

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

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 19-MAY-2021, ORM Number: SPA-2021-00099

Associated JDs: N/A or ORM numbers and identifiers (e.g. HQS-2020-00001-MSW-MITSITE) Review Area Location¹: 4192 Foreign Trade Zone Blvd.

State/Territory: CO City: Colorado Springs, 80977 County/Parish/Borough: El Paso County Center Coordinates of Review Area: Latitude 38.776882 Longitude -104.668837

II. FINDINGS

B.

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

X	The review area is comprised entirely of dry land (i.e., there are no waters or water features,
	including wetlands, of any kind in the entire review area). Rationale: An on-site visit was
	conducted with the applicant's consultant on April 9, 2021 to conduct a field wetland delineation
	of the Survey Area. During the wetland delineation, one linear water feature (S-1), and an
	associated drainage area with an ephemeral flow regime, was identified on the southeast side
	of the Survey Area. The drainage area associated with S-1 is located on the west side of
	Foreign Trade Zone Blvd (Figure 3). Outside of the Survey Area, S-1 continues east under the
	road via a concrete bridge (Photo 3 in Appendix C). The feature on site was characterized as
	an Ephemeral flow regime that provides flow only after precipitation events and lacking a
	connection to groundwater. No ordinary high-water mark or stream bed was observed.
	There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction
	within the review area (complete table in section II.B).
	There are "waters of the United States" within Clean Water Act jurisdiction within the review
	area (complete appropriate tables in section II.C).

Rivers and Harbors Act of 1899 Section 10 (\$ 10)2

area (complete table in section II.D).

•	WC13 and nic		1000 00011011 10 (3 10)	
	§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
	N/A	N/A	N/A	N/A

There are waters or water features excluded from Clean Water Act jurisdiction within the review

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)³

(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A	N/A	N/A	N/A

Tributaries ((a)(2) waters):

(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A	N/A	N/A	N/A

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

¹ Map(s)/Figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a requestfor an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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

(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A	N/A	N/A	N/A

Adjacent wetlands ((a)(4) waters):

(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A	N/A	N/A	N/A

D. Excluded Waters or Features

Excluded waters $((b)(1) - (b)(12))^4$:

Exclusion Name	Exclusion Size	Exclusion⁵	Rationale for Exclusion Determination
N/A	N/A	N/A	N/A

III. SUPPORTING INFORMATION

- A. **Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.
 - **X** Information submitted by, or on behalf of, the applicant/consultant: *Title(s)* and date(s). This information is not sufficient for purposes of this AJD.

Rationale: The information provided by the applicant/consultant is partial insufficiency since the National Wetland Inventory mapping indicates aquatic resources requiring a site visit. Data sheets prepared by the Corps: Title(s) and/or date(s).

X Photographs: (Photo 3 in Appendix C, aerial, and NWI aerial) Consultant letter provided 05-May-21.

X Corps Site visit(s) conducted on: Date(s). 9-Apr-2021

Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).

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

USDA NRCS Soil Survey: Title(s) and/or date(s).

X USFWS NWI maps: Title(s) and/or date(s). 19-Ma-21

USGS topographic maps: Title(s) and/or date(s).

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

B. Typical year assessment(s): N/A

C. **Additional comments to support AJD:** The onsite visit and the wetland delineation confirmed no aquatic resources and/or wetlands are present within the Study Area.

¹ Map(s)/Figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.

⁴ Some available waters are the conditional to the AJD form upleas a requestor appair finely applicable and the AJD form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



May 5, 2021

Tony Martinez Regulatory Project Manager Southern Colorado Regulatory Branch 201 W. 8th Street Pueblo, CO 81003

Re: Wetland Delineation Report

Horizon Substation

Dear Mr. Martinez:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) was retained by Colorado Springs Utilities (Utilities) to provide wetland delineation services for the proposed Advanced Technology Campus Master Plan (Project) located at the southwest corner of Drennan Road and Foreign Trade Zone Boulevard, near the Colorado Springs Airport (Figure 1, Appendix A). The following sections provide the methods, results, and conclusion of the wetland delineation conducted as part of the Project.

Introduction

Utilities wishes to develop the approximately 160-acre parcel of land located at 8655 Drennan Road, in El Paso County, State of Colorado. The Project is currently proceeding through the City of Colorado Springs annexation process. The Colorado Springs Utilities Advanced Technology Campus (ATC) Master Plan will include an ATC laboratory building, the new Horizon Substation, a potential future service center building, a solar array, a microgrid platform, a potential hydrogen cell facility, an aeroderivative facility, potentially three smaller lab/office buildings, and a potential Innovation and Collaboration Park for Utility and City employee use. The Project is to be rezoned to PF (Public Facility) within the City of Colorado Springs.

The Project has the potential to impact wetlands or other water bodies that may be under the jurisdiction of the U.S. Army Corps of Engineers (USACE) as designated by Section 404 of the Clean Water Act. Burns & McDonnell conducted a wetland delineation at the Project to evaluate for the presence of wetlands and other water bodies, including streams, drainages, and ponds. The delineation was conducted based on the proposed Project layout (Survey Area). The Survey Area totaled approximately 160 acres.

Methods

The following sections summarize the methods used for the review of existing data and the on-site wetland delineation.

Desktop Data Review

Burns & McDonnell reviewed the following available background information for the Survey Area prior to conducting the delineation:

• U.S. Geological Survey (USGS) 7.5-minute topographic map



May 5, 2021 Page 2

- U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) 2020 Soil Survey
- U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) data
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)
- National Agriculture Imagery Program (NAIP) aerial photography.

Wetland presence based solely on NWI data cannot be assumed to be an accurate assessment of potentially occurring jurisdictional wetlands and water bodies. Wetland identification criteria differ between the USFWS and the USACE. As a result, wetlands shown on an NWI map may not be under the jurisdiction of the USACE, and all USACE jurisdictional wetlands are not always included in NWI data. Therefore, a wetland delineation was conducted to identify any wetlands or other water bodies that may be present within the Survey Area.

On-site Delineation

Burns & McDonnell conducted the on-site delineation April 9, 2021. The delineation was completed in accordance with the 1987 Corps of Engineers Wetland Delineation Manual (1987 Manual) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region – Version 2.0 (Regional Supplement). These two publications provide the basis for identifying and delineating the boundaries of wetlands and provide the methodologies approved by the USACE for performing wetland delineations. To qualify as a wetland, positive indicators of three criteria: hydrophytic vegetation, wetland hydrology, and hydric soils, must be present. For more information on what qualifies as a positive indicator of hydrophytic vegetation, wetland hydrology, or hydric soil, please refer to the above-mentioned publications.

Wetland Determination Data Forms from the Regional Supplement were completed to characterize the Survey Area (Appendix B). Vegetation, soils, and hydrologic indicators were recorded at each of these sample plots. Locations of sample plots and other identified features were surveyed using a sub-meter accurate global positioning system (GPS) unit. Natural color photographs were taken on-site and are included in Appendix C.

Results

The following sections describe the results of the existing data review and the completed wetland delineation.

Desktop Data Review

The existing USGS topographic maps were reviewed by Burns & McDonnell wetland personnel to evaluate potential wetlands and water bodies within the Survey Area (Figure 2). The USGS topographic maps indicate the Survey Area is located on dry pastureland. The NWI data indicates that one riverine wetland (R4SBC) bisects the Survey Area from northwest to southeast, and a freshwater pond (PUSA) is on the southwestern edge of the Survey Area (Figure 2).

The NRCS SSURGO digital data indicates that the portions of seven soil map units are located within the Survey Area, (*) denotes soil type with hydric inclusions.



May 5, 2021 Page 3

- Ascalon sandy loam*, 1 to 3 percent slopes- 32.7% of Survey Area
- Vona sandy loam, warm, 0 to 3 percent slopes- 16.5% of Survey Area
- Truckton sandy loam*, 0 to 3 percent slopes- 15.6% of Survey Area
- Razor-Midway complex- 14.5% of Survey Area
- Ascalon sandy loam, 3 to 9 percent slopes- 7.8% of Survey Area
- Nelson-Tassel fine sandy loams*, 3 to 18 percent slopes-7.4% of Survey Area
- Truckton sandy loam, 3 to 9 percent slopes- 5.5% of Survey Area

The 2020 aerial photography indicates that the Survey Area consists of pasture (Figure 3). The Survey Area is mapped as a FEMA Flood Hazard Zone X: Area of Minimal Flood Hazard.

On-site Delineation Field Survey

On April 9, 2021, a Burns & McDonnell wetland scientist conducted a wetland delineation of the Survey Area. The wetland scientist recorded the location and extent of features identified within the Survey Area. The land cover and delineated wetlands and other waterbodies from the site visits are discussed in detail below.

Vegetation

The Survey Area was comprised of a pasture. Typical vegetation in upland areas of the Survey Area included buffalo grass (*Bouteloua dactyloides*), Kochia (*Kochia scoparia*), and common dandelion (*Taraxacum officinale*).

Soils

Typical upland soils were brown (7.5YR), dry and no redoximorphic features were present.

Hvdrology

The primary source of hydrology for the Survey Area was overland flow.

Delineated Areas

One linear water feature was identified during the on-site wetland delineation. The linear feature is described below. A sample plots was taken near the NWI mapped wetland on the western portion of the Survey Area (Figure 3). Wetland Determination Data Forms and photographs of the sample plots are included in Appendix B and C. Natural color photographs documenting the Survey Area are in Appendix C.

Water Feature

During the wetland delineation, one linear water feature (S-1), and an associated drainage area with an ephemeral flow regime, was identified on the southeast side of the Survey Area. The drainage area associated with S-1 is located on the west side of Foreign Trade Zone Blvd (Figure 3). Outside of the Survey Area, S-1 continues east under the road via a concrete bridge (Photo 3 in Appendix C).

Ephemeral flow is characterized by flow only after precipitation events and lacking a connection to groundwater.



May 5, 2021 Page 4

The drainage area associated with S-1 was incised and eroded (Photo C-1). The widest part of this drainage was approximately 50 feet. The area was dominated by willow (*Salix* spp.), and Koshia and the hydrophytic vegetation indicators were not met in this area, so a soil pit was not dug. An ordinary highwater mark was not visible. The bank height was approximately 5 feet.

Potential Impacts to Waters of the U.S.

The delineated waters do not appear to have a hydrological connection to downstream waters of the U.S. According to the April 21, 2020 published *Navigable Waters Protection Rule: Definition of Waters of the United States*, ephemeral streams are excluded from the definition of "waters of the United States." The final rule, adopted by the Colorado District Court on March 2, 2021, specifically clarifies that waters of the United States do not include ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools. However, official jurisdictional determinations can only be made by USACE.

Conclusion

Burns & McDonnell conducted a wetland delineation to identify and map wetlands and other waters within the Survey Area. One linear water feature with an associated drainage was identified during the on-site wetland delineation. The delineated waters do not appear to have a hydrological connection to downstream waters of the U.S. and these features are assumed to be non-jurisdictional. A request for jurisdictional determination (JD) is being sent to the USACE along with this report.

If you have any questions or require additional information, please feel free to contact me by telephone at (303) 842-3847 or by e-mail at apwoehler@burnsmcd.com.

Sincerely,

Angie Woehler

a. Whehler

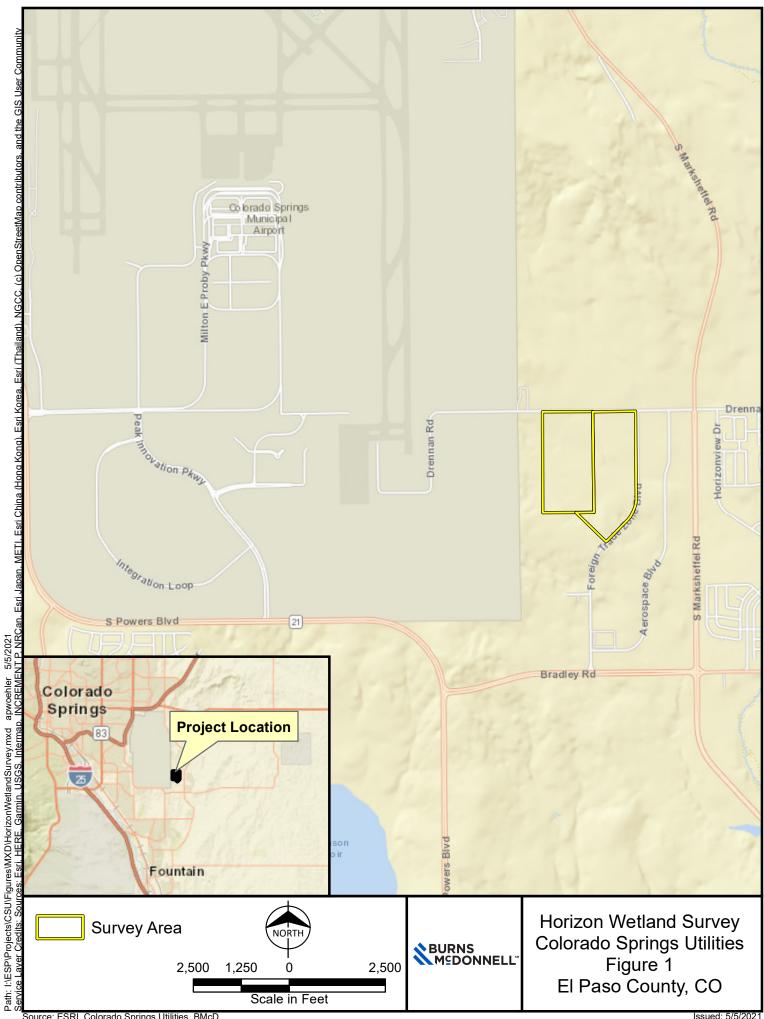
Staff Environmental Scientist

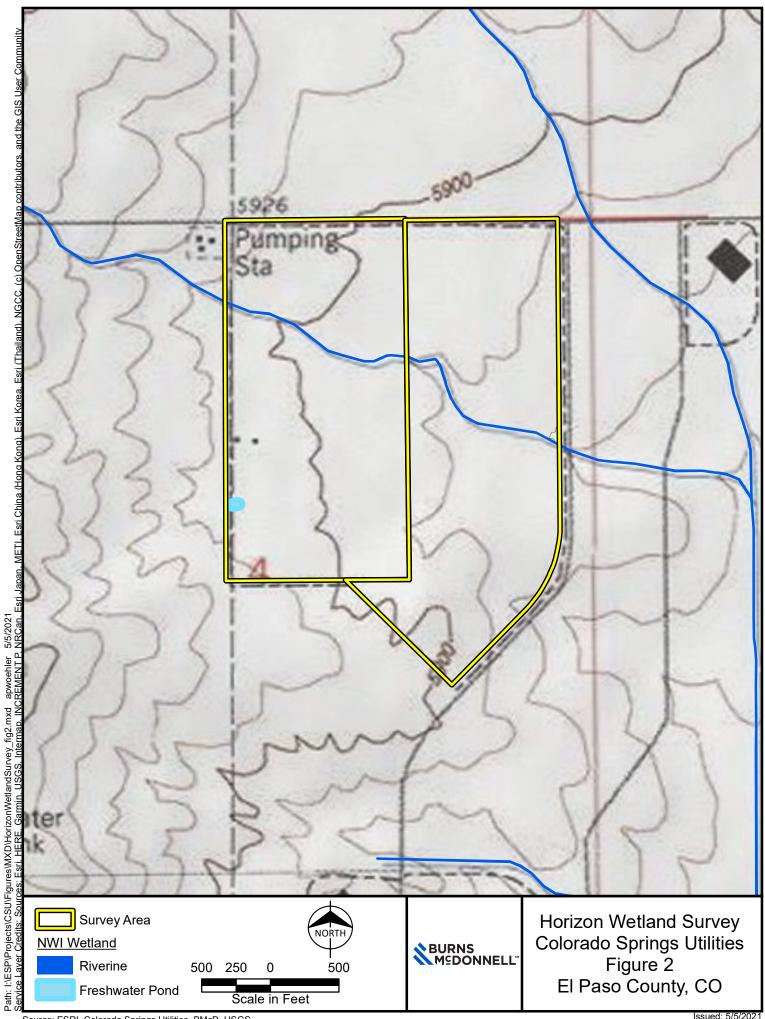
Appendix A – Figures

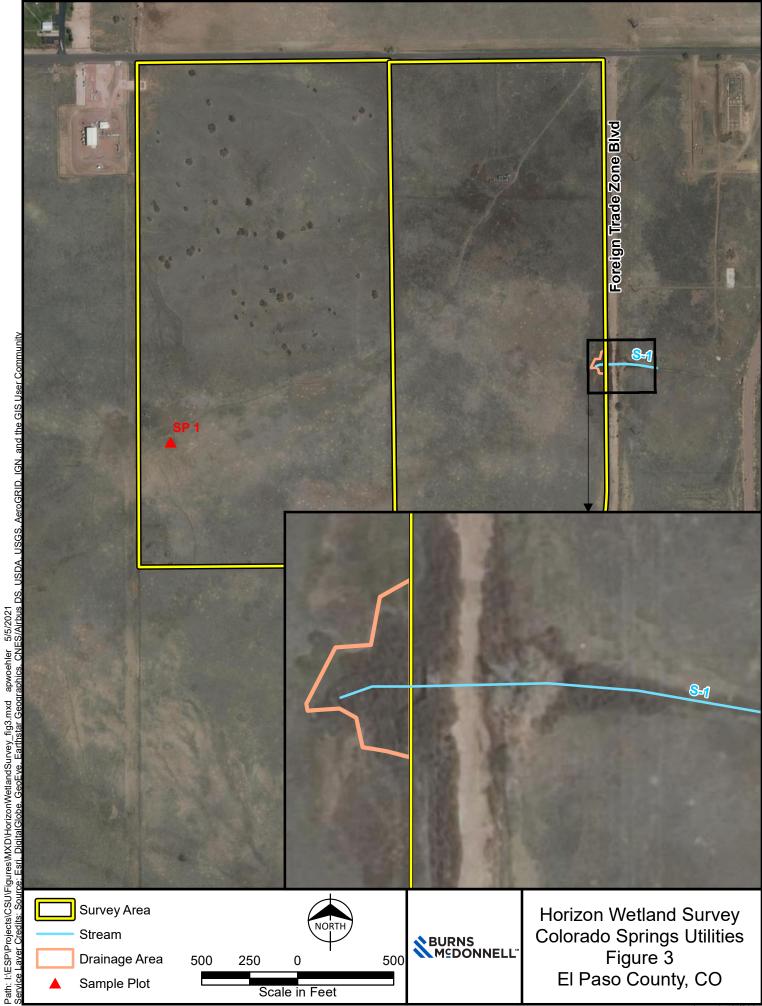
Appendix B – Wetland Determination Data Forms

Appendix C – Photograph Log











WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

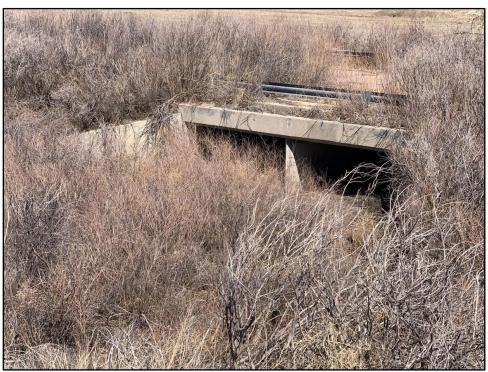
Project/Site: Horizon	City/County: Colorado Springs, El Pason Sampling Date: 04-09-2020
Applicant/Owner: Colorado Springs Utilities	State:COSampling Point: SP-1
Investigator(s): Angie Woehler	Section, Township, Range: Township 15S Range 65 W Section
Landform (hillslope, terrace, etc.):pasture	Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): LRR-ELat:	<u>38.776511</u> Long:-104.665147 Datum:NAD 83
Soil Map Unit Name: Ascalon sandy loam*, 1 to 3 percent slopes	NWI classification: Fresh Water Pond
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes x No(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly	y disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynaturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes_xNo	
Hydric Soil Present? Yes No x	within a Watlando Vaa Na V
Wetland Hydrology Present? YesNo_x Remarks:	
Remarks.	
VEGETATION – Use scientific names of plants.	
	te Dominant Indicator or Species? Status Number of Dominant Consider
1	Number of Dominant Species
2.	
3	
4	Percent of Dominant Species That Are OBL, FACW, or FAC:100%(A/B)
Sapling/Shrub Stratum (Plot size:)	Prevalence Index worksheet:
1	I I otal % Cover of: Multiply by:
2. 3.	OBL species x 1 =
4	FACW speciesx z = FAC
5.	species x 3 =
	= Total Cover
Herb Stratum (Plot size:) 1. Kochia scoparia 10%	O-losses T-(-l (A) (D)
2	
3.	
4	Hydrophytic Vegetation Indicators:
5	, , , , , , ,
6.	
7	
8	data in Remarks or on a separate sheet)
9	· · · · · · · · · · · · · · · · · · ·
10	
11	= Total Cover = Total Cover
Woody Vine Stratum (Plot size:)	= Total Cover
1	Hydrophytic
2	Procent? Vac Y No
% Bare Ground in Herb Stratum 90%	= Total Cover
	C) species was found, the plot passed the dominance test, however, a clear lack of
wetland vegetation is present.	

rofile Description: (De	scribe to the depti	n needed to document the indicator or	confirm the a	absence of indicators.)
	Natrix	Redox Features		,
nches) Color (moist)	% Co	olor (moist) % Type ¹	Loc ² Text	
12 7.5YR 4	/4 100		SC	:L
· · · · · · · · · · · · · · · · · · ·				
ype: C=Concentration,	D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated	Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
dric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	5	Sandy Redox (S5)		2 cm Muck (A10)
Histic Epipedon (A2)	9	Stripped Matrix (S6)		Red Parent Material (TF2)
_ Black Histic (A3)	l	Loamy Mucky Mineral (F1) (except MLR)	A 1)	Very Shallow Dark Surface (TF12)
_ Hydrogen Sulfide (A4		oamy Gleyed Matrix (F2)		Other (Explain in Remarks)
_ Depleted Below Dark	, ,	Depleted Matrix (F3)		•
_ Thick Dark Surface (A	,	Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
_ Sandy Mucky Mineral	` '	Depleted Dark Surface (F7)		wetland hydrology must be present,
Sandy Gleyed Matrix estrictive Layer (if pres		Redox Depressions (F8)		unless disturbed or problematic.
estrictive Laver (ii bres	sent):			
Type: compact soil		<u> </u>		
		<u> </u>	Ну	rdric Soil Present? YesNo X
Type: compact soil Depth (inches): 13+ in emarks: o wetland soil indicators			Ну	rdric Soil Present? YesNo_X
Type: compact soil	are present		Ну	rdric Soil Present? YesNo <u>X</u>
Type: compact soil	are present		Ну	rdric Soil Present? YesNo X
Type: compact soil Depth (inches): 13+ incompared soil indicators of wetland soil indicators DROLOGY etland Hydrology Indicators	are present	check all that apply)	Ну	
Type: compact soil Depth (inches): 13+ incompared soil indicators wetland soil indicators DROLOGY etland Hydrology Indicators	are present	check all that apply) Water-Stained Leaves (B9) (except		
Type: compact soil Depth (inches): 13+ incompacts: 13+ inc	are present cators: um of one required:			Secondary Indicators (2 or more required
Type: compact soil Depth (inches): _13+ in emarks: D wetland soil indicators DROLOGY etland Hydrology Indic imary Indicators (minim _ Surface Water (A1)	are present cators: um of one required:	Water-Stained Leaves (B9) (except		Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2,
Type: compact soil Depth (inches): 13+ in emarks: b wetland soil indicators DROLOGY etland Hydrology Indic imary Indicators (minim _ Surface Water (A1) _ High Water Table (A2)	are present cators: um of one required:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)		Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Type: compact soil Depth (inches): 13+ incompacts: Depth (inches): 13+ inches: Depth (inches): 13+ inches: 13+ inches: Depth (inches): 13+ inches: 13+ inc	are present cators: um of one required:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)		Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: compact soil Depth (inches): 13+ incompacts: DROLOGY etland Hydrology Indicators mary Indicators (minimary Indicators (mini	are present cators: um of one required:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)		Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Type: compact soil Depth (inches): 13+ incompacts: 13+ incompacts: 20 wetland soil indicators (incompact) DROLOGY etland Hydrology Indicators (minimary Indicators (Minimar	cators: um of one required: 2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living		Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Type: compact soil Depth (inches): 13+ incompacts: Dwetland soil indicators DROLOGY etland Hydrology Indicators (minimary Indicators (minimary Indicators (minimary Indicators (Manimary Indicato	cators: um of one required: 2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	Roots (C3)	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2)
Type: compact soil Depth (inches): 13+ in emarks: o wetland soil indicators DROLOGY etland Hydrology Indiciting Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3)_ Water Marks (B1)_ Sediment Deposits (B Drift Deposits (B3)_ Algal Mat or Crust (B4 Iron Deposits (B5)	are present cators: um of one required: 2) 32)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living	Roots (C3) _	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3)
Type: compact soil Depth (inches): 13+ in emarks: o wetland soil indicators of wetland soil indicators of wetland Hydrology Indictionary Indicators (minimaly Indicators (Male Indi	are present cators: um of one required: 2) 32) 4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR	Roots (C3) _	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: compact soil Depth (inches): 13+ in emarks: D wetland soil indicators DROLOGY etland Hydrology Indic imary Indicators (minim _ Surface Water (A1) _ High Water Table (A2 _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B _ Drift Deposits (B3) _ Algal Mat or Crust (B Iron Deposits (B5) _ Surface Soil Cracks (are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks)	Roots (C3) _	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: compact soil Depth (inches): 13+ incompacts: 13+ incompacts: 20 wetland soil indicators (incompact) DROLOGY etland Hydrology Indicators (minimary Indicators (Minimar	are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks)	Roots (C3) _	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: compact soil Depth (inches): 13+ incompacts: 13+ incompacts: 20 wetland soil indicators (incompact) DROLOGY etland Hydrology Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (incompact)) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B-10-10-10-10-10-10-10-10-10-10-10-10-10-	are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7) Concave Surface (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks)	Roots (C3) s (C6) R A)	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: compact soil Depth (inches): 13+ in emarks: o wetland soil indicators DROLOGY etland Hydrology Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Celd Observations:	are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7) Concave Surface (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks) 8) XDepth (inches):	Roots (C3) s (C6) R A)	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: compact soil Depth (inches): 13+ incompacts: 13+ in	are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7) Concave Surface (B YesNo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks) X Depth (inches): Depth (inches):	Roots (C3) s (C6) R A)	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: compact soil Depth (inches): 13+ incompacts: 13+ incompacts: 2 wetland soil indicators of wetland Hydrology Indicators (minimary Indicators (Marks (B1)) — Surface Water Table (A2) — Sediment Deposits (B3) — Algal Mat or Crust (B-1) — Iron Deposits (B5) — Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Marks	are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7) Concave Surface (B YesNo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks) 8) XDepth (inches):	Roots (C3) s (C6) R A)	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: compact soil Depth (inches): 13+ in emarks: D wetland soil indicators DROLOGY etland Hydrology Indic imary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Coeld Observations: urface Water Present? aturation Present? aturation Present? acturation Present?	are present cators: um of one required: 2) 32) 4) B6) Aerial Imagery (B7) Concave Surface (B YesNo YesNo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks) X Depth (inches): Depth (inches):	Roots (C3) _ s (C6) R A)	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 x Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)





Photograph C-1: View of drainage area associated with ephemeral stream (S-1), facing northeast.



Photograph C-2: View of drainage area and bridge under Foreign Trade Zone Blvd, facing east.



Photograph C-3: View from east side of bridge, facing northwest.



Photograph C-4: View of upland Sample Point (SP) 1, facing east.

