.			Column Totals:	95	(A)	475	(B)
4.			Prevalence Index = B//	A =	5.00		_ ()
5.							
6.			Hydrophytic Vegetati	on Indicato	rs:		
7.			1 - Rapid Test for	Hydrophytic	Vegetation		
8.			2 - Dominance Te	est is >50%	0		
9.			3 - Prevalence Inc	dex is $\leq 3.0^1$			
10.			4 - Morphological	Adaptations	¹ (Explain)		
	95 = Total Cover		Problematic Hydro	, ophytic Veae	etation ¹ (Exp	olain)	
Woody Vine Stratum (Plot size: 30 ft)		¹ Indicators of hydric so	il and wetlar	nd hydrology	/ must	
1 None Observed)		be present, unless dist	urbed or pro	blematic.	must	
2							
2.	= Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum <u>5</u>			Vegetation Present?	Y	es	No	x
Remarks:							

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

SOIL

_Geomorphic Position (D2)

Frost-Heave Hummocks (D7) (LRR F)

FAC-Neutral Test (D5)

Wetland Hydrology Present?

Depth	Matrix			Redox Fe	atures						
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	s		
0-12	10YR 3/1	100	None				Loam				
					<u> </u>		. <u> </u>				
	<u> </u>						. <u></u>				
						. <u> </u>					
						. <u> </u>					
					<u> </u>		·				
							<u> </u>				
ype: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, C	S=Covered or (Coated Sand Grai	ns. 'l	_ocation: PL=Pore Lining,	M=Matrix.			
yunc oons			Carada		(64)		Indicators for Proble	matic Hydric Solis :			
HISTOSO	ringdon (A2)		Sandy	Gleyed Matrix	(54)		Coast Prairie Roc	LKK I, J) Iov (A16) (I PP E G I	\L		
	pipedon (AZ)		Sandy	Motrix (SS)			Coast Frame Rec	(A 0) (LKK F, G, F)	ר)		
Black II	an Sulfide (AJ)			Mucky Mineral	L(E1)		High Plains Depr	essions (E16)			
Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2)							(I RR H outs	ide of MI RA 72 & 73	8)		
1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3)							Reduced Vertic (F18)				
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)						Red Parent Mater	ial (TF2)				
Thick Dark Surface (A12) Depleted Dark Surface (F7)						Very Shallow Dar	k Surface (TF12)				
Sandy Mucky Mineral (S1) Redox Depressions (F8)						Other (Explain in	Remarks)				
2.5 cm Mucky Peat or Peat (S2) (LRR G. H) High Plains Depressions (F16)						³ Indicators of hydrophy	tic vegetation and				
5 cm M	ucky Peat or Peat (S3) (LRR F)	(N	ILRA 72 & 73	of LRR H)		wetland hydrology	/ must be present,			
	, ,	,, ,	,		,		unless disturbed	or problematic.			
estrictive I	Layer (if observed):										
Type:											
Depth (i	inches):					Hydri	c Soil Present?	Yes	No <u>X</u>		
marks:											
o positive i	ndication of hydric soil	ls was obs	erved.								
ROLOG	θY										
etland hvo	drology Indicators:										
rimon (India	ators (minimum of on		od: abook all that a	anhu)			Secondary Indicators (minimum of two roqui	rod)		
Surface Water (A1) Salt Crust (B11)					Secondary Indicators (minimum of two required)						
High W/	ater Table (Δ 2)			nvertebrates	(B13)		Sparsely Vegetat	no (DO) ed Concave Surface (I	B8)		
Saturati	on (A3)			en Sulfide Od	or (C1)		Drainage Patterne	s (B10)	507		
	/arks (B1)		Nulle	ason Water Ta	able (C2)			heres on Living Roots	(C3)		
Water N			Diy-06	Secon Franci IC		tc (C3) (where tilled)					
Water M	nt Deposits (B2)		Oxidize	ed Rhizosphere	(C3)	(where tilled)					
Water M Sedime	nt Deposits (B2) posits (B3)		Oxidize (where	ed Rhizosphere not tilled)	es on Living Roots	s (C3)	(where tilled) Cravfish Burrows	(C8)			

- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)

Field	Observations:

Surface	Water	Present

t? Yes Yes No X Water Table Present?

Saturation Present? Yes No <u>X</u> Depth (inches): N/A (includes capillary fringe)

No

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

X

Thin Muck Surface (C7)

Other (Explain in Remarks)

Depth (inches):

Depth (inches):

N/A

N/A

Remarks:

No positive indication of wetland hydrology was observed.

Yes____ No __X___

Project/Site:			US	67		Cou	nty:	Dal	las	Sampling Date:	Jar	uary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA016
Investigator(s):	Johr	n William	s	and Gra	hme Borchar	dt	Section, T	ownship, R	ange:		N/A	
Landform (hillslope,	, terrace, e	tc.):		Ditcl	า		Local relie	f (concave,	convex, none):	Concave	Slope (%):	03-05
Subregion (LRR):			L	.RR J		Lat:	-96.9	97437	Long:	32.55407	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Stephen s	silty clay, 1 to	4 percei	nt slopes		N	VI Classification:		Upland
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)												
Are Vegetation	No	,Soil	No	or Hydrology	No sig	gnificantl	y disturbed	?	Are "Normal C	ircumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No na	turally p	roblematic?		(If needed, exp	olain any answers i	n Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Are within a Wetland?	ea Yes	NoX	
Remarks: This point was determined not to b	be within a wetla	nd due to the lac	k of all three wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								
3.				Total Number of Domir	nant			
4.				Species Across All Stra	ata:		1	(B)
	= To	tal Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. None Observed	,			That Are OBL, FACW,	or FAC:		0	(A/B)
2.								_ ` `
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mu	ltiply by:	
5.	·			OBL species	0	x 1 =	0	
	= To	tal Cover		FACW species	0	x 2 =	0	
Herb Stratum (Plot size: 5 ft.)				FAC species	0	x 3 =	0	
1. Nassella leucotricha	90	Yes	UPL	FACU species	0	x 4 =	0	
2. Geranium carolinianum	5	No	UPL	UPL species	95	x 5 =	475	
3.	<u> </u>			Column Totals:	95	(A)	475	(B)
4.	·			Prevalence Index = B/A	A =	5.00		
5	·				·			
6	·			Hydrophytic Vegetati	on Indicato	rs:		
7	·			1 - Rapid Test for	Hvdrophytic	: Vegetation	ı	
8	·			2 - Dominance Te	st is >50%	, regetation	•	
9	·			3 - Prevalence Inc	lex is $\leq 3.0^1$			
10	·			4 - Morphological	Adaptations	¹ (Explain)		
	95 = To	tal Cover		Problematic Hydro	ophytic Vea	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft	<u> </u>			¹ Indicators of hydric so	il and wetlar		v must	
1 None Observed)			be present, unless dist	urbed or pro	blematic.	ymust	
2	·			•				
Z	= To	tal Cover		Hydrophytic				
% Bare Ground in Herb Stratum 5				Vegetation Present?	Y	′es	No	<u>x</u>
Remarks:								
No positive indication of hydrophytic vegetation w	as observed (>50	% of dominan	t species indexed as l	FACILI or drier)				

hytic vegetation was observed (≥50% of dominant species indexed as FACU or drier). ositive indication of hydr

Depth	Matrix			Redox	Features			
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/1	90	None	_		_	Clay	
0-12	None	10	None	_		_	Gravel	
	. <u> </u>							
							<u> </u>	
pe: C=C	oncentration, D=Deplet	tion, RM=R	educed Matrix, C	S=Covered	or Coated Sand Gr	ains. 2	Location: PL=Pore Lining, N	/I=Matrix.
dric Soils	Indicators: (Applica	ble to all L	RRs, unless oth	erwise note	ed.)		Indicators for Problem	atic Hydric Soils [°] :
_Histoso	I (A1)		Sandy	Gleyed Mat	trix (S4)		1 cm Muck (A9) (LI	RR I, J)
_Histic E	pipedon (A2)		Sandy	Redox (S5)			Coast Prairie Redo	x (A16) (LRR F, G, H)
Black H	listic (A3)		Stripp	ed Matrix (S	6)		Dark Surface (S7)	(LRR G)
Hydroge	en Sulfide (A4)		Loamy	/ Mucky Min	eral (F1) tria (F0)		High Plains Depres	sions (F16)
Stratifie			Loamy	/ Gleyed Ma	trix (F2)		(LRR H OUISIO	DE OT MILRA /2 & /3)
I CIII IVI	uck (A9) (LKK F, G, H) d Bolow Dork Surface) (A 1 1)	Deple	ted Matrix (F	·3)		Reduced Vertic (F1	8) N (TE2)
Thick Dark Surface (A12) Depleted Dark Surface (F7)							Von Shallow Dark	ll (TFZ) Surface (TE12)
Sandy Mucky Mineral (S1) Redox Depressions (F8)							Other (Evolution in R	emarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G. H) High Plains Depressions (F16)							³ Indicators of hydrophyti	c vegetation and
5 cm M	ucky Peat or Peat (S3)	(LRR F)	, <u> </u>		73 of I RR H)		wetland hydrology i	nust be present.
	uony r out or r out (00)	()	(-		10 01 Elaith,		unless disturbed or	problematic.
strictive I	Layer (if observed):							
Type:								
Depth (i	inches):					Hydr	ic Soil Present?	Yes No X
narks:								
positive i	ndication of hydric soils	s was obser	ved.					
	27							
NOLOC	, , , , , , , , , , , , , , , , , , ,							
etland hyd	drology Indicators:							
mary Indic	cators (minimum of one	e is required	l; check all that a	pply)			Secondary Indicators (m	inimum of two required)
Surface	Water (A1)		Salt C	rust (B11)			Surface Soil Cracks	s (B6)
High Water Table (A2) Aquatic Invertebrates (B13)							Sparsely Vegetated	Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide Odor (C1)							Drainage Patterns	(B10)
Saturati							Ovidized Phizeenh	
Saturati Water N	/arks (B1)		Dry-Se	eason Water	r Table (C2)			eres on Living Roots (C3)
Saturati Water M Sedime	/larks (B1) nt Deposits (B2)		Dry-Se Oxidiz	eason Water ed Rhizosph	r Table (C2) neres on Living Roo	ots (C3)	(where tilled)	eres on Living Roots (C3)
Saturati Water M Sedime Drift De	/arks (B1) nt Deposits (B2) posits (B3)		Dry-Se Oxidiz (wher	eason Water ed Rhizosph e not tilled)	r Table (C2) neres on Living Roo	ots (C3)	(where tilled) Crayfish Burrows (eres on Living Roots (C3) C8)
Saturati Water M Sedime Drift De Algal M	Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Dry-Se Oxidiz (wher Prese	eason Water ed Rhizosph e not tilled) nce of Redu	r Table (C2) heres on Living Roo ced Iron (C4)	ots (C3)	(where tilled) Crayfish Burrows (C	eres on Living Roots (C3) C8) on Aerial Imagery (C9)
Saturati Water M Sedime Drift De Algal M Iron De	<i>M</i> arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		Dry-Se Oxidiz (wher Prese Thin M	eason Water ed Rhizosph e not tilled) nce of Redu <i>f</i> uck Surface	r Table (C2) neres on Living Roc ced Iron (C4) ∋ (C7)	ots (C3)	(where tilled) Crayfish Burrows ((Saturation Visible c Geomorphic Positio	eres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2)

N/A

N/A

N/A

Depth (inches):

Depth (inches):

Water-Stained Leaves (B9)

 Surface Water Present?
 Yes
 No
 X
 Depth (inches):

 Water Table Present?
 Yes
 No
 X
 Depth (inches):

No positive indication of wetland hydrology was observed.

Yes ____ No ____

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

Field Observations:

Saturation Present?

Remarks:

(includes capillary fringe)

Yes____ No __X___

Frost-Heave Hummocks (D7) (LRR F)

Wetland Hydrology Present?

Project/Site:			US	67		Cour	nty:	El	lis	Sampling Date:	Jar	nuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA018
Investigator(s):	John	William	าร	and Gra	hme Borchard	t	Section, To	wnship, R	ange:		N/A	
Landform (hillslope,	, terrace, et	tc.):		Flat			Local relief	(concave,	convex, none):	None	Slope (%):	00-03
Subregion (LRR):			L	.RR J		Lat:	-96.9	7696	Long:	32.54522	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Stephen s	silty clay, 1 to 4	percen	nt slopes		N	VI Classification:		Upland
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks.)												
Are Vegetation	No	,Soil	No	,or Hydrology	No sigr	nificantly	y disturbed?	•	Are "Normal C	ircumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally pr	oblematic?		(If needed, exp	olain any answers i	n Remarks.)	

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

Remarks:					
This point was determined not to be within a wettand due to the lack of all three wettand chiena.	vas determined not to be within a w	retland due to the lack of all t	hree wetland criteria.		

Remarks:								
 Mare Ground in Herb Stratum <u>5</u> 	=	Total Cover		Hydrophytic Vegetation Present?	Y	′es	No	X
Woody Vine Stratum (Plot size: <u>30 ft.</u> 1. <u>None Observed</u> 2)			be present, unless dist	il and wetlar urbed or pro	nd hydrolog blematic.	ly must	
	95 =	Total Cover		Problematic Hydro	ophytic Vege	etation' (Ex	plain)	
10				4 - Morphological	Adaptations	' (Explain)		
9				3 - Prevalence Inc	lex is ≤ 3.0'	1		
8				2 - Dominance Te	st is >50%			
7		. <u> </u>		1 - Rapid Test for	Hydrophytic	: Vegetatio	n	
6				Hydrophytic Vegetati	on Indicato	rs:		
5								
4. Aristida purpurea	5	No	UPL	Prevalence Index = B//	4 =	3.89		
3. <u>Plantago major</u>	15	No	FAC	Column Totals:	95	(A)	370	(B)
2. Lolium perenne	15	No	FACU	UPL species	5	x 5 =	25	
1. Cynodon dactylon	60	Yes	FACU	FACU species	75	x 4 =	300	
Herb Stratum (Plot size: 5 ft.)				FAC species	15	x 3 =	45	
	= 1	Total Cover		FACW species	0	x 2 =	0	
5.				OBL species	0	x 1 =	0	
4.				Total % Cov	er of:	Mu	ltiply by:	
3.				Prevalence Index Wo	rksheet:			
2								
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
	= 1	Total Cover						
4.				Species Across All Stra	ata:		1	(B)
3.				Total Number of Domin	nant			
2.				, ,				_ ()
1. None Observed				That Are OBL. FACW.	or FAC:		0	(A)
Tree Stratum (Plot size: 30 ft)	% cover	Species?	Status	Number of Dominant S	necies			
	Absolute	Dominant	Indicator	Dominance Test work	(sheet:			

SOIL

epth	Matrix			Redox F	eatures			
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/2	100	None				Loam	
							<u> </u>	
			<u> </u>					
		<u> </u>						
		<u> </u>	<u>.</u>					
	. <u></u>			<u> </u>				
				. <u> </u>				
ype: C=Co dric Soils	ncentration, D=Deple	etion, RM=Re	educed Matrix, CS	S=Covered or	Coated Sand Gr	ains. ⁻ L	ocation: PL=Pore Lining, N	I=Matrix.
			Condu		·)		1 om Muck (A0) (LE	
Histosol	(AT) vinodon (A2)		Sandy	Gleyed Matri Rodox (S5)	((34)		Coast Prairie Redo	(A16) (I PP F C H)
Black His	stic (A3)		Sanuy	d Matrix (S6)			Dark Surface (S7) (
Hydroge	n Sulfide (A4)			Mucky Miner	al (F1)		High Plains Depres	sions (F16)
Stratified	Lavers (A5) (LRR F)	Loamy	Gleved Matri	x (F2)		(LRR H outsid	le of MLRA 72 & 73)
	ck (A9) (LRR F. G. H	,)	Deplete	ed Matrix (F3))		Reduced Vertic (F1	8)
 Depleted	Below Dark Surface	(A11)	Beplox	Dark Surface	(F6)		Red Parent Materia	l (TF2)
Thick Da	rk Surface (A12)	()	Deplete	ed Dark Surfa	ace (F7)		Verv Shallow Dark	Surface (TF12)
Sandv M	uckv Mineral (S1)		Redox	Depressions	(F8)		Other (Explain in Re	emarks)
2.5 cm N	lucky Peat or Peat (S	62) (LRR G, 1	H) High Pl	ains Depress	sions (F16)		³ Indicators of hydrophytic	vegetation and
5 cm Mu	cky Peat or Peat (S3) (LRR F)	(N	LRA 72 & 73	3 of LRR H)		wetland hydrology n	nust be present,
							unless disturbed or	problematic.
estrictive L	ayer (if observed):							
Type:								
Depth (ir	nches):					Hydri	c Soil Present?	Yes <u>No X</u>
narks:	diantian of hydria anil		rod					
positive in	dication of flydric soli	S Was Ubser	veu.					
ROLOG	Y							
etland hyd	rology Indicators:							
- imary Indica	ators (minimum of on	e is required	· check all that an	(vla			Secondary Indicators (m	inimum of two required)
Surface	Water (A1)		Salt Cr	ust (B11)			Surface Soil Cracks	; (B6)
High Wa	ter Table (A2)		Aquatio	: Invertebrate	s (B13)		Sparsely Vegetated	Concave Surface (B8)
Saturatio	on (A3)		Hydroa	en Sulfide Oo	dor (C1)		Drainage Patterns (B10)
Water M	arks (B1)		Dry-Se	ason Water 1	able (C2)		Oxidized Rhizosphe	eres on Living Roots (C3)
								- , ,
Sedimen	it Deposits (B2)		Oxidize	d Rhizosphe	res on Living Roo	ts (C3)	(where tilled)	

- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)

Field	Observations:
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Surface	Water	Present

Surface	Water	Presen
oundoo		1 100001

(includes capillary fringe)

Surface Water Present?	Yes	No	х	Depth (inches):
Water Table Present?	Yes	No	Х	Depth (inches):
Saturation Present?	Yes	No	х	Depth (inches):

Wetland Hydrology Present?	Yes	No	Х

Saturation Visible on Aerial Imagery (C9)

Frost-Heave Hummocks (D7) (LRR F)

Geomorphic Position (D2)

_FAC-Neutral Test (D5)

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

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

Other (Explain in Remarks)

N/A

N/A

N/A

Remarks:

No positive indication of wetland hydrology was observed.

Project/Site:			US 6	67		Cour	nty:	Elli	is	Sampling Date:	Ja	nuary 28, 2019	
Applicant/Owner:				TxDOT-Dallas I	District			State:	Texas	Sampling Point:		DPA019	
Investigator(s):	John V	Villiams	;	and <u>Grah</u>	me Borchard	lt	Section, To	wnship, Ra	ange:		N/A		
Landform (hillslope,	terrace, etc	.):		Flat			Local relief	(concave,	convex, none):	None	Slope (%):	00-03	
Subregion (LRR):			LF	RR J		Lat:	-96.9	7670	Long:	32.54518	Datum:	NAD 1983 CONUS	
Soil Map Unit Name	:			Stephen si	lty clay, 1 to 4	l percer	nt slopes		N\	VI Classification:		Upland	
Are climatic / hydrol	ogic conditio	ons on tl	he site	typical for this t	ime of year?		Yes <u>X</u>	No	(if no, e	xplain in Remarks.	.)		
Are Vegetation	No,	Soil	No	or Hydrology,	No sigi	nificantly	y disturbed?		Are "Normal C	Circumstances" pre	sent? Yes	X No	
Are Vegetation	No ,	Soil	No	,or Hydrology	No nat	urally pr	oblematic?		(If needed, ex	plain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

	Absolute Dominant	Indicator	Dominance Test worl	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant S	Species			
1. None Observed	<u> </u>		That Are OBL, FACW,	or FAC:		0	(A)
2.							_ ` ´
3.			Total Number of Domi	nant			
4.			Species Across All Str	ata:		1	(B)
	= Total Cover		'				_ ()
Sapling/Shrub Stratum (Plot size: 15 ft.)		Percent of Dominant S	pecies			
1. None Observed	/		That Are OBL, FACW.	or FAC:		0	(A/B)
2						-	(
3			Prevalence Index Wo	rksheet:			
4			Total % Cov	er of [.]	М	ultiply by:	
5			OBL species	0	x 1 =	0	—
·	= Total Cover		FACW species	0	x2=	0	—
Herb Stratum (Plot size: 5 ft)			FAC species	0	x 3 =	0	—
1 Bothriochloa ischaemum	75 Yes	UPI	FACU species	0	x 4 =	0	—
2 Nassella leucotricha	15 No	UPI	UPL species	90	x 5 =	450	_
3			Column Totals	90	(A)	450	(B)
4			Prevalence Index = B/	A =	5.00		
5				·		<u> </u>	
6			Hydrophytic Vegetati	on Indicato	rs:		
7			1 - Rapid Test for	Hydrophytic	: Vegetatio	n	
8			2 - Dominance Te	est is >50%	regetatio		
9			3 - Prevalence Inc	dex is $\leq 3.0^1$			
10			4 - Morphological	Adaptations	¹ (Explain)		
	90 = Total Cover		Problematic Hydro	ophytic Vear	etation ¹ (F)	(plain)	
Woody Vine Stratum (Plot size: 30 ft	<u> </u>		¹ Indicators of hydric so	il and wetlar		w must	
1 None Observed	/		be present, unless dist	urbed or pro	blematic.	y musi	
2	<u></u>						
2	= Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 10			Vegetation	v	` 05	No	x
			Present?				
Remarks:							
No positive indication of hydrophytic vegetation v	vas observed (≥50% of domin	ant species indexed as	FACU or drier)				

Frost-Heave Hummocks (D7) (LRR F)

emarks				
Dills ³ : F, G, H)				
pils ³ : F, G, H)				
oils ³ : F, G, H)				
oils ³ : F, G, H)				
oils ³ : F, G, H)				
F, G, H)				
F, G, H)				
(LRR H outside of MLRA 72 & 73)				
Reduced Vertic (F18)				
Very Shallow Dark Surface (TF12)				
nd				
wetland hydrology must be present,				
N- Y				
NOX				
required)				
face (B8)				
Roots (C3)				
erv (C9)				

 Water-Stained Leaves	(B9)
 Water-Stained Leaves	(B9)

Field	Observations:
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Field Observations:							
Surface Water Present?	Yes	No	X Depth (inches):	N/A			
Water Table Present?	Yes	No	X Depth (inches):	N/A			
Saturation Present? (includes capillary fringe)	Yes	No	X Depth (inches):	N/A	Wetland Hydrology Present?	Yes	No
Describe Recorded Data (s	tream gaug	je, monitoring	well, aerial photos, previou	is inspections), if av	ailable:		
Remarks:							
No positive indication of w	vetland hydr	rology was obs	served.				

Project/Site:			US	67		Cou	nty:	E	lis	Sampling Date:	Ja	nuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA020
Investigator(s):	John	William	s	and Gra	hme Borchard	lt	Section,	Township, F	lange:		N/A	
Landform (hillslope,	, terrace, et	tc.):		Flat			Local re	lief (concave	, convex, none):	None	Slope (%):	00-03
Subregion (LRR):			L	RR J		Lat:	-9	6.97696	Long:	32.54148	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Austin si	ty clay, 1 to 3	percent	t slopes		N	WI Classification:		Upland
Are climatic / hydrol	logic condit	tions on	the site	typical for this	time of year?		Yes)	<u>(</u> No	(if no, e	explain in Remarks.	.)	
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	nificantl	ly disturbe	ed?	Are "Normal (Circumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally p	roblemati	c?	(If needed, ex	plain any answers i	in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	X X X	Is the Sampled Area within a Wetland?	Yes	No <u>X_</u>	
Remarks: This point was determined not to I	be within a wetland	due to the	lack of all th	ree wetland criteria.			

	Absolute Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant S	pecies			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A)
2.							
3.			Total Number of Domir	nant			
4.			Species Across All Stra	ata:		1	(B)
	= Total Cover						,
Sapling/Shrub Stratum (Plot size: 15 ft.)		Percent of Dominant S	pecies			
1. None Observed	/		That Are OBL, FACW,	or FAC:		0	(A/B)
2			- , - ,				_ (' ' '
3			Prevalence Index Wo	rksheet:			
4			Total % Cove	er of	Mu	ltiply by:	
5			OBL species	0	x 1 =	0	_
	= Total Cover		FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft)			FAC species	0	x 3 =	0	_
1 Nassella leucotricha	85 Yes	UPI	FACU species	0	x 4 =	0	_
2 Geranium carolinianum	5 No	UPI		90	x 5 =	450	_
3			Column Totals	90	(A)	450	(B)
4			Prevalence Index = B/A	A =	5.00		(2)
5				·			
6.			Hydronhytic Vegetatio	on Indicato	rs:		
7			1 - Rapid Test for	Hydrophytic	. Venetatio	h	
8			2 - Dominance Te	st is >50%	, regenane.		
9			3 - Prevalence Inc	lex is $\leq 3.0^1$			
10			4 - Morphological	Adaptations	¹ (Explain)		
10	90 = Total Cover		Problematic Hydro	onhytic Vear	etation ¹ (Ex	nlain)	
Weady/Vine Stratum (Plat aize: 20 ft			¹ Indicators of hydric and	il and watlar			
<u>Woody Vine Stratum</u> (Plot size: <u>30 It.</u>)		be present, unless dist	urbed or pro	blematic.	y musi	
2.	= Total Covor		Hydrophytic				
% Baro Ground in Horb Stratum 10			Vegetation	v	/oc	No	v
			Present?	I		_ 10 _	
Remarks:							
No positive indication of hydrophytic vegetation w	as observed (>50% of dominar	nt species indexed as	EACL or drier)				

DPA020

Profile Des	cription: (Describe t	o the depth	needed to docu	ment the in	ndicator or confirm	the absence	of indicators.)				
Depth	Matrix			Redox	x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-12	10YR 3/1	100	None				Clay Loam				
¹ Type: C=C	oncentration, D=Depl	etion, RM=R	educed Matrix, C	S=Covered	or Coated Sand Gr	ains. ²	Location: PL=Pore Lining	, M=Matrix.			
Hydric Soll	s Indicators: (Applic	able to all L	RRs, unless oth	erwise not	ed.)		Indicators for Proble	matic Hydric Soils [°] :			
Histoso	l (A1)		Sandy	Gleyed Ma	trix (S4)		1 cm Muck (A9) (LRR I, J)			
Histic E	pipedon (A2)		Sandy	Redox (S5)		Coast Prairie Rec	dox (A16) (LRR F, G, H)			
Black H	listic (A3)		Strippe	ed Matrix (S	6)		Dark Surface (S7	(LRR G)			
Hydrog	en Sulfide (A4)		Loamy	Mucky Min	eral (F1)		High Plains Depr	essions (F16)			
Stratifie	d Layers (A5) (LRR F	·)	Loamy	Gleyed Ma	atrix (F2)		(LRR H outs	side of MLRA 72 & 73)			
1 cm M	uck (A9) (LRR F, G, I	H)	Deplet	ed Matrix (F	=3)		Reduced Vertic (F18)			
Deplete	ed Below Dark Surface	e (A11)	Redox	Dark Surfa	ice (F6)		Red Parent Mate	rial (TF2)			
Thick D	ark Surface (A12)		Deplet	ed Dark Su	rface (F7)		Very Shallow Dar	rk Surface (TF12)			
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)		Other (Explain in	Remarks)			
2.5 cm	Mucky Peat or Peat (S2) (LRR G,	H) High P	lains Depre	essions (F16)		³ Indicators of hydrophy	ytic vegetation and			
5 cm M	ucky Peat or Peat (S	B) (LRR F)	(N	/ILRA 72 &	73 of LRR H)		wetland hydrolog	y must be present,			
							unless disturbed	or problematic.			
Restrictive	Layer (if observed):										
Туре:											
Depth (inches):					Hydr	ic Soil Present?	YesNoX			
Wetland by	z I										
Drimon Indi	arology mulcators.		h abaali all that a	and ()			Casandan Indiastara	(minimum of two required)			
Primary Indi	cators (minimum of or	ne is required	I; Check all that a				Surface Soil Cracks (B6)				
	e vvater (A1)			ust (BTT)				cks (BO)			
High VV	ater Table (AZ)		Aquati	c invertebra	ates (B13)		Sparsely Vegetat				
	ion (A3)		Hydrog	gen Sulfide			Drainage Pattern	s (B10)			
	viarks (B1)		Dry-Se	ason wate	r Table (C2)	ta (00)		oneres on Living Roots (C3)			
				ea Rnizospi	neres on Living Roc	ts (C3)	Crawfield Durrown (C2)				
	eposits (B3)		(wnere	e not tillea)) 		Crayiish Burrows (Co)				
Aigai iv	at or Crust (B4)		Preser	ice of Redu			Saturation Visible on Aerial Imagery (C9)				
Iron De	posits (B5) ian Visible an Aarial In			IUCK SUITAC							
		hagery (B7)	Other	Explain in I	Remarks)		FAC-Neutral Test (D5)				
vvater-	Stallieu Leaves (B9)										
Field Obser	vations:										
Surface Wa	er Present? Ves	No	X Dei	oth (inches))· N/A						
Water Table	Present? Vee	No		oth (inches))· N/A						
Saturation P	resent? Ves	No		oth (inches)): N/A	Wotls	and Hydrology Present?	Ves No X			
(includes ca	pillary fringe)	110	<u> </u>			welle	and right orogy rieselltr				
Describe Rec	orded Data (stream g	auge, monito	ring well, aerial p	hotos, prev	ious inspections), if	available:					
Remarks:											
No positive i	ndication of wetland h	ydrology was	s observed.								

Project/Site:			US	67		Cour	nty:	E	llis	Sampling Date:	Ja	inuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA021
Investigator(s):	John	Williams	6	and Gra	hme Borchard	lt	Section,	Township, R	ange:		N/A	
Landform (hillslope,	terrace, etc	c.):		Flat			Local rel	ief (concave	, convex, none):	Convex	Slope (%):	01-03
Subregion (LRR):			L	.RR J		Lat:	-96	6.97547	Long:	32.54686	Datum:	NAD 1983 CONUS
Soil Map Unit Name				Eddy gravelly	/ clay loam, 1	to 3 perc	cent slop	es	N\	VI Classification:		Upland
Are climatic / hydrolo	ogic conditi	ions on t	he site	e typical for this	time of year?		Yes X	No	(if no, e	xplain in Remarks	.)	
Are Vegetation	No	,Soil	Yes	or Hydrology	No sig	nificantly	y disturbe	d?	Are "Normal C	Circumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	or Hydrology	No nat	urally pr	oblematio	?	(If needed, ex	plain any answers i	in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	X X X	Is the Sampled Area within a Wetland?	Yes	No	<u>x</u>	
Remarks: This point was determined not to to The soil profile is disturbed from g	be within a wetland o	lue to th the road	e lack of all th way.	ree wetland criteria.				

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worl	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		1	(A)
2.								_
3.				Total Number of Domin	nant			
4.				Species Across All Str	ata:		2	(B)
	= To	otal Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	species			
1. None Observed				That Are OBL, FACW,	or FAC:		50%	(A/B)
2.								_ ` `
3.				Prevalence Index Wo	rksheet:			
4.		. <u> </u>		Total % Cov	er of:	Mu	tiply by:	
5.				OBL species	0	x 1 =	0	-
	= To	otal Cover		FACW species	0	x 2 =	0	-
Herb Stratum (Plot size: 5 ft.)				FAC species	30	x 3 =	90	-
1. Aristida purpurea	35	Yes	UPL	FACU species	0	x 4 =	0	-
2. Setaria parviflora	30	Yes	FAC	UPL species	40	x 5 =	200	-
3. Bothriochloa ischaemum	5	No	UPL	Column Totals:	70	(A)	290	(B)
4.				Prevalence Index = B/	A =	4.14		_ ` ´
5.		. <u> </u>						
6.				Hydrophytic Vegetati	on Indicato	rs:		
7.				1 - Rapid Test for	Hydrophytic	c Vegetatior	ı	
8.		. <u> </u>		2 - Dominance Te	est is >50%	0		
9.		. <u> </u>		3 - Prevalence Inc	dex is $\leq 3.0^1$			
10.	·			4 - Morphological	Adaptations	s ¹ (Explain)		
	70 = To	otal Cover		Problematic Hydro	ophytic Veg	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetla	nd hvdrolog	v must	
1 None Observed	/			be present, unless dist	urbed or pro	oblematic.	,	
2								
	= To	otal Cover		Hydrophytic				
% Bare Ground in Herb Stratum <u>30</u>				Vegetation Present?	١	/es	No	x
Remarks:								
No positive indication of hydrophytic vegetation w	ing abaaried (NE)	N/ of dominon	t analian indexed on	EACLL or drior)				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).
inches) Color (moist) % Type1 Loc2 Texture Remarks 0-12 10YR 3/1 25 None	Depth	Matrix			Redox	Features			
0-12 10YR 3/1 25 None	nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12 None 75 None	0-12	10YR 3/1	25	None				Loam	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4)	0-12	None	75	None				Gravel	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Mydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) 1 cm Muck (A9) (LRR I, J) Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F16) ³ indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. testrictive Layer (if observed): Type: Hydric Soil Present? Yes No marks: Matrix (S6) High Plains Depressions (F16) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		<u> </u>							
Image: Contraction of the context o									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soils Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ :									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Midicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) 1 cm Muck (A9) (LRR I, J) Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Muck (A9) (LRR F) Yes No marks: Matrix Stripped Strippe									
Image: Construction, Proceeding of the rule of construction of the vision of the vi		ncentration D=Deple	etion RM=	Reduced Matrix CS	S=Covered o	or Coated Sand G	rains ² l	ocation: PI =Pore Lining	M=Matrix
Histosol (A1) Sandy Gleyed Matrix (S4) 1 cm Muck (A9) (LRR I, J) Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type:	ydric Soils	Indicators: (Applic	able to all	LRRs, unless othe	erwise note	d.)		Indicators for Probler	matic Hydric Soils ³ :
Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. testrictive Layer (if observed): Type:	Histosol	(A1)		Sandy	Gleyed Matr	ix (S4)		1 cm Muck (A9) (I	LRR I, J)
Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) (LRR H outside of MLRA 72 & 73) 1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Histic Ep	pipedon (A2)		Sandy	Redox (S5)			Coast Prairie Red	ox (A16) (LRR F, G, H)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) (LRR H outside of MLRA 72 & 73) 1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F16) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Black Hi	stic (A3)		Strippe	d Matrix (S6	i)		Dark Surface (S7)) (LRR G)
Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) (LRR H outside of MLRA 72 & 73) 1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:	Hydroge	n Sulfide (A4)		Loamy	Mucky Mine	eral (F1)		High Plains Depre	essions (F16)
1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Mydric Soil Present? Yes No	Stratified	d Layers (A5) (LRR F)	Loamy	Gleyed Mat	rix (F2)		(LRR H outs	ide of MLRA 72 & 73)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) Som Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): marks:	1 cm Mu	ıck (A9) (LRR F, G, H	H)	Deplete	ed Matrix (F3	3)		Reduced Vertic (F	-18)
Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) wetland hydrology must be present, unless disturbed or problematic. testrictive Layer (if observed): Type:	Depleted	d Below Dark Surface	e (A11)	Redox	Dark Surfac	e (F6)		Red Parent Mater	ial (TF2)
Sandy Mucky Mineral (S1) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Thick Da	ark Surface (A12)		Deplete	ed Dark Sur	face (F7)		Very Shallow Dark	k Surface (TF12)
2.5 cm Mucky Peat or Peat (S2) (LRR G, H)High Plains Depressions (F16) 3 ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No emarks:	Sandy M	lucky Mineral (S1)		Redox	Depression	s (F8)		Other (Explain in I	Remarks)
5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No emarks:	2.5 cm M	Mucky Peat or Peat (32) (LRR G	6, H) High P	ains Depres	sions (F16)		³ Indicators of hydrophy	tic vegetation and
Restrictive Layer (if observed):	5 cm Mu	icky Peat or Peat (S3	8) (LRR F)	(N	ILRA 72 & 7	3 of LRR H)		wetland hydrology	must be present,
Type: Depth (inches): No emarks:	Restrictive L	aver (if observed):						uniess disturbed o	or problematic.
Depth (inches): No No	Type:								
emarks:	Depth (ii	nches):					Hvdri	c Soil Present?	Yes No X
marks:		, <u> </u>							
	emarks:								
to positive indication of hydric soils was observed.	lo positive ir	ndication of hydric soi	ls was obs	erved.					
	DROLOG	iΥ							
DROLOGY	Netland hyd	rology Indicators:							
DROLOGY Wetland hydrology Indicators:	Primary Indic	ators (minimum of or	ne is require	ed; check all that ap	oply)			Secondary Indicators (minimum of two required)
DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)	Surface	Water (A1)		Salt Cr	ust (B11)			Surface Soil Crac	ks (B6)
DROLOGY Netland hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	High Wa	ater Table (A2)		Aquatio	: Invertebrat	es (B13)		Sparsely Vegetate	ed Concave Surface (B8)
DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)	Saturatio	on (A3)		Hydrog	en Sulfide C	Ddor (C1)		Drainage Patterns	s (B10)
DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)					acon Water	Table (CO)		Out dias d Dhian and	hares on Living Dests (C2)

Oxidized Rhizospheres on Living Roots (C3)

N/A

N/A

N/A

(where not tilled)

Presence of Reduced Iron (C4)

Thin Muck Surface (C7)

(where tilled)

- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)
 - Frost-Heave Hummocks (D7) (LRR F)

Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Х Depth (inches): Water Table Present? Yes <u>No X</u> Depth (inches): No Saturation Present? Yes X____ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Sediment Deposits (B2)

Algal Mat or Crust (B4)

Drift Deposits (B3)

Iron Deposits (B5)

Wetland Hydrology Present?

Remarks:

No positive indication of wetland hydrology was observed.

Yes____ No __X___

Project/Site:			US	67		Co	unty:		Elli	s	Sampling Date:	Ja	nuary 28,	2019
Applicant/Owner:				TxDOT-Dalla	s District				State:	Texas	Sampling Point:		DPA022	2
Investigator(s):	John	William	IS	and Gr	ahme Borch	ardt	Secti	on, Tow	nship, Ra	inge:		N/A		
Landform (hillslope,	terrace, et	tc.):		Fla	t		Loca	l relief (c	concave, o	convex, none):	Convex	Slope (%):		01-03
Subregion (LRR):			L	.RR J		Lat:		-96.971	127	Long:	32.54662	Datum:	NAD 19	83 CONUS
Soil Map Unit Name	e:			Stephen	silty clay, 1 t	to 4 perce	ent slop	es		NV	VI Classification:		Upland	
Are climatic / hydrol	ogic condit	tions on	the site	e typical for this	time of yea	ır?	Yes	Х	No	(if no, e	xplain in Remarks.	.)		
Are Vegetation	No	,Soil	No	or Hydrology	No	significan	tly distu	irbed?		Are "Normal C	ircumstances" pre	sent? Yes	x	No
Are Vegetation	No	,Soil	No	,or Hydrology	No r	naturally p	problem	natic?		(If needed, exp	olain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	x	No _ No _ No _	x 	Is the Sampled Area within a Wetland?	Yes	NoX	<u>. </u>
Remarks: This point was determined not to l	be within	a wetland o	due to the	e lack of hydro	phytic vegetation and hydric soils.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		0	(A)
2.								_ ` ´
3				Total Number of Domir	ant			
4				Species Across All Stra	nta.		1	(B)
	=	Total Cover						(=)
Sanling/Shrub Stratum (Plot size: 15 ft)			Percent of Dominant S	necies			
1 Juniperus virginiana	/ 90	Yes	LIPI	That Are OBL_FACW	or FAC [.]		0	(A/B)
2 Celtis laevigata	10	<u></u> No	EAC		011710.		•	(/(D)
3			17.0	Prevalence Index Wo	ksheet:			
3	·	·		Total % Cove	er of:	Mu	ltiply by:	
4					<u>ہ ان ار</u>	v 1 =	n	
3.	100 -	Total Covor		EACW species	0		0	
Horb Stratum (Plot size: 5 ft)				FAC species	10	X2	20	
<u>Herb Stratum</u> (Flot size. <u>5 it.</u>)				FAC species	0	X3	30	
					0		450	
2				OPL species	90	x ɔ =	450	(D)
3	·	·			100	(A)	480	(B)
4				Prevalence index = B/A	\ =	4.80		
5								
6				Hydrophytic Vegetatio	on Indicato	rs:		
7		·		1 - Rapid Test for	Hydrophytic	· Vegetatior	ו	
8				2 - Dominance Te	st is >50%			
9				3 - Prevalence Inc	ex is ≤ 3.0'			
10				4 - Morphological	Adaptations	' (Explain)		
	=	Total Cover		Problematic Hydro	phytic Vege	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	l and wetlar	nd hydrolog	y must	
1. None Observed				be present, unless dist	urbed or pro	blematic.		
2				11 1				
	=	Total Cover		Negetation				
% Bare Ground in Herb Stratum				Present?	Y	'es	No	Х
Remarks:								
No positive indication of hydrophytic vegetation w	vas observed (≥	50% of dominan	t species indexed as	FACU or drier).				

SOIL

epth Matrix	Redox	reatures			
nches) Color (moist) % Co	olor (moist) %	Type ¹	Loc ²	Texture	Remarks
0-12 10YR 2/1 100	None —			Clay Loam	
ype: C=Concentration, D=Depletion, RM=Reduc	ced Matrix, CS=Covered o	or Coated Sand Grai	ns. ² L	ocation: PL=Pore Linin	ng, M=Matrix.
ydric Solis Indicators: (Applicable to all LRRs	s, unless otherwise note	a.)		Indicators for Prob	lematic Hydric Soils':
Histosol (A1)	Sandy Gleyed Matr	ix (S4)		1 cm Muck (A9) (LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S5)			Coast Prairie R	edox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped Matrix (S6	5)		Dark Surface (S	67) (LRR G)
Hydrogen Sulfide (A4)	Loamy Mucky Mine		High Plains De	pressions (F16)	
Stratified Layers (A5) (LRR F)	Loamy Gleyed Mat		(LRR H ou	utside of MLRA 72 & 73)	
1 cm Muck (A9) (LRR F, G, H)	Depleted Matrix (F3		Reduced Vertic	: (F18)	
Depleted Below Dark Surface (A11)	Redox Dark Surfac		Red Parent Ma	terial (TF2)	
Thick Dark Surface (A12)	Depleted Dark Surf		Very Shallow D	ark Surface (TF12)	
Sandy Mucky Mineral (S1)	Redox Depressions		Other (Explain i	in Remarks)	
2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	High Plains Depres		³ Indicators of hydrop	hytic vegetation and	
5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 7	'3 of LRR H)		wetland hydrolo	ogy must be present,
		r	unless disturbe	d or problematic.	
estrictive Layer (if observed):					
Туре:					
				- 0 - 1 Due 40	
Depth (inches): narks: o positive indication of hydric soils was observed			Hydrid	c Soll Present?	YesNoX
Depth (inches):			Hydrid	c Soll Present?	YesNo <u>X</u>
Depth (inches): marks: o positive indication of hydric soils was observed			Hydrid	c Soll Present?	Yes <u>No X</u>
Depth (inches): marks: o positive indication of hydric soils was observed PROLOGY			Hydrid	c Soll Present?	YesNo <u>X</u>
Depth (inches): marks: o positive indication of hydric soils was observed PROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; ch	.eck all that apply)		Hydrid	Secondary Indicator:	Yes <u>No X</u>
Depth (inches): marks: o positive indication of hydric soils was observed PROLOGY /etland hydrology Indicators: //mary Indicators (minimum of one is required; ch Surface Water (A1)			Hydrid	Secondary Indicator:	Yes <u>No X</u>
Depth (inches):		es (B13)	Hydrid	Secondary Indicator: Surface Soil Cr Sparsely Veget	s (minimum of two required) acks (B6) ated Concave Surface (B8)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY etland hydrology Indicators: <u>rimary Indicators (minimum of one is required; ch</u> Surface Water (A1) High Water Table (A2) Saturation (A3)		es (B13))dor (C1)	Hydrid	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Patter	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY etland hydrology Indicators: rimary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	neck all that apply) Salt Crust (B11) Aquatic Invertebrat Hydrogen Sulfide C Dry-Season Water	es (B13))dor (C1) Table (C2)	Hydrid	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Patte Oxidized Rhizo	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY etland hydrology Indicators: rimary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		es (B13))dor (C1) Table (C2) eres on Living Roots	(C3)	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Patte Oxidized Rhizo (where tilled)	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY Tetland hydrology Indicators: imary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3)		es (B13))dor (C1) Table (C2) eres on Living Roots	(C3)	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Patte Oxidized Rhizo (where tilled) Crayfish Burrov	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) C Drift Deposits (B3) Algal Mat or Crust (B4)		es (B13) Ddor (C1) Table (C2) eres on Living Roots	(C3)	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Patte Oxidized Rhizo (where tilled) Crayfish Burrov Saturation Visit	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; ch 		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7)	(C3)	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo (where tilled) Crayfish Burrov Saturation Visit Geomorphic Pc	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9) osition (D2)
Depth (inches): marks: p positive indication of hydric soils was observed PROLOGY Tetland hydrology Indicators: imary Indicators (minimum of one is required; ch 		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks)	(C3)	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ble on Aerial Imagery (C9) vsition (D2) est (D5)
Depth (inches): marks: o positive indication of hydric soils was observed PROLOGY retland hydrology Indicators: imary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) C Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		es (B13) Ddor (C1) Table (C2) eres on Living Roots ed Iron (C4) (C7) emarks)	(C3)	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo: (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	Yes <u>No X</u> s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9) osition (D2) est (D5) ummocks (D7) (LRR F)
Depth (inches): marks: p positive indication of hydric soils was observed ROLOGY etland hydrology Indicators: imary Indicators (minimum of one is required; ch 		es (B13) Odor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks)	(C3)	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ble on Aerial Imagery (C9) bsition (D2) est (D5) ummocks (D7) (LRR F)
Depth (inches): marks: p positive indication of hydric soils was observed PROLOGY Tetland hydrology Indicators: imary Indicators (minimum of one is required; ch 		es (B13) Ddor (C1) Table (C2) eres on Living Roots ed Iron (C4) (C7) emarks)	(C3)	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo: (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ble on Aerial Imagery (C9) sition (D2) est (D5) ummocks (D7) (LRR F)
Depth (inches): marks: p positive indication of hydric soils was observed PROLOGY Tetland hydrology Indicators: imary Indicators (minimum of one is required; ch 		es (B13) Ddor (C1) Table (C2) eres on Living Roots ed Iron (C4) (C7) emarks) N/A	(C3)	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Patter Oxidized Rhizo: (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ble on Aerial Imagery (C9) sition (D2) est (D5) ummocks (D7) (LRR F)
Depth (inches):		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks) N/A N/A	(C3) Wetla	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Patter Oxidized Rhizo: (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	<pre>Yes NoX s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ble on Aerial Imagery (C9) osition (D2) est (D5) ummocks (D7) (LRR F) ? Yes X No</pre>
Depth (inches):		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks) N/A N/A N/A	(C3) Wetla	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Patter Oxidized Rhizo (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	Yes <u>No X</u> s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9) osition (D2) ast (D5) ummocks (D7) (LRR F) Yes X No
Depth (inches):		es (B13) Ddor (C1) Table (C2) eres on Living Roots ed Iron (C4) (C7) emarks) N/A N/A N/A ous inspections), if a	(C3) (C3) Wetla	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo (where tilled) Crayfish Burrow Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	Yes <u>No X</u> s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9) osition (D2) est (D5) ummocks (D7) (LRR F) ? Yes <u>X</u> No
Depth (inches):		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks) N/A N/A N/A pus inspections), if an	(C3) (C3) Wetla	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rhizo: (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	Yes No X s (minimum of two required) acks (B6) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ble on Aerial Imagery (C9) pistion (D2) sst (D5) ummocks (D7) (LRR F) ? Yes X No
Depth (inches):		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks) N/A N/A pus inspections), if an y indicator).	(C3) (C3) Wetla	Secondary Indicator: Surface Soil Cr Sparsely Veget Drainage Patter Oxidized Rhizo: (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	Yes <u>No X</u> <u>s (minimum of two required)</u> acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9) osition (D2) est (D5) ummocks (D7) (LRR F) ? Yes X No
Depth (inches):		es (B13) Ddor (C1) Table (C2) eres on Living Roots red Iron (C4) (C7) emarks) N/A N/A N/A pus inspections), if an y indicator).	(C3) (C3) wetla	Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Patter Oxidized Rhizo (where tilled) Crayfish Burrov Saturation Visit Geomorphic Po FAC-Neutral Te Frost-Heave Hu	Yes <u>No X</u> s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3) vs (C8) ole on Aerial Imagery (C9) osition (D2) ast (D5) ummocks (D7) (LRR F) ? Yes X No

Project/Site:			US	67		Cour	nty:	E	llis	Sampling Date:	J	anuary 28,	2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA02	3
Investigator(s):	John	Williams	3	and <u>Gra</u>	hme Borchard	dt	Section,	Township, F	Range:		N/A		
Landform (hillslope,	terrace, etc	c.):		Flat			Local re	lief (concave	, convex, none):	Concave	Slope (%):		01-03
Subregion (LRR):			L	RR J		Lat:	-9	6.96933	Long:	32.54664	Datum:	NAD 1	983 CONUS
Soil Map Unit Name	:			Eddy gravelly	/ clay loam, 1	to 3 per	cent slop	es	N	WI Classification:		Upland	ł
Are climatic / hydrol	ogic conditi	ons on t	he site	typical for this	time of year?		Yes)	<u>(</u> No	(if no, e	explain in Remarks	.)		
Are Vegetation	Yes	,Soil	Yes	,or Hydrology	No sig	nificantly	y disturbe	ed?	Are "Normal (Circumstances" pre	sent? Ye	s X	No
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	turally pr	roblemati	c?	(If needed, ex	plain any answers i	in Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No _ No _ No _	X X X	Is the Sampled Area within a Wetland?	Yes	No	<u>x</u>
Remarks: This point was determined not to t	be within a wetlan	d due to the	e lack of all t	hree wetland criteria.			
This point was taken within a rece	ntly plowed field,	soils and ve	egetation we	re disturbed.			

VEGETATION - Use scientific names of plants.

	Absolute Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft)	% cover Species?	Status	Number of Dominant St	necies			
1 None Observed			That Are OBL_EACW	or FAC:		0	(A)
2	<u></u>			011710.		v	
2		·	Total Number of Domin	ont			
3				iant to:		2	(P)
4	- Tatal Cavar	·	Species Across Air Stra	ild.		2	(B)
Sapling/Shrub Stratum (Plot size: 15 ft.)		Percent of Dominant Sp	pecies		•	
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A/B)
2	<u></u>		Dural and Mark				
3	<u></u>		Prevalence index wor	KSneet:			
4			Total % Cove	er of:	Mu	Itiply by:	
5			OBL species	0	x 1 =	0	
	= Total Cover		FACW species	0	x 2 =	0	
Herb Stratum (Plot size: 5 ft.)			FAC species	0	x 3 =	0	
1. Schizachyrium scoparium	25 Yes	FACU	FACU species	25	x 4 =	100	
2. Bothriochloa ischaemum	15 Yes	UPL	UPL species	15	x 5 =	75	
3			Column Totals:	40	(A)	175	(B)
4			Prevalence Index = B/A	\ =	4.38		
5.							
6.			Hydrophytic Vegetatio	on Indicato	rs:		
7.			1 - Rapid Test for	Hydrophytic	Vegetatio	n	
8.			2 - Dominance Tes	st is >50%	Ū		
9.			3 - Prevalence Ind	ex is $\leq 3.0^1$			
10			4 - Morphological	Adaptations	¹ (Explain)		
	40 = Total Cover	·	Problematic Hydro	, phytic Veae	tation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft			¹ Indicators of hydric soi	l and wetlan		v muet	
1 None Observed)		be present, unless distu	urbed or pro	blematic.	ly musi	
2	- Tatal Cavar	·	Hydrophytic				
% Dana Crawad in Ulark Obactum 60			Vegetation	v		N	v
% Dare Ground in Herd Stratum 60			Present?	Y	es	NO	<u>^</u>
Pomarka							
No positivo indication of hydrophytic vegetation w	as observed (>50% of domi	inant spacios indoved as	EACLL or drior)				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

SOIL

Profile Des	cription: (Describe t	o the depth	needed to docu	ment the ir	dicator or confirm	the absence	of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
								Disturbed soil, recently plowed field
1			<u> </u>					
Type: C=C	oncentration, D=Depl	etion, RM=R	RRs unless oth	S=Covered	or Coated Sand Gra	ains. ² l	Location: PL=Pore Lin	ing, M=Matrix.
History			Sondu		triv (SA)		1 cm Muck (A	
Histost	ninodon (A2)		Sandy	Bodov (SE	unx (34)		Coast Brairio	Poder (A16) (I PP E C H)
Flistic L	Lippedon (A2)		Sanuy	od Matrix (S) 6)		Dark Surface	
	on Sulfido (ΛA)		Suippi	v Mucky Min	oral (E1)		High Plains D	oprossions (E16)
Hyuroy Stratifie	ell Sullide (A4)	5)	Loam	Gloved Mc	triv (E2)			epressions (FTO)
0.aa.i.e) /	Loani	od Matrix /	101X (1 Z) 22)			i_{0} (E19)
i Cill IV	A Below Dark Surface	•/ (A11)		countractitix (f	5) ce (E6)		Red Parant M	aterial (TE2)
	a below bark outiac	- (~ ()		ted Dark Suila	rface (F7)			Dark Surface (TE12)
Sandy	Mucky Mineral (S1)		Deplet		nace (F8)			nin Remarks)
0andy 2.5 cm	Mucky Peat or Peat (S2) (LRR G	H) High E	Plains Denre	essions (F16)		³ Indicators of hydro	popytic vegetation and
2.0 em M	lucky Peat or Peat (S	3) (LRR F)	··, / IIg// /		73 of I RR H)		wetland hvdro	logy must be present.
		, (,	(-		,		unless disturb	ed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth	inches):					Hydri	c Soil Present?	Yes No X
	· · · ·					-		
	<u>.</u>							
Wetland hv	drology Indicators:							
Primary Indi	cators (minimum of o	ne is require	d: check all that a	(vlaa			Secondary Indicate	ors (minimum of two required)
Surface	Water (A1)		Salt C	rust (B11)			Surface Soil (Cracks (B6)
High W	ater Table (A2)		e me	ic Invertebra	ites (B13)		Sparsely Veg	etated Concave Surface (B8)
Saturat	ion (A3)		Hydro	aen Sulfide	Odor (C1)		Drainage Patt	erns (B10)
Water	Marks (B1)		Drv-Se	eason Wate	r Table (C2)		Oxidized Rhiz	cospheres on Living Roots (C3)
Sedime	ent Deposits (B2)		Oxidiz	ed Rhizosp	neres on Living Roo	ts (C3)	(where tilled)	
Drift De	eposits (B3)		(wher	e not tilled)		()	Cravfish Burro	ows (C8)
Algal M	lat or Crust (B4)		Prese	nce of Redu	ced Iron (C4)		Saturation Vis	sible on Aerial Imagery (C9)
Iron De	posits (B5)		 Thin M	/luck Surfac	e (C7)		Geomorphic F	Position (D2)
Inunda	tion Visible on Aerial Ir	nagery (B7)	Other	(Explain in I	Remarks)		FAC-Neutral	Test (D5)
Water-	Stained Leaves (B9)			、 I	,		Frost-Heave H	Hummocks (D7) (LRR F)
	()							
Field Obser	vations:							
Surface Wa	ter Present? Yes	No	X De	pth (inches)	: N/A			
Water Table	Present? Yes	No	X De	pth (inches)	: N/A			
Saturation F	resent? Yes	No	X De	pth (inches)	: <u>N/A</u>	Wetla	and Hydrology Preser	nt? Yes No <u>X</u>
(includes ca	pillary fringe)			-				
Describe Rec	orded Data (stream g	auge, monito	oring well, aerial p	ohotos, prev	ious inspections), if	available:		
Demerter								
Remarks:	ndication of water -	wdrolog	e observed					
ino positive	nuication of wetland h	iyurology wa	s observed.					

Project/Site:			US	67		Count	y:	Ell	is	Sampling Date:	January 28, 2019		
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA024	
Investigator(s):	John	William	S	and Grat	nme Borchardt	5	Section, To	wnship, Ra	ange:		N/A		
Landform (hillslope,	terrace, et	tc.):		Depress	ion	L	_ocal relief	(concave,	convex, none):	Concave	Slope (%):	03-05	
Subregion (LRR):			L	RR J		Lat:	-96.97	7213	Long:	32.54747	Datum:	NAD 1983 CONUS	
Soil Map Unit Name	:			Stephen s	ilty clay, 1 to 4	percent	slopes		NV	VI Classification:		Upland	
Are climatic / hydrol	ogic condit	tions on	the site	typical for this	time of year?	Y	′es <u>X</u>	No	(if no, e	xplain in Remarks.	.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No signi	ficantly	disturbed?		Are "Normal C	ircumstances" pre	sent? Yes	S X No	
Are Vegetation	No	,Soil	Yes	,or Hydrology	No natur	ally pro	blematic?		(If needed, exp	olain any answers i	in Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	
Remarks:							
This point was determined to be w	<i>v</i> ithin a wetland du	e to the presence of a	all 3 wetland criteria.				
Datapoint taken in a recently deve	loped wetland.						

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test wor	ksneet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW	, or FAC:		2	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	rata:		2	(B)
	= 1	otal Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.	.)			Percent of Dominant S	Species			
1. None Observed				That Are OBL, FACW	, or FAC:		100%	(A/B)
2.								
3.				Prevalence Index Wo	orksheet:			
4.				Total % Cov	ver of:	Mu	Itiply by:	
5.				OBL species	0	x 1 =	0	
	= 1	otal Cover		FACW species	20	x 2 =	40	
Herb Stratum (Plot size: 5 ft.)				FAC species	35	x 3 =	105	
1. Sisyrinchium rosulatum	35	Yes	FAC	FACU species	0	x 4 =	0	
2. Cyperus odoratus	20	Yes	FACW	UPL species	0	x 5 =	0	
3.				Column Totals:	55	(A)	145	(B)
4.				Prevalence Index = B/	A =	2.64		
5.								
6.				Hydrophytic Vegetati	ion Indicator	rs:		
7.				1 - Rapid Test for	r Hydrophytic	Vegetatio	ı	
8.				X 2 - Dominance Te	est is >50%			
9.				X 3 - Prevalence In	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations	¹ (Explain)		
	55 = 1	otal Cover		Problematic Hydr	ophytic Vege	etation ¹ (Ex	plain)	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> 1. <i>None Observed</i>)			¹ Indicators of hydric so be present, unless dis	oil and wetlan turbed or pro	id hydrolog blematic.	y must	
2.								
% Bare Ground in Herb Stratum 45	= 1	otal Cover		Hydrophytic Vegetation Present?	Y	es X	No	
				110001111				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.0).

oth	Matrix			Redox	Features			
hes)	Color (moist)	%	Color (moist)	%	Type ¹	\log^2	Texture	Remarks
-12	10YR 2/1	100	None				Clay Loam	
	·							
	·							
	·							
	·							
	·							
			·					
be: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, C	S=Covered	or Coated Sand G	rains. ² L	ocation: PL=Pore Linin	g, M=Matrix.
Iric Soils	Indicators: (Applic	able to all	LRRs, unless oth	erwise note	ed.)		Indicators for Probl	ematic Hydric Soils ³ :
Histosol	(A1)		Sandy	Gleyed Mat	rix (S4)		1 cm Muck (A9)	(LRR I, J)
- Histic El	pipedon (A2)		Sandy	Redox (S5)			Coast Prairie Re	edox (A16) (LRR F, G, H)
Black H	istic (A3)		Strippe	ed Matrix (Se	6)		Dark Surface (S	57) (LRR G)
– Hydroge	en Sulfide (A4)		Loamy	/ Mucky Mine	eral (F1)		High Plains Dep	pressions (F16)
Stratifie	d Layers (A5) (LRR F	;)	Loamy	/ Gleyed Mat	trix (F2)		(LRR H ou	tside of MLRA 72 & 73)
- 1 cm Mu	uck (A9) (LRR F, G, I	H)	Deplet	ted Matrix (F	3)		Reduced Vertic	(F18)
_ Deplete	d Below Dark Surface	e (A11)	Redox	Dark Surfac	ce (F6)		Red Parent Mat	erial (TF2)
Thick Da	ark Surface (A12)		Deplet	ted Dark Sur	face (F7)		Very Shallow Da	ark Surface (TF12)
Sandy N	/lucky Mineral (S1)		Redox	Depression	s (F8)		X Other (Explain i	n Remarks)
2.5 cm I	Mucky Peat or Peat (S2) (LRR (6, H) High P	Plains Depres	ssions (F16)		³ Indicators of hydrop	hytic vegetation and
5 cm Mu	ucky Peat or Peat (S3	B) (LRR F)	(N	MLRA 72 & 1	73 of LRR H)		wetland hydrolo	gy must be present,
							unless disturbed	d or problematic.
trictive L	_ayer (if observed):							
Depth (i arks:	nches):	was observ	/ed			Hydri	c Soil Present?	Yes X No
Depth (i arks: ositive inc s were as land.	nches): dication of hydric soil ssumed to be hydric o	was observ due to the p	ved. presence of inundat	tion, FACW	and OBL vegetation	Hydrid on species, and	c Soil Present?	Yes X No
Depth (i arks: ositive inc s were as land.	nches): dication of hydric soil ssumed to be hydric o	was observ due to the p	/ed. resence of inundat	tion, FACW a	and OBL vegetation	Hydrid on species, and	c Soil Present? a definitive wetland bou	Yes X No
Depth (i arks: ositive inc s were as and. ROLOG	nches): dication of hydric soil ssumed to be hydric o SY frology Indicators:	was observ	ved. presence of inundat	tion, FACW a	and OBL vegetatio	Hydri	c Soil Present?	Yes X No no
Depth (i arks: ositive inc s were as and. ROLOG	nches): dication of hydric soil ssumed to be hydric o SY frology Indicators: cators (minimum of or	was observ due to the p ne is require	ved. presence of inundat ed; check all that a	tion, FACW :	and OBL vegetatio	Hydri	a definitive wetland bou	Yes X No
Depth (i arks: ositive inc s were as and. ROLOG tland hyd nary Indic _Surface	nches): dication of hydric soil ssumed to be hydric o SY trology Indicators: sators (minimum of or Water (A1)	was observ due to the p ne is requir	ved. presence of inundat ed; check all that a Salt Ci	tion, FACW -	and OBL vegetatio	Hydri	a definitive wetland bou	Yes X No ndary. This is a recently developed
Depth (i arks: cositive inc s were as and. ROLOG tland hyd hary Indic Surface High Wa	nches): dication of hydric soil ssumed to be hydric o SY Srology Indicators: cators (minimum of or Water (A1) ater Table (A2)	was observ due to the p ne is require	/ed. oresence of inundat ed; check all that a Salt Co Salt Co	tion, FACW a pply) rust (B11) c Invertebrat	and OBL vegetatio	by species, and	a definitive wetland bou	Yes X No ndary. This is a recently developed s (minimum of two required) acks (B6) ated Concave Surface (B8)
Depth (i arks: cositive inc s were as and. COLOG tland hyd mary Indic Surface High Wa Saturati	nches): dication of hydric soil ssumed to be hydric of SY Irology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3)	was observ due to the p	ved. presence of inundat ed; check all that a Salt Cr Aquati Hydrog	tion, FACW (pply) rust (B11) c Invertebrat gen Sulfide (and OBL vegetation	hydri on species, and	a definitive wetland bou	Yes X No ndary. This is a recently developed s (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10)
Depth (i arks: sitive inc s were as and. COLOG cland hyd hary Indic Surface High Wa Saturatic Water M	nches): dication of hydric soil ssumed to be hydric of SY frology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1)	was observ due to the p	ved. presence of inundat ed; check all that a Salt Cr Aquati Hydrog Dry-Se	tion, FACW a pply) rust (B11) c Invertebrat gen Sulfide (eason Water	and OBL vegetation tes (B13) Odor (C1) • Table (C2)	by species, and	a definitive wetland bou <u>Secondary Indicators</u> <u>Surface Soil Cra</u> <u>Sparsely Vegeta</u> <u>Drainage Patter</u> <u>Oxidized Rhizos</u>	Yes X No ndary. This is a recently developed s (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3)
Depth (i arks: cositive incos s were as and. COLOG tland hyd mary Indic Surface High Wa Saturatio Water M Sedimen	nches): dication of hydric soil ssumed to be hydric of SY frology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	was observ due to the p	ved. presence of inundation ed; check all that a Salt Cl Aquation Lydrog Dry-Se Cxidiz	tion, FACW a pply) rust (B11) ic Invertebrat gen Sulfide (eason Water ed Rhizosph	and OBL vegetation tes (B13) Ddor (C1) Table (C2) ieres on Living Ro	by species, and	a definitive wetland bou <u>Secondary Indicators</u> <u>Surface Soil Cra</u> <u>Sparsely Vegeta</u> <u>Drainage Patter</u> <u>Oxidized Rhizos</u> (where tilled)	Yes X No ndary. This is a recently developed (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3)
Depth (i arks: cositive incos s were as and. COLOG Surface High Wa Saturatio Water M Sedimen Drift Dej	nches): dication of hydric soil ssumed to be hydric of SY frology Indicators: ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	was observ due to the p	ved. presence of inundat ed; check all that a Salt Ci Aquati — Hydrog — Dry-Se — Oxidiza (where	tion, FACW a pply) rust (B11) ic Invertebrat gen Sulfide (eason Water ed Rhizosph e not tilled)	and OBL vegetation tes (B13) Ddor (C1) Table (C2) ieres on Living Ro	by species, and	c Soil Present? a definitive wetland bou Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow	Yes X No ndary. This is a recently developed (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) (pheres on Living Roots (C3) (C8)
Depth (i arks: ositive inc s were as and. COLOG Surface High Wa Saturati Water M Sedimen Drift Dep Algal Ma	nches): dication of hydric soil ssumed to be hydric of sy frology Indicators: sators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	was observ due to the p	ved. presence of inundat ed; check all that a Salt Cl Aquati Hydrog Dry-Se Oxidiza (where Preser	tion, FACW a pply) rust (B11) ic Invertebrai gen Sulfide (aason Water ed Rhizosph e not tilled) nce of Reduc	and OBL vegetation tes (B13) Ddor (C1) 'Table (C2) ieres on Living Ro ced Iron (C4)	by species, and	c Soil Present? a definitive wetland bou Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib	Yes X No ndary. This is a recently developed (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3) (C3) (C3) (C3) (C3)
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Depth (i arks: ositive inc s were as and. COLOG tiand hyd hary Indic Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Inundati	nches): dication of hydric soil ssumed to be hydric of SY Irology Indicators: ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial In	was observ due to the p ne is requir	ved. presence of inundation ed; check all that a Salt Cr Aquati Hydrog Dry-Se Oxidizer (where Preser Thin M)Other	tion, FACW a pply) rust (B11) ic Invertebrat gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Reduc fuck Surface (Explain in F	and OBL vegetation tes (B13) Odor (C1) "Table (C2) ieres on Living Ro ced Iron (C4) a (C7) Remarks)	by species, and	a definitive wetland bou <u>Secondary Indicators</u> Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po X FAC-Neutral Te	Yes X No ndary. This is a recently developed a (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2) st (D5)
Depth (i arks: sositive inc s were as and. COLOG tland hyd nary Indic Surface High Wa Saturatii Sedimen Drift Dep Algal Ma Iron Dep Inundati Water-S	nches): dication of hydric soil ssumed to be hydric of ssumed to be hydric of GY Irology Indicators: ators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial In Stained Leaves (B9)	was observ due to the p ne is requir	ved. presence of inundation ed; check all that a Salt Critical Aquation Dry-Se Oxidizer (where Preser Thin Monte of the set Other of the set Othe	tion, FACW : pply) rust (B11) ic Invertebrat gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Reduc fuck Surface (Explain in R	and OBL vegetation tes (B13) Odor (C1) Table (C2) teres on Living Ro ced Iron (C4) e (C7) Remarks)	hydrid on species, and	a definitive wetland bou <u>Secondary Indicators</u> Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po X FAC-Neutral Te Frost-Heave Hu	Yes X No ndary. This is a recently developed acks (B6) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2) st (D5) mmocks (D7) (LRR F)
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Depth (i arks: sitive inc s were as and. COLOG tland hyd Surface High Wa Saturatic Vater M Sedimen Drift Dep Algal Ma Iron Dep Inundati Water-S d Obserr	nches): dication of hydric soil ssumed to be hydric of ssumed to be hydric of FY Irology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial In Stained Leaves (B9) vations: or Brocont? Vac	was observ due to the p	ved. presence of inundation ed; check all that a Salt Cl Aquation Dry-Se Coxidizion (where Present Thin Monopole Other of the second Control of the s	tion, FACW a pply) rust (B11) ic Invertebrat gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Reduc fuck Surface (Explain in R	and OBL vegetation tes (B13) Odor (C1) Table (C2) teres on Living Ro ced Iron (C4) e (C7) Remarks)	on species, and	a definitive wetland bou <u>Secondary Indicators</u> Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po X FAC-Neutral Te Frost-Heave Hu	Yes X No ndary. This is a recently developed s (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) rs (C8) le on Aerial Imagery (C9) sition (D2) st (D5) mmocks (D7) (LRR F)
Depth (i arks: ositive inc is were as land. SOLOG tland hyd mary Indic Surface High Wa Saturatio Saturatio Vater N Sedimen Drift Dep Algal Ma Iron Dep Inundati Water-S Motoserr face Wate	nches): dication of hydric soil ssumed to be hydric of ssumed to be hydric of Frology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial In Stained Leaves (B9) vations: er Present? Yes	was observ due to the p ne is requir nagery (B7)	ved. presence of inundation ed; check all that a Salt Cl Aquation Dry-Sec Oxidize (where Thin Monthematical Othered Othered Dry-Sec Oxidize (whered Othered	tion, FACW i pply) rust (B11) ic Invertebral gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Reduc fuck Surface (Explain in R (Explain in R	and OBL vegetation tes (B13) Odor (C1) Table (C2) teres on Living Ro ced Iron (C4) c (C7) Remarks) 1 N(A	on species, and	a definitive wetland bou <u>Secondary Indicators</u> Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po X FAC-Neutral Te Frost-Heave Hu	Yes X No ndary. This is a recently developed acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) rs (C8) le on Aerial Imagery (C9) sition (D2) st (D5) mmocks (D7) (LRR F)
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Depth (i arks: ositive inc s were as and. COLOG tland hyd bary Indic Surface High Wat Saturatie Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Water-S d Observ face Wate ter Table uration Pr ludes cap ribe Recc	nches):	was observ due to the p ne is require nagery (B7) x N N nauge moni	ved. presence of inundation ed; check all that a ed; check all that a Salt Cl Aquati Hydrog Dry-Se Oxidize (where Oxidize (where Dry-Se Dry-Se Oxidize (where Dry-Se	tion, FACW : pply) rust (B11) ic Invertebral gen Sulfide (asson Water ed Rhizosph e not tilled) nce of Reduc fuck Surface (Explain in F pth (inches): pth (inches): hotos previo	and OBL vegetation tes (B13) Odor (C1) Table (C2) teres on Living Ro ced Iron (C4) teres (C7) Remarks) Table (C7) Remarks)	Hydri on species, and ots (C3)	a definitive wetland bou <u>Secondary Indicators</u> Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po X FAC-Neutral Te Frost-Heave Hu	Yes X No ndary. This is a recently developed (minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) spheres on Living Roots (C3) (C3

Project/Site:			US	67		Cou	nty:	E	llis	Sampling Date:	Jar	nuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA025
Investigator(s):	John	William	IS	and Gra	hme Borchard	dt	Section, T	ownship, R	lange:		N/A	
Landform (hillslope,	, terrace, et	tc.):		Flat	i i		Local relie	f (concave	, convex, none):	Convex	Slope (%):	03-05
Subregion (LRR):			L	.RR J		Lat:	-96.	97213	Long:	32.54755	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Stephen s	silty clay, 1 to	4 percer	nt slopes		NV	VI Classification:		Upland
Are climatic / hydrol	logic condit	tions on	the site	e typical for this	time of year?		Yes X	No	(if no, e	xplain in Remarks.	.)	
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	nificantl	y disturbed	?	Are "Normal C	ircumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	or Hydrology	No nat	urally pr	roblematic?		(If needed, exp	olain any answers i	in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW	or FAC:		1	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		2	(B)
		Total Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	Species			
1. Rhus aromatica	35	Yes	UPL	That Are OBL, FACW	or FAC:		50%	(A/B)
2.								
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Μυ	Itiply by:	
5.				OBL species	0	x 1 =	0	
	35 =	Total Cover		FACW species	0	x 2 =	0	
Herb Stratum (Plot size: 5 ft.)				FAC species	70	x 3 =	210	
1. Helianthus angustifolius	70	Yes	FAC	FACU species	0	x 4 =	0	
2.				UPL species	35	x 5 =	175	
3.				Column Totals:	105	(A)	385	(B)
4.				Prevalence Index = B/	A =	3.67		
5.								
6.				Hydrophytic Vegetati	on Indicator	s:		
7.				1 - Rapid Test for	Hydrophytic	Vegetatio	n	
8.				2 - Dominance Te	est is >50%	-		
9.				3 - Prevalence In	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations ¹	(Explain)		
	70 =	Total Cover		Problematic Hydr	ophytic Vege	tation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlan	d hydroloc	ly must	
1. None Observed				be present, unless dis	turbed or prot	plematic.		
2.								
	=	Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 30				Present?	Ye	es	No	х
				1.000.001				
Remarks:								

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

SOIL

epth	Matrix			Redox	Features			
ches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 2/1	100	None	_		_	Clay Loam	
·								
·								
					·			
(no: C=Con		otion PM-P	aduced Matrix C	S=Covorod	or Coated Sand Crain	2	Location: DL-Doro Lini	
dric Soils lu	dicators: (Applic	able to all L	RRs. unless oth	erwise note		5.	Indicators for Pro	hlomatic Hydric Soils ³ :
Listenel (A 4)		Condu	Clayed Mat	$riv_{(\Omega, A)}$		1 om Muck (Al	
	41) 		Sandy		IIX (54)			$\frac{\partial (\mathbf{L} \mathbf{K} \mathbf{K} \mathbf{I}, \mathbf{J})}{\partial (\mathbf{L} \mathbf{K} \mathbf{K} \mathbf{I}, \mathbf{J})}$
			Sandy	Redox (S5)	2)		Coast Prairie P	
Black Hist	(A3)		Strippe	ed Matrix (Si	6)			(S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy	Mucky Min	eral (F1)		High Plains De	epressions (F16)
Stratified	Layers (A5) (LRR F	•)	Loamy	Gleyed Ma	trix (F2)		(LRR H c	outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, I	H)	Deplet	ed Matrix (F	3)		Reduced Verti	ic (F18)
Depleted	Below Dark Surfac	e (A11)	Redox	Dark Surface	ce (F6)		Red Parent Ma	aterial (TF2)
Thick Dar	k Surface (A12)		Deplet	ed Dark Sur	face (F7)		Very Shallow I	Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox	Depression	is (F8)		Other (Explain	in Remarks)
2.5 cm Mu	ucky Peat or Peat (S2) (LRR G,	H) High P	lains Depre	ssions (F16)		³ Indicators of hydro	phytic vegetation and
5 cm Muc	ky Peat or Peat (S3	B) (LRR F)	(N	/ILRA 72 &	73 of LRR H)		wetland hydrol	logy must be present,
							unless disturb	ed or problematic.
strictive La	yer (if observed):							
Type:								
Denth (inc						Hvdr	ic Soil Present?	Yes No X
Deput (inc	ches):							
narks:	ication of hydric so	ils was obse	rved.					
positive ind	hes):	ils was obse	rved.					
arks: positive ind	hes):	ils was obse	rved.					
ROLOGY	ication of hydric so	ils was obse	rved.					
ROLOGY	ication of hydric so	ils was obse	rved.				Secondary Indicato	rs (minimum of two required)
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ROLOGY arks: positive ind ROLOGY atland hydro mary Indicat Surface W High Water Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta Algal Mat Iron Depo Inundatior Water-Sta Algal Mat Iron Depo Charles Capill Cribe Record marks:	ication of hydric so ication of hydric so plogy Indicators: cors (minimum of or vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) istis (B3) or Crust (B4) sits (B5) h Visible on Aerial Ir hined Leaves (B9) tions: Present? Yes sent? Yes sent? Yes ary fringe) fed Data (stream g	nagery (B7)	rved. d; check all that ap 	pply) rust (B11) c Invertebra gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Redur luck Surface (Explain in F pth (inches) pth (inches) pth (inches) pth (inches)	tes (B13) Odor (C1) r Table (C2) heres on Living Roots ced Iron (C4) a (C7) Remarks) : <u>N/A</u> : <u>N/A</u> ous inspections), if av	(C3) Wetta	Secondary Indicato Surface Soil C Sparsely Vege Drainage Patte Oxidized Rhize (where tilled) Crayfish Burro Saturation Vis Geomorphic P FAC-Neutral T Frost-Heave H and Hydrology Presen	rs (minimum of two required) Tracks (B6) stated Concave Surface (B8) erns (B10) ospheres on Living Roots (C3) ws (C8) ible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F) tt? Yes No X
ROLOGY arks: positive ind ROLOGY atland hydro mary Indicat Surface W High Water Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta Algal Mat Iron Depo Inundatior Algal Mat Child Observa rface Water ater Table Pi turation Pre- cludes capill cribe Record harks: positive ind	ication of hydric so ication of hydric so plogy Indicators: cors (minimum of or vater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) istis (B3) or Crust (B4) sits (B5) n Visible on Aerial Ir nined Leaves (B9) tions: Present? Yes sent? Yes sent? Yes ary fringe) Ied Data (stream g ication of wetland h	ils was obse	rved. d; check all that ap Salt Cr Aquation Dry-Se Oxidize (where Preser Thin M Other (X Dep X Dep X Dep x x Dep x x Dep x x Dep x x Dep x x Dep x x Dep x x Dep x x Dep x x Dep x x x Dep x x x Dep x x x Dep x x x x x x x x x x x x x	pply) rust (B11) c Invertebra gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Redur luck Surface (Explain in F pth (inches) pth (inches) pth (inches) pth (inches)	tes (B13) Odor (C1) r Table (C2) neres on Living Roots ced Iron (C4) a (C7) Remarks) : <u>N/A</u> : <u>N/A</u> ous inspections), if av	(C3) Wetta	Secondary Indicato Surface Soil C Sparsely Vege Drainage Patte Oxidized Rhize (where tilled) Crayfish Burro Saturation Vis Geomorphic P FAC-Neutral T Frost-Heave H and Hydrology Presen	rs (minimum of two required) Tracks (B6) stated Concave Surface (B8) erns (B10) ospheres on Living Roots (C3) ws (C8) ible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F) tt? Yes No X
ROLOGY tland hydro mary Indicat Surface W High Water Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta dobserva fface Water tartable Pr turation Pres- cludes capill cribe Record farks: positive ind	ication of hydric so ication of hydric so plogy Indicators: cors (minimum of or /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) h (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) h Visible on Aerial Ir hined Leaves (B9) tions: Present? Yes resent? Yes sent? Yes ary fringe) fed Data (stream g ication of wetland h	ils was obse	rved. d; check all that ag Salt Cr Aquation Dry-Se Oxidize (where Preser Thin M Other (X Deg X Deg X Deg X Deg Sobserved.	pply) rust (B11) c Invertebra gen Sulfide (eason Water ed Rhizosph e not tilled) nce of Redur luck Surface (Explain in F pth (inches) pth (inches) pth (inches) hotos, previ	tes (B13) Odor (C1) r Table (C2) heres on Living Roots ced Iron (C4) a (C7) Remarks) : <u>N/A</u> : <u>N/A</u> ous inspections), if av	(C3) Weth	Secondary Indicato Surface Soil C Sparsely Vege Drainage Patte Oxidized Rhize (where tilled) Crayfish Burro Saturation Vis Geomorphic P FAC-Neutral T Frost-Heave H and Hydrology Presen	rs (minimum of two required) Tracks (B6) stated Concave Surface (B8) erns (B10) ospheres on Living Roots (C3) ws (C8) ible on Aerial Imagery (C9) Position (D2) Test (D5) Hummocks (D7) (LRR F) tt? Yes No X

Project/Site:			US	67		Coun	nty:	Ell	is	Sampling Date:	Jar	nuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA026
Investigator(s):	John	William	S	and <u>Gra</u>	hme Borchardt		Section, To	wnship, Ra	ange:		N/A	
Landform (hillslope,	, terrace, et	tc.):		Flat			Local relief	(concave,	convex, none):	Concave	Slope (%):	01-03
Subregion (LRR):			L	RR J		Lat:	-96.97	7248	Long:	32.54752	Datum:	NAD 1983 CONUS
Soil Map Unit Name	e:			Stephen s	ilty clay, 1 to 4	percent	t slopes		NV	VI Classification:		Upland
Are climatic / hydrol	logic condit	tions on	the site	typical for this	time of year?	`	Yes <u>X</u>	No	(if no, e	xplain in Remarks.	.)	
Are Vegetation	No	,Soil	Yes	,or Hydrology	No sign	ificantly	disturbed?		Are "Normal C	ircumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No natu	rally pro	oblematic?		(If needed, exp	olain any answers i	n Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes <u></u> Yes <u></u>	No No No	Is the Sampled Area within a Wetland?	Yes	NoX
Remarks:					
This point was determined not to b	be within a wetland	due to the lack of hydric	soils and wetland hydrology.		
This point was taken in a scrub sh	rub field with distur	bed ground.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worl	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		2	(A)
2.								
3.				Total Number of Domin	nant			
4.				Species Across All Str	ata:		2	(B)
		Total Cover						_ · ·
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. Baccharis neglecta	45	Yes	FAC	That Are OBL, FACW,	or FAC:	1	00%	(A/B)
2.								_ · ·
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mult	iply by:	
5.				OBL species	0	x 1 =	0	-
	45 =	Total Cover		FACW species	0	x 2 =	0	-
Herb Stratum (Plot size: 5 ft.)				FAC species	50	x 3 =	150	-
1. Ambrosia trifida	5	Yes	FAC	FACU species	0	x 4 =	0	-
2.				UPL species	0	x 5 =	0	-
3.				Column Totals:	50	(A)	150	(B)
4.				Prevalence Index = B/	A =	3.00		/
5.								
6.				Hydrophytic Vegetati	on Indicator	s:		
7.				1 - Rapid Test for	Hydrophytic	Vegetation		
8.				X 2 - Dominance Te	est is >50%	0		
9.				X 3 - Prevalence Inc	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations ¹	(Explain)		
	5 =	Total Cover		Problematic Hydro	ophytic Vege	tation ¹ (Exp	lain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlan	d hvdroloav	must	
1. None Observed	/			be present, unless dist	urbed or prol	plematic.		
2.								
		Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 95				Vegetation Present?	Ye	es X	No	
				i legent:				
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.0).

SOIL	
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Profile Des	cription: (Describe t	o the depth	needed to docur	nent the in	ndicator or confirm	n the absence of	of indicators.)	
Depth	Matrix			Redox	x Features			
(inches)	Color (moist)	%	Color (moist)	%	Туре	Loc ²	Texture	Remarks
0-6								Disturbed mulch
					. <u> </u>			
					. <u></u>	. <u></u>		
¹ Type: C=C	Concentration, D=Depl	etion, RM=R	educed Matrix, CS	S=Covered	or Coated Sand G	rains. ² L	ocation: PL=Pore Lin	ing, M=Matrix.
Hydric Soil	s Indicators: (Applic	able to all L	RRs, unless othe	erwise not	ed.)		Indicators for Pro	blematic Hydric Soils ³ :
Histoso	ol (A1)		Sandy	Gleyed Ma	trix (S4)		1 cm Muck (A	9) (LRR I, J)
Histic E	Epipedon (A2)		Sandy	Redox (S5)		Coast Prairie	Redox (A16) (LRR F, G, H)
Black I	Histic (A3)		Strippe	d Matrix (S	6)		Dark Surface	(S7) (LRR G)
Hydrog	jen Sulfide (A4)		Loamy	Mucky Min	eral (F1)		High Plains D	epressions (F16)
Stratifie	ed Layers (A5) (LRR F	-)	Loamy	Gleyed Ma	atrix (F2)		(LRR H	outside of MLRA 72 & 73)
1 cm M	luck (A9) (LRR F, G, I	H)	Deplete	ed Matrix (F	=3)		Reduced Vert	ic (F18)
Deplet	ed Below Dark Surfac	e (A11)	Redox	Dark Surfa	ice (F6)		Red Parent M	laterial (TF2)
Thick [Dark Surface (A12)	·	Deplete	ed Dark Su	rface (F7)		Very Shallow	Dark Surface (TF12)
Sandy	Mucky Mineral (S1)		Redox	Depressior	ns (F8)		Other (Explain	n in Remarks)
2.5 cm	Mucky Peat or Peat (S2) (LRR G,	H) High P	lains Depre	essions (F16)		³ Indicators of hydro	pphytic vegetation and
5 cm N	lucky Peat or Peat (S	B) (LRR F)	(N	ILRA 72 &	73 of LRR H)		wetland hydro	logy must be present,
		,, ,	·		,		unless disturb	ed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth	(inches):					Hydrid	c Soil Present?	Yes No X
	. ,							
Remarks:								
	01/							
HIDROLO	J Y							
wetland hy	drology indicators:							
Primary Ind	icators (minimum of o	ne is required	l; check all that ap	oply)			Secondary Indicate	ors (minimum of two required)
Surfac	e Water (A1)		Salt Cr	ust (B11)			Surface Soil 0	Cracks (B6)
High W	/ater Table (A2)		Aquatio	c Invertebra	ates (B13)		Sparsely Veg	etated Concave Surface (B8)
Satura	tion (A3)		Hydrog	en Sulfide	Odor (C1)		Drainage Patt	terns (B10)
Water	Marks (B1)		Dry-Se	ason Wate	r Table (C2)		Oxidized Rhiz	cospheres on Living Roots (C3)
Sedim	ent Deposits (B2)		Oxidize	ed Rhizospl	heres on Living Ro	ots (C3)	(where tilled)	
Drift De	eposits (B3)		(where	e not tilled)			Crayfish Burro	ows (C8)
Algal M	lat or Crust (B4)		Presen	ice of Redu	iced Iron (C4)		Saturation Vis	sible on Aerial Imagery (C9)
Iron De	eposits (B5)		Thin M	uck Surfac	e (C7)		Geomorphic F	Position (D2)
Inunda	tion Visible on Aerial Ir	nagery (B7)	Other (Explain in I	Remarks)		FAC-Neutral	Test (D5)
Water-	Stained Leaves (B9)						Frost-Heave I	Hummocks (D7) (LRR F)
Field Obse	rvations:							
Surface Wa	ter Present? Yes	No	X Dep	oth (inches)): N/A			
Water Table	e Present? Yes	No	X Dep	oth (inches)): N/A			
Saturation F	Present? Yes	No	X Dep	oth (inches)): N/A	Wetla	nd Hydrology Preser	nt? Yes No X
(includes ca	pillary fringe)		·					
Describe Rec	corded Data (stream g	auge, monito	ring well, aerial pl	hotos, prev	ious inspections), i	f available:		
Remarks:								
No positive	indication of wetland h	ydrology wa	s observed.					

Project/Site:			US	67		Cou	unty:		Elli	s	Sampling Date:	J	anuary 28,	2019
Applicant/Owner:				TxDOT-Dalla	s District			s	State:	Texas	Sampling Point:		DPA027	7
Investigator(s):	John	William	s	and Gr	ahme Borcha	ırdt	Secti	on, Tow	nship, Ra	inge:		N/A		
Landform (hillslope,	terrace, et	ic.):		Fla	t		Loca	l relief (c	oncave,	convex, none):	Concave	Slope (%):		01-03
Subregion (LRR):			L	.RR J		Lat:		-96.973	808	Long:	32.54777	Datum:	NAD 19	83 CONUS
Soil Map Unit Name	:			Stephen	silty clay, 1 to	o 4 perce	ent slop	es		NV	VI Classification:		Upland	
Are climatic / hydrol	ogic condit	tions on	the site	e typical for this	s time of year	?	Yes	Х	No	(if no, e	xplain in Remarks.	.)		
Are Vegetation	No	,Soil	No	or Hydrology	No si	ignificant	tly distu	irbed?		Are "Normal C	ircumstances" pre	sent? Ye	s X	No
Are Vegetation	No	,Soil	Yes	or Hydrology	No na	aturally p	oroblem	natic?		(If needed, exp	olain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes	x	No
Remarks:						
This point was determined to be w	vithin a wetland due	to the presence of all	3 wetland criteria.			
Datapoint taken in a recently deve	loped wetland.					

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		1	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		1	(B)
	= '	Total Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		100%	(A/B)
2								
3				Prevalence Index Wo	rksheet:			
4				Total % Cov	er of:	Mu	ltiply by:	
5				OBL species	0	x 1 =	0	
	=	Total Cover		FACW species	5	x 2 =	10	
Herb Stratum (Plot size: 5 ft.)				FAC species	60	x 3 =	180	
1. Echinochloa crus-galli	55	Yes	FAC	FACU species	0	x 4 =	0	
2. Sisyrinchium angustifolium	5	No	FACW	UPL species	0	x 5 =	0	
3. Ambrosia trifida	5	No	FAC	Column Totals:	65	(A)	190	(B)
4				Prevalence Index = B/	A =	2.92		
5								
6				Hydrophytic Vegetati	on Indicator	rs:		
7				1 - Rapid Test for	Hydrophytic	Vegetatio	n	
8				X 2 - Dominance Te	est is >50%			
9				X 3 - Prevalence Inc	dex is $\leq 3.0^1$			
10				4 - Morphological	Adaptations	¹ (Explain)		
	65 =	Total Cover		Problematic Hydr	ophytic Vege	etation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlan	nd hydrolog	y must	
1. None Observed				be present, unless dis	turbed or pro	blematic.		
2.								
	= '	Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 35				Present?	Y	es X	No	
							_	
Remarks:								

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.0).

SOIL

Profile Description: (Describe to the depth	needed to document the indicator or confirm	the absence of ind	dicators.)	
Depth Matrix	Redox Features			
(inches) Color (moist) %	Color (moist) % Type ¹	Loc ²	Texture	Remarks
0-12 10YR 2/1 100	None — —			
				·
<u> </u>				
<u> </u>				
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, CS=Covered or Coated Sand Gra	ins. ² Locati	on: PL=Pore Lining	g, M=Matrix.
Hydric Soils Indicators: (Applicable to all L	RRs, unless otherwise noted.)	In	dicators for Probl	ematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	_	1 cm Muck (A9)	(LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S5)		Coast Prairie Re	edox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped Matrix (S6)		Dark Surface (S	7) (LRR G)
Hvdrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	_	High Plains Dep	ressions (F16)
Stratified Lavers (A5) (I RR F)	Loamy Gleved Matrix (F2)		(I RR H ou	tside of MI RA 72 & 73)
	Depleted Matrix (F2)		Reduced Vertic	(E19)
		_		
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	—	Ked Parent Mate	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	_	Very Shallow Da	ark Surface (TF12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		X Other (Explain in	n Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G,	H) High Plains Depressions (F16)	³ lı	ndicators of hydropł	nytic vegetation and
5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)		wetland hydrolog	gy must be present,
			unless disturbed	l or problematic.
Restrictive Layer (if observed):				
Туре:				
Depth (inches):		Hvdric Soi	I Present?	Yes X No
	eschee of individual of, 17 tow and OBE vegetation	species, and a def	initive wetland boui	idal y.
		species, and a def	initive wetland doui	ida y.
YDROLOGY		species, and a def	initive wettand bou	iudi y.
IYDROLOGY Wetland hydrology Indicators:		species, and a def		на у.
IYDROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is require	d; check all that apply)	species, and a dei	econdary Indicators	(minimum of two required)
Wetland hydrology Indicators: Primary Indicators (minimum of one is require) Surface Water (A1)	d; check all that apply) Salt Crust (B11)	species, and a def	econdary Indicators Surface Soil Cra	(minimum of two required)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta	(minimum of two required) acks (B6) ated Concave Surface (B8)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Bhizos	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Ovidized Phizospheres on Living Root	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B2)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled)	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root (where not tilled)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) X Algal Mat or Crust (B4)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root (where not tilled) Presence of Reduced Iron (C4)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patteri Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) X Algal Mat or Crust (B4) Iron Deposits (B5)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patteri Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Pos	(minimum of two required) acks (B6) ted Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2)
Wetland hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) X Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	d; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Pos X FAC-Neutral Tes	(minimum of two required) tocks (B6) ted Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2) st (D5)
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Wetland hydrology Indicators: Primary Indicators (minimum of one is require) Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) X Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Saturation Present? Yes No	d; check all that apply)	species, and a def	econdary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Pos X FAC-Neutral Te Frost-Heave Hu	(minimum of two required) acks (B6) ated Concave Surface (B8) ns (B10) pheres on Living Roots (C3) s (C8) le on Aerial Imagery (C9) sition (D2) st (D5) mmocks (D7) (LRR F)
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Project/Site:			US	67		Count	y:	Elli	s	Sampling Date:	Ja	inuary 28, 2019
Applicant/Owner:				TxDOT-Dallas	District			State:	Texas	Sampling Point:		DPA028
Investigator(s):	John	William	s	and Grat	nme Borchardt	5	Section, To	wnship, Ra	ange:		N/A	
Landform (hillslope,	terrace, et	tc.):		Strear	n	L	ocal relief	(concave,	convex, none):	Concave	Slope (%):	03-05
Subregion (LRR):			L	RR J		Lat:	-96.97	7269	Long:	32.54774	Datum:	NAD 1983 CONUS
Soil Map Unit Name	: <u> </u>			Stephen si	Ity clay, 1 to 4	percent	slopes		N	VI Classification:		Riverine
Are climatic / hydrolo	ogic condit	tions on	the site	typical for this t	time of year?	Y	′es <u>X</u>	No	(if no, e	xplain in Remarks.	.)	
Are Vegetation	No	,Soil	No	,or Hydrology	No signi	ficantly	disturbed?		Are "Normal C	ircumstances" pre	sent? Yes	X No
Are Vegetation	No	,Soil	No	,or Hydrology	No natu	ally pro	blematic?		(If needed, exp	olain any answers i	n Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	X X X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>	
Remarks:				•			
This point was determined not to	be within a wetl	and due to the	lack of all th	nree wetland criteria.			
This point was taken within the O	HWM of a strea	m (Stream 1).					
This point was taken within the O	HWW OF a Strea	m (Stream 1).					

VEGETATION - Use scientific names of plants.

	Absolute Dominant	Indicator	Dominance Test works	heet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species?	Status	Number of Dominant Spe	ecies			
1. None Observed			That Are OBL, FACW, or	FAC:		0	(A)
2.							
3.			Total Number of Domina	nt			
4.			Species Across All Strata	a:		0	(B)
	= Total Cover						_ ()
Sapling/Shrub Stratum (Plot size: 15 ft.)		Percent of Dominant Spe	ecies			
1. None Observed			That Are OBL, FACW, or	FAC:		0	(A/B)
2.							_ ` `
3.			Prevalence Index Work	sheet:			
4.		-	Total % Cover	of:	Mul	tiply by:	
5.			OBL species	0	x 1 =	0	_
·	= Total Cover	-	FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft.)			FAC species	0	x 3 =	0	_
1. None Observed			FACU species	0	x 4 =	0	_
2.		-	UPL species	0	x 5 =	0	_
3.		-	Column Totals:	0	(A)	0	(B)
4.		-	Prevalence Index = B/A =	=	N/A		_ ()
5							
6.			Hydrophytic Vegetation	Indicato	rs:		
7.			1 - Rapid Test for H	vdrophytic	C Vegetation	1	
8.			2 - Dominance Test	is >50%			
9			3 - Prevalence Index	$x \text{ is} \leq 3.0^1$			
10			4 - Morphological A	daptations	s ¹ (Explain)		
	= Total Cover		Problematic Hydrop	hvtic Vea	etation ¹ (Ex	olain)	
Woody Vine Stratum (Plot size: 30 ft)		¹ Indicators of hydric soil a	and wetla		/ must	
1 None Observed	/		be present, unless distur	bed or pro	oblematic.	ymust	
2				-			
2.	= Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum			Vegetation	``	/es	No	x
			Present?				<u> </u>
Remarks:							
No positive indication of hydrophytic vegetation w	as observed (≥50% of dominant sp	ecies indexed as F	ACU or drier).				
	· ·						

SOIL

epth	Matrix			Redox	x Features			
iches) Color (noist)	%	Color (moist)	%		l oc ²	Texture	Remarks
	<u>Holoty</u>						Toxicito	Homano
<u> </u>								
ype: C=Concentration	n, D=Deple	etion, RM=Re	educed Matrix, C	S=Covered	l or Coated Sand G	rains. ² l	ocation: PL=Pore Linir	ng, M=Matrix.
ydric Soils Indicators	: (Applica	able to all LF	RRs, unless oth	erwise not	ted.)		Indicators for Prob	lematic Hydric Soils ³ :
Histosol (A1)			Sandy	Gleyed Ma	trix (S4)		1 cm Muck (A9) (LRR I, J)
Histic Epipedon (A2	2)		Sandy	Redox (S5	5)		Coast Prairie R	edox (A16) (LRR F, G, H)
Black Histic (A3)	/		Strippe	ed Matrix (S	, 36)		Dark Surface (S	S7) (LRR G)
Hydrogen Sulfide (/	41)		Loamy	v Mucky Min	peral (E1)		High Plains De	(=), (=), (=), (=), (=), (=), (=), (=),
Stratified Lovers (A		`	Loamy					
Straumed Layers (A	5) (LKK F))	Loamy	Gieyed Ivia	atrix (FZ)		(LRR H O	utside of MLRA /2 & /3)
1 cm Muck (A9) (LI	R F, G, H	1)	Deplet	ed Matrix (F	F3)		Reduced Vertic	; (F18)
Depleted Below Da	rk Surface	e (A11)	Redox	Dark Surfa	ace (F6)		Red Parent Ma	terial (TF2)
Thick Dark Surface	(A12)		Deplet	ed Dark Su	ırface (F7)		Very Shallow D	ark Surface (TF12)
Sandy Mucky Mine	ral (S1)		Redox	Depression	ns (F8)		Other (Explain	in Remarks)
2.5 cm Mucky Peat	or Peat (S	62) (LRR G, I	H)High P	lains Depre	essions (F16)		³ Indicators of hydrop	phytic vegetation and
5 cm Mucky Peat o	r Peat (S3) (LRR F)	()	MLRA 72 &	73 of LRR H)		wetland hydrolo	ogy must be present,
							unless disturbe	d or problematic.
estrictive Layer (if ob	served):							
Type [.]								
Denth (inches):						Hydri	c Soil Present?	Vas No X
						inyan	e oon i resenti	
ROLOGY								
ROLOGY	icators:							
ROLOGY	icators:	e is required	· check all that a	nnlv)			Secondary Indicator	s (minimum of two required)
ROLOGY	icators: mum of on	e is required	; check all that a	pply)			Secondary Indicator	s (minimum of two required)
ROLOGY etland hydrology Ind imary Indicators (mini Surface Water (A1)	icators: mum of on	e is required	; check all that a Salt Cr	pply) rust (B11)	ntos (P13)		Secondary Indicator	s (minimum of two required) acks (B6)
etland hydrology Ind imary Indicators (mining Surface Water (A1) High Water Table (Saturation (A2)	icators: mum of on) A2)	e is required	; check all that a Salt Cr Aquati	pply) rust (B11) c Invertebra	ates (B13)		Secondary Indicator Surface Soil Cr Sparsely Veget	s (minimum of two required) acks (B6) ated Concave Surface (B8)
PROLOGY etland hydrology Ind imary Indicators (mining Surface Water (A1) High Water Table (Saturation (A3)	icators: mum of on) A2)	e is required	; check all that a Salt Ci Aquati Hydrog	pply) rust (B11) c Invertebra gen Sulfide	ates (B13) Odor (C1)		Secondary Indicator Surface Soil Cr Sparsely Veget Drainage Patte	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10)
PROLOGY etland hydrology Ind imary Indicators (mining Surface Water (A1) High Water Table (Saturation (A3) Water Marks (B1)	icators: mum of on A2)	e is required	; check all that a Salt Cr Aquati Hydrog Dry-Sc	pply) rust (B11) c Invertebra gen Sulfide aason Wate	ates (B13) Odor (C1) er Table (C2)		Secondary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Oxidized Rhizo	<u>s (minimum of two required)</u> acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3)
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Project/Site:			US	67		Cou	nty:	Ell	is	Sampling Date:	Jai	nuary 28, 2019	
Applicant/Owner:	TxDOT-Dallas District							State:	Texas	Sampling Point:		DPA029	
Investigator(s):	Johr	n William	S	and Grah	me Borchard	lt	Section, Tov	wnship, R	ange:		N/A		
Landform (hillslope,	terrace, e	etc.):		Flat			Local relief (concave,	convex, none):	Concave	Slope (%):	00-03	
Subregion (LRR):			L	.RR J		Lat:	-96.97	385	Long:	32.54764	Datum:	NAD 1983 CONUS	
Soil Map Unit Name	:			Stephen si	lty clay, 1 to 4	l percer	nt slopes		NV	VI Classification:		Upland	
Are climatic / hydrol	ogic condi	itions on	the site	e typical for this t	ime of year?		Yes X	No	(if no, e	xplain in Remarks.	.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No sig	nificantly	y disturbed?		Are "Normal C	ircumstances" pre	sent? Yes	X No	
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally pr	roblematic?		(If needed, exp	olain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland?	Yes	NoX	
Remarks:						
This point was determined not to b	oe within a wetlar	nd due to the lack of all th	nree wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	, or FAC:		1	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		4	(B)
		Total Cover						_ ()
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	Species			
1. Populus deltoides	/ 	Yes	FAC	That Are OBL, FACW	or FAC:		25%	(A/B)
2					,			(, , _)
3				Prevalence Index Wo	orksheet:			
۵ ۸				Total % Cov	er of	M	ltiply by:	
5				OBL species	0 0	x 1 =	0	_
0	15 =	Total Cover		FACW species	0	x2=	0	
Herb Stratum (Plot size: 5 ft)				FAC species	15	x3=	45	
1 Bothriochloa ischaemum	30	Yes	UPI	FACU species	50	x 4 =	200	
2 Sorahum halepense	25	Yes	FACU				150	
3 Ambrosia psilostachva	25	Yes	FACU	Column Totals:	95	(A)	395	(B)
4				Prevalence Index = B/	A =	<u>4 16</u>		_ (5)
5						4.10		
5				Hydronbytic Vegetati	on Indicato	re ·		
7				1 - Rapid Test for	Hydrophytic	Vegetatio	n	
8				2 Dominance T	~ 1000	, vegetatio		
0.				3 - Prevalence In	d_{OV} is < 3.0 ¹			
9 10					Δdantations	¹ (Evolain)		
10	80 -	Total Covor		Problematic Hydr	onhytic Veg	tation ¹ (Ex	(nicin	
Weeds Vine Stratum (Plateizes 20 ft	<u> </u>							
<u>woody vine Stratum</u> (Plot size: <u>30 ft.</u>)			be present unless dist	furbed or pro	na nyarolog oblematic	ly must	
					unseu er pre			
2		Total Cover		Hydrophytic				
% Bara Craund in Llark Stratum 20		- Total Cover		Vegetation		/ ~~	Na	v
				Present?	ř			<u>^</u>
Remarks:				1				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

ches) Color (moist) 9	<u>%</u> Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2 NA			. <u> </u>		Mulch	
2-12 10YR 2/1 10	00 None				Clay Loam	
					·	
					·	
vpe: C=Concentration D=Depletion	RM=Reduced Matrix	CS=Covered	t or Coated Sand G	irains	² Location: PL=Pore Lining	M=Matrix
dric Soils Indicators: (Applicable	to all LRRs, unless o	therwise not	ted.)	- anno	Indicators for Problem	natic Hydric Soils ³ :
Histosol (A1)	San	dy Gleyed Ma	atrix (S4)		1 cm Muck (A9) (L	.RR I, J)
Histic Epipedon (A2)	San	dy Redox (S5	5)		Coast Prairie Red	ox (A16) (LRR F, G, H)
_Black Histic (A3)	Strip	ped Matrix (S	56)		Dark Surface (S7)	(LRR G)
Hydrogen Sulfide (A4)	Loa	ny Mucky Mir	neral (F1)		High Plains Depre	ssions (F16)
Stratified Layers (A5) (LRR F)	Loa	ny Gleyed Ma	atrix (F2)		(LRR H outs	de of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)	Dep	leted Matrix (F3)		Reduced Vertic (F	18)
_ Depleted Below Dark Surface (A1	1)Red	ox Dark Surfa	ace (F6)		Red Parent Materi	al (TF2)
_ Thick Dark Surface (A12)	Dep	leted Dark Su	urface (F7)		Very Shallow Dark	Surface (TF12)
Sandy Mucky Mineral (S1)		ox Depressio	ons (F8)		Other (Explain in F	Remarks)
_ 2.5 cm Mucky Peat of Peat (S2) (I	LRR G, H)Higr				wetland hydrology	ic vegetation and
					unless disturbed o	r problematic.
strictive Layer (if observed):						
-						
Гуре:						
Type: Depth (inches): narks: positive indication of hydric soils wa	as observed.			Hyd	ric Soil Present?	Yes No <u>X</u>
Type: Depth (inches): narks: positive indication of hydric soils wa	as observed.			Hyd	ric Soil Present?	Yes No <u>X</u>
Type: Depth (inches): narks: positive indication of hydric soils wa	as observed.			Hyd	ric Soil Present?	Yes No <u>X</u>
Type: Depth (inches): arks: positive indication of hydric soils wa ROLOGY etland hydrology Indicators:	as observed.			Hyd	ric Soil Present?	Yes No <u>X</u>
Type: Depth (inches): narks: positive indication of hydric soils wa ROLOGY Reland hydrology Indicators: mary Indicators (minimum of one is i	as observed. required; check all that	apply)		Hyd	ric Soil Present?	Yes <u>No X</u>
Type: Depth (inches): narks: positive indication of hydric soils wa ROLOGY Etland hydrology Indicators: mary Indicators (minimum of one is n	is observed. required; check all tha Salt	apply) Crust (B11)		Hyd	ric Soil Present?	Yes No X
Type: Depth (inches): narks: positive indication of hydric soils wa ROLOGY etland hydrology Indicators: mary Indicators (minimum of one is i Surface Water (A1) High Water Table (A2)	as observed. required; check all tha Salt Aqu	apply) Crust (B11) atic Invertebri	ates (B13)	Hyd	ric Soil Present? <u>Secondary Indicators (r</u> Surface Soil Crack Sparsely Vegetate	Yes No X ninimum of two required) is (B6) d Concave Surface (B8)
Type: Depth (inches): narks: positive indication of hydric soils wather the soils wather the solution of hydric solution of h	required; check all that Salt Salt Aqu Hyd	apply) Crust (B11) atic Invertebr rogen Sulfide	ates (B13) • Odor (C1)	Hyd	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns	Yes No X ninimum of two required) (B6) d Concave Surface (B8) (B10)
Type: Depth (inches): positive indication of hydric soils wa ROLOGY etland hydrology Indicators: mary Indicators (minimum of one is r 	required; check all that Salt Aqu Hyd Dry	apply) Crust (B11) atic Invertebra ogen Sulfide Season Wate	ates (B13) • Odor (C1) er Table (C2)	Hyd	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph	Yes No X ninimum of two required) is (B6) d Concave Surface (B8) (B10) neres on Living Roots (C3)
Type: Depth (inches): positive indication of hydric soils wa ROLOGY etland hydrology Indicators: mary Indicators (minimum of one is r 	required; check all that Salt Aqu Hyd Dry- Ory- Ory-	apply) Crust (B11) atic Invertebr ogen Sulfide Season Wate lized Rhizosp	ates (B13) : Odor (C1) er Table (C2) oheres on Living Ro	bots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled)	Yes No X ninimum of two required) (B10) No X No X
Type: Depth (inches): positive indication of hydric soils wa positive indication of hydric soils wa ROLOGY etland hydrology Indicators: mary Indicators (minimum of one is n 	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh	apply) Crust (B11) atic Invertebri rogen Sulfide Season Wate ized Rhizosp ere not tilled	ates (B13) : Odor (C1) er Table (C2) wheres on Living Ro)	Hyd	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Sotuming Visible)	Yes No X ninimum of two required) (B6) d Concave Surface (B8) (B10) lerers on Living Roots (C3) (C8) (C0)
Type: Depth (inches): positive indication of hydric soils wa positive indication of hydric soils wa ROLOGY etland hydrology Indicators: mary Indicators (minimum of one is r Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) K5)	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir	apply) Crust (B11) atic Invertebra rogen Sulfide Season Wate ized Rhizosp are not tilled ence of Redu	ates (B13) c Odor (C1) er Table (C2) oheres on Living Ro) ucced Iron (C4) co (C7)	hyd bots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Commerchic Pacifi	Yes No X ninimum of two required) (B6) d Concave Surface (B8) (B10) teres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2)
Type: Depth (inches): marks: positive indication of hydric soils wather the soils wathe	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir re(B7) Oth	apply) Crust (B11) atic Invertebra rogen Sulfide Season Wate lized Rhizosp are not tilled ence of Redu Muck Surfac or (Evolain in	ates (B13) Odor (C1) er Table (C2) oheres on Living Ro) uced Iron (C4) se (C7) Remarks)	hyd bots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit EAC-Neutral Test	Yes No X ninimum of two required) (s (B6) d Concave Surface (B8) (B10) heres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5)
Type: Depth (inches): arks: positive indication of hydric soils wa ROLOGY tland hydrology Indicators: mary Indicators (minimum of one is r 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 Visible on Aerial Imager Water-Stained Leaves (B9)	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir ry (B7) Other	apply) Crust (B11) atic Invertebr rogen Sulfide Season Wate ized Rhizosp ere not tilled ence of Redu Muck Surfac er (Explain in	ates (B13) : Odor (C1) er Table (C2) oheres on Living Ro) uced Iron (C4) :e (C7) Remarks)	oots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humi	Yes No X ninimum of two required) is (B6) d Concave Surface (B8) (B10) ieres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) nocks (D7) (LRR F)
Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Construction of hydric soils water Construction of hydric soils water Construction of hydric soils water Construction of hydric soils water Construction of hydric soils water 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 Visible on Aerial Imager Water-Stained Leaves (B9)	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir ry (B7) Othe	apply) Crust (B11) atic Invertebra ogen Sulfide Season Wate ized Rhizosp ere not tilled ence of Redu Muck Surfac er (Explain in	ates (B13) : Odor (C1) er Table (C2) oheres on Living Ro) uced Iron (C4) ce (C7) Remarks)	bots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humn	Yes No X ninimum of two required) its (B6) d Concave Surface (B8) (B10) teres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) mocks (D7) (LRR F)
Type: Depth (inches): marks: positive indication of hydric soils wather ROLOGY stland hydrology Indicators: mary Indicators (minimum of one is r 	required; check all that required; check all that 	apply) Crust (B11) atic Invertebr ogen Sulfide Season Wate ized Rhizosp ere not tilled muck Surfac Muck Surfac er (Explain in	ates (B13) : Odor (C1) er Table (C2) wheres on Living Ro) uced Iron (C4) ce (C7) Remarks) (); N/A	hyd bots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humi	Yes No X ninimum of two required) is (B6) d Concave Surface (B8) (B10) teres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) mocks (D7) (LRR F)
Type: Depth (inches): positive indication of hydric soils wather positive indication of hydric soils wather ROLOGY stland hydrology Indicators: mary Indicators (minimum of one is r 	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir ry (B7) Other No X I	apply) Crust (B11) atic Invertebr rogen Sulfide Season Wate ized Rhizosp pre not tilled ence of Redu Muck Surfac er (Explain in Depth (inchess Depth (inchess	ates (B13) c Odor (C1) er Table (C2) wheres on Living Ro uced Iron (C4) ce (C7) Remarks) ce (C7) Remarks)	hyd hots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humi	Yes No X ninimum of two required) is (B6) d Concave Surface (B8) (B10) ieres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) mocks (D7) (LRR F)
Type: Depth (inches): positive indication of hydric soils wather positive indication of hydric soils wather positive indication of hydric soils wather ROLOGY etland hydrology Indicators: mary Indicators (minimum of one is n Surface Water (A1) 	as observed. required; check all that	apply) Crust (B11) atic Invertebra rogen Sulfide Season Wate ized Rhizosp are not tilled wence of Redu Muck Surfac er (Explain in Depth (inchess Depth (inchess Depth (inchess	ates (B13) • Odor (C1) er Table (C2) oheres on Living Ro) uced Iron (C4) ce (C7) Remarks) N/A N/A	oots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humi land Hydrology Present?	Yes No X ninimum of two required) is (B6) d Concave Surface (B8) (B10) neres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) nocks (D7) (LRR F)
Type: Depth (inches): arks: positive indication of hydric soils wa ROLOGY tland hydrology Indicators: mary Indicators (minimum of one is r 	required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir ry (B7) Othe No X [No X [No X]	apply) Crust (B11) atic Invertebra ogen Sulfide Season Wate lized Rhizosp ere not tilled ence of Redu Muck Surfac er (Explain in Depth (inches Depth (inches Depth (inches	ates (B13) 2 Odor (C1) 2 Table (C2) 2 otheres on Living Ro 3) 2 uced Iron (C4) 2 ce (C7) Remarks) 3): <u>N/A</u> 3): <u>N/A</u> 4): <u>N/A</u>	bots (C3)	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humn land Hydrology Present?	Yes No X ninimum of two required) is (B6) d Concave Surface (B8) (B10) ieres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) nocks (D7) (LRR F)
Type:	as observed. required; check all that required; check all that Salt Aqu Hyd Dry- Oxic (wh Pres Thir ry (B7) No X I I No X I I No X I I I I I I I I I I I I I I I I I I I	apply) Crust (B11) atic Invertebra rogen Sulfide Season Wate lized Rhizosp are not tilled ence of Redu Muck Surfac er (Explain in Depth (inches Depth (inches Depth (inches Depth (inches	ates (B13) • Odor (C1) er Table (C2) oheres on Living Ro) uced Iron (C4) ce (C7) Remarks) N/A N/A vious inspections), i	bots (C3) Wet	ric Soil Present? Secondary Indicators (r Surface Soil Crack Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humi land Hydrology Present?	Yes NoX ninimum of two required) is (B6) d Concave Surface (B8) (B10) neres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) nocks (D7) (LRR F) Yes NoX
Type: Depth (inches): arks: positive indication of hydric soils wa ROLOGY ettand hydrology Indicators: mary Indicators (minimum of one is r 	required; check all that required; check all that 	apply) Crust (B11) atic Invertebra ogen Sulfide Season Wate ized Rhizosp ere not tilled ence of Redu Muck Surfac Pare (Explain in Depth (inches Depth (inches Depth (inches	ates (B13) : Odor (C1) er Table (C2) oheres on Living Ro) uced Iron (C4) ce (C7) Remarks) :: <u>N/A</u> ;): <u>N/A</u> ;): <u>N/A</u> ;): <u>N/A</u>	hyd hots (C3) wet	ric Soil Present? Secondary Indicators (r Surface Soil Crach Sparsely Vegetate Drainage Patterns Oxidized Rhizosph (where tilled) Crayfish Burrows (Saturation Visible Geomorphic Posit FAC-Neutral Test Frost-Heave Humi land Hydrology Present?	Yes No X ninimum of two required) (S (B6) d Concave Surface (B8) (B10) teres on Living Roots (C3) C8) on Aerial Imagery (C9) on (D2) (D5) mocks (D7) (LRR F) Yes No X

Project/Site:			US	67		Count	ty:	Ell	is	Sampling Date:		May 1, 2019	9
Applicant/Owner:				TxDOT- Dallas	District		S	tate:	ТХ	Sampling Point:		DPB050	
Investigator(s):	Grahm	e Borch	ardt	and Ja	ason Voight		Section, Towr	ship, Ra	ange:		N/A		
Landform (hillslope,	terrace, et	tc.):		Depress	ion	L	Local relief (co	oncave,	convex, none):	Concave	Slope (%):	0	0-05
Subregion (LRR):			l	.RR J		Lat:	32.5622	20	Long:	-96.89008	Datum:	NAD 1983	(CONUS)
Soil Map Unit Name	:			Austin silf	ty clay, 1 to 3 p	percent s	slopes		N	VI Classification:		Riverine	
Are climatic / hydrolo	ogic condi	tions on	the site	e typical for this t	time of year?	Y	/es	No	(if no, e	xplain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No sign	ificantly	disturbed?		Are "Normal C	Circumstances" pre	sent? Yes	5 X	No
Are Vegetation	No	,Soil	Yes	,or Hydrology	No natu	rally pro	blematic?		(If needed, exp	plain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X Yes X	No No No	Is the Sampled Area within a Wetland?	Yes>	<u> </u>	No
Remarks:						
This point was determined to be w	vithin a wetland due	to the presence of all	3 wetland criteria.			
Datapoint taken in a recently deve	eloped wetland.					

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	pecies			
1. None Observed		<u> </u>		That Are OBL, FACW,	or FAC:		2	(A)
2.								
3.				Total Number of Domin	nant			
4.				Species Across All Stra	ata:		2	(B)
	=	Total Cover						
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. Salix nigra	45	Yes	FACW	That Are OBL, FACW,	or FAC:		100%	(A/B)
2.								
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mu	ltiply by:	
5.				OBL species	0	x 1 =	0	
	45 =	Total Cover		FACW species	125	x 2 =	250	
Herb Stratum (Plot size: 5 ft.)				FAC species	0	x 3 =	0	
1. Juncus marginatus	80	Yes	FACW	FACU species	0	x 4 =	0	
2.				UPL species	0	x 5 =	0	
3.				Column Totals:	125	(A)	250	(B)
4.				Prevalence Index = B/	4 =	2.00		
5.								
6.				Hydrophytic Vegetati	on Indicator	s:		
7.				1 - Rapid Test for	Hydrophytic	Vegetatio	n	
8.				X 2 - Dominance Te	st is >50%			
9.				X 3 - Prevalence Inc	lex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations	¹ (Explain)		
	80 =	Total Cover		Problematic Hydro	ophytic Vege	tation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlan	d hydrolog	y must	
1. None Observed				be present, unless dist	urbed or pro	blematic.		
2				Hydronbytic				
% Bare Ground in Herb Stratum 20	=	Total Cover		Vegetation	v	ne Y	No	
				Present?		<u> </u>		
Remarks:				<u>I</u>				

A positive indication of hydrophytic vegetation was observed (>50% of dominant species indexed as OBL, FACW, or FAC).

A positive indication of hydrophytic vegetation was observed (Prevalence Index is \leq 3.0).

S	О	IL

DPB050

rofile Description: (Describe to the depth	n needed to document the indicator or confirm the	e absence of indic	cators.)	
epth Matrix	Redox Features			
nches) Color (moist) %	Color (moist) % Type ¹	Loc ²	Texture	Remarks
0-18 10YR 2/1 100	None	0	Clay Loam	
		<u></u>		
			_	
ype: C=Concentration, D=Depletion, RM=F	Reduced Matrix, CS=Covered or Coated Sand Grains	s. ² Location	: PL=Pore Lining	, M=Matrix.
ydric Soils Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indi	cators for Proble	matic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)		1 cm Muck (A9) (LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S5)		Coast Prairie Red	dox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped Matrix (S6)		Dark Surface (S7	(LRR G)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)		High Plains Depr	essions (F16)
Stratified Layers (A5) (LRR F)	Loamy Gleyed Matrix (F2)		(LRR H outs	side of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)	Depleted Matrix (F3)		Reduced Vertic (F18)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		Red Parent Mate	rial (TF2)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)		Very Shallow Dar	rk Surface (TF12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	x	Other (Explain in	Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G	High Plains Depressions (F16)	³ Ind	icators of hydrophy	ytic vegetation and
5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)		wetland hydrolog	y must be present,
			unless disturbed	or problematic.
T				
				Vee V Ne
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pre-	ed. resence of inundation, FACW and OBL vegetation sp	Hydric Soil F	Present?	Yes X No
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland.	red. resence of inundation, FACW and OBL vegetation sp	Hydric Soil F	Present?	Yes X No
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY	ed. resence of inundation, FACW and OBL vegetation sp	Hydric Soil F	Present?	Yes X No
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY	ed. resence of inundation, FACW and OBL vegetation sp	Hydric Soil F	Present?	Yes X No
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY /etland hydrology Indicators: rimary Indicators (minimum of one is require	ed. resence of inundation, FACW and OBL vegetation sp ed: check all that apply)	Hydric Soil F	Present? itive wetland bound	Yes X No
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY /etland hydrology Indicators: rimary Indicators (minimum of one is require X Surface Water (A1)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11)	Hydric Soil F	Present? itive wetland bound	Yes X No
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY /etland hydrology Indicators: rimary Indicators (minimum of one is require XSurface Water (A1) High Water Table (A2)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13)	Hydric Soil F	Present? itive wetland bound itive wetland bound ondary Indicators (Surface Soil Crac Sparsely Vegetat	Yes X No dary. This is a recently developed (minimum of two required) :ks (B6) ed Concave Surface (B8)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pi etland. DROLOGY /etland hydrology Indicators: rimary Indicators (minimum of one is require XSurface Water (A1) High Water Table (A2) XSaturation (A3)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Hydric Soil F	ondary Indicators of Sparsely Vegetat	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require XSurface Water (A1) High Water Table (A2) XSaturation (A3) Water Marks (B1)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drv-Season Water Table (C2)	Hydric Soil F	ondary Indicators of Sparsely Vegetat Orange Pattern Oxidized Bhizost	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) otheres on Living Roots (C3)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require X_Surface Water (A1) High Water Table (A2) XSaturation (A3) Water Marks (B1) Setiment Deposits (B2)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Bhizospheres on Living Boots (Hydric Soil F pecies, and a definit	ondary Indicators of Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY /etland hydrology Indicators: rimary Indicators (minimum of one is require X_Surface Water (A1) High Water Table (A2) X_Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B2)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (Hydric Soil F pecies, and a definition	ondary Indicators of Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled)	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) obsers on Living Roots (C3) (C8)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require XSurface Water (A1) High Water Table (A2) XSaturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Alage Mat er cust (B4)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Brassnan of Reduced Iran (C1)	Hydric Soil F pecies, and a definition	ondary Indicators of Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ted Concave Surface (B8) s (B10) wheres on Living Roots (C3) (C8)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Vater Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Katalogal (B5)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Presence of Reduced Iron (C4) Thin Murk Surface (C7)	Hydric Soil F pecies, and a definition	ondary Indicators Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) tition (C2)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Vater Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Evolution in Remoder)	Hydric Soil F pecies, and a definition	ondary Indicators Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) + (C5)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	Hydric Soil F pecies, and a definition	ondary Indicators ondary Indicators Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tes	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) mmcdia (D3) (LBB 5)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY //etland hydrology Indicators: rimary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	Hydric Soil F	ondary Indicators ondary Indicators Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tes Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) mmocks (D7) (LRR F)
Type:	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	Hydric Soil F pecies, and a definition	ondary Indicators ondary Indicators Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tes Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY /etland hydrology Indicators: rrimary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) ield Observations:	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots ((where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	Hydric Soil F	ondary Indicators (ondary Indicators (Surface Soil Crace Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tess Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F)
Type: Depth (inches): marks: positive indication of hydric soil was observ oils were assumed to be hydric due to the pr etland. DROLOGY /etland hydrology Indicators: rrimary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) ield Observations: urface Water Present? Yes X Not	ed. resence of inundation, FACW and OBL vegetation sp ed; check all that apply) Salt Crust (B11)Aquatic Invertebrates (B13)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)Oxidized Rhizospheres on Living Roots ((where not tilled)Presence of Reduced Iron (C4)Thin Muck Surface (C7)Other (Explain in Remarks) pDepth (inches):3	Hydric Soil F	ondary Indicators (ondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tes Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F)
Type:	ed. resence of inundation, FACW and OBL vegetation spread ed; check all that apply)	Hydric Soil F pecies, and a defini (C3)	ondary Indicators (ondary Indicators (Surface Soil Crac Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tes Frost-Heave Hun	Yes X No (minimum of two required) (minimum of two required) (ks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) mocks (D7) (LRR F)
Type:	ed. resence of inundation, FACW and OBL vegetation spread ed; check all that apply)	Hydric Soil F pecies, and a defini (C3)	ondary Indicators (ondary Indicators (Surface Soil Crace Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tess Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F) Yes X No
Type:	ed. resence of inundation, FACW and OBL vegetation spectrum ed; check all that apply)	Hydric Soil F	ondary Indicators (ondary Indicators (Surface Soil Crace Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tes Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F) Yes X No
Type:	ed. resence of inundation, FACW and OBL vegetation spectrum ed; check all that apply)	Hydric Soil F	ondary Indicators (ondary Indicators (Surface Soil Crace Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tess Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F) Yes X No
Type:	ed. resence of inundation, FACW and OBL vegetation spectrum ed; check all that apply)	Hydric Soil F	ondary Indicators (ondary Indicators (Surface Soil Crace Sparsely Vegetat Drainage Pattern Oxidized Rhizosp (where tilled) Crayfish Burrows Saturation Visible Geomorphic Posi FAC-Neutral Tess Frost-Heave Hun	Yes X No dary. This is a recently developed (minimum of two required) cks (B6) ed Concave Surface (B8) s (B10) oheres on Living Roots (C3) (C8) e on Aerial Imagery (C9) ition (D2) t (D5) nmocks (D7) (LRR F) Yes X No

Project/Site:			US	67		Cou	nty:	Dalla	as	Sampling Date:		May 1, 2019	
Applicant/Owner:				TxDOT- Dallas	District			State:	ТХ	Sampling Point:		DPB053	
Investigator(s):	Grahm	ne Borch	ardt	and Ja	ason Voight		Section, Tov	vnship, Ra	inge:		N/A		
Landform (hillslope,	terrace, e	etc.):		Plain			Local relief (concave,	convex, none):	None	Slope (%):	00-	05
Subregion (LRR):			L	.RR J		Lat:	32.54	939	Long:	-96.97421	Datum:	NAD 1983 (C	ONUS)
Soil Map Unit Name	: <u> </u>			Stephen si	lty clay, 1 to	4 percer	nt slopes		NV	VI Classification:		Upland	
Are climatic / hydrolo	ogic condi	itions on	the site	e typical for this t	ime of year	?	Yes	No	(if no, e	xplain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No si	gnificantl	y disturbed?		Are "Normal C	ircumstances" pre	sent? Yes	X N	0
Are Vegetation	No	,Soil	No	,or Hydrology	No na	aturally p	roblematic?		(If needed, exp	olain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	x x x	Is the Sampled Area within a Wetland?	Yes	No	<u>x</u>
Remarks:				·			
This point was determined not to b	be within a wetla	nd due to the	lack of all t	hree wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute Dominan	Indicator	Dominance Test work	sheet:			
Tree Stratum (Plot size: 30 ft.)	% cover Species	? Status	Number of Dominant S	pecies			
1. None Observed			That Are OBL, FACW,	or FAC:		0	(A)
2			- , - ,				
3			Total Number of Domin	ant			
3	·		Species Across All Stra	an. tar		2	(B)
т	- Total Covor	<u> </u>	Opecies Across Air otra	ild.		2	(0)
Cardina (Chards Chartson (Distaines) 45 ft			Demonst of Demoistant O	!			
Sapling/Snrub Stratum (Plot size: 15 ft.)		Percent of Dominant S	pecies		•	
1. None Observed	<u> </u>		That Are OBL, FACW,	of FAC:		U	(A/B)
2			Description of the description				
3			Prevalence index wor	KSneet:			
4	<u> </u>		Total % Cove	er of:	Mu	Itiply by:	
5			OBL species	0	x1=	0	
	= Total Cover		FACW species	0	x 2 =	0	
Herb Stratum (Plot size: 5 ft.)			FAC species	0	x 3 =	0	
1. Smilax bona-nox	15 No	FACU	FACU species	60	x 4 =	240	
2. Rubus trivialis	<u>15</u> No	FACU	UPL species	20	x 5 =	100	
3. Verbena halei	20 Yes	UPL	Column Totals:	80	(A)	340	(B)
4. Solidago altissima	30 Yes	FACU	Prevalence Index = B/A	\ =	4.25		
5.							
6.			Hydrophytic Vegetatio	on Indicato	ors:		
7.			1 - Rapid Test for	Hvdrophvtid	c Vegetatio	n	
8.			2 - Dominance Te	st is >50%	Ū		
9			3 - Prevalence Ind	ex is $\leq 3.0^1$			
10			4 - Morphological	Adaptations	¹ (Explain)		
10	80 = Total Cover		Problematic Hydro	nhvtic Veg	etation ¹ (Ex	nlain)	
Wessley/ins. Charter (Distring) 20.4							
Woody vine Stratum (Plot size: 30 ft.)		be present unless dist	i and wetial	na nyarolog oblematic	y must	
1. None Observed	<u> </u>				biomato.		
2			Hydrophytic				
	= Total Cover		Vegetation				
% Bare Ground in Herb Stratum 20			Present?	۱	(es	No	X
Remarks:			FACULATINA				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

Profile Description: (Describe to the depth ne	eded to document the	indicator or confirm	he absence	of indicators.)	
Depth Matrix	Rede	ox Features			
(inches) Color (moist) % C	olor (moist) %	Type ¹	Loc ²	Texture	Remarks
0-16 10YR 2/2 100	None			Clay Loam	
		. <u></u> .		. <u></u>	
		- <u></u> -			
¹ Type: C=Concentration. D=Depletion. RM=Redu	uced Matrix. CS=Covere	d or Coated Sand Gra	ns. ² l	_ocation: PL=Pore Linin	ng. M=Matrix.
Hydric Soils Indicators: (Applicable to all LRR	s, unless otherwise no	oted.)		Indicators for Prob	lematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed M	latrix (S4)		1 cm Muck (A9)) (LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S	5)		Coast Prairie R	edox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped Matrix ((S6)		Dark Surface (S	S7) (LRR G)
Hydrogen Sulfide (A4)	Loamy Mucky M	ineral (F1)		High Plains Der	pressions (F16)
Stratified Lavers (A5) (I BB E)	Loamy Gleved M	Aatrix (E2)		/I PP H or	utside of MI BA 72 & 73)
	Donloted Metrix	(E2)		Poducod Vortio	
		(1 3) face (E6)			
Depleted Below Dark Surface (A11)	Kedox Dark Sur	iace (Fo)			$ \frac{1}{2} 1$
I hick Dark Surface (A12)	Depleted Dark S	Surface (F7)		Very Shallow D	vark Surface (TF12)
Sandy Mucky Mineral (S1)	Redox Depression	ons (F8)		Other (Explain i	in Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	High Plains Dep	ressions (F16)		Indicators of hydrop	phytic vegetation and
5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 a	& 73 of LRR H)		wetland hydrold	ogy must be present,
			-	uniess disturbe	d or problematic.
Restrictive Layer (if observed):					
Туре:					
Depth (inches):			Hydri	c Soil Present?	Yes No <u>X</u>
emarks: No positive indication of hydric soils was observed	d.		•		
emarks: No positive indication of hydric soils was observed DROLOGY	d.		• 		
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators:	d.				
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl	d. heck all that apply)			Secondary Indicators	s (minimum of two required)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; c Surface Water (A1)	d. <u>heck all that apply)</u> Salt Crust (B11)			<u>Secondary Indicators</u> Surface Soil Cr.	s (minimum of two required)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2)	d. heck all that apply) Salt Crust (B11) Aquatic Inverteb	rates (B13)		Secondary Indicators Surface Soil Cr. Sparsely Veget	s (minimum of two required) acks (B6) ated Concave Surface (B8)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3)	d. heck all that apply) Salt Crust (B11) Aquatic Inverteb Hvdrogen Sulfid	rates (B13) e Odor (C1)		Secondary Indicators Surface Soil Cr Sparsely Veget Drainace Pattel	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	d. heck all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Drv-Season Wat	rates (B13) e Odor (C1) ter Table (C2)		Secondary Indicators Surface Soil Cr Sparsely Veget Drainage Pattel Oxidized Rbizos	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Boots (C3)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	d. heck all that apply) Salt Crust (B11) Aquatic Inverteb Hydrogen Sulfid Dry-Season Wat Oxidized Rhizos	rates (B13) e Odor (C1) ter Table (C2)		Secondary Indicators Surface Soil Cr. Sparsely Veget Drainage Patter Oxidized Rhizo:	s (minimum of two required) acks (B6) ated Concave Surface (B8) rns (B10) spheres on Living Roots (C3)
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Project/Site:			US	67		Cour	nty:	Dalla	as	Sampling Date:	Ν	May 1, 2019	
Applicant/Owner:				TxDOT- Dallas	District			State:	ТХ	Sampling Point:		DPB054	
Investigator(s):	Grahm	e Borch	ardt	and Ja	ason Voight		Section, Tow	vnship, Ra	nge:		N/A		
Landform (hillslope,	terrace, e	tc.):		Plain			Local relief (concave, o	convex, none):	None	Slope (%):	00-05	
Subregion (LRR):			L	_RR J		Lat:	32.548	873	Long:	-96.97550	Datum:	NAD 1983 (CONUS)	
Soil Map Unit Name	:			Dalco d	clay, 1 to 3 pe	rcent sl	opes		N	WI Classification:		Upland	
Are climatic / hydrolo	ogic condi	tions on	the site	e typical for this t	time of year?		Yes	No	(if no, e	xplain in Remarks.)		
Are Vegetation	No	,Soil	No	,or Hydrology	No sigr	nificantly	y disturbed?		Are "Normal C	Circumstances" pres	sent? Yes	X No	
Are Vegetation	No	,Soil	No	,or Hydrology	No nat	urally pr	oblematic?		(If needed, exp	plain any answers i	n Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	x x x	Is the Sampled Area within a Wetland?	Yes	<u>No X</u>	_
Remarks:				•			
This point was determined not to b	oe within a wetla	and due to the	lack of all t	hree wetland criteria.			

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
Tree Stratum (Plot size: 30 ft.)	% cover	Species?	Status	Number of Dominant S	Species			
1. None Observed				That Are OBL, FACW,	or FAC:		1	(A)
2.								
3.				Total Number of Domi	nant			
4.				Species Across All Str	ata:		8	(B)
		= Total Cover						_ ` '
Sapling/Shrub Stratum (Plot size: 15 ft.)			Percent of Dominant S	pecies			
1. None Observed				That Are OBL, FACW,	or FAC:		13%	(A/B)
2.								
3.				Prevalence Index Wo	rksheet:			
4.				Total % Cov	er of:	Mu	Itiply by:	
5.				OBL species	0	x 1 =	0	_
		= Total Cover		FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft.)				FAC species	10	x 3 =	30	_
1. Lolium perenne	25	Yes	FACU	FACU species	25	x 4 =	100	_
2. Bromus Japonicus	15	Yes	UPL	UPL species	65	x 5 =	325	_
3. Avena fatua	10	Yes	UPL	Column Totals:	100	(A)	455	(B)
4. Oenothera curtiflora	10	Yes	UPL	Prevalence Index = B/	A =	4.55		
5. Castilleja indivisa	10	Yes	FAC					
6. Lupinus texensis	10	Yes	UPL	Hydrophytic Vegetati	on Indicator	's:		
7. Cirsium texanum	10	Yes	UPL	1 - Rapid Test for	Hydrophytic	Vegetation	ı	
8. Gaillardia pulchella	10	Yes	UPL	2 - Dominance Te	est is >50%			
9.				3 - Prevalence Inc	dex is $\leq 3.0^1$			
10.				4 - Morphological	Adaptations	¹ (Explain)		
	100	= Total Cover		Problematic Hydr	ophytic Vege	tation ¹ (Ex	plain)	
Woody Vine Stratum (Plot size: 30 ft.)			¹ Indicators of hydric so	il and wetlan	d hydrolog	y must	
1. None Observed				be present, unless dist	urbed or pro	blematic.	-	
2.								
		= Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum 0				Present?	Y	es	No	х
Remarks:								
No positive indication of hydrophytic vegetation w	an abaanvad	(>EOV/ of dominant	t anagiog indexed og l	EACLL or drior)				

No positive indication of hydrophytic vegetation was observed (≥50% of dominant species indexed as FACU or drier).

DPB054

Profile Description: (Describe to the depth nee	eded to docum	ent the inc	licator or confirm	the absence	of indicators.)	
Depth Matrix		Redox	Features			
(inches) Color (moist) % Color	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-20 10YR 3/2 100	None				Clay Loam	
					. <u> </u>	
¹ Type: C=Concentration, D=Depletion, RM=Redu	uced Matrix. CS:	=Covered o	or Coated Sand Gr	ains. 2	Location: PL=Pore Linin	g. M=Matrix.
Hydric Soils Indicators: (Applicable to all LRR	Rs, unless other	rwise note	d.)		Indicators for Prob	lematic Hydric Soils ³ :
Histosol (A1)	Sandy G	Bleved Matr	ix (S4)		1 cm Muck (A9)	(LRR I, J)
Histic Epipedon (A2)	Sandy R	Redox (S5)	()		Coast Prairie R	edox (A16) (LRR F, G, H)
Black Histic (A3)	Stripped	Matrix (S6	;)		Dark Surface (S	57) (LRR G)
Hydrogen Sulfide (A4)		Aucky Mine	eral (F1)		High Plains Der	pressions (E16)
Stratified Lavers (A5) (LRR F)		Cloved Mat	riv (F2)		(I RR H ou	itside of MI BA 72 & 73)
	Loanly C		11A (1 Z)			(510)
		u iviatrix (F3	о) (ГС)			
Depleted Below Dark Surface (A11)		Jark Surfac	e (F0)		Ked Parent Mat	
I NICK Dark Surface (A12)	Depleted	a Dark Surf			Very Shallow D	ark Surface (TF12)
Sandy Mucky Mineral (S1)	Redox D	Depressions	s (F8)		Other (Explain i	n Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	High Pla	ains Depres	sions (F16)		Indicators of hydrop	hytic vegetation and
5 cm Mucky Peat or Peat (S3) (LRR F)	(ML	LRA 72 & 7	'3 of LRR H)		wetland hydrolo	gy must be present,
					uniess disturbed	d or problematic.
Restrictive Layer (if observed):						
Туре:						
Depth (inches):				Hydr	ic Soil Present?	Yes No <u>X</u>
emarks: No positive indication of hydric soils was observed	d.					
emarks: No positive indication of hydric soils was observed DROLOGY	d.					
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators:	d.					
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required: cl	d. heck all that app	bly)			Secondary Indicators	s (minimum of two required)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1)	d. <u>heck all that app</u> Salt Cru	bly) st (B11)			<u>Secondary Indicators</u> Surface Soil Cra	s (minimum of two required)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2)	d. heck all that app Salt Cru Aquatic	bly) st (B11) Invertebrat	es (B13)		<u>Secondary Indicators</u> Surface Soil Cra Sparsely Veget	s (minimum of two required) acks (B6) ated Concave Surface (B8)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3)	d. heck all that app Salt Cru Aquatic Hvdroge	oly) st (B11) Invertebrat en Sulfide C	es (B13) Ddor (C1)		Secondary Indicators Surface Soil Cra Sparsely Veget Drainage Patter	s (minimum of two required) acks (B6) ated Concave Surface (B8) ms (B10)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	d. heck all that app Salt Cru Aquatic Hydroge Drv-Sea	oly) st (B11) Invertebrat en Sulfide C son Water	es (B13) Ddor (C1) Table (C2)		Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Bhizos	s (minimum of two required) acks (B6) ated Concave Surface (B8) ms (B10) soberes on Living Boots (C3)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	d. heck all that app Salt Cru Aquatic Hydroge Dry-Sea Oxidizer	bly) st (B11) Invertebrat en Sulfide C son Water	es (B13) Ddor (C1) Table (C2)	ts (C3)	Secondary Indicators Surface Soil Cra Sparsely Veget: Drainage Patter Oxidized Rhizos	s (minimum of two required) acks (B6) ated Concave Surface (B8) ms (B10) spheres on Living Roots (C3)
emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	d. heck all that app Salt Cru Aquatic Hydroge Dry-Sea Oxidizec (uterso	bly) st (B11) Invertebrat en Sulfide C son Water d Rhizospho not tilled)	es (B13))dor (C1) Table (C2) eres on Living Roc	ts (C3)	Secondary Indicators Surface Soil Cra Sparsely Veget Drainage Patter Oxidized Rhizos (where tilled)	s (minimum of two required) acks (B6) ated Concave Surface (B8) ms (B10) spheres on Living Roots (C3)
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emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl 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) Numerical Visible on Acriel Imagent (B7)	d. heck all that app Salt Cru Aquatic Hydroge Dry-Sea Oxidizec (where n Presenc Thin Mu	bly) st (B11) Invertebrat en Sulfide C son Water d Rhizospho not tilled) ce of Reduc ck Surface	es (B13) Ddor (C1) Table (C2) eres on Living Roc ed Iron (C4) (C7)	ts (C3)	Secondary Indicators Surface Soil Cra Sparsely Veget Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po	s (minimum of two required) acks (B6) ated Concave Surface (B8) ms (B10) spheres on Living Roots (C3) vs (C8) le on Aerial Imagery (C9) sition (D2)
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emarks: No positive indication of hydric soils was observed DROLOGY Wetland hydrology Indicators: Primary Indicators (minimum of one is required; cl 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 Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Saturation Present? Yes No	d. heck all that app Salt Cru Aquatic Hydroge Dry-Sea Oxidizec (where r Presenc Thin Mu Other (E X Dept X Dept X Dept X Dept X	bly) st (B11) Invertebrate on Sulfide C son Water d Rhizosphe not tilled) te of Reduc ck Surface :xplain in R h (inches): h (inches): h (inches):	es (B13) Ddor (C1) Table (C2) eres on Living Roc ed Iron (C4) (C7) emarks) <u>N/A</u> <u>N/A</u> <u>N/A</u>	ts (C3) Wetla available:	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Patter Oxidized Rhizos (where tilled) Crayfish Burrow Saturation Visib Geomorphic Po FAC-Neutral Te Frost-Heave Hu	s (minimum of two required) acks (B6) ated Concave Surface (B8) ms (B10) spheres on Living Roots (C3) /s (C8) /s (C8) /s (C8) /s (C8) /s (C9) /s (D5) /s (D5) /s (mmocks (D7) (LRR F)
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Attachment 3 – Historical Aerial Photographs





US 67 at Lake Ridge Parkway ASCS 03/28/1942







US 67 at Lake Ridge Parkway AMS 01/05/1953







US 67 at Lake Ridge Parkway ASCS 05/07/1958







US 67 at Lake Ridge Parkway USGS 10/19/1968







US 67 at Lake Ridge Parkway ASCS 02/13/1972













US 67 at Lake Ridge Parkway TXDOT 05/10/1984







US 67 at Lake Ridge Parkway USGS 02/19/1995





Ä	US 67 at Lake Ridge Parkway
W - E	USDA
V	2005
5	





\mathbf{A}	US 67 at Lake Ridge P
	USDA
∇	2010
S	





$\hat{\mathbf{A}}$	US 67 at Lake Ridge Parkway
Z ← E	USDA
V	2016
5	



Attachment 4 - Site Photographs


Photo 1: Wetland 1, Palustrine Scrub-Shrub (PSS) wetland. Photo taken in May 2019.



Photo 2: Wetland 2, Palustrine Emergent (PEM) wetland. Photo taken in January 2019.



Photo 3: Wetland 3, PEM wetland. Photo taken in January 2019.



Photo 4: Stream 1, photo looking downstream. Photo taken in May 2019.



Photo 5: Photo facing north, looking at maintained ROW near DPA008. Photo taken in January 2019



Photo 6: Photo facing east, looking into a shrubland pasture near DPA021. The soil is disturbed from gravel present along the roadway. Photo taken in January 2019.



Photo 7: Photo facing south, looking into a shrubland pasture near DPB053. Photo taken in May 2019.



Photo 8: Photo facing east towards the edge of property boundary near DPA023. Photo taken in January 2019.